

PHASE II ENVIRONMENTAL SITE ASSESSMENT

Vacant Parcels

Rockaway Avenue & Chester Street
Brooklyn, New York

PREPARED FOR

*Blue Sea Development Company, LLC
164 Main Street
Huntington, New York 11743*

PREPARED BY


*One Penn Plaza, Suite 715
New York, New York 10119*

November 12, 2020

PHASE II ENVIRONMENTAL SITE ASSESSMENT

Vacant Parcels

Rockaway Avenue & Chester Street
Brooklyn, New York

PREPARED FOR

Blue Sea Development Company, LLC
164 Main Street
Huntington, New York 11743

PREPARED BY



**VHB Engineering, Surveying,
Landscape Architecture and
Geology, P.C.**

One Penn Plaza, Suite 715
New York, New York 10119

November 12, 2020

Table of Contents

1	Executive Summary	i
2	Introduction	1
3	Site Background	3
	2.1 Site Location and Current Usage.....	3
	2.1.1 Description of Surrounding Properties	3
	2.2 Investigation Rationale.....	4
	2.2.1 Previous Environmental Report.....	4
4	Site Investigation	6
	3.1 Soil Sampling.....	7
	3.2 Groundwater Sampling	8
	3.3 Soil Vapor Sampling	8
5	Phase II ESA Investigation Results	10
	4.1 Geophysical Survey	10
	4.2 Soil Sampling.....	10
	4.2.1 Soil Boring SB-01	11
	4.2.2 Soil Boring SB-02	11
	4.2.3 Soil Boring SB-03	12
	4.2.4 Soil Boring SB-04	13
	4.2.5 Soil Boring SB-05	14
	4.2.6 Soil Boring SB-06	14
	4.2.7 Soil Boring SB-07	15
	4.2.8 Soil Boring SB-08	16
	4.2.9 Soil Boring SB-09	16
	4.2.10 Soil Boring SB-10	17
	4.2.11 Soil Boring SB-11	17
	4.3 Groundwater Samples	18
	4.3.1 Groundwater Sample GW-01	18
	4.3.2 Groundwater Sample GW-02.....	18
	4.3.3 Groundwater Sample GW-03.....	19
	4.4 Soil Vapor Quality.....	19
	4.4.1 Soil Vapor Sample SV-01	19
	4.4.2 Soil Vapor Sample SV-02.....	20
	4.4.3 Soil Vapor Sample SV-03	20
	4.4.4 Soil Vapor Sample SV-04.....	21
	4.5 Deviations from Work Plan/Site Constraints	21
6	Conclusions	22

List of Attachments

Attachment A – Figures

- Figure 1 – Site Location
- Figure 2 – Aerial Photograph
- Figure 3 – Sample Locations

Attachment B – Tables

- Table 1 – Summary of Soil Boring Analytical Data
- Table 2 – Summary of Groundwater Analytical Data
- Table 3 – Summary of Soil Vapor Analytical Data

- Attachment C – Site Photographs
- Attachment D – NYCDEP Correspondence
- Attachment E – Laboratory Data Sheets
- Attachment F – Soil Boring Logs
- Attachment G – NYSDOH Soil Vapor/Indoor Air Matrices
- Attachment H – Preparer Information



Executive Summary

VHB Engineering, Surveying, Landscape Architecture and Geology, P.C. (VHB) has prepared this report to document the results of a Phase II Environmental Site Assessment (ESA) performed in October 2020 in connection with eighteen (18) vacant parcels located on the east side of Chester Street and the west side of Rockaway Avenue, between East New York Avenue to the north and Pitkin Avenue to the south, in the Brownsville neighborhood of the Borough of Brooklyn, City and State of New York.

The subsurface investigation associated with this Phase II ESA was performed in accordance with the Work Plan and Health and Safety Plan (HASP) approved by the New York City Department of Environmental Protection (NYCDEP) in correspondence dated September 20, 2019 issued to the lead agency, the New York City Department of Housing Preservation and Development (NYCHPD). This Phase II ESA was prepared in connection with the redevelopment of the Site with a mixed-use building containing approximately 446 affordable housing units, community facility space as well as retail space.

The following Site conditions below were identified as a result of the subsurface investigation.

Soils

There were no volatile organic compounds (VOCs) detected in soils above New York State Department of Environmental Conservation (NYSDEC) Part 375 Track One Unrestricted Use Soil Cleanup Objectives (UUSCOs) with the exception of xylenes, which were detected in one surficial soil sample, SB-02 (0-2'). There were no VOCs detected above NYSDEC Part 375 Track Two Restricted-Use Restricted-Residential Soil Cleanup Objectives (RRSCOs). The

detection of xylenes in one soil sample can be considered an isolated occurrence due to the lack of any additional VOC detections above regulatory standards throughout the Site.

Semi-volatile organic compounds (SVOCs) were detected in the majority of the soil borings; primarily in shallow and mid-range soil samples. SVOC exceedances above NYSDEC Part 375 Track Two RRSCOs were detected in SB-01 (0-2'), SB-02 (5-7'), SB-03 (5-7'), SB-05 (0-2'), SB-06 (0-2'), SB-06 (2-4'), SB-07 (0-2') and SB-10 (0-2'). Additional SVOCs were also detected in those respective samples that exceeded NYSDEC Part 375 Track One UUSCOs but below Track Two RRSCOs. The widespread detection of the SVOCs benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene and indeno(1,2,3-cd)pyrene are typical compounds found in historic/urban fill materials from previous site development. There were no detections of SVOCs above UUSCOs in the underlying native sand samples.

Metals were detected in several soil borings above NYSDEC Part 375 Track Two RRSCOs. These soil samples include SB-03 (5-7') (arsenic and lead) and SB-06 (2-4') (barium and lead). Additional metals were detected that exceeded NYSDEC Part 375 Track One UUSCOs but below Track Two RRSCOs. These samples included SB-01 (0-2') (copper, lead, mercury and zinc), SB-02 (15-17') (mercury), SB-03 (0-2') (lead and zinc), SB-03 (5-7') (copper and zinc), SB-05 (0-2') (copper, lead, mercury and zinc), SB-06 (0-2') (barium, lead, mercury and zinc), SB-06 (2-4') (copper, mercury and zinc), SB-07 (0-2') (lead), SB-09 (0-2') (barium, lead, mercury and zinc) and SB-11 (0-2') (lead and zinc). The presence of metals in surficial and mid-range soil samples can likely be attributed to the presence of contaminated historic/urban fill that was observed throughout the majority of the Site. Only one sample collected from the underlying native sands had a detection of metals above UUSCOs – mercury at SB-02 (15-17').

There were no pesticides detected above NYSDEC Part 375 Track Two RRSCOs. However, several soil samples, mainly surficial and mid-range, were identified with concentrations of pesticides that exceed NYSDEC Part 375 Track One UUSCOs. These soil samples include SB-01 (0-2') (4,4'-DDD, 4,4'-DDE, 4,4'-DDT and dieldrin), SB-02 (0-2') (4,4'-DDE and 4,4'-DDT), SB-02 (5-7') (4,4'-DDT), SB-03 (0-2') (4,4'-DDE, 4,4'-DDT and dieldrin), SB-03 (5-7') (4,4'-DDD, 4,4'-DDE, 4,4'-DDT and dieldrin), SB-05 (0-2') (4,4'-DDT), SB-06 (0-2') (4,4'-DDD, 4,4'-DDE, 4,4'-DDT and dieldrin), SB-06 (2-4') (4,4'-DDE, 4,4'-DDT and dieldrin), SB-08 (0-2') (4,4'-DDT) and SB-10 (0-2') (4,4'-DDT). The presence of pesticides can likely be attributed to contaminated urban/historic fill that was observed throughout the majority of the Site. Pesticides were not detected above the UUSCOs in any of the underlying native sand soil samples.

There were no concentrations of polychlorinated biphenyls (PCBs) that exceeded NYSDEC Part 375 Track Two RRSCOs. However, total PCB concentrations in SB-01 (0-2') and SB-10 (4-6') were detected at concentrations that exceeded the NYSDEC Part 375 Track One UUSCO.

VHB recommends that soils within the project that will be excavated during site development be considered as *impaired* or *impacted*. Soils containing UUSCO and RRSCO exceedances within the redevelopment areas should properly be characterized prior to removal from the Site. Contaminated soils should be properly manifested and transported to an appropriate disposal facility capable of accepting soils impacted with VOCs, SVOCs, metals, pesticides and PCBs. Both the shallow and deeper soil horizons sampled during this investigation are proposed to be excavated as part of the future Site redevelopment. As an alternative, soils could also be transported to an alternate location that is capable of accepting and utilizing impacted backfill. These uses include many commercial, industrial and beneficial use facilities.

Groundwater

Based upon the results of the groundwater sampling, there were no pesticides or PCBs detected above NYSDEC Ambient Water Quality Standards and Guidance Values (AWQSGVs). One VOC, tetrachloroethylene (PCE), was detected at a concentration of 5.8 micrograms per liter ($\mu\text{g/L}$) in GW-03, which exceeds the NYSDEC AWQSGV of 5 $\mu\text{g/L}$. One SVOC, benzo(b)fluoranthene, was detected but below the limit of quantitation in GW-02 at an estimated concentration 0.02 $\mu\text{g/L}$, which exceeds the NYSDEC AWQSGV of 0.002 $\text{m}\mu\text{g/L}$. No additional VOCs or SVOCs were detected above NYSDEC AWQSGVs.

PCE was not detected in any of the on-Site groundwater or soil samples. As such, the detection of PCE in the off-Site groundwater monitoring well GW-03 is not likely related to current or former Site uses, but rather an off-Site source. The presence of the permanent off-Site groundwater monitoring well GW-03 suggests that it is used to monitor an off-site environmental or geotechnical condition.

Elevated total concentrations of metals could be attributed to high turbidity. Dissolved concentrations of manganese that exceed NYSDEC AWQSGV were detected in GW-01 and GW-02. The presence of manganese in groundwater is typical in New York City and can often be attributed to the dissolution of surrounding minerals and leaching from soil. Manganese is also naturally occurring in groundwater that has little oxygen and where groundwater flow is considered slow. Dissolved concentrations of sodium were detected in all three groundwater samples (GW-01, GW-02 and GW-03) that exceeded the NYSDEC AWQSGV. The presence of dissolved sodium is also typical in New York City and can be attributed to the Site's proximity to the coast, as well as the leaching of dissolved rock salt utilized for snow melting in urban areas. Further, thallium was detected at an estimated dissolved concentration of 1.68 $\mu\text{g/L}$, which exceeds the NYSDEC AWQSGV of 0.5 $\mu\text{g/L}$ in GW-03. There is no correlation between soil sample results and the presence of dissolved thallium detected in GW-03. The presence of thallium is typical of ore processing and manufacturing uses. Based upon the known historic use of the Site, it is likely the detection of thallium can be attributed to an off-Site source.

Soil Vapor

Based upon the results of the soil vapor sampling, VOCs were detected at the screening depths within the project area. VOCs included 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, 1,3-butadiene, 2,2,4-trimethylpentane, 2-butanone, 2-hexanone, 4-methyl-2-pentanone, acetone, benzene, carbon disulfide, chloromethane, cyclohexane, dichlorodifluoromethane, ethyl alcohol, ethylbenzene, heptane, isopropyl alcohol, n-hexane, xylenes, tert-butyl-alcohol, tetrahydrofuran, toluene and trichlorofluoromethane. Additional chlorinated VOCs subject to the New York State Department of Health (NYSDOH) Soil Vapor/Indoor Air matrices were detected including 111-TCA (SV-02 and SV-04), methylene chloride (SV-02, SV-03 and SV-04) and PCE (SV-02). Each of the compounds subject to NYSDOH matrices were subject to NYSDOH Soil Vapor/Indoor Air Matrix B and the maximum detection was reported at 9.88 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). Although no sub-slab soil vapor samples or indoor air samples were collected, the soil vapor results were compared to the NYSDOH Soil Vapor/Indoor Air Matrix B, NYSDOH recommends "No Further Action" for sub-slab concentrations less than $100 \mu\text{g}/\text{m}^3$.

Given the presence of petroleum- and refrigerant-related VOCs in the soil vapor beneath the Site, as well as the presence of chlorinated VOCs subject to the NYSDOH Soil Vapor/Indoor Air Matrices including 1,1,1-Trichloroethane (111-TCA), PCE and methylene chloride, VHB recommends that soil vapor beneath the Site be considered as *impaired* or slightly *impacted*. The VOCs found in soil vapor at the Site are typical throughout New York City including the borough of the Brooklyn, due to the extensive and dense development history. Given these conditions, VHB believes that no further action would be required with respect to soil vapor at this time. Furthermore, it is expected that the future development at the Site will include a building slab that will act as a barrier to protect future Site occupants from the impacted soil vapor beneath the Site, or as a conservative measure, a soil vapor barrier could be incorporated into the proposed Site development.

1

Introduction

VHB Engineering, Surveying, Landscape Architecture and Geology, P.C. (VHB) has prepared this report to document the results of a Phase II Environmental Site Assessment (ESA) performed in October 2020 in connection with eighteen (18) vacant parcels located on the east side of Chester Street and the west side of Rockaway Avenue, between East New York Avenue to the north and Pitkin Avenue to the south, in the Brownsville neighborhood of the Borough of Brooklyn, City and State of New York (hereinafter the "Site"; see **Figures 1 and 2 in Attachment A**).

The Site is identified by the street addresses and New York City (NYC) Tax Map Block and Lot Nos. noted below:

Parcel	Block	Lot	Address
1	3499	15	47 Chester Street
2	3499	17	Chester Street
3	3499	20	31 Chester Street
4	3499	21	29 Chester Street
5	3499	22	27 Chester Street
6	3499	23	Chester Street
7	3499	24	Chester Street
8	3499	45	348 Rockaway Avenue
9	3499	46	354 Rockaway Avenue
10	3499	47	356 Rockaway Avenue
11	3499	48	Rockaway Avenue
12	3499	50	376 Rockaway Avenue
13	3499	52	380 Rockaway Avenue

Parcel	Block	Lot	Address
14	3499	53	382 Rockaway Avenue
15	3499	54	384 Rockaway Avenue
16	3499	56	388 Rockaway Avenue
17	3499	57	390 Rockaway Avenue
18	3499	58	392 Rockaway Avenue

The Phase II ESA Investigation activities were conducted in October 2020 in accordance with the New York City Department of Environmental Protection (NYCDEP) approved Phase II ESA Work Plan dated August 16, 2019. The Phase II ESA Work Plan was prepared as part of the City Environmental Quality Review (CEQR) process. The Phase II ESA Work Plan and associated Health and Safety Plan (HASP) was approved by NYCDEP in correspondence issued to the lead agency (Department of City Planning [NYCDCP]) dated September 30, 2019 (see **Attachment D**)

2

Site Background

2.1 Site Location and Current Usage

The Site is predominantly vacant and vegetated, with the exception of Lot 45 (348 Rockaway Avenue), which is partially utilized as an electrical supply storage yard associated with the adjacent business to the north (Colonial Electric Supply). The Site is enclosed by a chain-link fence on all sides, with two gated entrances that are secured with padlocks; one on Chester Street and one on Rockaway Avenue. One (1) intermodal storage container are located on the northeastern and one (1) additional intermodal storage container is located on the southeastern portions of the Site. A vegetated soil stockpile, a downed tree, and various refuse and debris are located on the northern portions of the Site. The southwestern portion of the Site is used as a driveway for the residential structure adjacent to the south, which contains a vehicle behind a locked chain-link fence/gate.

2.1.1 Description of Surrounding Properties

Adjacent to the north is a commercial electrical supply business, located on the southern side of East New York Avenue. Beyond are numerous commercial and mixed-use commercial and multi-family residential properties. Multi-family residences along Chester Street and commercial and mixed-use commercial and residential properties along Rockaway Avenue to the south, with commercial properties along Pitkin Avenue, beyond. Commercial and mixed-use commercial and residential properties along Rockaway Avenue are present to the east, with multi-family public housing beyond. Institutional properties and multi-family residences to the west across Chester Street, and beyond.

2.2 Investigation Rationale

VHB prepared a Phase I ESA for the site, dated March 11, 2019, hereinafter the "Phase I ESA". The Phase I ESA included an assessment of the on-site conditions as well as Site history and a review of the surrounding/neighborhood properties that may have the potential to have environmental impacts on the Site. Based on the Site proposed redevelopment plans, as well as the findings and conclusions of the Phase I ESA (see **Section 2.2.1**), NYCDEP, as reviewing agency for the New York City Department of Housing Preservation and Development (HPD) required a Phase II ESA Work Plan be prepared for review and approval. As such, in accordance with Chapter 12, Section 300 of the *2014 CEQR Technical Manual*, with regulatory oversight provided by NYCDEP, a Phase II ESA Work Plan and associated HASP were prepared by VHB and approved by NYCDEP.

2.2.1 Previous Environmental Report

The Phase I ESA identified one recognized environmental condition (REC) for the Site. This REC is summarized as follows:

- › *Given the development history of the Site, several manufacturing uses were identified on Lot Nos. 48, 50, 54, 56, 57, and 58. Specifically, several furniture upholsterers, cabinet manufacturing, stone cutting, and manufacturing operations occupied these parcels. Former manufacturing relating to furniture upholstery has the potential to have impacted subsurface conditions based on the products utilized during these processes. Some represent a REC for the Site.*

In addition to the aforementioned REC, the following business environmental risks (BERs) were identified in the Phase I ESA:

- › *Based upon available New York City Department of Buildings (NYCDOB) records, fuel oil burner applications were identified for several of the former buildings on Lot 5 Site Investigation Nos. 17, 46, 50, and 56. As such, there is a potential for fuel oil to have been previously utilized in the former on-site buildings. The site-reconnaissance identified former building foundations and slabs across the Site. It is possible that any potential tanks, including basement aboveground storage tanks (ASTs), may have been removed prior to demolition. However, VHB was unable to verify the existence of any potential petroleum storage tanks at the Site based on the lack of tank documentation including registrations and municipal records. As such, the potential presence of petroleum storage tanks at the Site represents a BER.*
- › *Based on a review of historic Sanborn Fire Insurance maps, historic aerial photographs, and NYCDOB records, the Site was improved with residential and commercial structures since at least 1907 until the mid-1980s, when all structures were demolished. During the site reconnaissance, VHB observed evidence of several former building foundations. This would indicate that at least some of the former buildings were demolished into their basements. Given the history of the Site and lack of demolition records, the presence of urban fill material can be expected. Although the presence of urban fill material is typical in densely developed portions of New York City, it should be dealt with accordingly prior to any*

potential redevelopment. The likely presence of fill materials beneath the Site is considered a BER.

- › *Although the Site is currently vacant and undeveloped, several of the former structures were listed in the NYCDOB records database as containing elevators. Given that the Site has been developed with various commercial and residential structures since at least 1907, the ages of the former onsite buildings would indicate the potential for building materials to contain polychlorinated biphenyls (PCBs). As demolition of all on-site buildings occurred between 1972 and 1984, it cannot be verified whether any PCB containing materials were properly disposed prior to demolition. Therefore, based on the potential presence of PCBs in demolition debris, same is considered a BER.*
- › *A visual inspection of potential painted surfaces was conducted during the site reconnaissance. Although, no painted surfaces were observed, based upon the ages of the former on-site buildings and lack of demolition records, there is a potential for LBP to be present in demolition debris. Same is considered a BER for the Site.*
- › *No suspect ACM was observed during the visual inspections. However, given the age of the former on-site buildings, the demolition debris could potentially contain roofing materials or insulation that have the potential to be considered ACM. Same is considered a BER for the Site.*

3

Site Investigation

As outlined in the NYCDEP-approved Phase II ESA Work Plan, the following investigatory activities took place in October 2020:

- › Advancement of 11 soil borings and collection and analysis of at least 22 soil samples;
- › Conversion of two (2) soil borings to temporary groundwater monitoring wells and collection and analysis of two (2) groundwater samples from converted soil borings, as well as the collection and analysis of one (1) groundwater sample from an existing monitoring well; and
- › Installation of four (4) temporary soil vapor sampling points and collection and analysis of four (4) soil vapor samples.

The following sections provide detailed summaries of the investigative findings. Soil sample analytical results are compared to the New York State Department of Environmental Conservation (NYSDEC)'s Part 375-6.8(a) Unrestricted Use Soil Cleanup Objectives (UUSCOs) and NYSDCE Part 375-6.8(b) Restricted Use Restricted-Residential Soil Cleanup Objectives (RRSCO). Groundwater sample results are compared to the NYSDCE Technical and Operational Guidance Series (TOGS) 1.1.1 list of Ambient Water Quality Standards and Guidance Values (AWQSGVs). Although sub-slab soil vapor and indoor air samples were not collected and given that New York State does not have standards for soil vapor, for comparative purposes, soil vapor sample results are conservatively compared to the NYSDOH Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, May 2017 (Guidance) Soil Vapor/Indoor Air Matrices (**Attachment G**).

3.1 Soil Sampling

Soil Mechanics Drilling Corp (Soil Mechanics), subcontracted by Blue Sea Development Company, LLC, advanced 11 soil borings between October 13 and 15, 2020 at locations across the 18 Site parcels as shown on **Figure 3** in **Attachment A**. The 11 borings, designated as SB-01 through SB-11, were used to identify/characterize Site soils.

The soil borings were advanced to approximately 13 ft below ground surface (bgs), which is the anticipated terminal excavation depth for the future Site development. Prior to boring, any debris or other materials located in the vicinity of the soil boring location, were cleared/relocated, as needed. All 11 soil borings were advanced using a GeoProbe® Direct push drill rig. Continuous soil cores were collected utilizing factory-new acetate macrocore soil sampling tubes at each boring location from the surface to the terminal boring depth. The soil boring logs are included in **Attachment F**.

At least two soil samples were collected from each continuous soil core for laboratory analysis. In accordance with the Work Plan, one surficial sample (ranging from 0-2 ft bgs) and one deeper sample (from approximately 13-15 ft bgs) were collected from each boring location. Soils were observed for suspect characteristics (e.g., staining, odors, elevated photoionization [PID] detections¹, etc.). Additionally, evidence of historical fill material and construction/demolition debris including pieces of brick, concrete, wood, plastic, and glass was identified at depths ranging from ground surface soils to approximately 5-10 ft bgs. Given the observed conditions and to further characterize the historic fill material, six (6) additional "mid-range" samples were collected at certain boring locations.

In total, 28 soil samples were collected. Soil samples were transferred from the macrocores directly into laboratory-supplied glassware, stored in an ice-packed cooler and transported to Alpha Analytical, Inc². (Alpha) of Westborough, Massachusetts. under appropriate chain-of-custody protocols. Consistent with the *CEQR Technical Manual* and the approved Phase II ESA Work Plan, soil samples were analyzed for the following parameters:

- › Target Compound List (TCL) volatile organic compounds (VOCs) using United States Environmental Protection Agency (USEPA) Method 8260³;
- › TCL semi-volatile organic compounds (SVOCs) using USEPA Method 8270;
- › Target Analyte List (TAL) Metals using USEPA Methods 6010 and 7471;
- › Pesticides using USEPA Method 8081; and
- › Polychlorinated biphenyls (PCBs) using USEPA Method 8082.

Soil analytical results are summarized and compared to the UUSCOs (Track One) and RRSCO (Track Two) in **Table 1** of **Attachment B**, the complete laboratory data reports are included in **Attachment E**. RRSCO A summary the results is provided in **Section 4.2**.

¹ A PID is a portable field instrument capable of detecting a wide range of volatile organic compounds (VOCs).

² Alpha is a NYSDOH Environmental Laboratory Approval Program (ELAP) and National Environmental Laboratory Accreditation Program (NELAP)-certified laboratory

³ All VOC soil samples collected and submitted for laboratory analysis were preserved using USEPA Method 5035.

3.2 Groundwater Sampling

Groundwater samples were collected from two (2) locations within the Site and one (1) groundwater sample was collected from an existing monitoring well located in the sidewalk along Chester Street (see **Figure 3** of **Attachment A**), immediately outside of the chain-linked boundary of the Site.

Two (2) soil borings (SB-01 and SB-02) were converted to temporary monitoring wells for groundwater sampling. A third groundwater sample was proposed to be collected from SB-03, however, in accordance with the approved Work Plan, the existing groundwater monitoring well located in the sidewalk was determined to be viable and the third groundwater sample was collected at this location (sample ID GW-03, see **Figure 3** of **Attachment A**).

As discussed above, soil borings were advanced to groundwater utilizing the GeoProbe® drill rig. Groundwater was encountered at approximately 39 ft bgs. All non-dedicated drilling equipment was field decontaminated prior to use at the Site and between sampling locations. Groundwater samples were collected using factory-new polyethylene tubing through dedicated GeoProbe® sampling rods with stainless steel 0.02-inch slotted screen. At least three to five well volumes of groundwater were purged from each monitoring location, using an inertia pump.

The three (3) groundwater samples (GW-01 through GW-03) were collected directly into laboratory-supplied glassware, stored in ice-packed coolers, and transported to Alpha under appropriate chain-of-custody protocols. Consistent with the *CEQR Technical Manual* and the approved Work Plan, groundwater samples were analyzed for the following parameters:

- › TCL VOCs using USEPA Method 8260;
- › TCL SVOCs using USEPA Method 8270;
- › TAL Metals (total and dissolved concentrations [a.k.a. filtered and unfiltered, respectively]) using USEPA Methods 6010 and 7471;
- › Pesticides using USEPA Method 8081; and
- › PCBs using USEPA Method 8082.

Groundwater sample results are summarized and compared to NYSDEC TOGS 1.1.1 list of AWQSGVs in **Table 2** of **Attachment B**, the complete laboratory data reports are included in **Attachment E**. A summary the results is provided in **Section 4.3**.

3.3 Soil Vapor Sampling

Soil vapor samples were collected to assess the potential for a vapor encroachment condition (VEC) at the Site. The Site will be excavated to an approximate depth of 13 ft bgs to facilitate redevelopment and construction. As such, four (4) temporary soil vapor sampling points (SV-01 through SV-04) were installed to a depth of approximately 13.5 ft bgs, or just below the proposed terminal excavation depth, to be considered as representative of future building slab conditions at the Site.

Temporary soil vapor sampling points consisting of stainless-steel vapor screens attached to factory-new polyethylene tubing were installed utilizing the GeoProbe® drill rig at each location. Once at the terminal depth, the borehole surrounding the vapor point was backfilled with clean sand and sealed at the surface using non-toxic clay bentonite to prevent ambient air from being drawn into the boreholes. The areas immediately above each sample point's bentonite seal were encapsulated with a canister creating an annular space. Helium was introduced into each annular space as a tracer gas to assess the potential for leaks of ambient air into the sample tubing.

Each soil vapor samples was collected into a 2.7-liter laboratory-supplied vacuum Summa canister over a two-hour period using a laboratory-supplied flow controller set to a rate of approximately 0.0225 liters per minute (LPM), consistent with NYSDOH Guidance. Each of the four (4) Summa canisters were submitted to Alpha under appropriate chain-of-custody protocol for analysis of VOCs using USEPA Method TO-15. In addition, the soil vapor samples were also analyzed for helium for QA/QC purposes, as discussed above. No existing buildings are present at the Site, therefore, no indoor air samples or sub-slab soil vapor samples were collected. The NYSDOH guidance provides Decision Matrices⁴ (see **Attachment G**) to determine if no further action, monitoring, or mitigation is necessary for detections of various compounds in sub-slab soil vapor and indoor air. Although no indoor air or sub-slab soil vapor samples were collected, the soil vapor results were conservatively compared to the NYSDOH Decision Matrices.

Soil vapor sample results are summarized and compared to the NYSDOH Decision Matrices in **Table 3** of **Attachment B**, the complete laboratory data reports are included in **Attachment E**. A summary the results is provided in **Section 4.4**.

⁴ Provided in NYSDOH Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006 and amended May 2017.

4

Phase II ESA Investigation Results

The following sections provide a summary of the geologic and hydrogeologic findings, and the soil, groundwater, and soil vapor data that were generated during the Site Investigation.

4.1 Geophysical Survey

Based on the vacant/undeveloped nature of the Site, an on-site geophysical survey was not implemented. However, a one-call utility mark-out was completed in accordance with local laws to locate buried electric, natural gas, telecommunications, utilities, etc. Precautionary measures were implemented including hand-clearing, where necessary, utilizing field-decontaminated stainless-steel hand auger prior to utilizing heavy machinery to further advance soil borings. No USTs or physical anomalies were encountered during the investigation.

4.2 Soil Sampling

As discussed in **Section 3.1**, 11 soil borings were advanced across the Site and at least two soil samples were collected from each location. The soil boring locations are shown on **Figure 3 of Attachment A**, the sample results are summarized in **Table 1 of Attachment B**, and the complete laboratory data reports are included in **Attachment E**. A summary of soil sampling results is provided in the sub-sections below.

4.2.1 Soil Boring SB-01

Soil boring SB-01 was advanced in the northeastern portion of the Site at the approximately boundary between Lots 46 and 47, see **Figure 3 in Attachment A**. Soil boring SB-01 was advanced to a terminal depth of 15 ft bgs, to be representative of anticipated future excavation depths for the proposed building. As indicated in the soil boring logs provided in **Attachment F**, soil encountered within SB-01 generally consisted of an organic surficial layer underlain by typical urban fill with a mixture of brick, organic matter and wood debris from approximately 2-7 feet bgs. Native sands were encountered below the urban fill. No PID detections (greater than 0.4 part per million [ppm]) were recorded within the soils from SB-01.

Sample Results

As indicated on **Table 1 in Attachment B**, no VOCs were detected in either the shallow or deep soil samples above NYSDEC Part 375 Track One UUSCOs or Track Two RRSCOs. One (1) SVOC, benzo(k)fluoranthene, was detected in shallow soil sample SB-01 (0-2') at a concentration of 2.5 milligrams per kilogram (mg/kg), which exceeds the NYSDEC Part 375 UUSCO of 0.8 mg/kg, but is below the NYSDEC Part 375 Track Two RRSCO of 3.9 mg/kg. Six (6) additional SVOCs, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, dibenzo(a,h)anthracene and indeno(1,2,3-cd)pyrene were detected in SB-01 (0-2') at concentrations that exceed the NYSDEC Part 375 Track Two RRSCOs. No SVOCs were detected in deeper soil sample SB-2 (13-15') above laboratory method detection limits (MDLs). The metals copper, lead, zinc and mercury were each detected in shallow soil SB-01 (0-2') above NYSDEC Part 375 Track One UUSCOs but below NYSDEC Part 375 Track Two RRSCOs. No additional metals were detected in soil samples SB-01 (0-2') and SB-02 (13-15'). No PCBs were detected above laboratory MDLs in SB-01 (13-15'). However, total the PCB concentration in shallow soil sample SB-01 (0-2') was 0.158 mg/kg, which exceeds the NYSDEC Part 375 UUSCO of 0.1 mg/kg, but below the NYSDEC Part 375 Track Two RRSCOs of 0.81 mg/kg. Four (4) pesticides, 4,4'-DDD, 4,4'-DDE, 4,4'-DDT and dieldrin, were detected in shallow soil sample SB-01 (0-1') at concentrations above their respective NYSDEC Part 375 Track One UUSCOs, but below their respective NYSDEC Part 375 Track Two RRSCOs. No pesticides were detected in deeper soil sample SB-01 (13-15') above laboratory MDLs.

4.2.2 Soil Boring SB-02

Soil boring SB-02 was advanced in the southeastern portion of the Site at the approximate boundary between Lots 47 and 48, as indicated on **Figure 3 in Attachment A**. Soil boring SB-02 was advanced to a terminal depth of 20 ft bgs, to assess soil and fill horizons at and beyond future excavation depths for the proposed building. As indicated in the soil boring logs provided in **Attachment F**, soil encountered within SB-02 consisted of medium to coarse sands within the surficial layer to 3 feet bgs, underlain by urban fill material containing a mixture of brick fragments and concrete construction and demolition (C&D) debris to approximately 12 feet bgs, before transitioning to native

sands below. PID readings of 4.0 ppm were detected in fill material at approximately three-to-five feet bgs. One PID detection above background (78.6 ppm) occurred in soils screened from 1.5-foot bgs; however, no VOCs were detected in the soil sample as summarized below. No additional PID readings (greater than 0.5 part per million [ppm]) were recorded within the soils from SB-02.

In addition to the two (2) soil samples collected from SB-02 in accordance with the approved NYCDEP Work Plan, an additional mid-range soil sample was collected and analyzed from 5-7 feet bgs to further characterize urban/historic fill materials present at the Site.

Sample Results

As indicated in **Table 1** in **Attachment B**, total xylenes were detected in SB-02 (0-2') at a concentration of 0.28 mg/kg, which exceeds the NYSDEC Part 375 Track One UUSCO of 0.26 mg/kg, but well below NYSDEC Part 375 Track Two RRSCOs. No additional VOCs were detected above NYSDEC standards in SB-02. No SVOCs were detected above NYSDEC Part 375 Track One UUSCOs in SB-02 (0-2'). However, four SVOCs, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene and indeno(1,2,3-cd)pyrene were detected at a in mid-range sample SB-02 (5-7') at concentrations that exceeded their respective NYSDEC Part 375 Track Two RRSCOs. No SVOCs were detected above laboratory MDLs in SB-02 (15-17'). No metals were detected in exceedance of NYSDEC Part 375 Track One and Track Two SCOs in samples SB-02 (0-2') and SB-02 (5-7'). However, mercury was detected in deeper soil sample SB-02 (15-17') at a concentration of 0.28 mg/kg, which exceeds NYSDEC Part 375 Track One UUSCO of 0.18 mg/kg, but below NYSDEC Part 375 Track Two RRSCO of 0.81 mg/kg. The pesticides 4,4'-DDE and 4,4'-DDT were detected above NYSDEC Part 375 Track One UUSCOs in SB-02 (0-2') but below NYSDEC Part 375 Track Two RRSCOs. Additionally, 4,4'-DDT was detected above its NYSDEC Part 375 Track One UUSCO in SB-02 (5-7') but below NYSDEC Part 375 Track Two RRSCO. No pesticides were detected above laboratory MDLs in SB-02 (15-17'). No PCBs were detected above laboratory MDLs in mid-range sample SB-02 (5-7') and deeper sample SB-02 (15-17'). Furthermore, no PCBs were detected above NYSDEC Part 375 Track One UUSCOs or Track Two RRSCOs in shallow soil sample SB-01 (0-2').

4.2.3 Soil Boring SB-03

Soil boring SB-03 was advanced along the western portion of the Site at a central location on Lot 17, as shown on **Figure 3** in **Attachment A**. Soil boring SB-03 was advanced to a terminal depth of 15 ft bgs, to assess soil and fill horizons at and slightly beyond future excavation depths for the proposed building. As indicated in the soil boring logs provided in **Attachment F**, soil encountered within SB-03 consisted of medium to coarse sands and urban fill materials in the surficial layer down to 5 feet bgs underlain by urban fill material containing a mixture of brick fragments and concrete C&D debris down to approximately 7 feet bgs, before transitioning to native sands below. PID readings of

ranging up to 12.6 ppm were detected in fill material at the surficial horizon, with additional PID detections up to 8.1 ppm throughout the soil boring SB-03 location.

In addition to the two (2) soil samples collected from SB-03 in accordance with the approved NYCDEP Work Plan, an additional mid-range soil sample was collected and analyzed from 5-7 feet bgs to further characterize urban/historic fill materials present at the Site.

Sample Results

As indicated in **Table 1** in **Attachment B**, no VOCs or PCBs were detected above NYSDEC Part 375 Track One UUSCOs or Track Two RRSCOs in each of the soil samples collected at the SB-03 location. No SVOCs were detected in shallow soil sample SB-03 (0-2') above NYSDEC Part 375 SCOs, and no SVOCs were detected in deeper soil sample SB-03 (13-15') above laboratory MDLs. However, the SVOCs benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene and indeno(1,2,3-cd)pyrene were each detected in mid-range sample SB-03 (5-7') at concentrations that exceed their respective NYSDEC Part 375 Track Two RRSCOs. Additionally, chrysene was detected in mid-range sample SB-03 (5-7') at a concentration that exceeds its NYSDEC Part 375 Track One UUSCO but was below its NYSDEC Part 375 Track Two RRSCO. Two metals, lead and zinc, were detected in shallow soil SB-03 (0-2') at concentrations that exceeded NYSDEC Part 375 Track One UUSCOs but below Track Two RRSCOs. Copper and zinc were detected in mid-range sample SB-03 (5-7') that exceeded NYSDEC Part 375 Track One UUSCOs but below Track Two RRSCOs. Two metals, barium and lead, were detected in mid-range sample SB-03 (5-7') that exceed NYSDEC Part 375 Track Two RRSCOs. Pesticides were detected in both the shallow and mid-range samples SB-03 (0-2') and SB-03 (5-7) at concentrations that exceeded NYSDEC Part 375 Track One UUSCOs but below NYSDEC Part 375 Track Two RRSCOs. No pesticides were detected above laboratory MDLs in deeper sample SB-03 (13-15').

4.2.4 Soil Boring SB-04

Soil boring SB-04 was advanced along the northwestern portion of the Site proximate to the central boundary of Lots 23 and 24, as indicated on Figure 3 in Attachment A. Soil boring SB-04 was advanced to a terminal depth of 20 feet bgs, to assess soil and fill horizons at and slightly beyond future excavation depths for the proposed building. As indicated in the soil boring logs provided in **Attachment F**, soil encountered within SB-04 consisted of a mixture of organic and sands at the shallow horizon down to 2 feet bgs, followed by urban fill material containing a mixture of brick/glass fragments and concrete C&D debris down to approximately 5 feet bgs, before transitioning to native sands below. No PID readings (above 0.4 ppm) were detected during the screening of soil intervals at soil boring SB-04.

Sample Results

As indicated on **Table 1 in Attachment B**, there were no VOCs, SVOCs, metals, pesticides or PCBs detected above NYSDEC Part 375 Track One UUSCOs in both shallow soil sample SB-04 (0-2') and deeper soil sample SB-04 (13-15').

4.2.5 Soil Boring SB-05

Soil boring SB-05 was advanced on the northern central portion of the Site, within the northwestern boundary of Lot 48, as indicated on **Figure 3 in Attachment A**. Soil boring SB-05 was advanced to a terminal depth of 15 feet bgs, to assess soil and fill horizons at and slightly beyond future excavation depths for the proposed building. As indicated in the soil boring logs provided in **Attachment F**, soil encountered within SB-05 consisted of a mixture of medium to fine grained sands and urban fill material with brick fragments from grade to approximately 5 feet bgs. Apparent native sands were encountered below. No PID detections (max 0.2 ppm) were recorded at the screened intervals of soil boring SB-05.

Sample Results

As indicated on **Table 1 in Attachment B**, no VOCs or PCBs were detected above NYSDEC Part 375 Track One UUSCOs or Track Two RRSCOs in each of the soil samples collected at the SB-05 location. The SVOCs benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and indeno(1,2,3-cd)pyrene were detected in surficial soil sample SB-05 (0-2') at concentrations that exceed their respective NYSDEC Part 375 Track Two RRSCOs. One additional exceedance of chrysene was also detected in SB-05 (0-2') above its NYSDEC Part 375 Track One UUSCO but below its Track Two RRSCO. No SVOCs were detected in deeper soil sample SB-05 (13-15') above laboratory MDLs. One pesticide, 4,4'-DDT, was detected in shallow soil sample SB-05 (0-2') that exceeds the NYSDEC Part 375 Track One UUSCO but below the Track Two RRSCO. No additional pesticides were detected above NYSDEC standards in SB-05. Copper, lead, mercury and zinc were each detected in shallow soil sample SB-05 (0-2') above their respective NYSDEC Part 375 Track One UUSCOs but below Track Two RRSCOs. No additional metals were detected above applicable NYSDEC Part 375 SCOs in SB-05.

4.2.6 Soil Boring SB-06

Soil boring SB-06 was advanced along the eastern portion of the Site proximate to the boundary of Lots 48 and 50, as shown on **Figure 3 in Attachment A**. Soil boring SB-06 was advanced to a terminal depth of 15 ft bgs. As indicated in the soil boring logs provided in **Attachment F**, soil encountered within SB-06 consisted of medium to coarse sands with a mixture of urban fill materials in the surficial layer down to 5 feet bgs before transitioning to native sands below. PID detections up to 15 ppm were observed in fill material in various depth intervals at SB-06.

In addition to the two (2) soil samples collected from SB-06 in accordance with the approved NYCDEP Work Plan, an additional mid-range soil sample was collected and analyzed from 2-4 feet bgs to further characterize urban/historic fill materials present at the Site.

Sample Results

As indicated on **Table 1** in **Attachment B**, no VOCs or PCBs were detected above NYSDEC Part 375 Track One UUSCOs or Track Two RRSCOs in each of the soil samples collected at the SB-06 location. The SVOCs benz(a)anthracene, benzo(b)pyrene, benzo(b)fluoranthene and indeno(1,2,3-cd)pyrene were detected above their respective NYSDEC Part 375 Track Two RRSCOs in shallow and mid-range soil samples SB-06 (0-2') and SB-06 (2-4'). Chrysene and dibenzo(a,h)anthracene was also detected above NYSDEC Part 375 Track Two RRSCOs in surficial soil sample SB-06 (0-2'). Chrysene was detected in mid-range soil sample SB-06 (2-4') above the NYSDEC Part 375 Track One UUSCO but below Track Two RRSCO. The pesticides 4,4'-DDE and 4,4'-DDT were detected in both shallow and mid-range soil samples SB-06 (0-2') and SB-06 (2-4') above NYSDEC Part 375 Track One UUSCOs but below Track Two RRSCOs. Additionally, 4,4'-DDD and dieldrin were detected in shallow soil sample SB-07 (0-2') above Track One UUSCOs but below Track Two RRSCOs. No pesticides were detected above laboratory MDLs in deeper soil sample SB-06 (13-15'). With respect to metals, barium, lead, mercury and zinc were detected in shallow soil sample SB-06 (0-2') above NYSDEC Part 375 Track One UUSCOs but below Track Two RRSCOs. Barium and lead were detected in mid-range sample SB-06 (2-4') above NYSDEC Part 375 Track Two RRSCOs. Additionally, copper, mercury and zinc were also detected in mid-range sample SB-07 (2-4') above NYSDEC Part 375 Track One UUSCOs but below Track Two RRSCOs.

One (1) blind duplicate was submitted for laboratory analysis for deeper soil sample SB-06 (13-15'). The laboratory results confirm no VOCs, SVOCs, metals, pesticides or PCBs were detected either above laboratory MDLs or in exceedance of NYSDEC Part 375 SCOs, which are consistent with the parent sample results, as shown on **Table 1** in **Attachment B**.

4.2.7 Soil Boring SB-07

Soil boring SB-07 was advanced along the western portion of the Site proximate to the boundary of Lots 20 and 21, as shown on **Figure 3** in **Attachment A**. Soil boring SB-07 was advanced to a terminal depth of 20 ft bgs. As indicated in the soil boring logs provided in **Attachment F**, soil encountered within SB-07 consisted of medium to coarse sands with a mixture of urban fill materials in the surficial layer down approximately 5 feet bgs before transitioning to native sands below. No PID detections were recorded within the SB-07 soil intervals.

Sample Results

As indicated on **Table 1** in **Attachment B**, no VOCs, pesticides or PCBs were detected above NYSDEC Part 375 Track One UUSCOs or Track Two RRSCOs in each of the soil samples collected at the SB-07 location. The SVOCs benz(a)anthracene, benzo(b)pyrene, benzo(b)fluoranthene, chrysene, dibenzo(a,h)anthracene and indeno(1,2,3-cd)pyrene were detected above their respective NYSDEC Part 375 Track Two RRSCOs in shallow soil sample SB-07 (0-2'). Benzo(k)fluoranthene was also detected above the NYSDEC Part 375 Track One UUSCO but below the Track Two RRSCO. With respect to metals, lead was detected in shallow soil sample SB-07 (0-2') above its NYSDEC Part 375 Track One UUSCO but below the Track Two RRSCO.

4.2.8 Soil Boring SB-08

Soil boring SB-08 was advanced on the central portion of the Site, along the western portions of Lot 50, as shown on **Figure 3** in **Attachment A**. Soil boring SB-08 was advanced to a terminal depth of 15 ft bgs. As indicated in the soil boring logs provided in **Attachment F**, soil encountered within SB-08 consisted of medium to coarse sands in surficial soils, with a fill layer consisting of medium to coarse grained gray-brown sand with brick fragments down to approximately 8 feet bgs, before transitioning to native sands, below. No PID detections were recorded within the SB-08 soil intervals.

Sample Results

As indicated on **Table 1** in **Attachment B**, no VOCs, SVOCs, metals or PCBs were detected above NYSDEC Part 375 Track One UUSCOs or Track Two RRSCOs in the two soil samples collected at the SB-08 location. One pesticide, 4,4'-DDT, was detected in shallow soil sample SBo8 (0-2') at a concentration of 0.00524 mg/kg, which exceeds the NYSDEC Part 375 UUSCO of 0.0033 mg/kg but is below the NYSDEC Part 375 RRSCO of 7.9 mg/kg.

4.2.9 Soil Boring SB-09

Soil boring SB-09 was advanced on the eastern-central portion of the Site, along the boundary of Lots 52 and 53, as shown on **Figure 3** in **Attachment A**. Soil boring SB-09 was advanced to a terminal depth of 15 ft bgs. As indicated in the soil boring logs provided in **Attachment F**, soil encountered within SB-09 consisted of medium to coarse sands and urban/historic fill with brick and concrete down to approximately 7 feet bgs, before transitioning to native sands, below. No PID detections were recorded within the SB-09 soil intervals.

As indicated in **Table 1** in **Attachment B**, no VOCs, SVOCs, pesticides or PCBs were detected above NYSDEC Part 375 Track One UUSCOs or Track Two RRSCOs in the two soil samples collected at the SB-09 location. However, the metals barium, lead, mercury and zinc were detected in shallow soil sample SB-09 (0-2') exceeding the NYSDEC Part

375 Track One UUSCOs but below their respective Track Two RRSCOs. There were no metals detected above NYSDEC Part 375 regulatory standards in deeper soil sample SB-09 (13-15').

4.2.10 Soil Boring SB-10

Soil boring SB-10 was advanced along the southeastern portions of the Site on the central portions of Lot 54, as shown on **Figure 3** in **Attachment A**. Soil boring SB-10 was advanced to a terminal depth of 20 ft bgs. As indicated in the soil boring logs provided in **Attachment F**, soil encountered within SB-10 consisted of medium to coarse sands with sandy loam in the surficial horizon down to 3 feet bgs. A fill layer consisting of brick fragments, wood and C&D was observed at 3-7 feet bgs before transitioning to native sands below. No PID detections were recorded within the SB-10 soil intervals.

In addition to the two (2) soil samples collected from SB-10 in accordance with the approved NYCDEP Work Plan, an additional mid-range soil sample was collected and analyzed from 4-6 feet bgs to further characterize urban/historic fill materials present at the Site.

Sample Results

As indicated on **Table 1** in **Attachment B**, no VOCs or metals were detected above NYSDEC Part 375 Track One UUSCOs or Track Two RRSCOs in each of the soil samples collected at the SB-10 location. The SVOCs benz(a)anthracene, benzo(b)pyrene, benzo(b)fluoranthene and indeno(1,2,3-cd)pyrene were detected above their respective NYSDEC Part 375 Track Two RRSCOs in shallow soil samples SB-010 (0-2'). Chrysene and dibenzo(a,h)anthracene was also detected above NYSDEC Part 375 Track One UUSCOs but below Track Two RRSCOs in surficial soil sample SB-10 (0-2'). No SVOCs were detected above NYSDEC Part 375 Track One UUSCOs or Track Two RRSCOs in the mid-range or deeper samples at SB-10. One pesticide, 4,4'-DDET, was detected at a concentration of 0.0055 mg/kg in shallow soil sample SB-10 (0-2'), which exceeds the NYSDEC Part 375 Track One UUSCO of 0.0033 mg/kg, but was well below the Track Two RRSCO of 7.9 mg/kg. PCBs were detected in the mid-range sample SB-10 (4-6') at a concentration of 0.22 mg/kg, which exceeds the NYSDEC Part 375 Track One UUSCO of 0.1 mg/kg, but below the Track Two RRSCO of 1.0 mg/kg.

4.2.11 Soil Boring SB-11

Soil boring SB-11 was advanced along the southwestern portion of the Site within the central portions of Lot 15, as shown on **Figure 3** in **Attachment A**. Soil boring SB-11 was advanced to a terminal depth of 15 ft bgs. As indicated in the soil boring logs provided in **Attachment F**, soil encountered within SB-11 consisted of medium to coarse sands with sandy loam and organics in the surficial horizon down to 5 feet bgs before transitioning to native sands, below. No PID detections (exceeding 0.5 ppm) were recorded within the SB-11 soil intervals.

In addition to the two (2) soil samples collected from SB-11 in accordance with the approved NYCDEP Work Plan, an additional mid-range soil sample was collected and analyzed from 2-5 feet bgs to further characterize urban/historic fill materials present at the Site.

Sample Results

As indicated on **Table 1 in Attachment B**, no VOCs, SVOCs, pesticides or PCBs were detected above NYSDEC Part 375 Track One UUSCOs or Track Two RRSCOs in each of the soil samples collected at the SB-11 location. Lead and zinc, were detected in surficial soil sample SB-11 (0-2') at concentrations that exceed their respective NYSDEC Part 375 Track One UUSCOs but below their Track Two RRSCOs. No additional metals were detected in soil samples collected at SB-11 that exceeded NYSDEC Part 375 SCOs.

4.3 Groundwater Samples

As discussed in **Section 3.2**, three (3) groundwater samples were collected to assess Site groundwater conditions. The sample locations are shown on **Figure 3 of Attachment A**, the samples results are summarized in **Table 2 of Attachment B**, and the complete laboratory data reports are included in **Attachment E**. A summary of the groundwater results is provided in the sub-sections below.

4.3.1 Groundwater Sample GW-01

Soil boring SB-01 was advanced into groundwater, to a depth of 45 feet bgs using a hollow-stem auger and a temporary one-inch PVC monitoring well was installed. The depth to groundwater was recorded at 39.1 feet bgs. Using an inertial pump, at least three well volumes of groundwater were purged and groundwater sample GW-01 was collected.

As indicated in **Table 2 of Attachment B**, no VOCs, SVOCs, pesticides or PCBs were detected in GW-01 above applicable NYSDEC AWQSGVs. The metals arsenic, barium, beryllium, chromium, copper, iron, lead magnesium, manganese, nickel, selenium, sodium and thallium were detected at total concentrations that exceeded NYSDEC AWQSGVs. However, when compared to their corresponding dissolved concentrations, only manganese and sodium were detected at concentrations in GW-01 that exceeded NYSDEC AWQSGVs.

4.3.2 Groundwater Sample GW-02

Soil boring SB-02 was advanced into groundwater, to a depth of 45 feet bgs using a hollow-stem auger and a temporary one-inch PVC monitoring well was installed. The depth to groundwater was recorded at 39.5 feet bgs. Using an inertial pump, at least three well volumes of groundwater were purged and groundwater sample GW-02 was collected.

As indicated in **Table 2 of Attachment B**, no VOCs, pesticides or PCBs were detected in GW-02 above applicable NYSDEC AWQSGVs. One SVOC, benzo(b)fluoranthene, was detected at an estimated concentration of 0.02 micrograms per liter ($\mu\text{g/L}$), which exceeds the NYSDEC

AWQSGV of 0.002 µg/L. In addition, the metals barium, beryllium, chromium, copper, iron, lead, magnesium, manganese, nickel, selenium, sodium and thallium were detected at total concentrations that exceeded NYSDEC AWQSGVs. However, when compared to their corresponding dissolved concentrations, only manganese and sodium were detected at concentrations in GW-02 that exceeded NYSDEC AWQSGVs.

4.3.3 Groundwater Sample GW-03

Groundwater sample GW-03 was collected from an existing monitoring well located in the sidewalk outside the northwestern boundary of the Site (see **Figure 3** of **Attachment A**). It is assumed the monitoring well was either installed for monitoring an off-site condition or as a geotechnical observation well. The groundwater well consisted of a two-inch PVC monitoring well and the total depth was measured to be 44.8 feet bgs. Depth-to-groundwater was recorded at 37.95 feet bgs. Prior to sampling, groundwater was purged using an inertial pump until turbidity was visibly reduced.

As indicated in **Table 2** of **Attachment B**, no SVOCs, pesticides or PCBs were detected in GW-03 above applicable NYSDEC AWQSGVs. One SVOC, tetrachloroethylene (PCE), was detected at a concentration of 5.8 ug/L, which exceeds the NYSDEC AWQSGV of 5 ug/L. In addition, the metals chromium, copper, iron, lead magnesium, manganese, nickel, sodium and thallium were detected at total concentrations that exceeded NYSDEC AWQSGVs. However, when compared to their corresponding dissolved concentrations, only sodium and thallium were detected at concentrations in GW-03 that exceeded NYSDEC AWQSGVs.

4.4 Soil Vapor Quality

As previously indicated, a soil vapor study was conducted at the Site in accordance with the NYCDEP-approved Work Plan to assess the potential for a VEC at the Site. Four (4) soil vapor samples were collected across the Site at the locations shown on **Figure 3** of **Attachment A**, the samples results are summarized in **Table 3** of **Attachment B**, and the complete laboratory data reports are included in **Attachment E**. A summary of soil vapor analytical data is provided in the sub-sections, below.

4.4.1 Soil Vapor Sample SV-01

As shown on **Figure 3** of **Attachment A**, soil vapor sample SV-01 was collected at the northwestern portion of the Site, within Lot 23, at a depth of approximately 13.5 feet bgs.

As indicated on **Table 3** in **Attachment B**, petroleum-related and other VOCs were detected including 1,3-butadiene, 2-butanone, 2,hexanone, 4-methyl-2-pentanone, acetone, benzene, carbon disulfide, cyclohexane, heptane, n-Hexane, xylenes, tert-butyl alcohol and toluene. No VOCs were detected above laboratory MDLs for compounds that are subject to the NYSDOH Soil Vapor/Indoor Air Matrices.

According to NYSDOH guidance, *because minor leakage around the probe seal should not materially affect the usability of the soil vapor sampling results, the mere presence of the tracer gas in the sample should not be cause for alarm... if high concentrations (> 10%) of tracer gas*

are observed in a sample, the probe seal should be enhanced to reduce the infiltration of outdoor air. Helium (as a tracer gas) was not detected in sample SV-01. As such, soil vapor sample results for SV-01 should be considered valid and not influenced by outdoor air conditions.

4.4.2 Soil Vapor Sample SV-02

As shown on **Figure 3 of Attachment A**, soil vapor sample SV-02 was collected from the central portion of the Site, along the southeastern portions of Lot 17 at a depth of approximately 13.5 feet bgs.

As indicated on **Table 3 in Attachment B**, petroleum-related and other VOCs were detected including 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, 2,2,4-trimethylpentane, chloromethane, 1,3-butadiene, 2-butanone, 2,hexanone, 4-methyl-2-pentanone, acetone, benzene, carbon disulfide, cyclohexane, dichlorodifluoromethane, ethyl alcohol, ethylbenzene, heptane, n-Hexane, xylenes, tert-butyl alcohol, tetrahydrofuran and toluene. In addition, the following compounds subject to the NYSDOH Soil Vapor/Indoor Air Matrices were detected in SV-02:

- › 1,1,1-Trichloroethane (111-TCA); subject to NYSDOH Soil Vapor/Indoor Air Matrix B
- › Methylene Chloride; subject to NYSDOH Soil Vapor/Indoor Air Matrix B
- › Tetrachloroethylene; subject to NYSDOH Soil Vapor/Indoor Air Matrix B

111-TCA was detected in SV-02 at a concentration of 2.01 $\mu\text{g}/\text{m}^3$, methylene chloride was detected in SV-02 at a concentration of 7.4 $\mu\text{g}/\text{m}^3$ and PCE was detected in SV-02 at a concentration of 1.79 $\mu\text{g}/\text{m}^3$. Based upon a review of NYSDOH Soil Vapor/Indoor Air Matrix B, NYSDOH recommends "No Further Action" for sub-slab concentrations less than 100 $\mu\text{g}/\text{m}^3$.

4.4.3 Soil Vapor Sample SV-03

As shown on **Figure 3 of Attachment A**, soil vapor sample SV-03 was collected from the eastern-central portion of the Site, on the central portion of Lot 50 at a depth of approximately 13.5 feet bgs.

As indicated on **Table 3 in Attachment B**, petroleum-related and other VOCs were detected including 1,2,4-trimethylbenzene, 1,3-butadiene, 2-butanone, acetone, benzene, carbon disulfide, cyclohexane, dichlorodifluoromethane, ethylbenzene, heptane, isopropyl alcohol, n-Hexane, xylenes, tert-butyl alcohol, toluene and trichlorofluoromethane. In addition, the following compound subject to the NYSDOH Soil Vapor/Indoor Air Matrices was detected in SV-02:

- › Methylene Chloride; subject to NYSDOH Soil Vapor/Indoor Air Matrix B

Methylene chloride was detected in SV-03 at a concentration of 7.78 $\mu\text{g}/\text{m}^3$. Based upon a review of NYSDOH Soil Vapor/Indoor Air Matrix B, NYSDOH recommends "No Further Action" for sub-slab concentrations of methylene chloride that are less than 100 $\mu\text{g}/\text{m}^3$.

4.4.4 Soil Vapor Sample SV-04

As shown on **Figure 3 of Attachment A**, soil vapor sample SV-04 was collected from the southeastern portion of the Site, proximate to the central boundary of Lots 54 and 56 at a depth of approximately 13.5 feet bgs.

As indicated on **Table 3 in Attachment B**, petroleum-related and other VOCs were detected including 1,2,4-trimethylbenzene, 1,3-butadiene, 2-butanone, 2-hexanone, acetone, benzene, carbon disulfide, cyclohexane, dichlorodifluoromethane, ethylbenzene, heptane, n-Hexane, xylenes, tert-butyl alcohol and toluene. In addition, the following compounds subject to the NYSDOH matrices were detected in SV-03:

› Methylene Chloride; NYSDOH Soil Vapor/Indoor Air Matrix B

Methylene chloride was detected in SV-03 at a concentration of 7.61 $\mu\text{g}/\text{m}^3$. Based upon a review of NYSDOH Soil Vapor/Indoor Air Matrix B, NYSDOH recommends "No Further Action" for sub-slab concentrations less than 100 $\mu\text{g}/\text{m}^3$.

4.5 Deviations from Work Plan/Site Constraints

Soil Samples

There were no significant deviations from the Work Plan with respect to soil samples. However, sample intervals and depths were adjusted based upon field conditions. Furthermore, additional mid-range samples were collected to further characterize historic/urban fill materials at the Site.

Groundwater Samples

There were no significant deviations from the Work Plan with respect to groundwater samples.

Soil Vapor Samples

There were no significant deviations from the Work Plan with respect to soil vapor samples.

5

Conclusions

Based on the results of the subsurface investigation performed by VHB and its subcontractors at the Site, the following conclusions and associated recommendations are provided:

Soils

There were no VOCs detected in soils above NYSDEC Part 375 Track One UUSCOs with the exception of xylenes, which were detected in one surficial soil sample, SB-02 (0-2'). There were no VOCs detected above NYSDEC Part 375 Track Two RRSCOs. The detection of xylenes in one soil sample can be considered an isolated occurrence due to the lack of any additional VOC detections above regulatory standards throughout the Site.

SVOCs were detected in the majority of the soil borings; primarily in shallow and mid-range soil samples. SVOC exceedances above NYSDEC Part 375 Track Two RRSCOs were detected in SB-01 (0-2'), SB-02 (5-7'), SB-03 (5-7'), SB-05 (0-2'), SB-06 (0-2'), SB-06 (2-4'), SB-07 (0-2') and SB-10 (0-2'). Additional SVOCs were also detected in those respective samples that exceeded NYSDEC Part 375 Track One UUSCOs but below Track Two RRSCOs. The widespread detection of the SVOCs benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene and indeno(1,2,3-cd)pyrene are typical compounds found in historic/urban fill materials from previous site development. There were no detections of SVOCs above UUSCOs in the underlying native sand samples.

Metals were detected in several soil borings above NYSDEC Part 375 Track Two RRSCOs. These soil samples include SB-03 (5-7') (arsenic and lead) and SB-06 (2-4') (barium and lead). Additional metals were detected that exceeded NYSDEC Part 375 Track One UUSCOs but below Track Two RRSCOs. These samples included SB-01 (0-2') (copper, lead, mercury and zinc), SB-02 (15-17') (mercury), SB-03 (0-2') (lead and zinc), SB-03 (5-7') (copper and zinc), SB-05 (0-2') (copper, lead, mercury and zinc), SB-06 (0-2') (barium, lead, mercury and zinc), SB-06 (2-4') (copper, mercury and zinc), SB-07 (0-2') (lead), SB-09 (0-2') (barium, lead, mercury and zinc) and SB-11 (0-2') (lead and zinc). The presence of metals in surficial and mid-range soil samples can likely be attributed to the presence of contaminated historic/urban fill that was observed throughout the majority of the Site. Only one sample collected from the underlying native sands had a detection of metals above UUSCOs – mercury at SB-02 (15-17').

There were no pesticides detected above NYSDEC Part 375 Track Two RRSCOs. However, several soil samples, mainly surficial and mid-range, were identified with concentrations of pesticides that exceed NYSDEC Part 375 Track One UUSCOs. These soil samples include SB-01 (0-2') (4,4'-DDD, 4,4'-DDE, 4,4'-DDT and dieldrin), SB-02 (0-2') (4,4'-DDE and 4,4'-DDT), SB-02 (5-7') (4,4'-DDT), SB-03 (0-2') (4,4'-DDE, 4,4'-DDT and dieldrin), SB-03 (5-7') (4,4'-DDD, 4,4'-DDE, 4,4'-DDT and dieldrin), SB-05 (0-2') (4,4'-DDT), SB-06 (0-2') (4,4'-DDD, 4,4'-DDE, 4,4'-DDT and dieldrin), SB-06 (2-4') (4,4'-DDE, 4,4'-DDT and dieldrin), SB-08 (0-2') (4,4'-DDT) and SB-10 (0-2') (4,4'-DDT). The presence of pesticides can likely be attributed to contaminated urban/historic fill that was observed throughout the majority of the Site. Pesticides were not detected above the UUSCOs in any of the underlying native sand soil samples.

There were no concentrations of PCBs that exceeded NYSDEC Part 375 Track Two RRSCOs. However, total PCB concentrations in SB-01 (0-2') and SB-10 (4-6') were detected at concentrations that exceeded the NYSDEC Part 375 Track One UUSCO.

VHB recommends that soils within the project that will be excavated during site development be considered as *impaired* or *impacted*. Soils containing UUSCO and RRSCO exceedances within the redevelopment areas should properly be characterized prior to removal from the Site. Contaminated soils should be properly manifested and transported to an appropriate disposal facility capable of accepting soils impacted with VOCs, SVOCs, metals, pesticides and PCBs. Both the shallow and deeper soils horizons sampled during this investigation are proposed to be excavated as part of the future Site redevelopment. As an alternative, soils could also be transported to an alternate location that is capable of accepting and utilizing impacted backfill. These uses include many commercial, industrial and beneficial use facilities.

Groundwater

Based upon the results of the groundwater sampling, there were no pesticides or PCBs detected above NYSDEC AWQSGVs. One VOC, PCE, was detected at a concentration of 5.8 µg/L in GW-03, which exceeds the NYSDEC AWQSGV of 5 µg/L. One SVOC,

benzo(b)fluoranthene, was detected but below the limit of quantitation in GW-02 at an estimated concentration 0.02 µg/L, which exceeds the NYSDEC AWQSGV of 0.002 µg/L. No additional VOCs or SVOCs were detected above NYSDEC AWQSGVs.

PCE was not detected in any of the on-Site groundwater or soil samples. As such, the detection of PCE in the off-Site groundwater monitoring well GW-03 is not likely related to current or former Site uses, but rather an off-Site source. The presence of the permanent off-Site groundwater monitoring well GW-03 suggests that it is used to monitor an off-site environmental or geotechnical condition.

Elevated total concentrations of metals could be attributed to high turbidity. Dissolved concentrations of manganese that exceed NYSDEC AWQSGV were detected in GW-01 and GW-02. The presence of manganese in groundwater is typical in New York City and can often be attributed to the dissolution of from surrounding minerals and leaching from soil. Manganese is also naturally occurring in groundwater that has little oxygen and where groundwater flow is considered slow. Dissolved concentrations of sodium were detected in all three groundwater samples (GW-01, GW-02 and GW-03) that exceeded the NYSDEC AWQSGV. The presence of dissolved sodium is also typical in New York City and can be attributed to the Site's proximity to the coast, as well as the leaching of dissolved rock salt utilized for snow melting in urban areas. Further, thallium was detected at an estimated dissolve concentration of 1.68 µg/L, which exceeds the NYSDEC AWQSGV of 0.5 µg/L in GW-03. There is no correlation between soil sample results and the presence of dissolved thallium detected in GW-03. The presence of thallium is typical of ore processing and manufacturing uses. Based upon the known historic use of the Site, it is likely the detection of thallium can be attributed to an off-Site source.

Soil Vapor

Based upon the results of the soil vapor sampling, VOCs were detected at the screening depths within the project area. VOCs included 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, 1,3-butadiene, 2,2,4-trimethylpentane, 2-butanone, 2-hexanone, 4-methyl-2-pentanone, acetone, benzene, carbon disulfide, chloromethane, cyclohexane, dichlorodifluoromethane, ethyl alcohol, ethylbenzene, heptane, isopropyl alcohol, n-hexane, xylenes, tert-butyl-alcohol, tetrahydrofuran, toluene and trichlorofluoromethane. Additional chlorinated VOCs subject to the NYSDOH Soil Vapor/Indoor Air matrices were detected including 111-TCA (SV-02 and SV-04), methylene chloride (SV-02, SV-03 and SV-04) and PCE (SV-02). Each of the compounds subject to NYSDOH matrices were subject to NYSDOH Soil Vapor/Indoor Air Matrix B and the maximum detection was reported at 9.88 µg/m³. Although no sub-slab soil vapor samples or indoor air samples were collected, the soil vapor results were compared to the NYSDOH Soil Vapor/Indoor Air Matrix B, NYSDOH recommends "No Further Action" for sub-slab concentrations less than 100 µg/m³.

Given the presence of petroleum- and refrigerant-related VOCs in the soil vapor beneath the Site, as well as the presence of chlorinated VOCs subject to the NYSDOH Soil Vapor/Indoor Air Matrices including 111-TCA, PCE and methylene chloride, VHB recommends that soil vapor beneath the Site be considered as *impaired* or slightly *impacted*. The VOCs found in

soil vapor at the Site are typical throughout New York City including the borough of the Brooklyn, due to the extensive and dense development history. Given these conditions, VHB believes that no further action would be required with respect to soil vapor at this time. Furthermore, it is expected that the future development at the Site will include a building slab that will act as a barrier to protect future Site occupants from the impacted soil vapor beneath the Site, or as a conservative measure, a soil vapor barrier could be incorporated into the proposed Site development.

This Phase II Environmental Site Assessment Report was prepared by:


Prepared by: Bryan Murty
Senior Project Manager
VHB Engineering, Surveying, Landscape Architecture and Geology, P.C.

VHB Engineering, Surveying, Landscape Architecture and Geology, P.C.

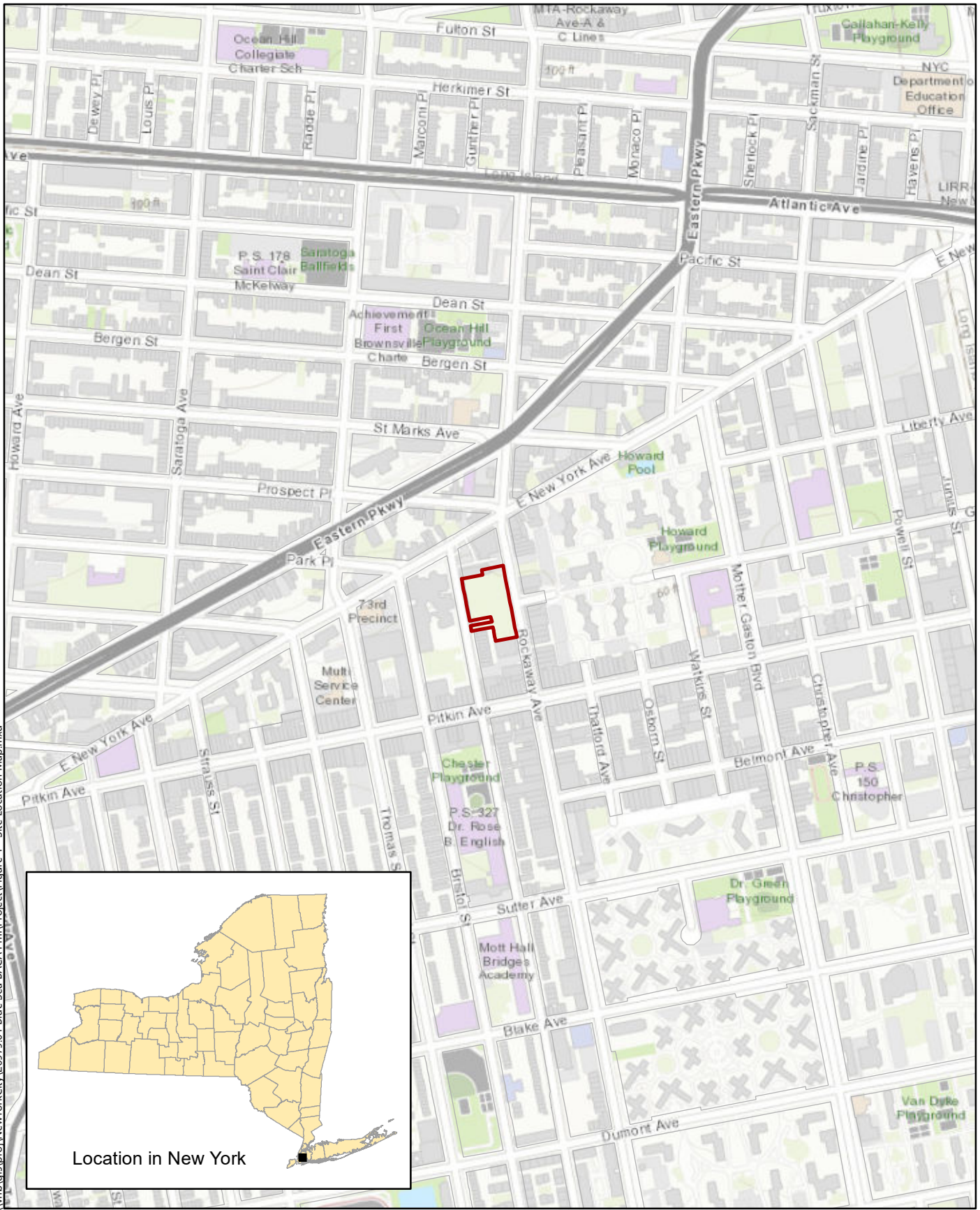
Signature: by: 

Supervised by: George Lester, PE
Senior Project Manager
VHB Engineering, Surveying, Landscape Architecture and Geology, P.C.

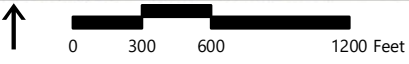
VHB Engineering, Surveying, Landscape Architecture and Geology, P.C.

Signature: by: 

ATTACHMENT A – FIGURES



\\nblgis\proj\NewYork\City\26979\01 Blue Sea BACA PH\Project\Figure 1 - Site Location Map.mxd



- Site
- Tax Block

Vacant Parcels
Rockaway Avenue and Chester Street

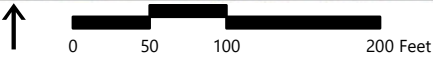
Brooklyn, New York

Source Info:
 - World Topographic Map from ESRI
 - Tax Blocks from NYGIS

Site Location Map



\\nhb\gis\proj\NewYork\City\26979.01 Blue Sea BACA PH\Project\Figure 2 - Aerial Photograph.mxd



- Site
- Road

Vacant Parcels Rockaway Avenue and Chester Street

Brooklyn, New York

Aerial Photograph

Source Info:
- Imagery from ESRI/NYS GIS Orthos (2018)



\\vhb\gis\proj\NewYork\City_26979.01 Blue Sea BACA Phil\Project\Figure 3 - Sample Locations.mxd



- Sample Type**
- Existing Monitoring Well
 - Soil Boring
 - Soil Boring/Monitoring Well
 - Soil Vapor
- Site
- Parcel Boundary

Vacant Parcels
Rockaway Avenue and Chester Street

Brooklyn, New York

Source Info:
- NYS Tax Parcels (ny.gis.gov)
- Imagery from ESRI/NYS GIS Orthos (2018)

Sample Locations

ATTACHMENT B – TABLES

Table 1
Summary of Soil Boring Analytical Data
Vacant Parcels, Rockaway Avenue & Chester Street, Brooklyn, NY

Boring Location ID:					SB-01	SB-01	SB-02	SB-02	SB-02	SB-03	SB-03	SB-03	SB-04	SB-04
Sample Date:					10/14/2020	10/14/2020	10/14/2020	10/15/2020	10/14/2020	10/15/2020	10/15/2020	10/15/2020	10/13/2020	10/13/2020
Sample Depth (bgs):					0-2 ft	13-15 ft	0-2 ft	5-7 ft	15-17 ft	0-2 ft	5-7 ft	13-15 ft	0-2 ft	13-15 ft
Analyte	CAS	Units	Restricted Residential SCO	Unrestricted Use SCO										
Volatile Organic Compounds - VOCs (SW8260C)														
1,1,1,2-TETRACHLOROETHANE	630-20-6	mg/kg	--	--	ND < 0.00017	ND < 0.00016	ND < 0.00017	ND < 0.00013	ND < 0.00014	ND < 0.00021	ND < 0.00019	ND < 0.00016	ND < 0.00017	ND < 0.00016
1,1,1-TRICHLOROETHANE	71-55-6	mg/kg	100	0.68	ND < 0.00022	ND < 0.00021	ND < 0.00022	ND < 0.00017	ND < 0.00018	ND < 0.00027	ND < 0.00024	ND < 0.0002	ND < 0.00021	ND < 0.00021
1,1,2,2-TETRACHLOROETHANE	79-34-5	mg/kg	--	--	ND < 0.00021	ND < 0.00021	ND < 0.00022	ND < 0.00017	ND < 0.00018	ND < 0.00027	ND < 0.00024	ND < 0.0002	ND < 0.00021	ND < 0.00021
1,1,2-TRICHLOROETHANE	79-00-5	mg/kg	--	--	ND < 0.00034	ND < 0.00033	ND < 0.00035	ND < 0.00027	ND < 0.00028	ND < 0.00043	ND < 0.00039	ND < 0.00033	ND < 0.00034	ND < 0.00033
1,1-DICHLOROETHANE	75-34-3	mg/kg	26	0.27	ND < 0.00019	ND < 0.00018	ND < 0.00019	ND < 0.00015	ND < 0.00015	ND < 0.00024	ND < 0.00021	ND < 0.00018	ND < 0.00018	ND < 0.00018
1,1-DICHLOROETHENE	75-35-4	mg/kg	100	0.33	ND < 0.00031	ND < 0.0003	ND < 0.00031	ND < 0.00024	ND < 0.00025	ND < 0.00039	ND < 0.00035	ND < 0.00029	ND < 0.0003	ND < 0.0003
1,1-DICHLOROPROPENE	563-58-6	mg/kg	--	--	ND < 0.0002	ND < 0.0002	ND < 0.00021	ND < 0.00016	ND < 0.00017	ND < 0.00026	ND < 0.00023	ND < 0.0002	ND < 0.0002	ND < 0.0002
1,2,3-TRICHLOROBENZENE	87-61-6	mg/kg	--	--	ND < 0.00042	ND < 0.0004	ND < 0.00042	ND < 0.00033	ND < 0.00034	ND < 0.00052	ND < 0.00047	ND < 0.0004	ND < 0.00041	ND < 0.0004
1,2,3-TRICHLOROPROPANE	96-18-4	mg/kg	--	--	ND < 0.00016	ND < 0.00016	ND < 0.00017	ND < 0.00013	ND < 0.00013	ND < 0.00021	ND < 0.00018	ND < 0.00016	ND < 0.00016	ND < 0.00016
1,2,4,5-TETRAMETHYLBENZENE	95-93-2	mg/kg	--	--	ND < 0.00025	ND < 0.00024	ND < 0.00025	ND < 0.00019	ND < 0.0002	ND < 0.00031	ND < 0.00028	ND < 0.00024	ND < 0.00024	ND < 0.00024
1,2,4-TRICHLOROBENZENE	120-82-1	mg/kg	--	--	ND < 0.00035	ND < 0.00034	ND < 0.00036	ND < 0.00028	ND < 0.00029	ND < 0.00044	ND < 0.0004	ND < 0.00033	ND < 0.00034	ND < 0.00034
1,2,4-TRIMETHYLBENZENE	95-63-6	mg/kg	52	3.6	0.001 J	ND < 0.00042	0.0049	ND < 0.00034	ND < 0.00035	0.00062 J	ND < 0.00049	ND < 0.00041	ND < 0.00042	ND < 0.00041
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	mg/kg	--	--	ND < 0.0013	ND < 0.0012	ND < 0.0013	ND < 0.001	ND < 0.001	ND < 0.0016	ND < 0.0015	ND < 0.0012	ND < 0.0012	ND < 0.0012
1,2-DIBROMOETHANE	106-93-4	mg/kg	--	--	ND < 0.00036	ND < 0.00035	ND < 0.00036	ND < 0.00028	ND < 0.00029	ND < 0.00045	ND < 0.00041	ND < 0.00034	ND < 0.00035	ND < 0.00035
1,2-DICHLOROBENZENE	95-50-1	mg/kg	100	1.1	ND < 0.00018	ND < 0.00018	ND < 0.00019	ND < 0.00015	ND < 0.00015	ND < 0.00023	ND < 0.00021	ND < 0.00018	ND < 0.00018	ND < 0.00018
1,2-DICHLOROETHANE	107-06-2	mg/kg	3.1	0.02	ND < 0.00033	ND < 0.00032	ND < 0.00034	ND < 0.00026	ND < 0.00027	ND < 0.00042	ND < 0.00038	ND < 0.00032	ND < 0.00032	ND < 0.00032
1,2-DICHLOROETHENE (TOTAL)	540-59-0	mg/kg	--	--	ND < 0.00018	ND < 0.00017	ND < 0.00018	ND < 0.00014	ND < 0.00014	ND < 0.00022	ND < 0.0002	ND < 0.00017	ND < 0.00017	ND < 0.00017
1,2-DICHLOROPROPANE	78-87-5	mg/kg	--	--	ND < 0.00016	ND < 0.00016	ND < 0.00016	ND < 0.00013	ND < 0.00013	ND < 0.0002	ND < 0.00018	ND < 0.00015	ND < 0.00016	ND < 0.00016
1,3,5-TRIMETHYLBENZENE	108-67-8	mg/kg	52	8.4	ND < 0.00025	ND < 0.00024	0.0014 J	ND < 0.0002	ND < 0.0002	ND < 0.00031	ND < 0.00028	ND < 0.00024	ND < 0.00024	ND < 0.00024
1,3-DICHLOROBENZENE	541-73-1	mg/kg	49	2.4	ND < 0.00019	ND < 0.00018	ND < 0.00019	ND < 0.00015	ND < 0.00016	ND < 0.00024	ND < 0.00022	ND < 0.00018	ND < 0.00019	ND < 0.00018
1,3-DICHLOROPROPANE	142-28-9	mg/kg	--	--	ND < 0.00022	ND < 0.00021	ND < 0.00022	ND < 0.00017	ND < 0.00018	ND < 0.00027	ND < 0.00024	ND < 0.0002	ND < 0.00021	ND < 0.00021
1,3-DICHLOROPROPENE, TOTAL	542-75-6	mg/kg	--	--	ND < 0.0002	ND < 0.0002	ND < 0.00021	ND < 0.00016	ND < 0.00017	ND < 0.00026	ND < 0.00023	ND < 0.00019	ND < 0.0002	ND < 0.0002
1,4-DICHLOROBENZENE	106-46-7	mg/kg	13	1.8	ND < 0.00022	ND < 0.00021	ND < 0.00022	ND < 0.00017	ND < 0.00018	ND < 0.00028	ND < 0.00025	ND < 0.00021	ND < 0.00022	ND < 0.00021
1,4-DIETHYLBENZENE	105-05-5	mg/kg	--	--	ND < 0.00023	ND < 0.00022	ND < 0.00023	ND < 0.00018	ND < 0.00019	ND < 0.00029	ND < 0.00026	ND < 0.00022	ND < 0.00022	ND < 0.00022
1,4-DIOXANE	123-91-1	mg/kg	13	0.1	ND < 0.045	ND < 0.044	ND < 0.046	ND < 0.036	ND < 0.037	ND < 0.057	ND < 0.051	ND < 0.043	ND < 0.044	ND < 0.044
2,2-DICHLOROPROPANE	594-20-7	mg/kg	--	--	ND < 0.00026	ND < 0.00025	ND < 0.00026	ND < 0.0002	ND < 0.00021	ND < 0.00033	ND < 0.0003	ND < 0.00025	ND < 0.00025	ND < 0.00025
2-BUTANONE	78-93-3	mg/kg	100	0.12	ND < 0.0029	ND < 0.0028	ND < 0.0029	ND < 0.0022	ND < 0.0023	ND < 0.0036	ND < 0.0032	ND < 0.0027	ND < 0.0028	ND < 0.0028
2-HEXANONE	591-78-6	mg/kg	--	--	ND < 0.0015	ND < 0.0015	ND < 0.0015	ND < 0.0012	ND < 0.0012	ND < 0.0019	ND < 0.0017	ND < 0.0014	ND < 0.0015	ND < 0.0015
4-ETHYLTOLUENE	622-96-8	mg/kg	--	--	ND < 0.00049	ND < 0.00048	0.006	ND < 0.00039	ND < 0.0004	0.0015 J	ND < 0.00056	ND < 0.00047	ND < 0.00048	ND < 0.00048
4-METHYL-2-PENTANONE	108-10-1	mg/kg	--	--	ND < 0.0016	ND < 0.0016	ND < 0.0017	ND < 0.0013	ND < 0.0014	ND < 0.0021	ND < 0.0019	ND < 0.0016	ND < 0.0016	ND < 0.0016
ACETONE	67-64-1	mg/kg	100	0.05	ND < 0.0062	ND < 0.006	0.05	ND < 0.0049	ND < 0.0051	0.017	0.026	ND < 0.0059	ND < 0.0061	ND < 0.006
ACRYLONITRILE	107-13-1	mg/kg	--	--	ND < 0.0015	ND < 0.0014	ND < 0.0015	ND < 0.0012	ND < 0.0012	ND < 0.0019	ND < 0.0017	ND < 0.0014	ND < 0.0014	ND < 0.0014
BENZENE	71-43-2	mg/kg	4.8	0.06	ND < 0.00021	ND < 0.00021	ND < 0.00022	ND < 0.00017	ND < 0.00018	ND < 0.00027	ND < 0.00024	ND < 0.0002	ND < 0.00021	ND < 0.00021
BROMOBENZENE	108-86-1	mg/kg	--	--	ND < 0.00019	ND < 0.00018	ND < 0.00019	ND < 0.00015	ND < 0.00015	ND < 0.00024	ND < 0.00021	ND < 0.00018	ND < 0.00018	ND < 0.00018
BROMOCHLOROMETHANE	74-97-5	mg/kg	--	--	ND < 0.00026	ND < 0.00026	ND < 0.00027	ND < 0.00021	ND < 0.00022	ND < 0.00033	ND < 0.0003	ND < 0.00025	ND < 0.00026	ND < 0.00025
BROMODICHLOROMETHANE	75-27-4	mg/kg	--	--	ND < 0.00014	ND < 0.00014	ND < 0.00014	ND < 0.00011	ND < 0.00012	ND < 0.00018	ND < 0.00016	ND < 0.00013	ND < 0.00014	ND < 0.00014
BROMOFORM	75-25-2	mg/kg	--	--	ND < 0.00032	ND < 0.00031	ND < 0.00032	ND < 0.00025	ND < 0.00026	ND < 0.0004	ND < 0.00036	ND < 0.0003	ND < 0.00031	ND < 0.0003
BROMOMETHANE	74-83-9	mg/kg	--	--	ND < 0.00075	ND < 0.00073	ND < 0.00076	ND < 0.00059	ND < 0.00061	ND < 0.00094	ND < 0.00085	ND < 0.00072	ND < 0.00073	ND < 0.00072
CARBON DISULFIDE	75-15-0	mg/kg	--	--	ND < 0.0059	ND < 0.0057	ND < 0.006	ND < 0.0046	ND < 0.0048	ND < 0.0074	ND < 0.0067	ND < 0.0056	ND < 0.0057	ND < 0.0056
CARBON TETRACHLORIDE	56-23-5	mg/kg	2.4	0.76	ND < 0.0003	ND < 0.00029	ND < 0.0003	ND < 0.00023	ND < 0.00024	ND < 0.00037	ND < 0.00034	ND < 0.00028	ND < 0.00029	ND < 0.00028
CHLOROBENZENE	108-90-7	mg/kg	100	1.1	ND < 0.00016	ND < 0.00016	ND < 0.00017	ND < 0.00013	ND < 0.00013	ND < 0.00021	ND < 0.00018	ND < 0.00016	ND < 0.00016	ND < 0.00016
CHLOROETHANE	75-00-3	mg/kg	--	--	ND < 0.00058	ND < 0.00056	ND < 0.00059	ND < 0.00046	ND < 0.00048	ND < 0.00074	ND < 0.00066	ND < 0.00056	ND < 0.00057	ND < 0.00056
CHLOROFORM	67-66-3	mg/kg	49	0.37	ND < 0.00018	ND < 0.00018	ND < 0.00018	ND < 0.00014	ND < 0.00015	ND < 0.00023	ND < 0.0002	ND < 0.00017	ND < 0.00018	ND < 0.00017
CHLOROMETHANE	74-87-3	mg/kg	--	--	ND < 0.0012	ND < 0.0012	ND < 0.0012	ND < 0.00095	ND < 0.00098	ND < 0.0015	ND < 0.0014	ND < 0.0011	ND < 0.0012	ND < 0.0012
CIS-1,2-DICHLOROETHENE	156-59-2	mg/kg	100	0.25	ND < 0.00022	ND < 0.00022	ND < 0.00023	ND < 0.00018	ND < 0.00018	ND < 0.00028	ND < 0.00026	ND < 0.00022	ND < 0.00022	ND < 0.00022
CIS-1,3-DICHLOROPROPENE	10061-01-5	mg/kg	--	--	ND < 0.0002	ND < 0.0002	ND < 0.00021	ND < 0.00016	ND < 0.00017	ND < 0.00026	ND < 0.00023	ND < 0.00019	ND < 0.0002	ND < 0.0002
DIBROMOCHLOROMETHANE	124-48-1	mg/kg	--	--	ND < 0.00018	ND < 0.00018	ND < 0.00018	ND < 0.00014	ND < 0.00015	ND < 0.00023	ND < 0.0002	ND < 0.00017	ND < 0.00018	ND < 0.00017
DIBROMOMETHANE	74-95-3	mg/kg	--	--	ND < 0.00031	ND < 0.0003	ND < 0.00031	ND < 0.00024	ND < 0.00025	ND < 0.00039	ND < 0.00035	ND < 0.00029	ND < 0.0003	ND < 0.0003
DICHLORODIFLUOROMETHANE	75-71-8	mg/kg	--	--	ND < 0.0012	ND < 0.0011	ND < 0.0012	ND < 0.00093	ND < 0.00096	ND < 0.0015	ND < 0.0013	ND < 0.0011	ND < 0.0012	ND < 0.0011
ETHYL ETHER	60-29-7	mg/kg	--	--	ND < 0.00044	ND < 0.00043	ND < 0.00045	ND < 0.00035	ND < 0.00036	ND < 0.00055	ND < 0.0005	ND < 0.00042	ND < 0.00043	ND <

Table 1
Summary of Soil Boring Analytical Data
Vacant Parcels, Rockaway Avenue & Chester Street, Brooklyn, NY

Boring Location ID:					SB-01	SB-01	SB-02	SB-02	SB-02	SB-03	SB-03	SB-03	SB-04	SB-04
Sample Date:					10/14/2020	10/14/2020	10/14/2020	10/15/2020	10/14/2020	10/15/2020	10/15/2020	10/15/2020	10/13/2020	10/13/2020
Sample Depth (bgs):					0-2 ft	13-15 ft	0-2 ft	5-7 ft	15-17 ft	0-2 ft	5-7 ft	13-15 ft	0-2 ft	13-15 ft
Analyte	CAS	Units	Restricted Residential SCO	Unrestricted Use SCO										
ETHYLBENZENE	100-41-4	mg/kg	41	1	ND < 0.00018	ND < 0.00018	0.045	ND < 0.00014	ND < 0.00015	0.0039	ND < 0.00021	ND < 0.00017	ND < 0.00018	ND < 0.00018
HEXACHLOROBUTADIENE	87-68-3	mg/kg	--	--	ND < 0.00022	ND < 0.00021	ND < 0.00022	ND < 0.00017	ND < 0.00018	ND < 0.00028	ND < 0.00025	ND < 0.00021	ND < 0.00021	ND < 0.00021
ISOPROPYLBENZENE	98-82-8	mg/kg	--	--	ND < 0.00014	ND < 0.00014	0.0019	ND < 0.00011	ND < 0.00012	ND < 0.00018	ND < 0.00016	ND < 0.00013	ND < 0.00014	ND < 0.00014
METHYL TERT BUTYL ETHER	1634-04-4	mg/kg	100	0.93	ND < 0.00026	ND < 0.00025	ND < 0.00026	ND < 0.0002	ND < 0.00021	ND < 0.00033	ND < 0.00029	ND < 0.00025	ND < 0.00025	ND < 0.00025
METHYLENE CHLORIDE	75-09-2	mg/kg	100	0.05	ND < 0.003	ND < 0.0029	ND < 0.003	ND < 0.0023	ND < 0.0024	ND < 0.0037	ND < 0.0034	ND < 0.0028	ND < 0.0029	ND < 0.0028
NAPHTHALENE	91-20-3	mg/kg	100	12	0.0016 J	ND < 0.00081	ND < 0.00085	ND < 0.00066	ND < 0.00068	ND < 0.001	0.0024 J	ND < 0.0008	ND < 0.00082	ND < 0.00081
N-BUTYLBENZENE	104-51-8	mg/kg	100	12	ND < 0.00022	ND < 0.00021	ND < 0.00022	ND < 0.00017	ND < 0.00018	ND < 0.00027	ND < 0.00024	ND < 0.0002	ND < 0.00021	ND < 0.00021
N-PROPYLBENZENE	103-65-1	mg/kg	100	3.9	ND < 0.00022	ND < 0.00021	0.0011 J	ND < 0.00017	ND < 0.00018	ND < 0.00028	ND < 0.00025	ND < 0.00021	ND < 0.00022	ND < 0.00021
O-CHLOROTOLUENE	95-49-8	mg/kg	--	--	ND < 0.00025	ND < 0.00024	ND < 0.00025	ND < 0.00019	ND < 0.0002	ND < 0.00031	ND < 0.00028	ND < 0.00024	ND < 0.00024	ND < 0.00024
O-XYLENE	95-47-6	mg/kg	--	--	ND < 0.00038	ND < 0.00036	0.075	ND < 0.0003	ND < 0.00031	0.006	ND < 0.00043	ND < 0.00036	ND < 0.00037	ND < 0.00036
P/M-XYLENE	179601-23-1	mg/kg	--	--	ND < 0.00072	ND < 0.0007	0.2	ND < 0.00057	ND < 0.00059	0.016	ND < 0.00082	ND < 0.00069	ND < 0.00071	ND < 0.0007
P-CHLOROTOLUENE	106-43-4	mg/kg	--	--	ND < 0.00014	ND < 0.00014	ND < 0.00014	ND < 0.00011	ND < 0.00011	ND < 0.00018	ND < 0.00016	ND < 0.00013	ND < 0.00014	ND < 0.00013
P-ISOPROPYLTOLUENE	99-87-6	mg/kg	--	--	0.045	ND < 0.00014	0.0052	ND < 0.00011	ND < 0.00012	0.00082 J	ND < 0.00016	ND < 0.00013	ND < 0.00014	ND < 0.00014
SEC-BUTYLBENZENE	135-98-8	mg/kg	100	11	ND < 0.00019	ND < 0.00018	ND < 0.00019	ND < 0.00015	ND < 0.00015	ND < 0.00024	ND < 0.00021	ND < 0.00018	ND < 0.00018	ND < 0.00018
STYRENE	100-42-5	mg/kg	--	--	0.00045 J	ND < 0.00024	ND < 0.00026	ND < 0.0002	ND < 0.00021	ND < 0.00032	ND < 0.00029	ND < 0.00024	ND < 0.00025	ND < 0.00024
TERT-BUTYLBENZENE	98-06-6	mg/kg	100	5.9	ND < 0.00015	ND < 0.00015	ND < 0.00015	ND < 0.00012	ND < 0.00012	ND < 0.00019	ND < 0.00017	ND < 0.00014	ND < 0.00015	ND < 0.00015
TETRACHLOROETHENE	127-18-4	mg/kg	19	1.3	ND < 0.00025	ND < 0.00024	ND < 0.00026	ND < 0.0002	ND < 0.00021	ND < 0.00032	ND < 0.00029	ND < 0.00024	ND < 0.00025	ND < 0.00024
TOLUENE	108-88-3	mg/kg	100	0.7	ND < 0.0007	ND < 0.00068	0.0026	ND < 0.00055	ND < 0.00057	ND < 0.00088	ND < 0.0008	ND < 0.00067	ND < 0.00068	ND < 0.00067
TRANS-1,2-DICHLOROETHENE	156-60-5	mg/kg	100	0.19	ND < 0.00018	ND < 0.00017	ND < 0.00018	ND < 0.00014	ND < 0.00014	ND < 0.00022	ND < 0.0002	ND < 0.00017	ND < 0.00017	ND < 0.00017
TRANS-1,3-DICHLOROPROPENE	10061-02-6	mg/kg	--	--	ND < 0.00035	ND < 0.00034	ND < 0.00036	ND < 0.00028	ND < 0.00029	ND < 0.00044	ND < 0.0004	ND < 0.00034	ND < 0.00034	ND < 0.00034
TRANS-1,4-DICHLORO-2-BUTENE	110-57-6	mg/kg	--	--	ND < 0.0018	ND < 0.0018	ND < 0.0018	ND < 0.0014	ND < 0.0015	ND < 0.0023	ND < 0.0021	ND < 0.0017	ND < 0.0018	ND < 0.0018
TRICHLOROETHENE	79-01-6	mg/kg	21	0.47	ND < 0.00018	ND < 0.00017	ND < 0.00018	ND < 0.00014	ND < 0.00014	ND < 0.00022	ND < 0.0002	ND < 0.00017	ND < 0.00017	ND < 0.00017
TRICHLOROFLUOROMETHANE	75-69-4	mg/kg	--	--	ND < 0.0009	ND < 0.00087	ND < 0.00091	ND < 0.00071	ND < 0.00073	ND < 0.0011	ND < 0.001	ND < 0.00086	ND < 0.00088	ND < 0.00086
VINYL ACETATE	108-05-4	mg/kg	--	--	ND < 0.0028	ND < 0.0027	ND < 0.0028	ND < 0.0022	ND < 0.0023	ND < 0.0035	ND < 0.0031	ND < 0.0026	ND < 0.0027	ND < 0.0027
VINYL CHLORIDE	75-01-4	mg/kg	0.9	0.02	ND < 0.00043	ND < 0.00042	ND < 0.00044	ND < 0.00034	ND < 0.00035	ND < 0.00054	ND < 0.00049	ND < 0.00041	ND < 0.00042	ND < 0.00042
XYLENE (TOTAL)	1330-20-7	mg/kg	100	0.26	ND < 0.00038	ND < 0.00036	0.28	ND < 0.0003	ND < 0.00031	0.022	ND < 0.00043	ND < 0.00036	ND < 0.00037	ND < 0.00036
Semi-Volatile Organic Compounds - SVOCs (SW8070D)														
1,2,4,5-TETRACHLOROBENZENE	95-94-3	mg/kg	--	--	ND < 0.2	ND < 0.018	ND < 0.02	ND < 0.019	ND < 0.018	ND < 0.02	ND < 0.02	ND < 0.018	ND < 0.018	ND < 0.018
1,2,4-TRICHLOROBENZENE	120-82-1	mg/kg	--	--	ND < 0.22	ND < 0.019	ND < 0.022	ND < 0.021	ND < 0.02	ND < 0.022	ND < 0.021	ND < 0.02	ND < 0.02	ND < 0.019
1,2-DICHLOROBENZENE	95-50-1	mg/kg	100	1.1	ND < 0.34	ND < 0.031	ND < 0.034	ND < 0.033	ND < 0.031	ND < 0.034	ND < 0.034	ND < 0.032	ND < 0.032	ND < 0.03
1,3-DICHLOROBENZENE	541-73-1	mg/kg	49	2.4	ND < 0.33	ND < 0.029	ND < 0.033	ND < 0.031	ND < 0.03	ND < 0.033	ND < 0.032	ND < 0.03	ND < 0.03	ND < 0.029
1,4-DICHLOROBENZENE	106-46-7	mg/kg	13	1.8	ND < 0.34	ND < 0.03	ND < 0.034	ND < 0.032	ND < 0.03	ND < 0.034	ND < 0.033	ND < 0.031	ND < 0.031	ND < 0.03
1,4-DIOXANE	123-91-1	mg/kg	13	0.1	ND < 0.088	ND < 0.0078	ND < 0.0088	ND < 0.0084	ND < 0.008	ND < 0.0088	ND < 0.0086	ND < 0.0081	ND < 0.0081	ND < 0.0078
2,4,5-TRICHLOROPHENOL	95-95-4	mg/kg	--	--	ND < 0.37	ND < 0.033	ND < 0.037	ND < 0.035	ND < 0.033	ND < 0.037	ND < 0.036	ND < 0.034	ND < 0.034	ND < 0.033
2,4,6-TRICHLOROPHENOL	88-06-2	mg/kg	--	--	ND < 0.36	ND < 0.032	ND < 0.036	ND < 0.034	ND < 0.033	ND < 0.036	ND < 0.035	ND < 0.034	ND < 0.034	ND < 0.032
2,4-DICHLOROPHENOL	120-83-2	mg/kg	--	--	ND < 0.31	ND < 0.027	ND < 0.031	ND < 0.029	ND < 0.028	ND < 0.031	ND < 0.03	ND < 0.028	ND < 0.028	ND < 0.027
2,4-DIMETHYLPHENOL	105-67-9	mg/kg	--	--	ND < 0.63	ND < 0.056	ND < 0.063	ND < 0.06	ND < 0.057	ND < 0.063	ND < 0.062	ND < 0.058	ND < 0.058	ND < 0.056
2,4-DINITROPHENOL	51-28-5	mg/kg	--	--	ND < 0.9	ND < 0.079	ND < 0.089	ND < 0.085	ND < 0.081	ND < 0.09	ND < 0.087	ND < 0.082	ND < 0.082	ND < 0.079
2,4-DINITROTOLUENE	121-14-2	mg/kg	--	--	ND < 0.38	ND < 0.034	ND < 0.038	ND < 0.036	ND < 0.035	ND < 0.038	ND < 0.037	ND < 0.035	ND < 0.035	ND < 0.034
2,6-DINITROTOLUENE	606-20-2	mg/kg	--	--	ND < 0.33	ND < 0.029	ND < 0.033	ND < 0.031	ND < 0.03	ND < 0.033	ND < 0.032	ND < 0.03	ND < 0.03	ND < 0.029
2-CHLORONAPHTHALENE	91-58-7	mg/kg	--	--	ND < 0.19	ND < 0.017	ND < 0.019	ND < 0.018	ND < 0.017	ND < 0.019	ND < 0.018	ND < 0.018	ND < 0.018	ND < 0.017
2-CHLOROPHENOL	95-57-8	mg/kg	--	--	ND < 0.23	ND < 0.02	ND < 0.023	ND < 0.022	ND < 0.02	ND < 0.023	ND < 0.022	ND < 0.021	ND < 0.021	ND < 0.02
2-METHYLNAPHTHALENE	91-57-6	mg/kg	--	--	ND < 0.23	ND < 0.02	ND < 0.023	ND < 0.022	ND < 0.021	ND < 0.023	0.081 J	ND < 0.021	ND < 0.021	ND < 0.02
2-METHYLPHENOL	95-48-7	mg/kg	100	0.33	ND < 0.3	ND < 0.026	ND < 0.03	ND < 0.028	ND < 0.027	ND < 0.03	ND < 0.029	ND < 0.027	ND < 0.027	ND < 0.026
2-NITROANILINE	88-74-4	mg/kg	--	--	ND < 0.37	ND < 0.033	ND < 0.037	ND < 0.035	ND < 0.033	ND < 0.037	ND < 0.036	ND < 0.034	ND < 0.034	ND < 0.033
2-NITROPHENOL	88-75-5	mg/kg	--	--	ND < 0.72	ND < 0.064	ND < 0.072	ND < 0.068	ND < 0.065	ND < 0.072	ND < 0.07	ND < 0.066	ND < 0.066	ND < 0.064
3,3'-DICHLOROBENZIDINE	91-94-1	mg/kg	--	--	ND < 0.51	ND < 0.045	ND < 0.051	ND < 0.048	ND < 0.046	ND < 0.051	ND < 0.05	ND < 0.047	ND < 0.047	ND < 0.045
3-METHYLPHENOL/4-METHYLPHENOL	65794-96-9	mg/kg	--	--	ND < 0.3	ND < 0.027	ND < 0.03	ND < 0.028	ND < 0.027	ND < 0.03	ND < 0.029	ND < 0.028	ND < 0.028	ND < 0.027
3-NITROANILINE	99-09-2	mg/kg	--	--	ND < 0.36	ND < 0.032	ND < 0.036	ND < 0.034	ND < 0.033	ND < 0.036	ND < 0.035	ND < 0.033	ND < 0.033	ND < 0.032
4,6-DINITRO-O-CRESOL	534-52-1	mg/kg	--	--	ND < 0.92	ND < 0.082	ND < 0.092	ND < 0.087	ND < 0.083	ND < 0.092	ND < 0.09	ND < 0.085	ND < 0.085	ND < 0.082
4-BROMOPHENYL PHENYL ETHER	101-55-3	mg/kg	--	--	ND < 0.29	ND < 0.026	ND < 0.029	ND < 0.028	ND < 0.026	ND < 0.029	ND < 0.028	ND < 0.027	ND < 0.027	ND < 0.026

Table 1
Summary of Soil Boring Analytical Data
Vacant Parcels, Rockaway Avenue & Chester Street, Brooklyn, NY

Boring Location ID:					SB-01	SB-01	SB-02	SB-02	SB-02	SB-03	SB-03	SB-03	SB-04	SB-04
Sample Date:					10/14/2020	10/14/2020	10/14/2020	10/15/2020	10/14/2020	10/15/2020	10/15/2020	10/15/2020	10/13/2020	10/13/2020
Sample Depth (bgs):					0-2 ft	13-15 ft	0-2 ft	5-7 ft	15-17 ft	0-2 ft	5-7 ft	13-15 ft	0-2 ft	13-15 ft
Analyte	CAS	Units	Restricted Residential SCO	Unrestricted Use SCO										
4-CHLOROANILINE	106-47-8	mg/kg	--	--	ND < 0.35	ND < 0.031	ND < 0.035	ND < 0.033	ND < 0.032	ND < 0.035	ND < 0.034	ND < 0.032	ND < 0.032	ND < 0.031
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	mg/kg	--	--	ND < 0.2	ND < 0.018	ND < 0.02	ND < 0.019	ND < 0.018	ND < 0.02	ND < 0.02	ND < 0.019	ND < 0.019	ND < 0.018
4-NITROANILINE	100-01-6	mg/kg	--	--	ND < 0.8	ND < 0.07	ND < 0.079	ND < 0.075	ND < 0.072	ND < 0.08	ND < 0.077	ND < 0.073	ND < 0.073	ND < 0.07
4-NITROPHENOL	100-02-7	mg/kg	--	--	ND < 0.78	ND < 0.07	ND < 0.078	ND < 0.074	ND < 0.071	ND < 0.078	ND < 0.076	ND < 0.072	ND < 0.072	ND < 0.07
ACENAPHTHENE	83-32-9	mg/kg	100	20	0.56 J	ND < 0.018	0.037 J	0.088 J	ND < 0.018	0.023 J	0.24	ND < 0.018	ND < 0.018	ND < 0.018
ACENAPHTHYLENE	208-96-8	mg/kg	100	100	0.32 J	ND < 0.026	0.056 J	0.079 J	ND < 0.027	0.05 J	0.16	ND < 0.027	0.032 J	ND < 0.026
ACETOPHENONE	98-86-2	mg/kg	--	--	ND < 0.24	ND < 0.021	ND < 0.024	ND < 0.022	ND < 0.021	ND < 0.024	ND < 0.023	ND < 0.022	ND < 0.022	ND < 0.021
ANTHRACENE	120-12-7	mg/kg	100	100	1.8	ND < 0.033	0.14	0.37	ND < 0.034	0.1 J	0.5	ND < 0.034	0.058 J	ND < 0.033
BENZO(A)ANTHRACENE	56-55-3	mg/kg	1	1	5.7	ND < 0.019	0.48	1.1	ND < 0.019	0.42	1.4	ND < 0.02	0.2	ND < 0.019
BENZO(A)PYRENE	50-32-8	mg/kg	1	1	5.7	ND < 0.042	0.5	1.1	ND < 0.042	0.48	1.4	ND < 0.043	0.23	ND < 0.042
BENZO(B)FLUORANTHENE	205-99-2	mg/kg	1	1	6.8	ND < 0.029	0.64	1.3	ND < 0.029	0.58	1.6	ND < 0.03	0.24	ND < 0.029
BENZO(GH)PERYLENE	191-24-2	mg/kg	100	100	3.2	ND < 0.02	0.31	0.61	ND < 0.02	0.28	0.74	ND < 0.021	0.12 J	ND < 0.02
BENZO(K)FLUORANTHENE	207-08-9	mg/kg	3.9	0.8	2.5	ND < 0.027	0.2	0.5	ND < 0.028	0.18	0.5	ND < 0.028	0.083 J	ND < 0.027
BENZOIC ACID	65-85-0	mg/kg	--	--	ND < 1.9	ND < 0.17	ND < 0.19	ND < 0.18	ND < 0.18	ND < 0.19	ND < 0.19	ND < 0.18	ND < 0.18	ND < 0.17
BENZYL ALCOHOL	100-51-6	mg/kg	--	--	ND < 0.59	ND < 0.052	ND < 0.059	ND < 0.056	ND < 0.053	ND < 0.059	ND < 0.057	ND < 0.054	ND < 0.054	ND < 0.052
BIPHENYL	92-52-4	mg/kg	--	--	ND < 0.45	ND < 0.04	ND < 0.044	ND < 0.042	ND < 0.04	ND < 0.044	ND < 0.043	ND < 0.041	ND < 0.041	ND < 0.04
BIS(2-CHLOROETHOXY)METHANE	111-91-1	mg/kg	--	--	ND < 0.19	ND < 0.017	ND < 0.019	ND < 0.018	ND < 0.017	ND < 0.019	ND < 0.019	ND < 0.018	ND < 0.018	ND < 0.017
BIS(2-CHLOROETHYL)ETHER	111-44-4	mg/kg	--	--	ND < 0.26	ND < 0.023	ND < 0.026	ND < 0.025	ND < 0.023	ND < 0.026	ND < 0.025	ND < 0.024	ND < 0.024	ND < 0.023
BIS(2-CHLOROISOPROPYL)ETHER	108-60-1	mg/kg	--	--	ND < 0.33	ND < 0.029	ND < 0.033	ND < 0.031	ND < 0.03	ND < 0.033	ND < 0.032	ND < 0.03	ND < 0.03	ND < 0.029
BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	mg/kg	--	--	ND < 0.66	ND < 0.059	ND < 0.066	ND < 0.063	ND < 0.06	0.078 J	0.088 J	ND < 0.061	ND < 0.061	ND < 0.059
BUTYL BENZYL PHTHALATE	85-68-7	mg/kg	--	--	ND < 0.48	ND < 0.043	ND < 0.048	ND < 0.046	ND < 0.044	ND < 0.048	ND < 0.047	ND < 0.044	ND < 0.045	ND < 0.043
CARBAZOLE	86-74-8	mg/kg	--	--	0.67 J	ND < 0.016	0.066 J	0.19	ND < 0.017	0.051 J	0.23	ND < 0.017	0.02 J	ND < 0.016
CHRYSENE	218-01-9	mg/kg	3.9	1	5.4	ND < 0.018	0.48	0.97	ND < 0.018	0.42	1.4	ND < 0.018	0.22	ND < 0.018
DIBENZO(A,H)ANTHRACENE	53-70-3	mg/kg	0.33	0.33	0.92 J	ND < 0.02	0.074 J	0.15	ND < 0.02	0.072 J	0.19	ND < 0.02	0.03 J	ND < 0.02
DIBENZOFURAN	132-64-9	mg/kg	59	7	0.27 J	ND < 0.016	0.019 J	0.05 J	ND < 0.016	ND < 0.018	0.1 J	ND < 0.017	ND < 0.017	ND < 0.016
DIETHYL PHTHALATE	84-66-2	mg/kg	--	--	ND < 0.18	ND < 0.016	ND < 0.018	ND < 0.017	ND < 0.016	ND < 0.018	ND < 0.017	ND < 0.016	ND < 0.016	ND < 0.016
DIMETHYL PHTHALATE	131-11-3	mg/kg	--	--	ND < 0.4	ND < 0.036	ND < 0.04	ND < 0.038	ND < 0.036	ND < 0.04	ND < 0.039	ND < 0.037	ND < 0.037	ND < 0.036
DI-N-BUTYL PHTHALATE	84-74-2	mg/kg	--	--	ND < 0.36	ND < 0.032	ND < 0.036	ND < 0.034	ND < 0.033	0.06 J	ND < 0.035	ND < 0.034	ND < 0.034	ND < 0.032
DI-N-OCTYL PHTHALATE	117-84-0	mg/kg	--	--	ND < 0.65	ND < 0.058	ND < 0.065	ND < 0.062	ND < 0.059	ND < 0.065	ND < 0.064	ND < 0.06	ND < 0.06	ND < 0.058
FLUORANTHENE	206-44-0	mg/kg	100	100	11	ND < 0.02	0.91	2.5	ND < 0.02	0.81	2.8	ND < 0.02	0.39	ND < 0.02
FLUORENE	86-73-7	mg/kg	100	30	0.53 J	ND < 0.016	0.036 J	0.093 J	ND < 0.017	0.026 J	0.23	ND < 0.017	0.019 J	ND < 0.016
HEXACHLORO BENZENE	118-74-1	mg/kg	1.2	0.33	ND < 0.22	ND < 0.019	ND < 0.021	ND < 0.02	ND < 0.019	ND < 0.022	ND < 0.021	ND < 0.02	ND < 0.02	ND < 0.019
HEXACHLORO BUTADIENE	87-68-3	mg/kg	--	--	ND < 0.28	ND < 0.025	ND < 0.028	ND < 0.027	ND < 0.025	ND < 0.028	ND < 0.027	ND < 0.026	ND < 0.026	ND < 0.025
HEXACHLORO CYCLOPENTADIENE	77-47-4	mg/kg	--	--	ND < 1.7	ND < 0.15	ND < 0.17	ND < 0.16	ND < 0.16	ND < 0.17	ND < 0.17	ND < 0.16	ND < 0.16	ND < 0.15
HEXACHLOROETHANE	67-72-1	mg/kg	--	--	ND < 0.31	ND < 0.028	ND < 0.031	ND < 0.029	ND < 0.028	ND < 0.031	ND < 0.03	ND < 0.029	ND < 0.029	ND < 0.028
INDENO(1,2,3-CD)PYRENE	193-39-5	mg/kg	0.5	0.5	3.4	ND < 0.024	0.3	0.7	ND < 0.024	0.3	0.79	ND < 0.025	0.12 J	ND < 0.024
ISOPHORONE	78-59-1	mg/kg	--	--	ND < 0.25	ND < 0.022	ND < 0.025	ND < 0.024	ND < 0.022	ND < 0.025	ND < 0.024	ND < 0.023	ND < 0.023	ND < 0.022
NAPHTHALENE	91-20-3	mg/kg	100	12	ND < 0.23	ND < 0.021	ND < 0.023	ND < 0.022	ND < 0.021	ND < 0.023	0.1 J	ND < 0.022	ND < 0.022	ND < 0.021
NITROBENZENE	98-95-3	mg/kg	--	--	ND < 0.28	ND < 0.025	ND < 0.028	ND < 0.027	ND < 0.026	ND < 0.028	ND < 0.028	ND < 0.026	ND < 0.026	ND < 0.025
NITROSODIPHENYLAMINE (NDPA)/DPA	86-30-6	mg/kg	--	--	ND < 0.22	ND < 0.019	ND < 0.022	ND < 0.021	ND < 0.02	ND < 0.022	ND < 0.021	ND < 0.02	ND < 0.02	ND < 0.019
N-NITROSODI-N-PROPYLAMINE	621-64-7	mg/kg	--	--	ND < 0.3	ND < 0.026	ND < 0.03	ND < 0.028	ND < 0.027	ND < 0.03	ND < 0.029	ND < 0.027	ND < 0.027	ND < 0.026
P-CHLORO-M-CRESOL	59-50-7	mg/kg	--	--	ND < 0.29	ND < 0.025	ND < 0.029	ND < 0.027	ND < 0.026	ND < 0.029	ND < 0.028	ND < 0.026	ND < 0.026	ND < 0.025
PENTACHLOROPHENOL	87-86-5	mg/kg	6.7	0.8	ND < 0.42	ND < 0.037	ND < 0.042	ND < 0.04	ND < 0.038	ND < 0.042	ND < 0.041	ND < 0.039	ND < 0.039	ND < 0.037
PHENANTHRENE	85-01-8	mg/kg	100	100	6.7	ND < 0.021	0.51	1.5	ND < 0.021	0.4	2.4	ND < 0.021	0.26	ND < 0.021
PHENOL	108-95-2	mg/kg	100	0.33	ND < 0.29	ND < 0.026	ND < 0.029	ND < 0.028	ND < 0.026	ND < 0.029	ND < 0.028	ND < 0.027	ND < 0.027	ND < 0.026
PYRENE	129-00-0	mg/kg	100	100	9.7	ND < 0.017	0.82	1.9	ND < 0.017	0.72	2.7	ND < 0.018	0.42	ND < 0.017
Metals (6010D, SW7471B)														
ALUMINUM, TOTAL	7429-90-5	mg/kg	--	--	3860	7800	4670	5400	3720	5210	6090	4540	2650	3410
ANTIMONY, TOTAL	7440-36-0	mg/kg	--	--	1.03 J	0.592 J	0.51 J	ND < 0.326	0.531 J	ND < 0.337	1.59 J	ND < 0.318	0.473 J	0.77 J
ARSENIC, TOTAL	7440-38-2	mg/kg	16	13	3.94	2.45	1.41	3.52	2.53	5.77	6.76	1.55	3.15	1.17
BARIUM, TOTAL	7440-39-3	mg/kg	400	350	343	23.9	74.8	73.3	18.6	294	531	29.7	31.3	24.6

Table 1
Summary of Soil Boring Analytical Data
Vacant Parcels, Rockaway Avenue & Chester Street, Brooklyn, NY

Boring Location ID:					SB-01	SB-01	SB-02	SB-02	SB-02	SB-03	SB-03	SB-03	SB-04	SB-04
Sample Date:					10/14/2020	10/14/2020	10/14/2020	10/15/2020	10/14/2020	10/15/2020	10/15/2020	10/15/2020	10/13/2020	10/13/2020
Sample Depth (bgs):					0-2 ft	13-15 ft	0-2 ft	5-7 ft	15-17 ft	0-2 ft	5-7 ft	13-15 ft	0-2 ft	13-15 ft
Analyte	CAS	Units	Restricted Residential SCO	Unrestricted Use SCO										
BERYLLIUM, TOTAL	7440-41-7	mg/kg	72	7.2	0.611	0.487	0.228 J	0.24 J	0.209 J	0.283 J	0.302 J	0.226 J	0.207 J	0.259 J
CADMIUM, TOTAL	7440-43-9	mg/kg	4.3	2.5	0.234 J	ND < 0.08	ND < 0.089	0.274 J	ND < 0.079	0.425 J	1.32	0.159 J	ND < 0.081	ND < 0.077
CALCIUM, TOTAL	7440-70-2	mg/kg	--	--	15800	851	3580	5960	677	26900	22500	548	472	571
CHROMIUM, TOTAL	7440-47-3	mg/kg	--	--	23.1	19.5	9.65	12.3	9.59	11	15.3	12	6.14	11.3
COBALT, TOTAL	7440-48-4	mg/kg	--	--	5.29	9.48	3.77	4.05	2.28	3.53	4.14	4.45	3.34	4.8
COPPER, TOTAL	7440-50-8	mg/kg	270	50	51.3	21.1	15.2	18.7	13.8	13.3	90.5	11.2	18.2	11.2
IRON, TOTAL	7439-89-6	mg/kg	--	--	13200	24600	11200	12400	11200	10800	21300	15900	7290	18000
LEAD, TOTAL	7439-92-1	mg/kg	400	63	323	8.32	54	51.8	12.8	130	2290	4.37	18.1	3.79 J
MAGNESIUM, TOTAL	7439-95-4	mg/kg	--	--	2070	3630	2140	1560	988	2930	6060	1900	1130	1100
MANGANESE, TOTAL	7439-96-5	mg/kg	2000	1600	297	520	277	227	52	630	365	484	160	404
NICKEL, TOTAL	7440-02-0	mg/kg	310	30	10.4	15.1	8.6	8.74	5.5	8.19	9.46	10	14.3	8.5
POTASSIUM, TOTAL	7440-09-7	mg/kg	--	--	431	971	390	443	409	367	440	447	317	336
SELENIUM, TOTAL	7782-49-2	mg/kg	180	3.9	ND < 0.232	0.268 J	0.382 J	ND < 0.221	0.241 J	ND < 0.228	ND < 0.222	ND < 0.216	ND < 0.214	ND < 0.203
SILVER, TOTAL	7440-22-4	mg/kg	180	2	ND < 0.254	ND < 0.23	ND < 0.258	ND < 0.242	ND < 0.228	ND < 0.251	ND < 0.244	ND < 0.236	ND < 0.235	ND < 0.222
SODIUM, TOTAL	7440-23-5	mg/kg	--	--	146 J	113 J	50.5 J	167 J	43.9 J	446	229	70.1 J	20.2 J	54.4 J
THALLIUM, TOTAL	7440-28-0	mg/kg	--	--	ND < 0.283	ND < 0.256	ND < 0.287	ND < 0.27	ND < 0.253	ND < 0.279	ND < 0.272	ND < 0.263	ND < 0.261	0.298 J
VANADIUM, TOTAL	7440-62-2	mg/kg	--	--	17	35	18.8	19.5	17.8	16.8	25.2	18.3	9.14	21.8
ZINC, TOTAL	7440-66-6	mg/kg	10000	109	464	29.9	58.5	63	18	177	496	20.3	35.1	15.9
MERCURY, TOTAL	7439-97-6	mg/kg	0.81	0.18	0.284	ND < 0.043	0.104	0.096	0.28	0.116	0.114	ND < 0.048	ND < 0.044	ND < 0.043
Pesticides (SW8081B)														
4,4'-DDD	72-54-8	mg/kg	13	0.0033	0.0113	ND < 0.00057	0.00261	0.00303	ND < 0.00059	0.00275 J	0.00515	ND < 0.000608	ND < 0.000606	ND < 0.000591
4,4'-DDE	72-55-9	mg/kg	8.9	0.0033	0.0293 P	ND < 0.00037	0.0047	0.00247	0.000737 J	0.0147	0.0744	ND < 0.000394	ND < 0.000393	ND < 0.000383
4,4'-DDT	50-29-3	mg/kg	7.9	0.0033	0.107	ND < 0.00129	0.0133	0.00861	ND < 0.00133	0.0303	0.339	ND < 0.00137	ND < 0.00136	ND < 0.00133
ALDRIN	309-00-2	mg/kg	0.097	0.005	0.000907 J	ND < 0.000563	ND < 0.000639	ND < 0.000589	ND < 0.000583	ND < 0.00125	ND < 0.000629	ND < 0.0006	ND < 0.000598	ND < 0.000583
ALPHA-BHC	319-84-6	mg/kg	0.48	0.02	ND < 0.000217	ND < 0.000189	ND < 0.000215	ND < 0.000198	ND < 0.000196	ND < 0.000419	ND < 0.000211	ND < 0.000202	ND < 0.000201	ND < 0.000196
BETA-BHC	319-85-7	mg/kg	0.36	0.036	ND < 0.000697	ND < 0.000606	ND < 0.000688	ND < 0.000635	ND < 0.000628	ND < 0.00134	ND < 0.000678	ND < 0.000646	ND < 0.000644	ND < 0.000628
CHLORDANE	57-74-9	mg/kg	--	--	0.224 P	ND < 0.0053	ND < 0.00601	0.0188	ND < 0.00548	0.0692 P	0.144	ND < 0.00565	ND < 0.00563	ND < 0.00549
CIS-CHLORDANE	5103-71-9	mg/kg	4.2	0.094	0.0228 IP	ND < 0.000557	0.00214 JIP	ND < 0.000583	ND < 0.000577	0.00606	0.0208 IP	ND < 0.000594	ND < 0.000592	ND < 0.000577
DELTA-BHC	319-86-8	mg/kg	100	0.04	ND < 0.00036	ND < 0.000313	ND < 0.000355	ND < 0.000328	ND < 0.000324	ND < 0.000694	ND < 0.00035	ND < 0.000334	ND < 0.000333	ND < 0.000324
DIELDRIN	60-57-1	mg/kg	0.2	0.005	0.0212	ND < 0.0005	0.00234	ND < 0.000523	ND < 0.000517	0.00896	0.0694	ND < 0.000533	ND < 0.000531	ND < 0.000518
ENDOSULFAN I	959-98-8	mg/kg	24	2.4	ND < 0.000434	ND < 0.000378	ND < 0.000429	ND < 0.000396	ND < 0.000391	ND < 0.000837	ND < 0.000422	ND < 0.000403	ND < 0.000401	ND < 0.000391
ENDOSULFAN II	33213-65-9	mg/kg	24	2.4	ND < 0.000614	ND < 0.000534	ND < 0.000606	ND < 0.000559	ND < 0.000553	ND < 0.00118	ND < 0.000597	ND < 0.00057	ND < 0.000568	ND < 0.000554
ENDOSULFAN SULFATE	1031-07-8	mg/kg	24	2.4	ND < 0.000364	ND < 0.000317	ND < 0.00036	ND < 0.000332	ND < 0.000328	ND < 0.000703	ND < 0.000354	ND < 0.000338	ND < 0.000337	ND < 0.000329
ENDRIN ALDEHYDE	7421-93-4	mg/kg	--	--	ND < 0.000804	ND < 0.0007	ND < 0.000794	ND < 0.000732	ND < 0.000724	ND < 0.00155	ND < 0.000782	ND < 0.000746	ND < 0.000743	ND < 0.000725
ENDRIN KETONE	53494-70-5	mg/kg	--	--	ND < 0.000473	ND < 0.000412	ND < 0.000467	ND < 0.000431	ND < 0.000426	ND < 0.000912	ND < 0.00046	ND < 0.000439	ND < 0.000437	ND < 0.000427
ENDRIN	72-20-8	mg/kg	11	0.014	ND < 0.000314	ND < 0.000273	ND < 0.00031	ND < 0.000286	ND < 0.000283	ND < 0.000605	ND < 0.000305	ND < 0.000291	ND < 0.00029	ND < 0.000283
HEPTACHLOR EPOXIDE	1024-57-3	mg/kg	--	--	0.00189 JIP	ND < 0.0009	ND < 0.00102	ND < 0.000942	ND < 0.000931	ND < 0.00199	ND < 0.001	ND < 0.000959	ND < 0.000955	ND < 0.000932
HEPTACHLOR	76-44-8	mg/kg	2.1	0.042	ND < 0.000412	ND < 0.000358	ND < 0.000407	ND < 0.000375	ND < 0.000371	ND < 0.000794	ND < 0.000401	ND < 0.000382	ND < 0.000381	ND < 0.000371
LINDANE	58-89-9	mg/kg	1.3	0.1	ND < 0.000342	ND < 0.000298	ND < 0.000338	ND < 0.000312	ND < 0.000308	ND < 0.00066	ND < 0.000333	ND < 0.000318	ND < 0.000316	ND < 0.000309
METHOXYCHLOR	72-43-5	mg/kg	--	--	ND < 0.00107	ND < 0.000933	ND < 0.00106	ND < 0.000977	ND < 0.000966	ND < 0.00207	ND < 0.00104	ND < 0.000995	ND < 0.000991	ND < 0.000967
TOXAPHENE	8001-35-2	mg/kg	--	--	ND < 0.00965	ND < 0.0084	ND < 0.00953	ND < 0.00879	ND < 0.00869	ND < 0.0186	ND < 0.00938	ND < 0.00895	ND < 0.00892	ND < 0.0087
TRANS-CHLORDANE	5103-74-2	mg/kg	--	--	0.0232 IP	ND < 0.000528	0.00219 JIP	ND < 0.000552	ND < 0.000546	0.00817	0.0204 IP	ND < 0.000563	ND < 0.00056	0.000549 JIP
Polychlorinated Biphenyls - PCBs (SW8082A)														
AROCLOR 1016	12674-11-2	mg/kg	--	--	ND < 0.00336	ND < 0.00295	ND < 0.0034	ND < 0.00318	ND < 0.00298	ND < 0.00322	ND < 0.00334	ND < 0.00313	ND < 0.00311	ND < 0.00295
AROCLOR 1221	11104-28-2	mg/kg	--	--	ND < 0.00379	ND < 0.00332	ND < 0.00384	ND < 0.00358	ND < 0.00336	ND < 0.00364	ND < 0.00378	ND < 0.00353	ND < 0.00351	ND < 0.00332
AROCLOR 1232	11141-16-5	mg/kg	--	--	ND < 0.00802	ND < 0.00703	ND < 0.00812	ND < 0.00758	ND < 0.0071	ND < 0.00769	ND < 0.00799	ND < 0.00748	ND < 0.00742	ND < 0.00704
AROCLOR 1242	53469-21-9	mg/kg	--	--	ND < 0.0051	ND < 0.00447	ND < 0.00516	ND < 0.00482	ND < 0.00452	ND < 0.00489	ND < 0.00508	ND < 0.00475	ND < 0.00472	ND < 0.00447
AROCLOR 1248	12672-29-6	mg/kg	--	--	ND < 0.00567	ND < 0.00498	ND < 0.00574	ND < 0.00536	ND < 0.00503	ND < 0.00544	ND < 0.00565	ND < 0.00529	ND < 0.00525	ND < 0.00498
AROCLOR 1254	11097-69-1	mg/kg	--	--	0.0974	ND < 0.00363	0.017 J	ND < 0.00391	ND < 0.00366	ND < 0.00397	ND < 0.00412	ND < 0.00386	ND < 0.00383	ND < 0.00363
AROCLOR 1260	11096-82-5	mg/kg	--	--	0.0422	ND < 0.00613	0.0108 J	ND < 0.00661	ND < 0.00619	0.00756 J	ND < 0.00696	ND < 0.00652	ND < 0.00647	ND < 0.00613
AROCLOR 1262	37324-23-5	mg/kg	--	--	ND < 0.0048	ND < 0.00421	ND < 0.00486	ND < 0.00454	ND < 0.00426	ND < 0.00461	ND < 0.00478	ND < 0.00448	ND < 0.00445	ND < 0.00421

Table 1
Summary of Soil Boring Analytical Data
Vacant Parcels, Rockaway Avenue & Chester Street, Brooklyn, NY

Boring Location ID:					SB-01	SB-01	SB-02	SB-02	SB-02	SB-03	SB-03	SB-03	SB-04	SB-04
Sample Date:					10/14/2020	10/14/2020	10/14/2020	10/15/2020	10/14/2020	10/15/2020	10/15/2020	10/15/2020	10/13/2020	10/13/2020
Sample Depth (bgs):					0-2 ft	13-15 ft	0-2 ft	5-7 ft	15-17 ft	0-2 ft	5-7 ft	13-15 ft	0-2 ft	13-15 ft
Analyte	CAS	Units	Restricted Residential SCO	Unrestricted Use SCO										
AROCLOR 1268	11100-14-4	mg/kg	--	--	0.0187 J	ND < 0.00344	ND < 0.00397	ND < 0.0037	ND < 0.00347	ND < 0.00376	ND < 0.0039	ND < 0.00365	0.0218 J	ND < 0.00344
PCBS, TOTAL	1336-36-3	mg/kg	1	0.1	0.158 J	ND < 0.00295	0.0278 J	ND < 0.00318	ND < 0.00298	0.00756 J	ND < 0.00334	ND < 0.00313	0.0218 J	ND < 0.00295

Notes:

Screening Levels

SCO = NYSDEC Soil Cleanup Objective

Detected results that exceed the SCOs are shaded.

Units

mg/kg = milligrams per kilogram

bgs = below ground surface

Data Qualifiers

ND = Not detected above laboratory method detection limit (MDL).

J = Estimated value is greater than MDL and less than Limit of Quantitation (LOQ).

I = The lower value for the two columns has been reported due to obvious interference.

P = The RPD between the results for the two columns exceeds the method-specified criteria.

Other Acronyms/Symbols

-- = not analyzed for or no screening level

Table 1
Summary of Soil Boring Analytical Data
Vacant Parcels, Rockaway Avenue & Chester Street, Brooklyn, NY

Boring Location ID:					SB-05	SB-05	SB-06	SB-06	SB-06	SB-06	SB-07	SB-07	SB-08	SB-08
Sample Date:					10/13/2020	10/13/2020	10/13/2020	10/15/2020	10/13/2020	10/13/2020	10/13/2020	10/13/2020	10/13/2020	10/13/2020
Sample Depth (bgs):					0-2 ft	13-15 ft	0-2 ft	2-4 ft	13-15 ft	13-15 ft	0-2 ft	13-15 ft	0-2 ft	13-15 ft
Analyte	CAS	Units	Restricted Residential SCO	Unrestricted Use SCO						Duplicate				
Volatile Organic Compounds - VOCs (SW8260C)														
1,1,1,2-TETRACHLOROETHANE	630-20-6	mg/kg	--	--	ND < 0.00015	ND < 0.00013	ND < 0.00016	ND < 0.00014	ND < 0.00013	ND < 0.00013	ND < 0.00023	ND < 0.00016	ND < 0.00016	ND < 0.00021
1,1,1-TRICHLOROETHANE	71-55-6	mg/kg	100	0.68	ND < 0.00019	ND < 0.00017	ND < 0.00021	ND < 0.00018	ND < 0.00016	ND < 0.00016	ND < 0.00029	ND < 0.0002	ND < 0.0002	ND < 0.00026
1,1,2,2-TETRACHLOROETHANE	79-34-5	mg/kg	--	--	ND < 0.00019	ND < 0.00017	ND < 0.00021	ND < 0.00018	ND < 0.00016	ND < 0.00016	ND < 0.00028	ND < 0.0002	ND < 0.0002	ND < 0.00026
1,1,2-TRICHLOROETHANE	79-00-5	mg/kg	--	--	ND < 0.00031	ND < 0.00027	ND < 0.00033	ND < 0.00029	ND < 0.00026	ND < 0.00026	ND < 0.00046	ND < 0.00032	ND < 0.00031	ND < 0.00042
1,1-DICHLOROETHANE	75-34-3	mg/kg	26	0.27	ND < 0.00017	ND < 0.00014	ND < 0.00018	ND < 0.00016	ND < 0.00014	ND < 0.00014	ND < 0.00025	ND < 0.00017	ND < 0.00017	ND < 0.00023
1,1-DICHLOROETHENE	75-35-4	mg/kg	100	0.33	ND < 0.00027	ND < 0.00024	ND < 0.0003	ND < 0.00026	ND < 0.00023	ND < 0.00023	ND < 0.00041	ND < 0.00028	ND < 0.00028	ND < 0.00038
1,1-DICHLOROPROPENE	563-58-6	mg/kg	--	--	ND < 0.00018	ND < 0.00016	ND < 0.0002	ND < 0.00017	ND < 0.00016	ND < 0.00016	ND < 0.00027	ND < 0.00019	ND < 0.00019	ND < 0.00025
1,2,3-TRICHLOROBENZENE	87-61-6	mg/kg	--	--	ND < 0.00037	ND < 0.00032	ND < 0.0004	ND < 0.00035	ND < 0.00031	ND < 0.00032	ND < 0.00055	ND < 0.00038	ND < 0.00038	ND < 0.00051
1,2,3-TRICHLOROPROPANE	96-18-4	mg/kg	--	--	ND < 0.00015	ND < 0.00013	ND < 0.00016	ND < 0.00014	ND < 0.00012	ND < 0.00012	ND < 0.00022	ND < 0.00015	ND < 0.00015	ND < 0.0002
1,2,4,5-TETRAMETHYLBENZENE	95-93-2	mg/kg	--	--	ND < 0.00022	ND < 0.00019	ND < 0.00024	ND < 0.00021	ND < 0.00019	ND < 0.00019	ND < 0.00033	ND < 0.00023	ND < 0.00022	ND < 0.0003
1,2,4-TRICHLOROBENZENE	120-82-1	mg/kg	--	--	ND < 0.00031	ND < 0.00027	ND < 0.00034	ND < 0.0003	ND < 0.00027	ND < 0.00027	ND < 0.00047	ND < 0.00032	ND < 0.00032	ND < 0.00043
1,2,4-TRIMETHYLBENZENE	95-63-6	mg/kg	52	3.6	ND < 0.00038	ND < 0.00034	ND < 0.00042	ND < 0.00036	ND < 0.00033	ND < 0.00033	ND < 0.00057	ND < 0.0004	ND < 0.00039	ND < 0.00053
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	mg/kg	--	--	ND < 0.0012	ND < 0.001	ND < 0.0012	ND < 0.0011	ND < 0.00098	ND < 0.00098	ND < 0.0017	ND < 0.0012	ND < 0.0012	ND < 0.0016
1,2-DIBROMOETHANE	106-93-4	mg/kg	--	--	ND < 0.00032	ND < 0.00028	ND < 0.00035	ND < 0.0003	ND < 0.00027	ND < 0.00027	ND < 0.00048	ND < 0.00033	ND < 0.00033	ND < 0.00044
1,2-DICHLOROBENZENE	95-50-1	mg/kg	100	1.1	ND < 0.00017	ND < 0.00014	ND < 0.00018	ND < 0.00016	ND < 0.00014	ND < 0.00014	ND < 0.00025	ND < 0.00017	ND < 0.00017	ND < 0.00023
1,2-DICHLOROETHANE	107-06-2	mg/kg	3.1	0.02	ND < 0.0003	ND < 0.00026	ND < 0.00032	ND < 0.00028	ND < 0.00025	ND < 0.00025	ND < 0.00044	ND < 0.00031	ND < 0.0003	ND < 0.00041
1,2-DICHLOROETHENE (TOTAL)	540-59-0	mg/kg	--	--	ND < 0.00016	ND < 0.00014	ND < 0.00017	ND < 0.00015	ND < 0.00013	ND < 0.00013	ND < 0.00024	ND < 0.00016	ND < 0.00016	ND < 0.00022
1,2-DICHLOROPROPANE	78-87-5	mg/kg	--	--	ND < 0.00014	ND < 0.00012	ND < 0.00016	ND < 0.00014	ND < 0.00012	ND < 0.00012	ND < 0.00021	ND < 0.00015	ND < 0.00015	ND < 0.0002
1,3,5-TRIMETHYLBENZENE	108-67-8	mg/kg	52	8.4	ND < 0.00022	ND < 0.00019	ND < 0.00024	ND < 0.00021	ND < 0.00019	ND < 0.00019	ND < 0.00033	ND < 0.00023	ND < 0.00023	ND < 0.0003
1,3-DICHLOROBENZENE	541-73-1	mg/kg	49	2.4	ND < 0.00017	ND < 0.00015	ND < 0.00018	ND < 0.00016	ND < 0.00014	ND < 0.00014	ND < 0.00025	ND < 0.00018	ND < 0.00017	ND < 0.00023
1,3-DICHLOROPROPANE	142-28-9	mg/kg	--	--	ND < 0.00019	ND < 0.00017	ND < 0.00021	ND < 0.00018	ND < 0.00016	ND < 0.00016	ND < 0.00029	ND < 0.0002	ND < 0.0002	ND < 0.00026
1,3-DICHLOROPROPENE, TOTAL	542-75-6	mg/kg	--	--	ND < 0.00018	ND < 0.00016	ND < 0.0002	ND < 0.00017	ND < 0.00015	ND < 0.00015	ND < 0.00027	ND < 0.00019	ND < 0.00018	ND < 0.00025
1,4-DICHLOROBENZENE	106-46-7	mg/kg	13	1.8	ND < 0.0002	ND < 0.00017	ND < 0.00021	ND < 0.00019	ND < 0.00017	ND < 0.00017	ND < 0.00029	ND < 0.0002	ND < 0.0002	ND < 0.00027
1,4-DIETHYLBENZENE	105-05-5	mg/kg	--	--	ND < 0.0002	ND < 0.00018	ND < 0.00022	ND < 0.00019	ND < 0.00017	ND < 0.00017	ND < 0.0003	ND < 0.00021	ND < 0.00021	ND < 0.00028
1,4-DIOXANE	123-91-1	mg/kg	13	0.1	ND < 0.04	ND < 0.035	ND < 0.044	ND < 0.038	ND < 0.034	ND < 0.034	ND < 0.06	ND < 0.042	ND < 0.041	ND < 0.056
2,2-DICHLOROPROPANE	594-20-7	mg/kg	--	--	ND < 0.00023	ND < 0.0002	ND < 0.00025	ND < 0.00022	ND < 0.0002	ND < 0.0002	ND < 0.00035	ND < 0.00024	ND < 0.00024	ND < 0.00032
2-BUTANONE	78-93-3	mg/kg	100	0.12	ND < 0.0026	ND < 0.0022	ND < 0.0028	ND < 0.0024	ND < 0.0022	ND < 0.0022	ND < 0.0038	ND < 0.0026	ND < 0.0026	ND < 0.0035
2-HEXANONE	591-78-6	mg/kg	--	--	ND < 0.0014	ND < 0.0012	ND < 0.0015	ND < 0.0013	ND < 0.0012	ND < 0.0012	ND < 0.002	ND < 0.0014	ND < 0.0014	ND < 0.0019
4-ETHYLTOLUENE	622-96-8	mg/kg	--	--	ND < 0.00044	ND < 0.00038	ND < 0.00048	ND < 0.00042	ND < 0.00038	ND < 0.00038	ND < 0.00066	ND < 0.00046	ND < 0.00045	ND < 0.00061
4-METHYL-2-PENTANONE	108-10-1	mg/kg	--	--	ND < 0.0015	ND < 0.0013	ND < 0.0016	ND < 0.0014	ND < 0.0012	ND < 0.0012	ND < 0.0022	ND < 0.0015	ND < 0.0015	ND < 0.002
ACETONE	67-64-1	mg/kg	100	0.05	ND < 0.0055	ND < 0.0048	0.0068 J	0.015	ND < 0.0047	ND < 0.0047	ND < 0.0082	ND < 0.0058	ND < 0.0056	ND < 0.0076
ACRYLONITRILE	107-13-1	mg/kg	--	--	ND < 0.0013	ND < 0.0012	ND < 0.0014	ND < 0.0012	ND < 0.0011	ND < 0.0011	ND < 0.002	ND < 0.0014	ND < 0.0014	ND < 0.0018
BENZENE	71-43-2	mg/kg	4.8	0.06	ND < 0.00019	ND < 0.00017	ND < 0.00021	ND < 0.00018	ND < 0.00016	ND < 0.00016	0.00038 J	ND < 0.0002	ND < 0.0002	ND < 0.00026
BROMOBENZENE	108-86-1	mg/kg	--	--	ND < 0.00017	ND < 0.00014	ND < 0.00018	ND < 0.00016	ND < 0.00014	ND < 0.00014	ND < 0.00025	ND < 0.00017	ND < 0.00017	ND < 0.00023
BROMOCHLOROMETHANE	74-97-5	mg/kg	--	--	ND < 0.00024	ND < 0.0002	ND < 0.00026	ND < 0.00022	ND < 0.0002	ND < 0.0002	ND < 0.00035	ND < 0.00024	ND < 0.00024	ND < 0.00032
BROMODICHLOROMETHANE	75-27-4	mg/kg	--	--	ND < 0.00012	ND < 0.00011	ND < 0.00014	ND < 0.00012	ND < 0.00011	ND < 0.00011	ND < 0.00019	ND < 0.00013	ND < 0.00013	ND < 0.00017
BROMOFORM	75-25-2	mg/kg	--	--	ND < 0.00028	ND < 0.00025	ND < 0.00031	ND < 0.00027	ND < 0.00024	ND < 0.00024	ND < 0.00042	ND < 0.00029	ND < 0.00029	ND < 0.00039
BROMOMETHANE	74-83-9	mg/kg	--	--	ND < 0.00067	ND < 0.00058	ND < 0.00073	ND < 0.00063	ND < 0.00057	ND < 0.00057	ND < 0.001	ND < 0.0007	ND < 0.00068	ND < 0.00092
CARBON DISULFIDE	75-15-0	mg/kg	--	--	ND < 0.0052	ND < 0.0046	ND < 0.0057	ND < 0.005	ND < 0.0044	ND < 0.0045	ND < 0.0078	ND < 0.0054	ND < 0.0054	ND < 0.0072
CARBON TETRACHLORIDE	56-23-5	mg/kg	2.4	0.76	ND < 0.00026	ND < 0.00023	ND < 0.00029	ND < 0.00025	ND < 0.00022	ND < 0.00022	ND < 0.00039	ND < 0.00028	ND < 0.00027	ND < 0.00036
CHLOROBENZENE	108-90-7	mg/kg	100	1.1	ND < 0.00015	ND < 0.00013	ND < 0.00016	ND < 0.00014	ND < 0.00012	ND < 0.00012	ND < 0.00022	ND < 0.00015	ND < 0.00015	ND < 0.0002
CHLOROETHANE	75-00-3	mg/kg	--	--	ND < 0.00052	ND < 0.00045	ND < 0.00057	ND < 0.00049	ND < 0.00044	ND < 0.00044	ND < 0.00078	ND < 0.00054	ND < 0.00053	ND < 0.00072
CHLOROFORM	67-66-3	mg/kg	49	0.37	ND < 0.00016	ND < 0.00014	ND < 0.00018	ND < 0.00015	ND < 0.00014	ND < 0.00014	ND < 0.00024	ND < 0.00017	ND < 0.00016	ND < 0.00022
CHLOROMETHANE	74-87-3	mg/kg	--	--	ND < 0.0011	ND < 0.00094	ND < 0.0012	ND < 0.001	ND < 0.00091	ND < 0.00091	ND < 0.0016	ND < 0.0011	ND < 0.0011	ND < 0.0015
CIS-1,2-DICHLOROETHENE	156-59-2	mg/kg	100	0.25	ND < 0.0002	ND < 0.00018	ND < 0.00022	ND < 0.00019	ND < 0.00017	ND < 0.00017	ND < 0.0003	ND < 0.00021	ND < 0.0002	ND < 0.00028
CIS-1,3-DICHLOROPROPENE	10061-01-5	mg/kg	--	--	ND < 0.00018	ND < 0.00016	ND < 0.0002	ND < 0.00017	ND < 0.00015	ND < 0.00015	ND < 0.00027	ND < 0.00019	ND < 0.00018	ND < 0.00025
DIBROMOCHLOROMETHANE	124-48-1	mg/kg	--	--	ND < 0.00016	ND < 0.00014	ND < 0.00018	ND < 0.00015	ND < 0.00014	ND < 0.00014	ND < 0.00024	ND < 0.00017	ND < 0.00016	ND < 0.00022
DIBROMOMETHANE	74-95-3	mg/kg	--	--	ND < 0.00027	ND < 0.00024	ND < 0.0003	ND < 0.00026	ND < 0.00023	ND < 0.00023	ND < 0.00041	ND < 0.00028	ND < 0.00028	ND < 0.00038
DICHLORODIFLUOROMETHANE	75-71-8	mg/kg	--	--	ND < 0.001	ND < 0.00092	ND < 0.0011	ND < 0.001	ND < 0.00089	ND < 0.0009	ND < 0.0016	ND < 0.0011	ND < 0.0011	ND < 0.0014
ETHYL ETHER	60-29-7	mg/kg	--	--	ND < 0.00039	ND < 0.00034	ND < 0.00043	ND < 0.00037	ND < 0.00033	ND < 0.00033	ND < 0.00058			

Table 1
Summary of Soil Boring Analytical Data
Vacant Parcels, Rockaway Avenue & Chester Street, Brooklyn, NY

Boring Location ID:					SB-05	SB-05	SB-06	SB-06	SB-06	SB-06	SB-07	SB-07	SB-08	SB-08
Sample Date:					10/13/2020	10/13/2020	10/13/2020	10/15/2020	10/13/2020	10/13/2020	10/13/2020	10/13/2020	10/13/2020	10/13/2020
Sample Depth (bgs):					0-2 ft	13-15 ft	0-2 ft	2-4 ft	13-15 ft	13-15 ft	0-2 ft	13-15 ft	0-2 ft	13-15 ft
Analyte	CAS	Units	Restricted Residential SCO	Unrestricted Use SCO						Duplicate				
ETHYLBENZENE	100-41-4	mg/kg	41	1	ND < 0.00016	ND < 0.00014	ND < 0.00018	ND < 0.00015	ND < 0.00014	ND < 0.00014	ND < 0.00024	ND < 0.00017	ND < 0.00016	ND < 0.00022
HEXACHLOROBUTADIENE	87-68-3	mg/kg	--	--	ND < 0.00019	ND < 0.00017	ND < 0.00021	ND < 0.00018	ND < 0.00016	ND < 0.00016	ND < 0.00029	ND < 0.0002	ND < 0.0002	ND < 0.00027
ISOPROPYLBENZENE	98-82-8	mg/kg	--	--	ND < 0.00012	ND < 0.00011	ND < 0.00014	ND < 0.00012	ND < 0.00011	ND < 0.00011	ND < 0.00019	ND < 0.00013	ND < 0.00013	ND < 0.00017
METHYL TERT BUTYL ETHER	1634-04-4	mg/kg	100	0.93	ND < 0.00023	ND < 0.0002	ND < 0.00025	ND < 0.00022	ND < 0.0002	ND < 0.0002	ND < 0.00034	ND < 0.00024	ND < 0.00024	ND < 0.00032
METHYLENE CHLORIDE	75-09-2	mg/kg	100	0.05	ND < 0.0026	ND < 0.0023	ND < 0.0029	ND < 0.0025	ND < 0.0022	ND < 0.0022	ND < 0.0039	ND < 0.0027	ND < 0.0027	ND < 0.0036
NAPHTHALENE	91-20-3	mg/kg	100	12	ND < 0.00075	ND < 0.00065	ND < 0.00082	ND < 0.00071	ND < 0.00064	ND < 0.00064	ND < 0.0011	ND < 0.00078	ND < 0.00076	ND < 0.001
N-BUTYLBENZENE	104-51-8	mg/kg	100	12	ND < 0.00019	ND < 0.00017	ND < 0.00021	ND < 0.00018	ND < 0.00016	ND < 0.00016	ND < 0.00029	ND < 0.0002	ND < 0.0002	ND < 0.00026
N-PROPYLBENZENE	103-65-1	mg/kg	100	3.9	ND < 0.0002	ND < 0.00017	ND < 0.00021	ND < 0.00019	ND < 0.00017	ND < 0.00017	ND < 0.00029	ND < 0.0002	ND < 0.0002	ND < 0.00027
O-CHLOROTOLUENE	95-49-8	mg/kg	--	--	ND < 0.00022	ND < 0.00019	ND < 0.00024	ND < 0.00021	ND < 0.00019	ND < 0.00019	ND < 0.00033	ND < 0.00023	ND < 0.00022	ND < 0.0003
O-XYLENE	95-47-6	mg/kg	--	--	ND < 0.00034	ND < 0.00029	ND < 0.00036	ND < 0.00032	ND < 0.00028	ND < 0.00028	ND < 0.0005	ND < 0.00035	ND < 0.00034	ND < 0.00046
P/M-XYLENE	179601-23-1	mg/kg	--	--	ND < 0.00064	ND < 0.00056	ND < 0.0007	ND < 0.00061	ND < 0.00055	ND < 0.00055	ND < 0.00096	ND < 0.00067	ND < 0.00066	ND < 0.00089
P-CHLOROTOLUENE	106-43-4	mg/kg	--	--	ND < 0.00012	ND < 0.00011	ND < 0.00014	ND < 0.00012	ND < 0.0001	ND < 0.0001	ND < 0.00018	ND < 0.00013	ND < 0.00013	ND < 0.00017
P-ISOPROPYLTOLUENE	99-87-6	mg/kg	--	--	ND < 0.00012	ND < 0.00011	0.00021 J	ND < 0.00012	ND < 0.00011	ND < 0.00011	ND < 0.00019	ND < 0.00013	ND < 0.00013	ND < 0.00017
SEC-BUTYLBENZENE	135-98-8	mg/kg	100	11	ND < 0.00017	ND < 0.00015	ND < 0.00018	ND < 0.00016	ND < 0.00014	ND < 0.00014	ND < 0.00025	ND < 0.00017	ND < 0.00017	ND < 0.00023
STYRENE	100-42-5	mg/kg	--	--	ND < 0.00022	ND < 0.0002	ND < 0.00024	ND < 0.00021	ND < 0.00019	ND < 0.00019	ND < 0.00034	ND < 0.00023	ND < 0.00023	ND < 0.00031
TERT-BUTYLBENZENE	98-06-6	mg/kg	100	5.9	ND < 0.00014	ND < 0.00012	ND < 0.00015	ND < 0.00013	ND < 0.00012	ND < 0.00012	ND < 0.0002	ND < 0.00014	ND < 0.00014	ND < 0.00019
TETRACHLOROETHENE	127-18-4	mg/kg	19	1.3	ND < 0.00022	ND < 0.0002	ND < 0.00024	ND < 0.00021	ND < 0.00019	ND < 0.00019	ND < 0.00034	ND < 0.00023	ND < 0.00023	ND < 0.00031
TOLUENE	108-88-3	mg/kg	100	0.7	ND < 0.00063	ND < 0.00054	ND < 0.00068	0.00086 J	ND < 0.00053	ND < 0.00053	ND < 0.00093	ND < 0.00065	ND < 0.00064	ND < 0.00086
TRANS-1,2-DICHLOROETHENE	156-60-5	mg/kg	100	0.19	ND < 0.00016	ND < 0.00014	ND < 0.00017	ND < 0.00015	ND < 0.00013	ND < 0.00013	ND < 0.00024	ND < 0.00016	ND < 0.00016	ND < 0.00022
TRANS-1,3-DICHLOROPROPENE	10061-02-6	mg/kg	--	--	ND < 0.00031	ND < 0.00027	ND < 0.00034	ND < 0.0003	ND < 0.00027	ND < 0.00027	ND < 0.00047	ND < 0.00033	ND < 0.00032	ND < 0.00043
TRANS-1,4-DICHLORO-2-BUTENE	110-57-6	mg/kg	--	--	ND < 0.0016	ND < 0.0014	ND < 0.0018	ND < 0.0015	ND < 0.0014	ND < 0.0014	ND < 0.0024	ND < 0.0017	ND < 0.0017	ND < 0.0022
TRICHLOROETHENE	79-01-6	mg/kg	21	0.47	ND < 0.00016	ND < 0.00014	ND < 0.00017	ND < 0.00015	ND < 0.00013	ND < 0.00013	ND < 0.00024	ND < 0.00016	ND < 0.00016	ND < 0.00022
TRICHLOROFLUOROMETHANE	75-69-4	mg/kg	--	--	ND < 0.0008	ND < 0.0007	ND < 0.00087	ND < 0.00076	ND < 0.00068	ND < 0.00068	ND < 0.0012	ND < 0.00083	ND < 0.00082	ND < 0.0011
VINYL ACETATE	108-05-4	mg/kg	--	--	ND < 0.0025	ND < 0.0022	ND < 0.0027	ND < 0.0023	ND < 0.0021	ND < 0.0021	ND < 0.0037	ND < 0.0026	ND < 0.0025	ND < 0.0034
VINYL CHLORIDE	75-01-4	mg/kg	0.9	0.02	ND < 0.00039	ND < 0.00034	ND < 0.00042	ND < 0.00036	ND < 0.00033	ND < 0.00033	ND < 0.00057	ND < 0.0004	ND < 0.00039	ND < 0.00053
XYLENE (TOTAL)	1330-20-7	mg/kg	100	0.26	ND < 0.00034	ND < 0.00029	ND < 0.00036	ND < 0.00032	ND < 0.00028	ND < 0.00028	ND < 0.0005	ND < 0.00035	ND < 0.00034	ND < 0.00046
Semi-Volatile Organic Compounds - SVOCs (SW8070D)														
1,2,4,5-TETRACHLOROBENZENE	95-94-3	mg/kg	--	--	ND < 0.019	ND < 0.018	ND < 0.019	ND < 0.019	ND < 0.019	ND < 0.019	ND < 0.019	ND < 0.018	ND < 0.019	ND < 0.02
1,2,4-TRICHLOROBENZENE	120-82-1	mg/kg	--	--	ND < 0.021	ND < 0.02	ND < 0.021	ND < 0.02	ND < 0.021	ND < 0.021	ND < 0.021	ND < 0.02	ND < 0.02	ND < 0.022
1,2-DICHLOROBENZENE	95-50-1	mg/kg	100	1.1	ND < 0.033	ND < 0.031	ND < 0.033	ND < 0.032	ND < 0.033	ND < 0.033	ND < 0.033	ND < 0.031	ND < 0.032	ND < 0.034
1,3-DICHLOROBENZENE	541-73-1	mg/kg	49	2.4	ND < 0.031	ND < 0.03	ND < 0.032	ND < 0.031	ND < 0.031	ND < 0.032	ND < 0.032	ND < 0.029	ND < 0.031	ND < 0.032
1,4-DICHLOROBENZENE	106-46-7	mg/kg	13	1.8	ND < 0.032	ND < 0.03	ND < 0.032	ND < 0.031	ND < 0.032	ND < 0.032	ND < 0.032	ND < 0.03	ND < 0.031	ND < 0.033
1,4-DIOXANE	123-91-1	mg/kg	13	0.1	ND < 0.0084	ND < 0.0079	ND < 0.0086	ND < 0.0082	ND < 0.0084	ND < 0.0085	ND < 0.0084	ND < 0.0078	ND < 0.0082	ND < 0.0087
2,4,5-TRICHLOROPHENOL	95-95-4	mg/kg	--	--	ND < 0.035	ND < 0.033	ND < 0.036	ND < 0.034	ND < 0.035	ND < 0.035	ND < 0.035	ND < 0.033	ND < 0.034	ND < 0.036
2,4,6-TRICHLOROPHENOL	88-06-2	mg/kg	--	--	ND < 0.034	ND < 0.033	ND < 0.035	ND < 0.034	ND < 0.035	ND < 0.035	ND < 0.035	ND < 0.032	ND < 0.034	ND < 0.036
2,4-DICHLOROPHENOL	120-83-2	mg/kg	--	--	ND < 0.029	ND < 0.028	ND < 0.03	ND < 0.029	ND < 0.029	ND < 0.03	ND < 0.029	ND < 0.027	ND < 0.029	ND < 0.03
2,4-DIMETHYLPHENOL	105-67-9	mg/kg	--	--	ND < 0.06	ND < 0.057	ND < 0.061	ND < 0.059	ND < 0.06	ND < 0.061	ND < 0.06	ND < 0.056	ND < 0.059	ND < 0.062
2,4-DINITROPHENOL	51-28-5	mg/kg	--	--	ND < 0.085	ND < 0.08	ND < 0.087	ND < 0.083	ND < 0.085	ND < 0.086	ND < 0.085	ND < 0.08	ND < 0.083	ND < 0.088
2,4-DINITROTOLUENE	121-14-2	mg/kg	--	--	ND < 0.036	ND < 0.034	ND < 0.037	ND < 0.036	ND < 0.036	ND < 0.037	ND < 0.037	ND < 0.034	ND < 0.036	ND < 0.038
2,6-DINITROTOLUENE	606-20-2	mg/kg	--	--	ND < 0.031	ND < 0.03	ND < 0.032	ND < 0.031	ND < 0.031	ND < 0.032	ND < 0.031	ND < 0.029	ND < 0.031	ND < 0.032
2-CHLORONAPHTHALENE	91-58-7	mg/kg	--	--	ND < 0.018	ND < 0.017	ND < 0.018	ND < 0.018	ND < 0.018	ND < 0.018	ND < 0.018	ND < 0.017	ND < 0.018	ND < 0.019
2-CHLOROPHENOL	95-57-8	mg/kg	--	--	ND < 0.021	ND < 0.02	ND < 0.022	ND < 0.021	ND < 0.022	ND < 0.022	ND < 0.022	ND < 0.02	ND < 0.021	ND < 0.022
2-METHYLNAPHTHALENE	91-57-6	mg/kg	--	--	ND < 0.022	ND < 0.021	0.08 J	0.039 J	ND < 0.022	ND < 0.022	0.23	ND < 0.021	ND < 0.022	ND < 0.023
2-METHYLPHENOL	95-48-7	mg/kg	100	0.33	ND < 0.028	ND < 0.027	ND < 0.029	ND < 0.028	ND < 0.028	ND < 0.028	ND < 0.028	ND < 0.026	ND < 0.028	ND < 0.029
2-NITROANILINE	88-74-4	mg/kg	--	--	ND < 0.035	ND < 0.033	ND < 0.036	ND < 0.034	ND < 0.035	ND < 0.036	ND < 0.035	ND < 0.033	ND < 0.034	ND < 0.036
2-NITROPHENOL	88-75-5	mg/kg	--	--	ND < 0.068	ND < 0.065	ND < 0.07	ND < 0.067	ND < 0.069	ND < 0.069	ND < 0.069	ND < 0.064	ND < 0.067	ND < 0.071
3,3'-DICHLOROBENZIDINE	91-94-1	mg/kg	--	--	ND < 0.048	ND < 0.046	ND < 0.05	ND < 0.047	ND < 0.049	ND < 0.049	ND < 0.049	ND < 0.045	ND < 0.048	ND < 0.05
3-METHYLPHENOL/4-METHYLPHENOL	65794-96-9	mg/kg	--	--	ND < 0.028	ND < 0.027	ND < 0.029	ND < 0.028	ND < 0.029	ND < 0.029	ND < 0.029	ND < 0.027	ND < 0.028	ND < 0.029
3-NITROANILINE	99-09-2	mg/kg	--	--	ND < 0.034	ND < 0.032	ND < 0.035	ND < 0.034	ND < 0.034	ND < 0.035	ND < 0.034	ND < 0.032	ND < 0.034	ND < 0.036
4,6-DINITRO-O-CRESOL	534-52-1	mg/kg	--	--	ND < 0.087	ND < 0.082	ND < 0.089	ND < 0.086	ND < 0.088	ND < 0.088	ND < 0.088	ND < 0.082	ND < 0.086	ND < 0.09
4-BROMOPHENYL PHENYL ETHER	101-55-3	mg/kg	--	--	ND < 0.028	ND < 0.026	ND < 0.028	ND < 0.027	ND < 0.028	ND < 0.028	ND < 0.028	ND < 0.026	ND < 0.027	ND < 0.029

Table 1
Summary of Soil Boring Analytical Data
Vacant Parcels, Rockaway Avenue & Chester Street, Brooklyn, NY

Boring Location ID:					SB-05	SB-05	SB-06	SB-06	SB-06	SB-06	SB-07	SB-07	SB-08	SB-08
Sample Date:					10/13/2020	10/13/2020	10/13/2020	10/15/2020	10/13/2020	10/13/2020	10/13/2020	10/13/2020	10/13/2020	10/13/2020
Sample Depth (bgs):					0-2 ft	13-15 ft	0-2 ft	2-4 ft	13-15 ft	13-15 ft	0-2 ft	13-15 ft	0-2 ft	13-15 ft
Analyte	CAS	Units	Restricted Residential SCO	Unrestricted Use SCO						Duplicate				
4-CHLOROANILINE	106-47-8	mg/kg	--	--	ND < 0.033	ND < 0.031	ND < 0.034	ND < 0.032	ND < 0.033	ND < 0.034	ND < 0.033	ND < 0.031	ND < 0.032	ND < 0.034
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	mg/kg	--	--	ND < 0.019	ND < 0.018	ND < 0.02	ND < 0.019	ND < 0.02	ND < 0.02	ND < 0.02	ND < 0.018	ND < 0.019	ND < 0.02
4-NITROANILINE	100-01-6	mg/kg	--	--	ND < 0.075	ND < 0.071	ND < 0.077	ND < 0.074	ND < 0.076	ND < 0.076	ND < 0.076	ND < 0.071	ND < 0.074	ND < 0.078
4-NITROPHENOL	100-02-7	mg/kg	--	--	ND < 0.074	ND < 0.07	ND < 0.076	ND < 0.073	ND < 0.074	ND < 0.075	ND < 0.075	ND < 0.07	ND < 0.073	ND < 0.077
ACENAPHTHENE	83-32-9	mg/kg	100	20	0.099 J	ND < 0.018	0.33	0.12 J	ND < 0.019	ND < 0.019	1.2	ND < 0.018	0.024 J	ND < 0.02
ACENAPHTHYLENE	208-96-8	mg/kg	100	100	0.094 J	ND < 0.026	0.36	0.13 J	ND < 0.028	ND < 0.028	0.062 J	ND < 0.026	0.051 J	ND < 0.029
ACETOPHENONE	98-86-2	mg/kg	--	--	0.028 J	ND < 0.021	ND < 0.023	ND < 0.022	ND < 0.023	ND < 0.023	ND < 0.023	ND < 0.021	ND < 0.022	ND < 0.023
ANTHRACENE	120-12-7	mg/kg	100	100	0.33	ND < 0.034	1.1	0.4	ND < 0.036	ND < 0.036	2.5	ND < 0.033	0.086 J	ND < 0.037
BENZO(A)ANTHRACENE	56-55-3	mg/kg	1	1	1.3	ND < 0.019	4.8	1.2	ND < 0.02	ND < 0.021	5.2	ND < 0.019	0.33	0.022 J
BENZO(A)PYRENE	50-32-8	mg/kg	1	1	1.4	ND < 0.042	4.2	1.3	ND < 0.044	ND < 0.045	4.5	ND < 0.042	0.36	ND < 0.046
BENZO(B)FLUORANTHENE	205-99-2	mg/kg	1	1	1.7	ND < 0.029	6	1.6	ND < 0.031	ND < 0.031	5.5	ND < 0.029	0.44	ND < 0.032
BENZO(GH)PERYLENE	191-24-2	mg/kg	100	100	0.84	ND < 0.02	2.4	0.72	ND < 0.021	ND < 0.022	2	ND < 0.02	0.2	ND < 0.022
BENZO(K)FLUORANTHENE	207-08-9	mg/kg	3.9	0.8	0.56	ND < 0.028	1.4	0.56	ND < 0.029	ND < 0.029	1.9	ND < 0.027	0.15	ND < 0.03
BENZOIC ACID	65-85-0	mg/kg	--	--	ND < 0.18	ND < 0.17	ND < 0.19	ND < 0.18	ND < 0.18	ND < 0.19	ND < 0.18	ND < 0.17	ND < 0.18	ND < 0.19
BENZYL ALCOHOL	100-51-6	mg/kg	--	--	ND < 0.056	ND < 0.053	ND < 0.057	ND < 0.054	ND < 0.056	ND < 0.056	ND < 0.056	ND < 0.052	ND < 0.055	ND < 0.058
BIPHENYL	92-52-4	mg/kg	--	--	ND < 0.042	ND < 0.04	ND < 0.043	ND < 0.041	ND < 0.042	ND < 0.043	0.051 J	ND < 0.04	ND < 0.041	ND < 0.044
BIS(2-CHLOROETHOXY)METHANE	111-91-1	mg/kg	--	--	ND < 0.018	ND < 0.017	ND < 0.019	ND < 0.018	ND < 0.018	ND < 0.018	ND < 0.018	ND < 0.017	ND < 0.018	ND < 0.019
BIS(2-CHLOROETHYL)ETHER	111-44-4	mg/kg	--	--	ND < 0.025	ND < 0.023	ND < 0.025	ND < 0.024	ND < 0.025	ND < 0.025	ND < 0.025	ND < 0.023	ND < 0.024	ND < 0.026
BIS(2-CHLOROISOPROPYL)ETHER	108-60-1	mg/kg	--	--	ND < 0.031	ND < 0.029	ND < 0.032	ND < 0.03	ND < 0.031	ND < 0.031	ND < 0.031	ND < 0.029	ND < 0.03	ND < 0.032
BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	mg/kg	--	--	ND < 0.063	ND < 0.06	0.19	0.18	ND < 0.063	ND < 0.064	ND < 0.063	ND < 0.059	0.079 J	ND < 0.065
BUTYL BENZYL PHTHALATE	85-68-7	mg/kg	--	--	ND < 0.046	ND < 0.043	ND < 0.047	ND < 0.045	ND < 0.046	ND < 0.046	ND < 0.046	ND < 0.043	ND < 0.045	ND < 0.047
CARBAZOLE	86-74-8	mg/kg	--	--	0.19	ND < 0.017	0.6	0.26	ND < 0.018	ND < 0.018	1.2	ND < 0.017	0.03 J	ND < 0.018
CHRYSENE	218-01-9	mg/kg	3.9	1	1.3	ND < 0.018	4.1	1.3	ND < 0.019	ND < 0.019	4.6	ND < 0.018	0.32	0.02 J
DIBENZO(A,H)ANTHRACENE	53-70-3	mg/kg	0.33	0.33	0.22	ND < 0.02	0.65	0.2	ND < 0.021	ND < 0.021	0.65	ND < 0.02	0.057 J	ND < 0.022
DIBENZOFURAN	132-64-9	mg/kg	59	7	0.053 J	ND < 0.016	0.19	0.087 J	ND < 0.017	ND < 0.017	0.62	ND < 0.016	ND < 0.017	ND < 0.018
DIETHYL PHTHALATE	84-66-2	mg/kg	--	--	ND < 0.017	ND < 0.016	ND < 0.017	ND < 0.016	ND < 0.017	ND < 0.017	ND < 0.017	ND < 0.016	ND < 0.016	ND < 0.017
DIMETHYL PHTHALATE	131-11-3	mg/kg	--	--	ND < 0.038	ND < 0.036	ND < 0.039	ND < 0.037	ND < 0.038	ND < 0.039	ND < 0.038	ND < 0.036	ND < 0.038	ND < 0.04
DI-N-BUTYLPHTHALATE	84-74-2	mg/kg	--	--	0.034 J	ND < 0.033	0.059 J	ND < 0.034	ND < 0.035	ND < 0.035	ND < 0.035	ND < 0.032	ND < 0.034	ND < 0.036
DI-N-OCTYLPHTHALATE	117-84-0	mg/kg	--	--	ND < 0.062	ND < 0.058	ND < 0.063	ND < 0.061	ND < 0.062	ND < 0.063	ND < 0.062	ND < 0.058	ND < 0.061	ND < 0.064
FLUORANTHENE	206-44-0	mg/kg	100	100	2.6	ND < 0.02	7.2	2.8	ND < 0.021	ND < 0.021	9.2	ND < 0.02	0.63	0.036 J
FLUORENE	86-73-7	mg/kg	100	30	0.1 J	ND < 0.017	0.36	0.13 J	ND < 0.018	ND < 0.018	0.95	ND < 0.017	0.031 J	ND < 0.018
HEXACHLORO BENZENE	118-74-1	mg/kg	1.2	0.33	ND < 0.02	ND < 0.019	ND < 0.021	ND < 0.02	ND < 0.02	ND < 0.021	ND < 0.02	ND < 0.019	ND < 0.02	ND < 0.021
HEXACHLORO BUTADIENE	87-68-3	mg/kg	--	--	ND < 0.027	ND < 0.025	ND < 0.027	ND < 0.026	ND < 0.027	ND < 0.027	ND < 0.027	ND < 0.025	ND < 0.026	ND < 0.028
HEXACHLOROCYCLOPENTADIENE	77-47-4	mg/kg	--	--	ND < 0.16	ND < 0.16	ND < 0.17	ND < 0.16	ND < 0.16	ND < 0.17	ND < 0.17	ND < 0.15	ND < 0.16	ND < 0.17
HEXACHLOROETHANE	67-72-1	mg/kg	--	--	ND < 0.029	ND < 0.028	ND < 0.03	ND < 0.029	ND < 0.03	ND < 0.03	ND < 0.03	ND < 0.028	ND < 0.029	ND < 0.03
INDENO(1,2,3-CD)PYRENE	193-39-5	mg/kg	0.5	0.5	0.91	ND < 0.024	2.9	0.82	ND < 0.025	ND < 0.026	2.4	ND < 0.024	0.23	ND < 0.026
ISOPHORONE	78-59-1	mg/kg	--	--	ND < 0.024	ND < 0.022	ND < 0.024	ND < 0.023	ND < 0.024	ND < 0.024	ND < 0.024	ND < 0.022	ND < 0.023	ND < 0.024
NAPHTHALENE	91-20-3	mg/kg	100	12	0.031 J	ND < 0.021	0.12 J	0.058 J	ND < 0.022	ND < 0.022	0.15 J	ND < 0.021	ND < 0.022	ND < 0.023
NITROBENZENE	98-95-3	mg/kg	--	--	ND < 0.027	ND < 0.025	ND < 0.028	ND < 0.026	ND < 0.027	ND < 0.027	ND < 0.027	ND < 0.025	ND < 0.026	ND < 0.028
NITROSODIPHENYLAMINE (NDPA)/DPA	86-30-6	mg/kg	--	--	ND < 0.021	ND < 0.02	ND < 0.021	ND < 0.02	ND < 0.021	ND < 0.021	ND < 0.021	ND < 0.019	ND < 0.02	ND < 0.021
N-NITROSODI-N-PROPYLAMINE	621-64-7	mg/kg	--	--	ND < 0.028	ND < 0.026	ND < 0.029	ND < 0.028	ND < 0.028	ND < 0.028	ND < 0.028	ND < 0.026	ND < 0.028	ND < 0.029
P-CHLORO-M-CRESOL	59-50-7	mg/kg	--	--	ND < 0.027	ND < 0.026	ND < 0.028	ND < 0.026	ND < 0.027	ND < 0.027	ND < 0.027	ND < 0.025	ND < 0.027	ND < 0.028
PENTACHLOROPHENOL	87-86-5	mg/kg	6.7	0.8	ND < 0.04	ND < 0.038	ND < 0.041	ND < 0.039	ND < 0.04	ND < 0.04	ND < 0.04	ND < 0.038	ND < 0.039	ND < 0.041
PHENANTHRENE	85-01-8	mg/kg	100	100	1.6	ND < 0.021	4.9	1.9	ND < 0.022	ND < 0.022	9	ND < 0.021	0.39	ND < 0.023
PHENOL	108-95-2	mg/kg	100	0.33	ND < 0.027	ND < 0.026	ND < 0.028	ND < 0.027	ND < 0.028	ND < 0.028	ND < 0.028	ND < 0.026	ND < 0.027	ND < 0.028
PYRENE	129-00-0	mg/kg	100	100	2.4	ND < 0.017	6.3	2.3	ND < 0.018	ND < 0.018	7.9	ND < 0.017	0.6	0.034 J
Metals (6010D, SW7471B)														
ALUMINUM, TOTAL	7429-90-5	mg/kg	--	--	4910	6530	5460	6390	4730	9340	2920	6200	4090	8070
ANTIMONY, TOTAL	7440-36-0	mg/kg	--	--	1.83 J	0.589 J	0.778 J	1.2 J	0.689 J	0.69 J	ND < 0.325	ND < 0.304	0.672 J	1.07 J
ARSENIC, TOTAL	7440-38-2	mg/kg	16	13	5.34	1.02	3.92	7.53	0.916	1.37	4.01	1.04	1.93	2.31
BARIUM, TOTAL	7440-39-3	mg/kg	400	350	186	15.8	396	497	24.7	27.7	96.6	24.3	43.2	15.6

Table 1
Summary of Soil Boring Analytical Data
Vacant Parcels, Rockaway Avenue & Chester Street, Brooklyn, NY

Boring Location ID:					SB-05	SB-05	SB-06	SB-06	SB-06	SB-06	SB-07	SB-07	SB-08	SB-08
Sample Date:					10/13/2020	10/13/2020	10/13/2020	10/15/2020	10/13/2020	10/13/2020	10/13/2020	10/13/2020	10/13/2020	10/13/2020
Sample Depth (bgs):					0-2 ft	13-15 ft	0-2 ft	2-4 ft	13-15 ft	13-15 ft	0-2 ft	13-15 ft	0-2 ft	13-15 ft
Analyte	CAS	Units	Restricted Residential	Unrestricted Use										
			SCO	SCO	Duplicate									
BERYLLIUM, TOTAL	7440-41-7	mg/kg	72	7.2	0.249 J	0.369 J	0.268 J	0.334 J	0.353 J	0.55	0.231 J	0.344 J	0.269 J	0.482
CADMIUM, TOTAL	7440-43-9	mg/kg	4.3	2.5	0.472 J	ND < 0.077	0.161 J	1.32	ND < 0.082	ND < 0.086	ND < 0.084	ND < 0.079	ND < 0.082	ND < 0.084
CALCIUM, TOTAL	7440-70-2	mg/kg	--	--	13000	471	18300	16100	575	662	35000	505	4240	781
CHROMIUM, TOTAL	7440-47-3	mg/kg	--	--	13.4	16.1	11.7	22.2	14.4	24.7	7.34	10.9	9.56	27.2
COBALT, TOTAL	7440-48-4	mg/kg	--	--	5.45	11.2	4.25	6.55	6.33	8.25	4.66	5.06	4.43	6.19
COPPER, TOTAL	7440-50-8	mg/kg	270	50	82	12.8	20.9	66.3	15.4	18.1	26.7	10.5	14.3	26.9
IRON, TOTAL	7439-89-6	mg/kg	--	--	28200	20200	11900	27600	19800	25700	7920	11600	16000	33400
LEAD, TOTAL	7439-92-1	mg/kg	400	63	251	5.02	200	1290	5.09	5.77	179	4.29	30.8	6.37
MAGNESIUM, TOTAL	7439-95-4	mg/kg	--	--	2850	1730	5800	2490	1780	3250	1260	1620	1710	1520
MANGANESE, TOTAL	7439-96-5	mg/kg	2000	1600	274	621	318	476	455	291	93.8	305	333	186
NICKEL, TOTAL	7440-02-0	mg/kg	310	30	14.1	12.3	8.74	17.9	11.4	13.5	10.5	9.94	8.73	12.9
POTASSIUM, TOTAL	7440-09-7	mg/kg	--	--	564	579	300	466	409	1100	875	517	407	516
SELENIUM, TOTAL	7782-49-2	mg/kg	180	3.9	0.318 J	ND < 0.203	ND < 0.231	ND < 0.216	ND < 0.217	ND < 0.225	ND < 0.221	ND < 0.207	ND < 0.217	ND < 0.222
SILVER, TOTAL	7440-22-4	mg/kg	180	2	ND < 0.243	ND < 0.222	ND < 0.253	0.242 J	ND < 0.238	ND < 0.247	ND < 0.242	ND < 0.227	ND < 0.238	ND < 0.243
SODIUM, TOTAL	7440-23-5	mg/kg	--	--	110 J	27.2 J	55.2 J	78.9 J	42.1 J	32 J	200	24 J	43.7 J	27.3 J
THALLIUM, TOTAL	7440-28-0	mg/kg	--	--	ND < 0.27	0.298 J	ND < 0.282	ND < 0.263	0.361 J	ND < 0.275	ND < 0.27	ND < 0.252	ND < 0.265	ND < 0.271
VANADIUM, TOTAL	7440-62-2	mg/kg	--	--	18.8	27.5	15.9	46.4	26.8	33.9	14	19.4	20.7	35.1
ZINC, TOTAL	7440-66-6	mg/kg	10000	109	602	34.8	288	680	24.6	28.5	89.6	21.1	42.2	48.8
MERCURY, TOTAL	7439-97-6	mg/kg	0.81	0.18	0.341	ND < 0.043	0.303	0.611	ND < 0.045	ND < 0.046	0.171	ND < 0.043	0.113	ND < 0.047
Pesticides (SW8081B)														
4,4'-DDD	72-54-8	mg/kg	13	0.0033	0.00223	ND < 0.000588	0.00783	ND < 0.000615	ND < 0.000619	ND < 0.000622	ND < 0.00061	ND < 0.000574	0.00196	ND < 0.000618
4,4'-DDE	72-55-9	mg/kg	8.9	0.0033	0.00258	ND < 0.000381	0.00615	0.00496	ND < 0.000402	ND < 0.000403	0.000541 JIP	ND < 0.000372	0.000948 J	ND < 0.000401
4,4'-DDT	50-29-3	mg/kg	7.9	0.0033	0.0152	ND < 0.00132	0.0316	0.0153	ND < 0.0014	ND < 0.0014	ND < 0.00138	ND < 0.00129	0.00524	ND < 0.00139
ALDRIN	309-00-2	mg/kg	0.097	0.005	ND < 0.000617	ND < 0.00058	ND < 0.000627	ND < 0.000607	ND < 0.000611	ND < 0.000614	ND < 0.000602	ND < 0.000566	ND < 0.000609	ND < 0.00061
ALPHA-BHC	319-84-6	mg/kg	0.48	0.02	ND < 0.000207	ND < 0.000195	ND < 0.000211	ND < 0.000204	ND < 0.000206	ND < 0.000206	ND < 0.000202	ND < 0.00019	ND < 0.000205	ND < 0.000205
BETA-BHC	319-85-7	mg/kg	0.36	0.036	ND < 0.000664	ND < 0.000625	ND < 0.000675	ND < 0.000654	ND < 0.000658	ND < 0.000661	ND < 0.000648	ND < 0.00061	ND < 0.000656	ND < 0.000657
CHLORDANE	57-74-9	mg/kg	--	--	ND < 0.0058	ND < 0.00546	ND < 0.0059	0.0364 P	ND < 0.00575	ND < 0.00577	ND < 0.00566	ND < 0.00533	ND < 0.00573	ND < 0.00574
CIS-CHLORDANE	5103-71-9	mg/kg	4.2	0.094	0.00329 IP	ND < 0.000574	0.00495 IP	0.00171 J	ND < 0.000605	ND < 0.000607	ND < 0.000596	ND < 0.00056	ND < 0.000602	ND < 0.000604
DELTA-BHC	319-86-8	mg/kg	100	0.04	ND < 0.000343	ND < 0.000323	ND < 0.000349	ND < 0.000338	ND < 0.00034	ND < 0.000341	ND < 0.000335	ND < 0.000315	ND < 0.000339	ND < 0.000339
DIELDRIN	60-57-1	mg/kg	0.2	0.005	0.0021	ND < 0.000515	0.00527	ND < 0.000539	ND < 0.000543	ND < 0.000545	0.00274	ND < 0.000503	0.000736 J	ND < 0.000541
ENDOSULFAN I	959-98-8	mg/kg	24	2.4	ND < 0.000414	ND < 0.000389	ND < 0.000421	ND < 0.000407	ND < 0.00041	ND < 0.000412	ND < 0.000404	ND < 0.00038	ND < 0.000409	ND < 0.000409
ENDOSULFAN II	33213-65-9	mg/kg	24	2.4	ND < 0.000585	ND < 0.000551	ND < 0.000595	ND < 0.000576	ND < 0.00058	ND < 0.000582	ND < 0.000571	ND < 0.000538	ND < 0.000578	ND < 0.000579
ENDOSULFAN SULFATE	1031-07-8	mg/kg	24	2.4	ND < 0.000347	ND < 0.000327	ND < 0.000353	ND < 0.000342	ND < 0.000344	ND < 0.000346	ND < 0.000339	ND < 0.000319	ND < 0.000343	ND < 0.000344
ENDRIN ALDEHYDE	7421-93-4	mg/kg	--	--	ND < 0.000766	ND < 0.000721	ND < 0.000779	ND < 0.000754	ND < 0.00076	ND < 0.000762	ND < 0.000748	ND < 0.000704	ND < 0.000757	ND < 0.000758
ENDRIN KETONE	53494-70-5	mg/kg	--	--	ND < 0.000451	ND < 0.000424	ND < 0.000458	ND < 0.000444	ND < 0.000447	ND < 0.000449	ND < 0.00044	ND < 0.000414	ND < 0.000445	ND < 0.000446
ENDRIN	72-20-8	mg/kg	11	0.014	ND < 0.000299	ND < 0.000281	ND < 0.000304	ND < 0.000295	ND < 0.000297	ND < 0.000298	ND < 0.000292	ND < 0.000275	ND < 0.000296	ND < 0.000296
HEPTACHLOR EPOXIDE	1024-57-3	mg/kg	--	--	ND < 0.000985	ND < 0.000927	ND < 0.001	ND < 0.00097	ND < 0.000977	ND < 0.00098	ND < 0.000962	ND < 0.000905	ND < 0.000973	ND < 0.000975
HEPTACHLOR	76-44-8	mg/kg	2.1	0.042	ND < 0.000393	ND < 0.000369	ND < 0.000399	ND < 0.000386	ND < 0.000389	ND < 0.000391	ND < 0.000383	ND < 0.000361	ND < 0.000388	ND < 0.000388
LINDANE	58-89-9	mg/kg	1.3	0.1	ND < 0.000326	ND < 0.000307	ND < 0.000332	ND < 0.000321	ND < 0.000323	ND < 0.000325	ND < 0.000318	ND < 0.0003	ND < 0.000322	ND < 0.000323
METHOXYCHLOR	72-43-5	mg/kg	--	--	ND < 0.00102	ND < 0.000961	ND < 0.00104	ND < 0.00101	ND < 0.00101	ND < 0.00102	ND < 0.000998	ND < 0.000939	ND < 0.00101	ND < 0.00101
TOXAPHENE	8001-35-2	mg/kg	--	--	ND < 0.0092	ND < 0.00865	ND < 0.00935	ND < 0.00905	ND < 0.00912	ND < 0.00915	ND < 0.00898	ND < 0.00845	ND < 0.00908	ND < 0.0091
TRANS-CHLORDANE	5103-74-2	mg/kg	--	--	0.00256 IP	ND < 0.000544	0.00423 IP	0.00177 JIP	ND < 0.000573	ND < 0.000575	ND < 0.000564	ND < 0.000531	ND < 0.000571	ND < 0.000572
Polychlorinated Biphenyls - PCBs (SW8082A)														
AROCLOR 1016	12674-11-2	mg/kg	--	--	ND < 0.00326	ND < 0.00304	ND < 0.00324	ND < 0.00314	ND < 0.00323	ND < 0.00332	ND < 0.00326	ND < 0.00299	ND < 0.00312	ND < 0.00338
AROCLOR 1221	11104-28-2	mg/kg	--	--	ND < 0.00367	ND < 0.00343	ND < 0.00366	ND < 0.00355	ND < 0.00364	ND < 0.00374	ND < 0.00368	ND < 0.00338	ND < 0.00352	ND < 0.00381
AROCLOR 1232	11141-16-5	mg/kg	--	--	ND < 0.00777	ND < 0.00725	ND < 0.00774	ND < 0.0075	ND < 0.00771	ND < 0.00792	ND < 0.00778	ND < 0.00715	ND < 0.00745	ND < 0.00806
AROCLOR 1242	53469-21-9	mg/kg	--	--	ND < 0.00494	ND < 0.00461	ND < 0.00492	ND < 0.00477	ND < 0.0049	ND < 0.00503	ND < 0.00495	ND < 0.00454	ND < 0.00474	ND < 0.00512
AROCLOR 1248	12672-29-6	mg/kg	--	--	ND < 0.0055	ND < 0.00513	ND < 0.00548	ND < 0.00531	ND < 0.00546	ND < 0.0056	ND < 0.0055	ND < 0.00506	ND < 0.00527	ND < 0.0057
AROCLOR 1254	11097-69-1	mg/kg	--	--	ND < 0.00401	ND < 0.00374	ND < 0.004	ND < 0.00387	ND < 0.00398	ND < 0.00408	ND < 0.00402	ND < 0.00369	ND < 0.00385	0.00714 J
AROCLOR 1260	11096-82-5	mg/kg	--	--	0.0172 J	ND < 0.00632	0.00945 J	ND < 0.00654	ND < 0.00672	ND < 0.0069	ND < 0.00678	ND < 0.00623	ND < 0.00665	ND < 0.00702
AROCLOR 1262	37324-23-5	mg/kg	--	--	ND < 0.00466	ND < 0.00434	ND < 0.00464	ND < 0.00449	ND < 0.00462	ND < 0.00474	ND < 0.00466	ND < 0.00428	ND < 0.00446	ND < 0.00483

Table 1
Summary of Soil Boring Analytical Data
Vacant Parcels, Rockaway Avenue & Chester Street, Brooklyn, NY

Boring Location ID:					SB-05	SB-05	SB-06	SB-06	SB-06	SB-06	SB-07	SB-07	SB-08	SB-08
Sample Date:					10/13/2020	10/13/2020	10/13/2020	10/15/2020	10/13/2020	10/13/2020	10/13/2020	10/13/2020	10/13/2020	10/13/2020
Sample Depth (bgs):					0-2 ft	13-15 ft	0-2 ft	2-4 ft	13-15 ft	13-15 ft	0-2 ft	13-15 ft	0-2 ft	13-15 ft
Analyte	CAS	Units	Restricted Residential SCO	Unrestricted Use SCO						Duplicate				
AROCLOR 1268	11100-14-4	mg/kg	--	--	0.00652 J	ND < 0.00354	0.0054 J	0.00877 J	ND < 0.00377	ND < 0.00387	ND < 0.0038	ND < 0.00349	ND < 0.00364	ND < 0.00394
PCBS, TOTAL	1336-36-3	mg/kg	1	0.1	0.0237 J	ND < 0.00304	0.0149 J	0.00877 J	ND < 0.00323	ND < 0.00332	ND < 0.00326	ND < 0.00299	ND < 0.00312	0.00714 J

Notes:

Screening Levels

SCO = NYSDEC Soil Cleanup Objective

Detected results that exceed the SCOs are shaded.

Units

mg/kg = milligrams per kilogram

bgs = below ground surface

Data Qualifiers

ND = Not detected above laboratory method detection limit (MDL).

J = Estimated value is greater than MDL and less than Limit of Quantitation (LOQ).

I = The lower value for the two columns has been reported due to obvious interference.

P = The RPD between the results for the two columns exceeds the method-specified criteria.

Other Acronyms/Symbols

-- = not analyzed for or no screening level

Table 1
Summary of Soil Boring Analytical Data
Vacant Parcels, Rockaway Avenue & Chester Street, Brooklyn, NY

Boring Location ID:					SB-09	SB-09	SB-10	SB-10	SB-10	SB-11	SB-11	SB-11
Sample Date:					10/13/2020	10/13/2020	10/15/2020	10/15/2020	10/15/2020	10/15/2020	10/15/2020	10/15/2020
Sample Depth (bgs):					0-2 ft	13-15 ft	0-2 ft	4-6 ft	13-15 ft	0-2 ft	2-5 ft	13-15 ft
Analyte	CAS	Units	Restricted Residential SCO	Unrestricted Use SCO								
Volatiles Organic Compounds - VOCs (SW8260C)												
1,1,1,2-TETRACHLOROETHANE	630-20-6	mg/kg	--	--	ND < 0.00017	ND < 0.00015	ND < 0.00015	ND < 0.00016	ND < 0.00014	ND < 0.00015	ND < 0.00016	ND < 0.00014
1,1,1-TRICHLOROETHANE	71-55-6	mg/kg	100	0.68	ND < 0.00021	ND < 0.00019	ND < 0.00019	ND < 0.0002	ND < 0.00018	ND < 0.0002	ND < 0.0002	ND < 0.00018
1,1,2,2-TETRACHLOROETHANE	79-34-5	mg/kg	--	--	ND < 0.00021	ND < 0.00019	ND < 0.00019	ND < 0.0002	ND < 0.00018	ND < 0.00019	ND < 0.0002	ND < 0.00017
1,1,2-TRICHLOROETHANE	79-00-5	mg/kg	--	--	ND < 0.00034	ND < 0.00031	ND < 0.00031	ND < 0.00032	ND < 0.00029	ND < 0.00031	ND < 0.00032	ND < 0.00028
1,1-DICHLOROETHANE	75-34-3	mg/kg	26	0.27	ND < 0.00018	ND < 0.00017	ND < 0.00017	ND < 0.00018	ND < 0.00016	ND < 0.00017	ND < 0.00018	ND < 0.00015
1,1-DICHLOROETHENE	75-35-4	mg/kg	100	0.33	ND < 0.0003	ND < 0.00027	ND < 0.00028	ND < 0.00029	ND < 0.00026	ND < 0.00028	ND < 0.00029	ND < 0.00025
1,1-DICHLOROPROPENE	563-58-6	mg/kg	--	--	ND < 0.0002	ND < 0.00018	ND < 0.00018	ND < 0.00019	ND < 0.00017	ND < 0.00018	ND < 0.00019	ND < 0.00017
1,2,3-TRICHLOROBENZENE	87-61-6	mg/kg	--	--	ND < 0.00041	ND < 0.00037	ND < 0.00037	ND < 0.00039	ND < 0.00035	ND < 0.00038	ND < 0.00039	ND < 0.00034
1,2,3-TRICHLOROPROPANE	96-18-4	mg/kg	--	--	ND < 0.00016	ND < 0.00015	ND < 0.00015	ND < 0.00015	ND < 0.00014	ND < 0.00015	ND < 0.00015	ND < 0.00013
1,2,4,5-TETRAMETHYLBENZENE	95-93-2	mg/kg	--	--	ND < 0.00024	ND < 0.00022	ND < 0.00022	ND < 0.00023	ND < 0.00021	ND < 0.00022	ND < 0.00023	ND < 0.0002
1,2,4-TRICHLOROBENZENE	120-82-1	mg/kg	--	--	ND < 0.00034	ND < 0.00031	ND < 0.00032	ND < 0.00033	ND < 0.0003	ND < 0.00032	ND < 0.00033	ND < 0.00028
1,2,4-TRIMETHYLBENZENE	95-63-6	mg/kg	52	3.6	ND < 0.00042	ND < 0.00038	ND < 0.00039	ND < 0.0004	ND < 0.00036	ND < 0.00039	ND < 0.0004	ND < 0.00035
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	mg/kg	--	--	ND < 0.0013	ND < 0.0011	ND < 0.0012	ND < 0.0012	ND < 0.0011	ND < 0.0012	ND < 0.0012	ND < 0.001
1,2-DIBROMOETHANE	106-93-4	mg/kg	--	--	ND < 0.00035	ND < 0.00032	ND < 0.00032	ND < 0.00034	ND < 0.0003	ND < 0.00033	ND < 0.00034	ND < 0.00029
1,2-DICHLOROBENZENE	95-50-1	mg/kg	100	1.1	ND < 0.00018	ND < 0.00016	ND < 0.00017	ND < 0.00017	ND < 0.00016	ND < 0.00017	ND < 0.00017	ND < 0.00015
1,2-DICHLOROETHANE	107-06-2	mg/kg	3.1	0.02	ND < 0.00032	ND < 0.0003	ND < 0.0003	ND < 0.00031	ND < 0.00028	ND < 0.0003	ND < 0.00031	ND < 0.00027
1,2-DICHLOROETHENE (TOTAL)	540-59-0	mg/kg	--	--	ND < 0.00017	ND < 0.00016	ND < 0.00016	ND < 0.00016	ND < 0.00015	ND < 0.00016	ND < 0.00016	ND < 0.00014
1,2-DICHLOROPROPANE	78-87-5	mg/kg	--	--	ND < 0.00016	ND < 0.00014	ND < 0.00014	ND < 0.00015	ND < 0.00014	ND < 0.00015	ND < 0.00015	ND < 0.00013
1,3,5-TRIMETHYLBENZENE	108-67-8	mg/kg	52	8.4	ND < 0.00024	ND < 0.00022	ND < 0.00022	ND < 0.00023	ND < 0.00021	ND < 0.00022	ND < 0.00023	ND < 0.0002
1,3-DICHLOROBENZENE	541-73-1	mg/kg	49	2.4	ND < 0.00019	ND < 0.00017	ND < 0.00017	ND < 0.00018	ND < 0.00016	ND < 0.00017	ND < 0.00018	ND < 0.00016
1,3-DICHLOROPROPANE	142-28-9	mg/kg	--	--	ND < 0.00021	ND < 0.00019	ND < 0.00019	ND < 0.0002	ND < 0.00018	ND < 0.0002	ND < 0.0002	ND < 0.00018
1,3-DICHLOROPROPENE, TOTAL	542-75-6	mg/kg	--	--	ND < 0.0002	ND < 0.00018	ND < 0.00018	ND < 0.00019	ND < 0.00017	ND < 0.00018	ND < 0.00019	ND < 0.00017
1,4-DICHLOROBENZENE	106-46-7	mg/kg	13	1.8	ND < 0.00022	ND < 0.0002	ND < 0.0002	ND < 0.00021	ND < 0.00018	ND < 0.0002	ND < 0.00021	ND < 0.00018
1,4-DIETHYLBENZENE	105-05-5	mg/kg	--	--	ND < 0.00022	ND < 0.0002	ND < 0.0002	ND < 0.00021	ND < 0.00019	ND < 0.00021	ND < 0.00021	ND < 0.00018
1,4-DIOXANE	123-91-1	mg/kg	13	0.1	ND < 0.044	ND < 0.04	ND < 0.041	ND < 0.042	ND < 0.038	ND < 0.041	ND < 0.042	ND < 0.037
2,2-DICHLOROPROPANE	594-20-7	mg/kg	--	--	ND < 0.00026	ND < 0.00023	ND < 0.00023	ND < 0.00024	ND < 0.00022	ND < 0.00024	ND < 0.00024	ND < 0.00021
2-BUTANONE	78-93-3	mg/kg	100	0.12	ND < 0.0028	ND < 0.0026	ND < 0.0026	ND < 0.0027	ND < 0.0024	ND < 0.0026	ND < 0.0027	ND < 0.0023
2-HEXANONE	591-78-6	mg/kg	--	--	ND < 0.0015	ND < 0.0014	ND < 0.0014	ND < 0.0014	ND < 0.0013	ND < 0.0014	ND < 0.0014	ND < 0.0012
4-ETHYLTOLUENE	622-96-8	mg/kg	--	--	ND < 0.00048	ND < 0.00044	ND < 0.00044	ND < 0.00046	ND < 0.00042	ND < 0.00045	ND < 0.00046	ND < 0.0004
4-METHYL-2-PENTANONE	108-10-1	mg/kg	--	--	ND < 0.0016	ND < 0.0015	ND < 0.0015	ND < 0.0015	ND < 0.0014	ND < 0.0015	ND < 0.0015	ND < 0.0013
ACETONE	67-64-1	mg/kg	100	0.05	ND < 0.0061	ND < 0.0055	0.0069 J	0.025	ND < 0.0052	ND < 0.0056	ND < 0.0058	ND < 0.005
ACRYLONITRILE	107-13-1	mg/kg	--	--	ND < 0.0014	ND < 0.0013	ND < 0.0013	ND < 0.0014	ND < 0.0012	ND < 0.0013	ND < 0.0014	ND < 0.0012
BENZENE	71-43-2	mg/kg	4.8	0.06	ND < 0.00021	ND < 0.00019	ND < 0.00019	0.00052 J	ND < 0.00018	ND < 0.00019	ND < 0.0002	ND < 0.00017
BROMOBENZENE	108-86-1	mg/kg	--	--	ND < 0.00018	ND < 0.00017	ND < 0.00017	ND < 0.00018	ND < 0.00016	ND < 0.00017	ND < 0.00018	ND < 0.00015
BROMOCHLOROMETHANE	74-97-5	mg/kg	--	--	ND < 0.00026	ND < 0.00024	ND < 0.00024	ND < 0.00025	ND < 0.00022	ND < 0.00024	ND < 0.00025	ND < 0.00022
BROMODICHLOROMETHANE	75-27-4	mg/kg	--	--	ND < 0.00014	ND < 0.00012	ND < 0.00013	ND < 0.00013	ND < 0.00012	ND < 0.00013	ND < 0.00013	ND < 0.00011
BROMOFORM	75-25-2	mg/kg	--	--	ND < 0.00031	ND < 0.00028	ND < 0.00028	ND < 0.0003	ND < 0.00027	ND < 0.00029	ND < 0.0003	ND < 0.00026
BROMOMETHANE	74-83-9	mg/kg	--	--	ND < 0.00074	ND < 0.00067	ND < 0.00067	ND < 0.0007	ND < 0.00063	ND < 0.00068	ND < 0.0007	ND < 0.00061
CARBON DISULFIDE	75-15-0	mg/kg	--	--	ND < 0.0058	ND < 0.0052	ND < 0.0053	ND < 0.0055	ND < 0.0049	ND < 0.0053	ND < 0.0055	ND < 0.0048
CARBON TETRACHLORIDE	56-23-5	mg/kg	2.4	0.76	ND < 0.00029	ND < 0.00026	ND < 0.00027	ND < 0.00028	ND < 0.00025	ND < 0.00027	ND < 0.00028	ND < 0.00024
CHLOROBENZENE	108-90-7	mg/kg	100	1.1	ND < 0.00016	ND < 0.00015	ND < 0.00015	ND < 0.00015	ND < 0.00014	ND < 0.00015	ND < 0.00015	ND < 0.00013
CHLOROETHANE	75-00-3	mg/kg	--	--	ND < 0.00057	ND < 0.00052	ND < 0.00052	ND < 0.00055	ND < 0.00049	ND < 0.00053	ND < 0.00055	ND < 0.00047
CHLOROFORM	67-66-3	mg/kg	49	0.37	ND < 0.00018	ND < 0.00016	ND < 0.00016	ND < 0.00017	ND < 0.00015	ND < 0.00016	ND < 0.00017	ND < 0.00015
CHLOROMETHANE	74-87-3	mg/kg	--	--	ND < 0.0012	ND < 0.0011	ND < 0.0011	ND < 0.0011	ND < 0.001	ND < 0.0011	ND < 0.0011	ND < 0.00098
CIS-1,2-DICHLOROETHENE	156-59-2	mg/kg	100	0.25	ND < 0.00022	ND < 0.0002	ND < 0.0002	ND < 0.00021	ND < 0.00019	ND < 0.0002	ND < 0.00021	ND < 0.00018
CIS-1,3-DICHLOROPROPENE	10061-01-5	mg/kg	--	--	ND < 0.0002	ND < 0.00018	ND < 0.00018	ND < 0.00019	ND < 0.00017	ND < 0.00018	ND < 0.00019	ND < 0.00017
DIBROMOCHLOROMETHANE	124-48-1	mg/kg	--	--	ND < 0.00018	ND < 0.00016	ND < 0.00016	ND < 0.00017	ND < 0.00015	ND < 0.00016	ND < 0.00017	ND < 0.00015
DIBROMOMETHANE	74-95-3	mg/kg	--	--	ND < 0.0003	ND < 0.00027	ND < 0.00028	ND < 0.00029	ND < 0.00026	ND < 0.00028	ND < 0.00029	ND < 0.00025
DICHLORODIFLUOROMETHANE	75-71-8	mg/kg	--	--	ND < 0.0012	ND < 0.001	ND < 0.0011	ND < 0.0011	ND < 0.00099	ND < 0.0011	ND < 0.0011	ND < 0.00096
ETHYL ETHER	60-29-7	mg/kg	--	--	ND < 0.00043	ND < 0.00039	ND < 0.0004	ND < 0.00041	ND < 0.00037	ND < 0.0004	ND < 0.00041	ND < 0.00036

Table 1
Summary of Soil Boring Analytical Data
Vacant Parcels, Rockaway Avenue & Chester Street, Brooklyn, NY

Boring Location ID:					SB-09	SB-09	SB-10	SB-10	SB-10	SB-11	SB-11	SB-11
Sample Date:					10/13/2020	10/13/2020	10/15/2020	10/15/2020	10/15/2020	10/15/2020	10/15/2020	10/15/2020
Sample Depth (bgs):					0-2 ft	13-15 ft	0-2 ft	4-6 ft	13-15 ft	0-2 ft	2-5 ft	13-15 ft
Analyte	CAS	Units	Restricted Residential SCO	Unrestricted Use SCO								
ETHYLBENZENE	100-41-4	mg/kg	41	1	ND < 0.00018	ND < 0.00016	ND < 0.00016	ND < 0.00017	ND < 0.00015	ND < 0.00016	ND < 0.00017	ND < 0.00015
HEXACHLOROBUTADIENE	87-68-3	mg/kg	--	--	ND < 0.00021	ND < 0.00019	ND < 0.0002	ND < 0.0002	ND < 0.00018	ND < 0.0002	ND < 0.0002	ND < 0.00018
ISOPROPYLBENZENE	98-82-8	mg/kg	--	--	ND < 0.00014	ND < 0.00012	ND < 0.00013	ND < 0.00013	ND < 0.00012	ND < 0.00013	ND < 0.00013	ND < 0.00011
METHYL TERT BUTYL ETHER	1634-04-4	mg/kg	100	0.93	ND < 0.00025	ND < 0.00023	ND < 0.00023	ND < 0.00024	ND < 0.00022	ND < 0.00023	ND < 0.00024	ND < 0.00021
METHYLENE CHLORIDE	75-09-2	mg/kg	100	0.05	ND < 0.0029	ND < 0.0026	ND < 0.0026	ND < 0.0028	ND < 0.0025	ND < 0.0027	ND < 0.0028	ND < 0.0024
NAPHTHALENE	91-20-3	mg/kg	100	12	ND < 0.00082	ND < 0.00075	ND < 0.00075	ND < 0.00079	ND < 0.0007	ND < 0.00076	ND < 0.00078	ND < 0.00068
N-BUTYLBENZENE	104-51-8	mg/kg	100	12	ND < 0.00021	ND < 0.00019	ND < 0.00019	ND < 0.0002	ND < 0.00018	ND < 0.0002	ND < 0.0002	ND < 0.00018
N-PROPYLBENZENE	103-65-1	mg/kg	100	3.9	ND < 0.00022	ND < 0.0002	ND < 0.0002	ND < 0.00021	ND < 0.00018	ND < 0.0002	ND < 0.00021	ND < 0.00018
O-CHLOROTOLUENE	95-49-8	mg/kg	--	--	ND < 0.00024	ND < 0.00022	ND < 0.00022	ND < 0.00023	ND < 0.00021	ND < 0.00022	ND < 0.00023	ND < 0.0002
O-XYLENE	95-47-6	mg/kg	--	--	ND < 0.00037	ND < 0.00034	ND < 0.00034	ND < 0.00035	ND < 0.00032	ND < 0.00034	ND < 0.00035	ND < 0.0003
P/M-XYLENE	179601-23-1	mg/kg	--	--	ND < 0.00071	ND < 0.00064	ND < 0.00065	ND < 0.00068	ND < 0.00061	ND < 0.00065	ND < 0.00068	ND < 0.00059
P-CHLOROTOLUENE	106-43-4	mg/kg	--	--	ND < 0.00014	ND < 0.00012	ND < 0.00012	ND < 0.00013	ND < 0.00012	ND < 0.00013	ND < 0.00013	ND < 0.00011
P-ISOPROPYLTOLUENE	99-87-6	mg/kg	--	--	ND < 0.00014	ND < 0.00012	0.0033	ND < 0.00013	ND < 0.00012	0.0072	ND < 0.00013	ND < 0.00011
SEC-BUTYLBENZENE	135-98-8	mg/kg	100	11	ND < 0.00018	ND < 0.00017	ND < 0.00017	ND < 0.00018	ND < 0.00016	ND < 0.00017	ND < 0.00018	ND < 0.00015
STYRENE	100-42-5	mg/kg	--	--	ND < 0.00025	ND < 0.00022	ND < 0.00023	ND < 0.00024	ND < 0.00021	ND < 0.00023	ND < 0.00024	ND < 0.0002
TERT-BUTYLBENZENE	98-06-6	mg/kg	100	5.9	ND < 0.00015	ND < 0.00014	ND < 0.00014	ND < 0.00014	ND < 0.00013	ND < 0.00014	ND < 0.00014	ND < 0.00012
TETRACHLOROETHENE	127-18-4	mg/kg	19	1.3	ND < 0.00025	ND < 0.00022	ND < 0.00023	ND < 0.00024	ND < 0.00021	ND < 0.00023	ND < 0.00024	ND < 0.0002
TOLUENE	108-88-3	mg/kg	100	0.7	ND < 0.00069	ND < 0.00062	ND < 0.00063	ND < 0.00066	0.00067 J	ND < 0.00063	ND < 0.00066	ND < 0.00057
TRANS-1,2-DICHLOROETHENE	156-60-5	mg/kg	100	0.19	ND < 0.00017	ND < 0.00016	ND < 0.00016	ND < 0.00016	ND < 0.00015	ND < 0.00016	ND < 0.00016	ND < 0.00014
TRANS-1,3-DICHLOROPROPENE	10061-02-6	mg/kg	--	--	ND < 0.00034	ND < 0.00031	ND < 0.00032	ND < 0.00033	ND < 0.0003	ND < 0.00032	ND < 0.00033	ND < 0.00029
TRANS-1,4-DICHLORO-2-BUTENE	110-57-6	mg/kg	--	--	ND < 0.0018	ND < 0.0016	ND < 0.0016	ND < 0.0017	ND < 0.0015	ND < 0.0016	ND < 0.0017	ND < 0.0015
TRICHLOROETHENE	79-01-6	mg/kg	21	0.47	ND < 0.00017	ND < 0.00016	ND < 0.00016	ND < 0.00016	ND < 0.00015	ND < 0.00016	ND < 0.00016	ND < 0.00014
TRICHLOROFLUOROMETHANE	75-69-4	mg/kg	--	--	ND < 0.00088	ND < 0.0008	ND < 0.00081	ND < 0.00084	ND < 0.00075	ND < 0.00081	ND < 0.00084	ND < 0.00073
VINYL ACETATE	108-05-4	mg/kg	--	--	ND < 0.0027	ND < 0.0025	ND < 0.0025	ND < 0.0026	ND < 0.0023	ND < 0.0025	ND < 0.0026	ND < 0.0022
VINYL CHLORIDE	75-01-4	mg/kg	0.9	0.02	ND < 0.00042	ND < 0.00038	ND < 0.00039	ND < 0.0004	ND < 0.00036	ND < 0.00039	ND < 0.0004	ND < 0.00035
XYLENE (TOTAL)	1330-20-7	mg/kg	100	0.26	ND < 0.00037	ND < 0.00034	ND < 0.00034	ND < 0.00035	ND < 0.00032	ND < 0.00034	ND < 0.00035	ND < 0.0003
Semi-Volatile Organic Compounds - SVOCs (SW8070D)												
1,2,4,5-TETRACHLOROBENZENE	95-94-3	mg/kg	--	--	ND < 0.019	ND < 0.018	ND < 0.036	ND < 0.02	ND < 0.018	ND < 0.093	ND < 0.019	ND < 0.018
1,2,4-TRICHLOROBENZENE	120-82-1	mg/kg	--	--	ND < 0.021	ND < 0.019	ND < 0.04	ND < 0.021	ND < 0.02	ND < 0.1	ND < 0.021	ND < 0.02
1,2-DICHLOROBENZENE	95-50-1	mg/kg	100	1.1	ND < 0.033	ND < 0.031	ND < 0.063	ND < 0.034	ND < 0.031	ND < 0.16	ND < 0.033	ND < 0.031
1,3-DICHLOROBENZENE	541-73-1	mg/kg	49	2.4	ND < 0.032	ND < 0.029	ND < 0.06	ND < 0.032	ND < 0.03	ND < 0.15	ND < 0.031	ND < 0.03
1,4-DICHLOROBENZENE	106-46-7	mg/kg	13	1.8	ND < 0.032	ND < 0.03	ND < 0.061	ND < 0.033	ND < 0.03	ND < 0.16	ND < 0.032	ND < 0.03
1,4-DIOXANE	123-91-1	mg/kg	13	0.1	ND < 0.0085	ND < 0.0078	ND < 0.016	ND < 0.0086	ND < 0.008	ND < 0.041	ND < 0.0084	ND < 0.0079
2,4,5-TRICHLOROPHENOL	95-95-4	mg/kg	--	--	ND < 0.035	ND < 0.033	ND < 0.067	ND < 0.036	ND < 0.033	ND < 0.17	ND < 0.035	ND < 0.033
2,4,6-TRICHLOROPHENOL	88-06-2	mg/kg	--	--	ND < 0.035	ND < 0.032	ND < 0.066	ND < 0.035	ND < 0.033	ND < 0.17	ND < 0.035	ND < 0.033
2,4-DICHLOROPHENOL	120-83-2	mg/kg	--	--	ND < 0.03	ND < 0.027	ND < 0.056	ND < 0.03	ND < 0.028	ND < 0.14	ND < 0.029	ND < 0.028
2,4-DIMETHYLPHENOL	105-67-9	mg/kg	--	--	ND < 0.061	ND < 0.056	ND < 0.12	ND < 0.062	ND < 0.057	ND < 0.29	ND < 0.06	ND < 0.057
2,4-DINITROPHENOL	51-28-5	mg/kg	--	--	ND < 0.086	ND < 0.079	ND < 0.16	ND < 0.087	ND < 0.081	ND < 0.41	ND < 0.085	ND < 0.08
2,4-DINITROTOLUENE	121-14-2	mg/kg	--	--	ND < 0.037	ND < 0.034	ND < 0.07	ND < 0.037	ND < 0.035	ND < 0.18	ND < 0.036	ND < 0.034
2,6-DINITROTOLUENE	606-20-2	mg/kg	--	--	ND < 0.032	ND < 0.029	ND < 0.06	ND < 0.032	ND < 0.03	ND < 0.15	ND < 0.031	ND < 0.03
2-CHLORONAPHTHALENE	91-58-7	mg/kg	--	--	ND < 0.018	ND < 0.017	ND < 0.035	ND < 0.018	ND < 0.017	ND < 0.088	ND < 0.018	ND < 0.017
2-CHLOROPHENOL	95-57-8	mg/kg	--	--	ND < 0.022	ND < 0.02	ND < 0.041	ND < 0.022	ND < 0.02	ND < 0.1	ND < 0.022	ND < 0.02
2-METHYLNAPHTHALENE	91-57-6	mg/kg	--	--	ND < 0.022	ND < 0.02	0.066 J	ND < 0.022	ND < 0.021	ND < 0.11	ND < 0.022	ND < 0.021
2-METHYLPHENOL	95-48-7	mg/kg	100	0.33	ND < 0.029	ND < 0.026	ND < 0.054	ND < 0.029	ND < 0.027	ND < 0.14	ND < 0.028	ND < 0.027
2-NITROANILINE	88-74-4	mg/kg	--	--	ND < 0.036	ND < 0.033	ND < 0.068	ND < 0.036	ND < 0.033	ND < 0.17	ND < 0.035	ND < 0.033
2-NITROPHENOL	88-75-5	mg/kg	--	--	ND < 0.069	ND < 0.064	ND < 0.13	ND < 0.07	ND < 0.065	ND < 0.33	ND < 0.069	ND < 0.065
3,3'-DICHLOROBENZIDINE	91-94-1	mg/kg	--	--	ND < 0.049	ND < 0.045	ND < 0.093	ND < 0.05	ND < 0.046	ND < 0.24	ND < 0.049	ND < 0.046
3-METHYLPHENOL/4-METHYLPHENOL	65794-96-9	mg/kg	--	--	ND < 0.029	ND < 0.027	ND < 0.055	ND < 0.029	ND < 0.027	ND < 0.14	ND < 0.029	ND < 0.027
3-NITROANILINE	99-09-2	mg/kg	--	--	ND < 0.035	ND < 0.032	ND < 0.066	ND < 0.035	ND < 0.033	ND < 0.17	ND < 0.034	ND < 0.032
4,6-DINITRO-O-CRESOL	534-52-1	mg/kg	--	--	ND < 0.089	ND < 0.082	ND < 0.17	ND < 0.09	ND < 0.083	ND < 0.43	ND < 0.088	ND < 0.083
4-BROMOPHENYL PHENYL ETHER	101-55-3	mg/kg	--	--	ND < 0.028	ND < 0.026	ND < 0.053	ND < 0.028	ND < 0.026	ND < 0.14	ND < 0.028	ND < 0.026

Table 1
Summary of Soil Boring Analytical Data
Vacant Parcels, Rockaway Avenue & Chester Street, Brooklyn, NY

Boring Location ID:					SB-09	SB-09	SB-10	SB-10	SB-10	SB-11	SB-11	SB-11
Sample Date:					10/13/2020	10/13/2020	10/15/2020	10/15/2020	10/15/2020	10/15/2020	10/15/2020	10/15/2020
Sample Depth (bgs):					0-2 ft	13-15 ft	0-2 ft	4-6 ft	13-15 ft	0-2 ft	2-5 ft	13-15 ft
Analyte	CAS	Units	Restricted Residential SCO	Unrestricted Use SCO								
4-CHLOROANILINE	106-47-8	mg/kg	--	--	ND < 0.034	ND < 0.031	ND < 0.064	ND < 0.034	ND < 0.031	ND < 0.16	ND < 0.033	ND < 0.031
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	mg/kg	--	--	ND < 0.02	ND < 0.018	ND < 0.037	ND < 0.02	ND < 0.018	ND < 0.095	ND < 0.02	ND < 0.018
4-NITROANILINE	100-01-6	mg/kg	--	--	ND < 0.076	ND < 0.07	ND < 0.14	ND < 0.077	ND < 0.072	ND < 0.37	ND < 0.076	ND < 0.071
4-NITROPHENOL	100-02-7	mg/kg	--	--	ND < 0.075	ND < 0.07	ND < 0.14	ND < 0.076	ND < 0.071	ND < 0.36	ND < 0.074	ND < 0.07
ACENAPHTHENE	83-32-9	mg/kg	100	20	0.03 J	ND < 0.018	0.26 J	0.025 J	ND < 0.018	ND < 0.092	ND < 0.019	ND < 0.018
ACENAPHTHYLENE	208-96-8	mg/kg	100	100	0.041 J	ND < 0.026	0.37	0.047 J	ND < 0.027	ND < 0.14	ND < 0.028	ND < 0.027
ACETOPHENONE	98-86-2	mg/kg	--	--	ND < 0.023	ND < 0.021	ND < 0.043	ND < 0.023	ND < 0.021	ND < 0.11	ND < 0.023	ND < 0.021
ANTHRACENE	120-12-7	mg/kg	100	100	0.1 J	ND < 0.033	1.1	0.1 J	ND < 0.034	ND < 0.17	ND < 0.036	ND < 0.034
BENZO(A)ANTHRACENE	56-55-3	mg/kg	1	1	0.47	ND < 0.019	2.6	0.38	ND < 0.019	0.42 J	0.03 J	ND < 0.019
BENZO(A)PYRENE	50-32-8	mg/kg	1	1	0.54	ND < 0.042	2.3	0.44	ND < 0.042	0.47 J	ND < 0.044	ND < 0.042
BENZO(B)FLUORANTHENE	205-99-2	mg/kg	1	1	0.63	ND < 0.029	2.7	0.52	ND < 0.029	0.5 J	0.031 J	ND < 0.029
BENZO(GHI)PERYLENE	191-24-2	mg/kg	100	100	0.34	ND < 0.02	1	0.26	ND < 0.02	0.33 J	ND < 0.021	ND < 0.02
BENZO(K)FLUORANTHENE	207-08-9	mg/kg	3.9	0.8	0.25	ND < 0.027	1.1	0.2	ND < 0.028	0.19 J	ND < 0.029	ND < 0.028
BENZOIC ACID	65-85-0	mg/kg	--	--	ND < 0.19	ND < 0.17	ND < 0.35	ND < 0.19	ND < 0.18	ND < 0.9	ND < 0.18	ND < 0.17
BENZYL ALCOHOL	100-51-6	mg/kg	--	--	ND < 0.056	ND < 0.052	ND < 0.11	ND < 0.057	ND < 0.053	ND < 0.27	ND < 0.056	ND < 0.053
BIPHENYL	92-52-4	mg/kg	--	--	ND < 0.043	ND < 0.04	ND < 0.081	ND < 0.043	ND < 0.04	ND < 0.21	ND < 0.042	ND < 0.04
BIS(2-CHLOROETHOXY)METHANE	111-91-1	mg/kg	--	--	ND < 0.018	ND < 0.017	ND < 0.035	ND < 0.019	ND < 0.017	ND < 0.089	ND < 0.018	ND < 0.017
BIS(2-CHLOROETHYL)ETHER	111-44-4	mg/kg	--	--	ND < 0.025	ND < 0.023	ND < 0.047	ND < 0.025	ND < 0.023	ND < 0.12	ND < 0.025	ND < 0.023
BIS(2-CHLOROISOPROPYL)ETHER	108-60-1	mg/kg	--	--	ND < 0.032	ND < 0.029	ND < 0.06	ND < 0.032	ND < 0.03	ND < 0.15	ND < 0.031	ND < 0.029
BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	mg/kg	--	--	ND < 0.064	ND < 0.059	ND < 0.12	0.24	ND < 0.06	ND < 0.31	ND < 0.063	ND < 0.06
BUTYL BENZYL PHTHALATE	85-68-7	mg/kg	--	--	ND < 0.046	ND < 0.043	ND < 0.088	ND < 0.047	ND < 0.044	ND < 0.22	ND < 0.046	ND < 0.043
CARBAZOLE	86-74-8	mg/kg	--	--	0.049 J	ND < 0.016	0.38	0.042 J	ND < 0.017	ND < 0.086	ND < 0.018	ND < 0.017
CHRYSENE	218-01-9	mg/kg	3.9	1	0.45	ND < 0.018	2.4	0.36	ND < 0.018	0.41 J	0.027 J	ND < 0.018
DIBENZO(A,H)ANTHRACENE	53-70-3	mg/kg	0.33	0.33	0.085 J	ND < 0.02	0.3	0.061 J	ND < 0.02	ND < 0.1	ND < 0.021	ND < 0.02
DIBENZOFURAN	132-64-9	mg/kg	59	7	ND < 0.017	ND < 0.016	0.27 J	ND < 0.018	ND < 0.016	ND < 0.084	ND < 0.017	ND < 0.016
DIETHYL PHTHALATE	84-66-2	mg/kg	--	--	ND < 0.017	ND < 0.016	ND < 0.032	ND < 0.017	ND < 0.016	ND < 0.082	ND < 0.017	ND < 0.016
DIMETHYL PHTHALATE	131-11-3	mg/kg	--	--	ND < 0.039	ND < 0.036	ND < 0.074	ND < 0.039	ND < 0.036	ND < 0.19	ND < 0.038	ND < 0.036
DI-N-BUTYL PHTHALATE	84-74-2	mg/kg	--	--	ND < 0.035	ND < 0.032	ND < 0.066	0.056 J	ND < 0.033	ND < 0.17	ND < 0.035	ND < 0.033
DI-N-OCTYL PHTHALATE	117-84-0	mg/kg	--	--	ND < 0.063	ND < 0.058	ND < 0.12	ND < 0.064	ND < 0.059	ND < 0.3	ND < 0.062	ND < 0.059
FLUORANTHENE	206-44-0	mg/kg	100	100	0.86	ND < 0.02	6.6	0.77	ND < 0.02	0.78	0.047 J	ND < 0.02
FLUORENE	86-73-7	mg/kg	100	30	0.027 J	ND < 0.016	0.57	0.028 J	ND < 0.017	ND < 0.086	ND < 0.018	ND < 0.017
HEXACHLORO BENZENE	118-74-1	mg/kg	1.2	0.33	ND < 0.021	ND < 0.019	ND < 0.039	ND < 0.021	ND < 0.019	ND < 0.1	ND < 0.02	ND < 0.019
HEXACHLORO BUTADIENE	87-68-3	mg/kg	--	--	ND < 0.027	ND < 0.025	ND < 0.051	ND < 0.027	ND < 0.025	ND < 0.13	ND < 0.027	ND < 0.025
HEXACHLOROCYCLOPENTADIENE	77-47-4	mg/kg	--	--	ND < 0.17	ND < 0.15	ND < 0.32	ND < 0.17	ND < 0.16	ND < 0.8	ND < 0.16	ND < 0.16
HEXACHLOROETHANE	67-72-1	mg/kg	--	--	ND < 0.03	ND < 0.028	ND < 0.057	ND < 0.03	ND < 0.028	ND < 0.14	ND < 0.03	ND < 0.028
INDENO(1,2,3-CD)PYRENE	193-39-5	mg/kg	0.5	0.5	0.35	ND < 0.024	1.2	0.28	ND < 0.024	0.27 J	ND < 0.025	ND < 0.024
ISOPHORONE	78-59-1	mg/kg	--	--	ND < 0.024	ND < 0.022	ND < 0.045	ND < 0.024	ND < 0.022	ND < 0.12	ND < 0.024	ND < 0.022
NAPHTHALENE	91-20-3	mg/kg	100	12	ND < 0.022	ND < 0.021	0.054 J	ND < 0.023	ND < 0.021	ND < 0.11	ND < 0.022	ND < 0.021
NITROBENZENE	98-95-3	mg/kg	--	--	ND < 0.027	ND < 0.025	ND < 0.052	ND < 0.028	ND < 0.026	ND < 0.13	ND < 0.027	ND < 0.026
NITROSODIPHENYLAMINE (NDPA)/DPA	86-30-6	mg/kg	--	--	ND < 0.021	ND < 0.019	ND < 0.04	ND < 0.021	ND < 0.02	ND < 0.1	ND < 0.021	ND < 0.02
N-NITROSODI-N-PROPYLAMINE	621-64-7	mg/kg	--	--	ND < 0.028	ND < 0.026	ND < 0.054	ND < 0.029	ND < 0.027	ND < 0.14	ND < 0.028	ND < 0.027
P-CHLORO-M-CRESOL	59-50-7	mg/kg	--	--	ND < 0.028	ND < 0.025	ND < 0.052	ND < 0.028	ND < 0.026	ND < 0.13	ND < 0.027	ND < 0.026
PENTACHLOROPHENOL	87-86-5	mg/kg	6.7	0.8	ND < 0.041	ND < 0.037	ND < 0.077	ND < 0.041	ND < 0.038	ND < 0.2	ND < 0.04	ND < 0.038
PHENANTHRENE	85-01-8	mg/kg	100	100	0.42	ND < 0.021	5.2	0.32	ND < 0.021	0.4 J	0.036 J	ND < 0.021
PHENOL	108-95-2	mg/kg	100	0.33	ND < 0.028	ND < 0.026	ND < 0.053	ND < 0.028	ND < 0.026	ND < 0.13	ND < 0.028	ND < 0.026
PYRENE	129-00-0	mg/kg	100	100	0.78	ND < 0.017	5	0.66	ND < 0.017	0.71	0.051 J	ND < 0.017
Metals (6010D, SW7471B)												
ALUMINUM, TOTAL	7429-90-5	mg/kg	--	--	4900	4140	4560	4900	3790	3420	8010	6870
ANTIMONY, TOTAL	7440-36-0	mg/kg	--	--	1.1 J	0.798 J	ND < 0.316	0.347 J	ND < 0.306	ND < 0.315	ND < 0.318	ND < 0.306
ARSENIC, TOTAL	7440-38-2	mg/kg	16	13	2.97	0.869	2.96	4.34	1.88	3.15	6.73	2.01
BARIUM, TOTAL	7440-39-3	mg/kg	400	350	384	44.3	33.1	54.3	28.1	80	50.9	37

Table 1
Summary of Soil Boring Analytical Data
Vacant Parcels, Rockaway Avenue & Chester Street, Brooklyn, NY

Boring Location ID:					SB-09	SB-09	SB-10	SB-10	SB-10	SB-11	SB-11	SB-11
Sample Date:					10/13/2020	10/13/2020	10/15/2020	10/15/2020	10/15/2020	10/15/2020	10/15/2020	10/15/2020
Sample Depth (bgs):					0-2 ft	13-15 ft	0-2 ft	4-6 ft	13-15 ft	0-2 ft	2-5 ft	13-15 ft
Analyte	CAS	Units	Restricted Residential SCO	Unrestricted Use SCO								
BERYLLIUM, TOTAL	7440-41-7	mg/kg	72	7.2	0.27 J	0.3 J	0.241 J	0.222 J	0.306 J	0.108 J	0.469	0.322 J
CADMIUM, TOTAL	7440-43-9	mg/kg	4.3	2.5	0.087 J	ND < 0.077	0.241 J	0.525 J	0.242 J	0.938	0.168 J	0.209 J
CALCIUM, TOTAL	7440-70-2	mg/kg	--	--	9870	746	1720	15700	519	20800	38500	608
CHROMIUM, TOTAL	7440-47-3	mg/kg	--	--	10.9	9.81	16.8	12.7	13.8	11.3	16.6	17.4
COBALT, TOTAL	7440-48-4	mg/kg	--	--	3.94	4.34	4.43	5.88	5.3	3.22	6.4	6.24
COPPER, TOTAL	7440-50-8	mg/kg	270	50	32.1	12.6	15.6	26.1	9.04	42.5	14.1	12.1
IRON, TOTAL	7439-89-6	mg/kg	--	--	13500	12400	14100	22800	21800	8520	15200	17400
LEAD, TOTAL	7439-92-1	mg/kg	400	63	393	5.12	36.9	29.1	3.64 J	161	7.59	4.26
MAGNESIUM, TOTAL	7439-95-4	mg/kg	--	--	4680	1720	1890	1810	1360	3340	2400	1580
MANGANESE, TOTAL	7439-96-5	mg/kg	2000	1600	251	535	241	296	424	163	397	446
NICKEL, TOTAL	7440-02-0	mg/kg	310	30	9.01	8.73	8.89	7.53	8.38	8.65	18.7	12.4
POTASSIUM, TOTAL	7440-09-7	mg/kg	--	--	378	580	432	333	463	410	675	663
SELENIUM, TOTAL	7782-49-2	mg/kg	180	3.9	0.357 J	ND < 0.204	ND < 0.214	ND < 0.23	ND < 0.208	ND < 0.214	ND < 0.216	ND < 0.208
SILVER, TOTAL	7440-22-4	mg/kg	180	2	ND < 0.246	ND < 0.224	ND < 0.235	ND < 0.252	ND < 0.228	ND < 0.235	ND < 0.237	ND < 0.228
SODIUM, TOTAL	7440-23-5	mg/kg	--	--	90 J	42.7 J	54.5 J	54.6 J	47.9 J	98.4 J	153 J	44.3 J
THALLIUM, TOTAL	7440-28-0	mg/kg	--	--	ND < 0.274	ND < 0.249	ND < 0.262	ND < 0.28	ND < 0.254	ND < 0.261	ND < 0.264	ND < 0.254
VANADIUM, TOTAL	7440-62-2	mg/kg	--	--	17.8	16.2	19	20.1	26.2	21	25.2	24.5
ZINC, TOTAL	7440-66-6	mg/kg	10000	109	337	20.7	37.8	76.3	19.7	133	30.5	24.4
MERCURY, TOTAL	7439-97-6	mg/kg	0.81	0.18	0.255	ND < 0.042	0.068 J	ND < 0.051	ND < 0.045	0.104	ND < 0.05	ND < 0.044
Pesticides (SW8081B)												
4,4'-DDD	72-54-8	mg/kg	13	0.0033	ND < 0.000612	ND < 0.000564	ND < 0.000583	ND < 0.00632	ND < 0.000586	0.000616 J	ND < 0.000617	ND < 0.000581
4,4'-DDE	72-55-9	mg/kg	8.9	0.0033	ND < 0.000396	ND < 0.000365	0.00145 J	ND < 0.0041	ND < 0.00038	0.000461 J	0.000431 JP	ND < 0.000376
4,4'-DDT	50-29-3	mg/kg	7.9	0.0033	ND < 0.00138	ND < 0.00127	0.0055	ND < 0.0142	ND < 0.00132	0.00177 J	ND < 0.00139	ND < 0.00131
ALDRIN	309-00-2	mg/kg	0.097	0.005	ND < 0.000604	ND < 0.000556	ND < 0.000576	ND < 0.00624	ND < 0.000579	ND < 0.000578	ND < 0.000609	ND < 0.000573
ALPHA-BHC	319-84-6	mg/kg	0.48	0.02	ND < 0.000203	ND < 0.000187	ND < 0.000194	ND < 0.0021	ND < 0.000194	ND < 0.000194	ND < 0.000205	ND < 0.000193
BETA-BHC	319-85-7	mg/kg	0.36	0.036	ND < 0.00065	ND < 0.000599	ND < 0.00062	ND < 0.00672	ND < 0.000623	ND < 0.000623	ND < 0.000656	ND < 0.000617
CHLORDANE	57-74-9	mg/kg	--	--	ND < 0.00568	ND < 0.00523	ND < 0.00542	ND < 0.0587	ND < 0.00544	ND < 0.00544	ND < 0.00573	ND < 0.00539
CIS-CHLORDANE	5103-71-9	mg/kg	4.2	0.094	ND < 0.000597	ND < 0.00055	0.00109 J	ND < 0.00617	ND < 0.000572	ND < 0.000572	ND < 0.000602	ND < 0.000567
DELTA-BHC	319-86-8	mg/kg	100	0.04	ND < 0.000336	ND < 0.000309	ND < 0.00032	ND < 0.00347	ND < 0.000322	ND < 0.000322	ND < 0.000339	ND < 0.000319
DIELDRIN	60-57-1	mg/kg	0.2	0.005	ND < 0.000536	ND < 0.000494	ND < 0.000511	ND < 0.00554	ND < 0.000514	0.000669 J	ND < 0.00054	ND < 0.000509
ENDOSULFAN I	959-98-8	mg/kg	24	2.4	ND < 0.000405	ND < 0.000373	ND < 0.000386	ND < 0.00418	ND < 0.000388	ND < 0.000388	ND < 0.000408	ND < 0.000385
ENDOSULFAN II	33213-65-9	mg/kg	24	2.4	ND < 0.000573	ND < 0.000528	ND < 0.000546	ND < 0.00592	ND < 0.000549	ND < 0.000549	ND < 0.000578	ND < 0.000544
ENDOSULFAN SULFATE	1031-07-8	mg/kg	24	2.4	ND < 0.00034	ND < 0.000313	ND < 0.000324	ND < 0.00351	ND < 0.000326	ND < 0.000326	ND < 0.000343	ND < 0.000323
ENDRIN ALDEHYDE	7421-93-4	mg/kg	--	--	ND < 0.00075	ND < 0.000691	ND < 0.000716	ND < 0.00775	ND < 0.000719	ND < 0.000719	ND < 0.000756	ND < 0.000712
ENDRIN KETONE	53494-70-5	mg/kg	--	--	ND < 0.000442	ND < 0.000407	ND < 0.000421	ND < 0.00456	ND < 0.000423	ND < 0.000423	ND < 0.000445	ND < 0.000419
ENDRIN	72-20-8	mg/kg	11	0.014	ND < 0.000293	ND < 0.00027	ND < 0.000279	ND < 0.00303	ND < 0.000281	ND < 0.000281	ND < 0.000295	ND < 0.000278
HEPTACHLOR EPOXIDE	1024-57-3	mg/kg	--	--	ND < 0.000965	ND < 0.000889	ND < 0.00092	ND < 0.00997	ND < 0.000924	ND < 0.000924	ND < 0.000973	ND < 0.000916
HEPTACHLOR	76-44-8	mg/kg	2.1	0.042	ND < 0.000384	ND < 0.000354	ND < 0.000367	ND < 0.00397	ND < 0.000368	ND < 0.000368	ND < 0.000388	ND < 0.000365
LINDANE	58-89-9	mg/kg	1.3	0.1	ND < 0.000319	ND < 0.000294	ND < 0.000305	ND < 0.0033	ND < 0.000306	ND < 0.000306	ND < 0.000322	ND < 0.000303
METHOXYCHLOR	72-43-5	mg/kg	--	--	ND < 0.001	ND < 0.000922	ND < 0.000954	ND < 0.0103	ND < 0.000959	ND < 0.000958	ND < 0.00101	ND < 0.00095
TOXAPHENE	8001-35-2	mg/kg	--	--	ND < 0.009	ND < 0.0083	ND < 0.00859	ND < 0.093	ND < 0.00863	ND < 0.00862	ND < 0.00908	ND < 0.00855
TRANS-CHLORDANE	5103-74-2	mg/kg	--	--	ND < 0.000566	ND < 0.000521	ND < 0.00054	ND < 0.00585	ND < 0.000542	0.000567 JIP	ND < 0.000571	ND < 0.000537
Polychlorinated Biphenyls - PCBs (SW8082A)												
AROCLOR 1016	12674-11-2	mg/kg	--	--	ND < 0.00331	ND < 0.00291	ND < 0.0031	ND < 0.00339	ND < 0.003	ND < 0.00308	ND < 0.00322	ND < 0.00296
AROCLOR 1221	11104-28-2	mg/kg	--	--	ND < 0.00373	ND < 0.00328	ND < 0.0035	ND < 0.00382	ND < 0.00339	ND < 0.00347	ND < 0.00364	ND < 0.00334
AROCLOR 1232	11141-16-5	mg/kg	--	--	ND < 0.00789	ND < 0.00695	ND < 0.00741	ND < 0.00809	ND < 0.00718	ND < 0.00735	ND < 0.00769	ND < 0.00706
AROCLOR 1242	53469-21-9	mg/kg	--	--	ND < 0.00502	ND < 0.00442	ND < 0.00471	ND < 0.00514	ND < 0.00456	ND < 0.00467	ND < 0.00489	ND < 0.00449
AROCLOR 1248	12672-29-6	mg/kg	--	--	ND < 0.00558	ND < 0.00492	ND < 0.00524	0.103	ND < 0.00508	ND < 0.0052	ND < 0.00544	ND < 0.005
AROCLOR 1254	11097-69-1	mg/kg	--	--	ND < 0.00407	ND < 0.00358	ND < 0.00382	0.117	ND < 0.0037	0.0198 J	0.00775 J	ND < 0.00364
AROCLOR 1260	11096-82-5	mg/kg	--	--	0.00751 J	ND < 0.00606	ND < 0.00646	ND < 0.00705	ND < 0.00625	0.0123 J	ND < 0.0067	ND < 0.00616
AROCLOR 1262	37324-23-5	mg/kg	--	--	ND < 0.00473	ND < 0.00416	ND < 0.00444	ND < 0.00485	ND < 0.0043	ND < 0.0044	ND < 0.00461	ND < 0.00423

Table 1
Summary of Soil Boring Analytical Data
Vacant Parcels, Rockaway Avenue & Chester Street, Brooklyn, NY

Boring Location ID:					SB-09	SB-09	SB-10	SB-10	SB-10	SB-11	SB-11	SB-11
Sample Date:					10/13/2020	10/13/2020	10/15/2020	10/15/2020	10/15/2020	10/15/2020	10/15/2020	10/15/2020
Sample Depth (bgs):					0-2 ft	13-15 ft	0-2 ft	4-6 ft	13-15 ft	0-2 ft	2-5 ft	13-15 ft
Analyte	CAS	Units	Restricted Residential SCO	Unrestricted Use SCO								
AROCLOR 1268	11100-14-4	mg/kg	--	--	ND < 0.00386	ND < 0.0034	ND < 0.00362	ND < 0.00395	ND < 0.00351	ND < 0.00359	ND < 0.00376	ND < 0.00345
PCBS, TOTAL	1336-36-3	mg/kg	1	0.1	0.00751 J	ND < 0.00291	ND < 0.0031	0.22	ND < 0.003	0.0321 J	0.00775 J	ND < 0.00296

Notes:

Screening Levels

SCO = NYSDEC Soil Cleanup Objective

Detected results that exceed the SCOs are shaded.

Units

mg/kg = milligrams per kilogram

bgs = below ground surface

Data Qualifiers

ND = Not detected above laboratory method detection limit (MDL).

J = Estimated value is greater than MDL and less than Limit of Quantitation (LOQ).

I = The lower value for the two columns has been reported due to obvious interference.

P = The RPD between the results for the two columns exceeds the method-specified criteria.

Other Acronyms/Symbols

-- = not analyzed for or no screening level

Table 2
Summary of Groundwater Analytical Data
Vacant Parcels, Rockaway Avenue & Chester Street, Brooklyn, NY

				Location ID:	GW-1	GW-2	GW-3
				Sample Date:	10/14/2020	10/14/2020	10/15/2020
Analyte	CAS	Units	NYSDEC AWQS Class GA GW				
Volatile Organic Compounds - VOCs (SW8260C)							
1,1,1,2-TETRACHLOROETHANE	630-20-6	ug/l	5	ND < 0.7	ND < 0.7	ND < 0.7	
1,1,1-TRICHLOROETHANE	71-55-6	ug/l	5	ND < 0.7	ND < 0.7	ND < 0.7	
1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/l	5	ND < 0.17	ND < 0.17	ND < 0.17	
1,1,2-TRICHLOROETHANE	79-00-5	ug/l	1	ND < 0.5	ND < 0.5	ND < 0.5	
1,1-DICHLOROETHANE	75-34-3	ug/l	5	ND < 0.7	ND < 0.7	ND < 0.7	
1,1-DICHLOROETHENE	75-35-4	ug/l	5	ND < 0.17	ND < 0.17	ND < 0.17	
1,1-DICHLOROPROPENE	563-58-6	ug/l	5	ND < 0.7	ND < 0.7	ND < 0.7	
1,2,3-TRICHLOROBENZENE	87-61-6	ug/l	5	ND < 0.7	ND < 0.7	ND < 0.7	
1,2,3-TRICHLOROPROPANE	96-18-4	ug/l	0.04	ND < 0.7	ND < 0.7	ND < 0.7	
1,2,4,5-TETRAMETHYLBENZENE	95-93-2	ug/l	5	ND < 0.54	ND < 0.54	ND < 0.54	
1,2,4-TRICHLOROBENZENE	120-82-1	ug/l	5	ND < 0.7	ND < 0.7	ND < 0.7	
1,2,4-TRIMETHYLBENZENE	95-63-6	ug/l	5	ND < 0.7	ND < 0.7	ND < 0.7	
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	ug/l	0.04	ND < 0.7	ND < 0.7	ND < 0.7	
1,2-DIBROMOETHANE	106-93-4	ug/l	0.0006	ND < 0.65	ND < 0.65	ND < 0.65	
1,2-DICHLOROBENZENE	95-50-1	ug/l	3	ND < 0.7	ND < 0.7	ND < 0.7	
1,2-DICHLOROETHANE	107-06-2	ug/l	0.6	ND < 0.13	ND < 0.13	ND < 0.13	
1,2-DICHLOROETHENE (TOTAL)	540-59-0	ug/l	--	ND < 0.7	ND < 0.7	ND < 0.7	
1,2-DICHLOROPROPANE	78-87-5	ug/l	1	ND < 0.14	ND < 0.14	ND < 0.14	
1,3,5-TRIMETHYLBENZENE	108-67-8	ug/l	5	ND < 0.7	ND < 0.7	ND < 0.7	
1,3-DICHLOROBENZENE	541-73-1	ug/l	3	ND < 0.7	ND < 0.7	ND < 0.7	
1,3-DICHLOROPROPANE	142-28-9	ug/l	5	ND < 0.7	ND < 0.7	ND < 0.7	
1,3-DICHLOROPROPENE, TOTAL	542-75-6	ug/l	--	ND < 0.14	ND < 0.14	ND < 0.14	
1,4-DICHLOROBENZENE	106-46-7	ug/l	3	ND < 0.7	ND < 0.7	ND < 0.7	
1,4-DIETHYLBENZENE	105-05-5	ug/l	--	ND < 0.7	ND < 0.7	ND < 0.7	
1,4-DIOXANE	123-91-1	ug/l	--	ND < 61	ND < 61	ND < 61	
2,2-DICHLOROPROPANE	594-20-7	ug/l	5	ND < 0.7	ND < 0.7	ND < 0.7	
2-BUTANONE	78-93-3	ug/l	50	ND < 1.9	ND < 1.9	ND < 1.9	
2-HEXANONE	591-78-6	ug/l	50	ND < 1	ND < 1	ND < 1	
4-ETHYLTOLUENE	622-96-8	ug/l	--	ND < 0.7	ND < 0.7	ND < 0.7	
4-METHYL-2-PENTANONE	108-10-1	ug/l	--	ND < 1	ND < 1	ND < 1	
ACETONE	67-64-1	ug/l	50	1.5 J	2.9 J	ND < 1.5	
ACRYLONITRILE	107-13-1	ug/l	5	ND < 1.5	ND < 1.5	ND < 1.5	
BENZENE	71-43-2	ug/l	1	ND < 0.16	ND < 0.16	ND < 0.16	
BROMOBENZENE	108-86-1	ug/l	5	ND < 0.7	ND < 0.7	ND < 0.7	
BROMOCHLOROMETHANE	74-97-5	ug/l	5	ND < 0.7	ND < 0.7	ND < 0.7	
BROMODICHLOROMETHANE	75-27-4	ug/l	50	ND < 0.19	ND < 0.19	ND < 0.19	
BROMOFORM	75-25-2	ug/l	50	ND < 0.65	ND < 0.65	ND < 0.65	
BROMOMETHANE	74-83-9	ug/l	5	ND < 0.7	ND < 0.7	ND < 0.7	
CARBON DISULFIDE	75-15-0	ug/l	60	ND < 1	ND < 1	ND < 1	
CARBON TETRACHLORIDE	56-23-5	ug/l	5	ND < 0.13	ND < 0.13	ND < 0.13	
CHLOROBENZENE	108-90-7	ug/l	5	ND < 0.7	ND < 0.7	ND < 0.7	
CHLOROETHANE	75-00-3	ug/l	5	ND < 0.7	ND < 0.7	ND < 0.7	
CHLOROFORM	67-66-3	ug/l	7	1.7 J	ND < 0.7	0.7 J	
CHLOROMETHANE	74-87-3	ug/l	--	ND < 0.7	ND < 0.7	ND < 0.7	
CIS-1,2-DICHLOROETHENE	156-59-2	ug/l	5	ND < 0.7	ND < 0.7	ND < 0.7	
CIS-1,3-DICHLOROPROPENE	10061-01-5	ug/l	0.4	ND < 0.14	ND < 0.14	ND < 0.14	
DIBROMOCHLOROMETHANE	124-48-1	ug/l	50	ND < 0.15	ND < 0.15	ND < 0.15	
DIBROMOMETHANE	74-95-3	ug/l	5	ND < 1	ND < 1	ND < 1	
DICHLORODIFLUOROMETHANE	75-71-8	ug/l	5	ND < 1	ND < 1	ND < 1	
ETHYL ETHER	60-29-7	ug/l	--	ND < 0.7	ND < 0.7	ND < 0.7	
ETHYLBENZENE	100-41-4	ug/l	5	ND < 0.7	ND < 0.7	ND < 0.7	
HEXACHLOROBUTADIENE	87-68-3	ug/l	0.5	ND < 0.7	ND < 0.7	ND < 0.7	
ISOPROPYLBENZENE	98-82-8	ug/l	5	ND < 0.7	ND < 0.7	ND < 0.7	
METHYL TERT BUTYL ETHER	1634-04-4	ug/l	10	ND < 0.7	ND < 0.7	ND < 0.7	
METHYLENE CHLORIDE	75-09-2	ug/l	5	ND < 0.7	ND < 0.7	ND < 0.7	
NAPHTHALENE	91-20-3	ug/l	10	ND < 0.7	ND < 0.7	ND < 0.7	
N-BUTYLBENZENE	104-51-8	ug/l	5	ND < 0.7	ND < 0.7	ND < 0.7	
N-PROPYLBENZENE	103-65-1	ug/l	5	ND < 0.7	ND < 0.7	ND < 0.7	
O-CHLOROTOLUENE	95-49-8	ug/l	5	ND < 0.7	ND < 0.7	ND < 0.7	
O-XYLENE	95-47-6	ug/l	5	ND < 0.7	ND < 0.7	ND < 0.7	
P/M-XYLENE	179601-23-1	ug/l	5	ND < 0.7	ND < 0.7	ND < 0.7	
P-CHLOROTOLUENE	106-43-4	ug/l	5	ND < 0.7	ND < 0.7	ND < 0.7	
P-ISOPROPYLTOLUENE	99-87-6	ug/l	5	ND < 0.7	ND < 0.7	ND < 0.7	

Table 2
Summary of Groundwater Analytical Data
Vacant Parcels, Rockaway Avenue & Chester Street, Brooklyn, NY

				Location ID:	GW-1	GW-2	GW-3
				Sample Date:	10/14/2020	10/14/2020	10/15/2020
Analyte	CAS	Units	NYSDEC AWQS Class GA GW				
SEC-BUTYLBENZENE	135-98-8	ug/l	5	ND < 0.7	ND < 0.7	ND < 0.7	
STYRENE	100-42-5	ug/l	5	ND < 0.7	ND < 0.7	ND < 0.7	
TERT-BUTYLBENZENE	98-06-6	ug/l	5	ND < 0.7	ND < 0.7	ND < 0.7	
TETRACHLOROETHENE	127-18-4	ug/l	5	0.35 J	ND < 0.18	5.8	
TOLUENE	108-88-3	ug/l	5	ND < 0.7	ND < 0.7	ND < 0.7	
TRANS-1,2-DICHLOROETHENE	156-60-5	ug/l	5	ND < 0.7	ND < 0.7	ND < 0.7	
TRANS-1,3-DICHLOROPROPENE	10061-02-6	ug/l	0.4	ND < 0.16	ND < 0.16	ND < 0.16	
TRANS-1,4-DICHLORO-2-BUTENE	110-57-6	ug/l	5	ND < 0.7	ND < 0.7	ND < 0.7	
TRICHLOROETHENE	79-01-6	ug/l	5	ND < 0.18	ND < 0.18	0.36 J	
TRICHLOROFUOROMETHANE	75-69-4	ug/l	5	ND < 0.7	ND < 0.7	ND < 0.7	
VINYL ACETATE	108-05-4	ug/l	--	ND < 1	ND < 1	ND < 1	
VINYL CHLORIDE	75-01-4	ug/l	2	ND < 0.07	ND < 0.07	ND < 0.07	
XYLENE (TOTAL)	1330-20-7	ug/l	--	ND < 0.7	ND < 0.7	ND < 0.7	
Semi-Volatile Organic Compounds - SVOCs (SW8070D)							
1,2,4,5-TETRACHLOROENZENE	95-94-3	ug/l	5	ND < 0.44	ND < 0.44	ND < 0.44	
1,2,4-TRICHLOROENZENE	120-82-1	ug/l	5	ND < 0.5	ND < 0.5	ND < 0.5	
1,2-DICHLOROENZENE	95-50-1	ug/l	3	ND < 0.45	ND < 0.45	ND < 0.45	
1,3-DICHLOROENZENE	541-73-1	ug/l	3	ND < 0.4	ND < 0.4	ND < 0.4	
1,4-DICHLOROENZENE	106-46-7	ug/l	3	ND < 0.43	ND < 0.43	ND < 0.43	
2,4,5-TRICHLOROPHENOL	95-95-4	ug/l	--	ND < 0.77	ND < 0.77	ND < 0.77	
2,4,6-TRICHLOROPHENOL	88-06-2	ug/l	--	ND < 0.61	ND < 0.61	ND < 0.61	
2,4-DICHLOROPHENOL	120-83-2	ug/l	1	ND < 0.41	ND < 0.41	ND < 0.41	
2,4-DIMETHYLPHENOL	105-67-9	ug/l	50	ND < 1.8	ND < 1.8	ND < 1.8	
2,4-DINITROPHENOL	51-28-5	ug/l	10	ND < 6.6	ND < 6.6	ND < 6.6	
2,4-DINITROTOLUENE	121-14-2	ug/l	5	ND < 1.2	ND < 1.2	ND < 1.2	
2,6-DINITROTOLUENE	606-20-2	ug/l	5	ND < 0.93	ND < 0.93	ND < 0.93	
2-CHLOROPHENOL	95-57-8	ug/l	--	ND < 0.48	ND < 0.48	ND < 0.48	
2-METHYLPHENOL	95-48-7	ug/l	--	ND < 0.49	ND < 0.49	ND < 0.49	
2-NITROANILINE	88-74-4	ug/l	5	ND < 0.5	ND < 0.5	ND < 0.5	
2-NITROPHENOL	88-75-5	ug/l	--	ND < 0.85	ND < 0.85	ND < 0.85	
3,3'-DICHLOROBENZIDINE	91-94-1	ug/l	5	ND < 1.6	ND < 1.6	ND < 1.6	
3-METHYLPHENOL/4-METHYLPHENOL	65794-96-9	ug/l	--	ND < 0.48	ND < 0.48	ND < 0.48	
3-NITROANILINE	99-09-2	ug/l	5	ND < 0.81	ND < 0.81	ND < 0.81	
4,6-DINITRO-O-CRESOL	534-52-1	ug/l	--	ND < 1.8	ND < 1.8	ND < 1.8	
4-BROMOPHENYL PHENYL ETHER	101-55-3	ug/l	--	ND < 0.38	ND < 0.38	ND < 0.38	
4-CHLOROANILINE	106-47-8	ug/l	5	ND < 1.1	ND < 1.1	ND < 1.1	
4-CHLOROPHENYL PHENYL ETHER	7005-72-3	ug/l	--	ND < 0.49	ND < 0.49	ND < 0.49	
4-NITROANILINE	100-01-6	ug/l	5	ND < 0.8	ND < 0.8	ND < 0.8	
4-NITROPHENOL	100-02-7	ug/l	--	ND < 0.67	ND < 0.67	ND < 0.67	
ACETOPHENONE	98-86-2	ug/l	--	ND < 0.53	ND < 0.53	ND < 0.53	
BENZOIC ACID	65-85-0	ug/l	--	ND < 2.6	ND < 2.6	ND < 2.6	
BENZYL ALCOHOL	100-51-6	ug/l	--	ND < 0.59	ND < 0.59	ND < 0.59	
BIPHENYL	92-52-4	ug/l	--	ND < 0.46	ND < 0.46	ND < 0.46	
BIS(2-CHLOROETHOXY)METHANE	111-91-1	ug/l	5	ND < 0.5	ND < 0.5	ND < 0.5	
BIS(2-CHLOROETHYL)ETHER	111-44-4	ug/l	1	ND < 0.5	ND < 0.5	ND < 0.5	
BIS(2-CHLOROISOPROPYL)ETHER	108-60-1	ug/l	5	ND < 0.53	ND < 0.53	ND < 0.53	
BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	ug/l	5	ND < 1.5	ND < 1.5	ND < 1.5	
BUTYL BENZYL PHTHALATE	85-68-7	ug/l	50	ND < 1.2	ND < 1.2	ND < 1.2	
CARBAZOLE	86-74-8	ug/l	--	ND < 0.49	ND < 0.49	ND < 0.49	
DIBENZOFURAN	132-64-9	ug/l	--	ND < 0.5	ND < 0.5	ND < 0.5	
DIETHYL PHTHALATE	84-66-2	ug/l	50	ND < 0.38	ND < 0.38	ND < 0.38	
DIMETHYL PHTHALATE	131-11-3	ug/l	50	ND < 1.8	ND < 1.8	ND < 1.8	
DI-N-BUTYLPHTHALATE	84-74-2	ug/l	50	0.57 J	0.49 J	ND < 0.39	
DI-N-OCTYLPHTHALATE	117-84-0	ug/l	50	ND < 1.3	ND < 1.3	ND < 1.3	
HEXACHLOROCYCLOPENTADIENE	77-47-4	ug/l	5	ND < 0.69	ND < 0.69	ND < 0.69	
ISOPHORONE	78-59-1	ug/l	50	ND < 1.2	ND < 1.2	ND < 1.2	
NITROBENZENE	98-95-3	ug/l	0.4	ND < 0.77	ND < 0.77	ND < 0.77	
NITROSODIPHENYLAMINE(NDPA)/DPA	86-30-6	ug/l	50	ND < 0.42	ND < 0.42	ND < 0.42	
N-NITROSODI-N-PROPYLAMINE	621-64-7	ug/l	--	ND < 0.64	ND < 0.64	ND < 0.64	
P-CHLORO-M-CRESOL	59-50-7	ug/l	--	ND < 0.35	ND < 0.35	ND < 0.35	
PHENOL	108-95-2	ug/l	1	ND < 0.57	ND < 0.57	ND < 0.57	
SVOCs SIM (SW8070D SIM)							
2-CHLORONAPHTHALENE	91-58-7	ug/l	10	ND < 0.02	ND < 0.02	ND < 0.02	
2-METHYLNAPHTHALENE	91-57-6	ug/l	--	0.05 J	0.03 J	0.03 J	

Table 2
Summary of Groundwater Analytical Data
Vacant Parcels, Rockaway Avenue & Chester Street, Brooklyn, NY

			Location ID:	GW-1	GW-2	GW-3
			Sample Date:	10/14/2020	10/14/2020	10/15/2020
Analyte	CAS	Units	NYSDEC AWQS Class GA GW			
ACENAPHTHENE	83-32-9	ug/l	20	ND < 0.01	ND < 0.01	ND < 0.01
ACENAPHTHYLENE	208-96-8	ug/l	--	ND < 0.01	ND < 0.01	ND < 0.01
ANTHRACENE	120-12-7	ug/l	50	ND < 0.01	ND < 0.01	ND < 0.01
BENZO(A)ANTHRACENE	56-55-3	ug/l	0.002	ND < 0.02	ND < 0.02	ND < 0.02
BENZO(A)PYRENE	50-32-8	ug/l	0	ND < 0.02	ND < 0.02	ND < 0.02
BENZO(B)FLUORANTHENE	205-99-2	ug/l	0.002	ND < 0.01	0.02 J	ND < 0.01
BENZO(GHI)PERYLENE	191-24-2	ug/l	--	ND < 0.01	ND < 0.01	ND < 0.01
BENZO(K)FLUORANTHENE	207-08-9	ug/l	0.002	ND < 0.01	ND < 0.01	ND < 0.01
CHRYSENE	218-01-9	ug/l	0.002	ND < 0.01	ND < 0.01	ND < 0.01
DIBENZO(A,H)ANTHRACENE	53-70-3	ug/l	--	ND < 0.01	ND < 0.01	ND < 0.01
FLUORANTHENE	206-44-0	ug/l	50	ND < 0.02	0.04 J	ND < 0.02
FLUORENE	86-73-7	ug/l	50	ND < 0.01	ND < 0.01	ND < 0.01
HEXACHLOROBENZENE	118-74-1	ug/l	0.04	ND < 0.01	ND < 0.01	ND < 0.01
HEXACHLOROBUTADIENE	87-68-3	ug/l	0.5	ND < 0.05	ND < 0.05	ND < 0.05
HEXACHLOROETHANE	67-72-1	ug/l	5	ND < 0.06	ND < 0.06	ND < 0.06
INDENO(1,2,3-CD)PYRENE	193-39-5	ug/l	0.002	ND < 0.01	ND < 0.01	ND < 0.01
NAPHTHALENE	91-20-3	ug/l	10	ND < 0.05	ND < 0.05	ND < 0.05
PENTACHLOROPHENOL	87-86-5	ug/l	1	ND < 0.01	ND < 0.01	ND < 0.01
PHENANTHRENE	85-01-8	ug/l	50	0.03 J	0.03 J	ND < 0.02
PYRENE	129-00-0	ug/l	50	0.02 J	0.04 J	ND < 0.02
Metals (SW6020B, SW7470A)						
ALUMINUM, DISSOLVED	7429-90-5	ug/L	--	5.94 J	5 J	ND < 16.4
ALUMINUM, TOTAL	7429-90-5	ug/L	--	251000	103000	28100
ANTIMONY, DISSOLVED	7440-36-0	ug/L	3	0.5 J	0.42 J	2.48 J
ANTIMONY, TOTAL	7440-36-0	ug/L	3	ND < 0.85	ND < 0.42	0.49 J
ARSENIC, DISSOLVED	7440-38-2	ug/L	25	0.23 J	0.24 J	ND < 0.82
ARSENIC, TOTAL	7440-38-2	ug/L	25	36.45	18.11	8.67
BARIUM, DISSOLVED	7440-39-3	ug/L	1000	25.09	37.62	67.18
BARIUM, TOTAL	7440-39-3	ug/L	1000	2627	1819	745.7
BERYLLIUM, DISSOLVED	7440-41-7	ug/L	3	ND < 0.1	ND < 0.1	ND < 0.53
BERYLLIUM, TOTAL	7440-41-7	ug/L	3	17.86	6.83	1.78
CADMIUM, DISSOLVED	7440-43-9	ug/L	5	0.08 J	0.21	ND < 0.29
CADMIUM, TOTAL	7440-43-9	ug/L	5	2.88	2.1	0.98
CALCIUM, DISSOLVED	7440-70-2	ug/L	--	77700	116000	102000
CALCIUM, TOTAL	7440-70-2	ug/L	--	137000	139000	117000
CHROMIUM, DISSOLVED	7440-47-3	ug/L	50	ND < 0.17	ND < 0.17	ND < 0.89
CHROMIUM, TOTAL	7440-47-3	ug/L	50	865.8	426.2	70.62
COBALT, DISSOLVED	7440-48-4	ug/L	--	5.92	9.09	ND < 0.81
COBALT, TOTAL	7440-48-4	ug/L	--	358.4	188.3	70.46
COPPER, DISSOLVED	7440-50-8	ug/L	200	ND < 0.38	0.51 J	ND < 1.92
COPPER, TOTAL	7440-50-8	ug/L	200	729.3	313.2	99.46
IRON, DISSOLVED	7439-89-6	ug/L	300	21.3 J	ND < 19.1	ND < 95.5
IRON, TOTAL	7439-89-6	ug/L	300	478000	273000	79800
LEAD, DISSOLVED	7439-92-1	ug/L	25	ND < 0.34	ND < 0.34	ND < 1.71
LEAD, TOTAL	7439-92-1	ug/L	25	327.6	150	124
MAGNESIUM, DISSOLVED	7439-95-4	ug/L	35000	9580	19400	16000
MAGNESIUM, TOTAL	7439-95-4	ug/L	35000	136000	76600	41700
MANGANESE, DISSOLVED	7439-96-5	ug/L	300	1826	3766	2.93 J
MANGANESE, TOTAL	7439-96-5	ug/L	300	33120	25510	6247
NICKEL, DISSOLVED	7440-02-0	ug/L	100	21.63	38.58	11.16
NICKEL, TOTAL	7440-02-0	ug/L	100	1302	791	256.1
POTASSIUM, DISSOLVED	7440-09-7	ug/L	--	7630	15300	7690
POTASSIUM, TOTAL	7440-09-7	ug/L	--	56400	37700	15400
SELENIUM, DISSOLVED	7782-49-2	ug/L	10	1.82 J	7.88	ND < 8.65
SELENIUM, TOTAL	7782-49-2	ug/L	10	63.4	24.6	7.86
SILVER, DISSOLVED	7440-22-4	ug/L	50	ND < 0.16	ND < 0.16	ND < 0.81
SILVER, TOTAL	7440-22-4	ug/L	50	0.36 J	0.2 J	0.76
SODIUM, DISSOLVED	7440-23-5	ug/L	20000	63600	20900	203000
SODIUM, TOTAL	7440-23-5	ug/L	20000	68700	24100	197000
THALLIUM, DISSOLVED	7440-28-0	ug/L	0.5	0.18 J	ND < 0.14	1.68 J
THALLIUM, TOTAL	7440-28-0	ug/L	0.5	3.88	1.98	0.64
VANADIUM, DISSOLVED	7440-62-2	ug/L	--	ND < 1.57	ND < 1.57	ND < 7.85
VANADIUM, TOTAL	7440-62-2	ug/L	--	438.7	204.1	88.26
ZINC, DISSOLVED	7440-66-6	ug/L	2000	ND < 3.41	3.76 J	ND < 17.05

Table 2
Summary of Groundwater Analytical Data
Vacant Parcels, Rockaway Avenue & Chester Street, Brooklyn, NY

				Location ID:	GW-1	GW-2	GW-3
				Sample Date:	10/14/2020	10/14/2020	10/15/2020
Analyte	CAS	Units	NYSDEC AWQS Class GA GW				
ZINC, TOTAL	7440-66-6	ug/L	2000	1066	555.6	162.4	
MERCURY, DISSOLVED	7439-97-6	ug/L	0.7	ND < 0.09	ND < 0.09	ND < 0.09	
MERCURY, TOTAL	7439-97-6	ug/L	0.7	0.15 J	ND < 0.09	ND < 0.09	
Pesticides (SW8081B)							
4,4'-DDD	72-54-8	ug/l	0.3	ND < 0.003	ND < 0.003	ND < 0.003	
4,4'-DDE	72-55-9	ug/l	0.2	ND < 0.003	ND < 0.003	ND < 0.003	
4,4'-DDT	50-29-3	ug/l	0.2	ND < 0.003	ND < 0.003	ND < 0.003	
ALDRIN	309-00-2	ug/l	0	ND < 0.002	ND < 0.002	ND < 0.002	
ALPHA-BHC	319-84-6	ug/l	0.01	ND < 0.003	ND < 0.003	ND < 0.003	
BETA-BHC	319-85-7	ug/l	0.04	ND < 0.004	ND < 0.004	ND < 0.004	
CHLORDANE	57-74-9	ug/l	0.05	ND < 0.033	ND < 0.033	ND < 0.033	
CIS-CHLORDANE	5103-71-9	ug/l	--	ND < 0.005	ND < 0.005	ND < 0.005	
DELTA-BHC	319-86-8	ug/l	0.04	ND < 0.003	ND < 0.003	ND < 0.003	
DIELDRIN	60-57-1	ug/l	0.004	ND < 0.003	ND < 0.003	ND < 0.003	
ENDOSULFAN I	959-98-8	ug/l	--	ND < 0.002	ND < 0.002	ND < 0.002	
ENDOSULFAN II	33213-65-9	ug/l	--	ND < 0.004	ND < 0.004	ND < 0.004	
ENDOSULFAN SULFATE	1031-07-8	ug/l	--	ND < 0.003	ND < 0.003	ND < 0.003	
ENDRIN ALDEHYDE	7421-93-4	ug/l	5	ND < 0.006	ND < 0.006	ND < 0.006	
ENDRIN KETONE	53494-70-5	ug/l	5	ND < 0.003	ND < 0.003	ND < 0.003	
ENDRIN	72-20-8	ug/l	0	ND < 0.003	ND < 0.003	ND < 0.003	
HEPTACHLOR EPOXIDE	1024-57-3	ug/l	0.03	ND < 0.003	ND < 0.003	ND < 0.003	
HEPTACHLOR	76-44-8	ug/l	0.04	ND < 0.002	ND < 0.002	ND < 0.002	
LINDANE	58-89-9	ug/l	0.05	ND < 0.003	ND < 0.003	ND < 0.003	
METHOXYCHLOR	72-43-5	ug/l	35	ND < 0.005	ND < 0.005	ND < 0.005	
TOXAPHENE	8001-35-2	ug/l	0.06	ND < 0.045	ND < 0.045	ND < 0.045	
TRANS-CHLORDANE	5103-74-2	ug/l	--	ND < 0.004	ND < 0.004	ND < 0.004	
Polychlorinated Biphenyls - PCBs (SW8082A)							
AROCLOR 1016	12674-11-2	ug/l	0.09	ND < 0.034	ND < 0.034	ND < 0.034	
AROCLOR 1221	11104-28-2	ug/l	0.09	ND < 0.067	ND < 0.067	ND < 0.067	
AROCLOR 1232	11141-16-5	ug/l	0.09	ND < 0.046	ND < 0.046	ND < 0.046	
AROCLOR 1242	53469-21-9	ug/l	0.09	ND < 0.039	ND < 0.039	ND < 0.039	
AROCLOR 1248	12672-29-6	ug/l	0.09	ND < 0.049	ND < 0.049	ND < 0.049	
AROCLOR 1254	11097-69-1	ug/l	0.09	ND < 0.039	ND < 0.039	ND < 0.039	
AROCLOR 1260	11096-82-5	ug/l	0.09	ND < 0.032	ND < 0.032	ND < 0.032	
AROCLOR 1262	37324-23-5	ug/l	0.09	ND < 0.035	ND < 0.035	ND < 0.035	
AROCLOR 1268	11100-14-4	ug/l	0.09	ND < 0.034	ND < 0.034	ND < 0.034	
PCBS, TOTAL	1336-36-3	ug/l	--	ND < 0.032	ND < 0.032	ND < 0.032	

Notes:

Screening Levels

NYSDEC AWQS = Ambient Water Quality Standards (TOGS June 2004)

Exceedances of the AWQS are shaded.

Units

ug/L = micrograms per liter

Data Qualifiers

ND = Not detected above laboratory method detection limit (MDL).

J = Estimated value is greater than MDL and less than Limit of Quantitation (LOQ).

Other Acronyms/Symbols

-- = not analyzed for or no screening level

Table 3
Summary of Soil Vapor Analytical Data
Vacant Parcels, Rockaway Avenue & Chester Street, Brooklyn, NY

				Location ID:	SV-1	SV-2	SV-3	SV-4
				Sample Date:	10/14/2020	10/14/2020	10/14/2020	10/14/2020
Volatile Organic Compounds - VOCs (TO15)	CAS	Units	NYSDOH Soil Vapor/Indoor Air Matrix					
1,1,1-TRICHLOROETHANE	71-55-6	ug/m ³	B	ND < 1.36	2.01	ND < 0.851	9.88	
1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/m ³	-	ND < 2.11	ND < 0.422	ND < 1.32	ND < 1.41	
1,1,2-TRICHLORO-1,1,2,2-TRIFLUOROETHANE	76-13-1	ug/m ³	-	ND < 2.51	ND < 0.503	ND < 1.57	ND < 1.68	
1,1,2-TRICHLOROETHANE	79-00-5	ug/m ³	-	ND < 1.83	ND < 0.366	ND < 1.14	ND < 1.22	
1,1-DICHLOROETHANE	75-34-3	ug/m ³	-	ND < 1.27	ND < 0.254	ND < 0.793	ND < 0.846	
1,1-DICHLOROETHENE	75-35-4	ug/m ³	A	ND < 1.28	ND < 0.255	ND < 0.797	ND < 0.848	
1,2,4-TRICHLOROBENZENE	120-82-1	ug/m ³	-	ND < 2.5	ND < 0.5	ND < 1.57	ND < 1.67	
1,2,4-TRIMETHYLBENZENE	95-63-6	ug/m ³	-	ND < 0.905	5.06	4.33	4.57	
1,2-DIBROMOETHANE	106-93-4	ug/m ³	-	ND < 2.15	ND < 0.431	ND < 1.34	ND < 1.44	
1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE	76-14-2	ug/m ³	-	ND < 2.07	ND < 0.413	ND < 1.29	ND < 1.38	
1,2-DICHLOROBENZENE	95-50-1	ug/m ³	-	ND < 1.89	ND < 0.378	ND < 1.18	ND < 1.26	
1,2-DICHLOROETHANE	107-06-2	ug/m ³	-	ND < 1.22	ND < 0.244	ND < 0.761	ND < 0.814	
1,2-DICHLOROPROPANE	78-87-5	ug/m ³	-	ND < 1.41	ND < 0.282	ND < 0.883	ND < 0.938	
1,3,5-TRIMETHYLBENZENE	108-67-8	ug/m ³	-	ND < 1.66	1.34	ND < 1.04	ND < 1.11	
1,3-BUTADIENE	106-99-0	ug/m ³	-	56.6	19.6	43.6	47.1	
1,3-DICHLOROBENZENE	541-73-1	ug/m ³	-	ND < 1.89	ND < 0.377	ND < 1.18	ND < 1.26	
1,4-DICHLOROBENZENE	106-46-7	ug/m ³	-	ND < 1.91	ND < 0.382	ND < 1.2	ND < 1.27	
1,4-DIOXANE	123-91-1	ug/m ³	-	ND < 1.45	ND < 0.29	ND < 0.908	ND < 0.966	
2,2,4-TRIMETHYLPENTANE	540-84-1	ug/m ³	-	ND < 0.841	2.36	ND < 0.528	ND < 0.56	
2-BUTANONE	78-93-3	ug/m ³	-	35.1	21.1	57.2	47.2	
2-HEXANONE	591-78-6	ug/m ³	-	5	2.5	ND < 0.828	3.7	
3-CHLOROPROPENE	107-05-1	ug/m ³	-	ND < 0.914	ND < 0.183	ND < 0.573	ND < 0.61	
4-ETHYLTOLUENE	622-96-8	ug/m ³	-	ND < 0.909	ND < 0.182	ND < 0.57	ND < 0.605	
4-METHYL-2-PENTANONE	108-10-1	ug/m ³	-	25.8	2.38	ND < 0.541	ND < 0.574	
ACETONE	67-64-1	ug/m ³	-	78.4	28.5	215	134	
BENZENE	71-43-2	ug/m ³	-	18.7	10.1	21.3	18.6	
BENZYL CHLORIDE	100-44-7	ug/m ³	-	ND < 1.25	ND < 0.25	ND < 0.782	ND < 0.834	
BROMODICHLOROMETHANE	75-27-4	ug/m ³	-	ND < 1.69	ND < 0.338	ND < 1.06	ND < 1.13	
BROMOFORM	75-25-2	ug/m ³	-	ND < 3.31	ND < 0.663	ND < 2.07	ND < 2.21	
BROMOMETHANE	74-83-9	ug/m ³	-	ND < 1.5	ND < 0.3	ND < 0.94	ND < 1	
CARBON DISULFIDE	75-15-0	ug/m ³	-	9.22	5.73	17	14.1	
CARBON TETRACHLORIDE	56-23-5	ug/m ³	A	ND < 1.57	ND < 0.314	ND < 0.981	ND < 1.04	
CHLOROBENZENE	108-90-7	ug/m ³	-	ND < 1.44	ND < 0.287	ND < 0.898	ND < 0.958	
CHLOROETHANE	75-00-3	ug/m ³	-	ND < 1.06	ND < 0.212	ND < 0.665	ND < 0.707	
CHLOROFORM	67-66-3	ug/m ³	-	ND < 1.54	ND < 0.309	ND < 0.967	ND < 1.03	
CHLOROMETHANE	74-87-3	ug/m ³	-	ND < 0.71	0.516	ND < 0.444	ND < 0.475	
CIS-1,2-DICHLOROETHENE	156-59-2	ug/m ³	A	ND < 2.32	ND < 0.464	ND < 1.45	ND < 1.55	
CIS-1,3-DICHLOROPROPENE	10061-01-5	ug/m ³	-	ND < 0.926	ND < 0.186	ND < 0.581	ND < 0.617	
CYCLOHEXANE	110-82-7	ug/m ³	-	4.75	4.2	10.9	6.54	
DIBROMOCHLOROMETHANE	124-48-1	ug/m ³	-	ND < 2.62	ND < 0.523	ND < 1.64	ND < 1.75	
DICHLORODIFLUOROMETHANE	75-71-8	ug/m ³	-	ND < 1.44	6.92	27.8	3.34	
ETHYL ACETATE	141-78-6	ug/m ³	-	ND < 2.2	ND < 0.44	ND < 1.37	ND < 1.47	
ETHYL ALCOHOL	64-17-5	ug/m ³	-	ND < 6.9	12.7	ND < 4.31	ND < 4.6	
ETHYLBENZENE	100-41-4	ug/m ³	-	ND < 0.938	4.29	20.8	4.13	
HEPTANE	142-82-5	ug/m ³	-	22.9	15.3	100	35.4	
HEXACHLOROBUTADIENE	87-68-3	ug/m ³	-	ND < 2.82	ND < 0.564	ND < 1.76	ND < 1.88	
ISO-PROPYL ALCOHOL	67-63-0	ug/m ³	-	ND < 5.87	ND < 1.17	6.66	ND < 3.91	
METHYL TERT BUTYL ETHER	1634-04-4	ug/m ³	-	ND < 0.945	ND < 0.189	ND < 0.591	ND < 0.631	
METHYLENE CHLORIDE	75-09-2	ug/m ³	B	ND < 2.33	7.4	7.78	7.61	
N-HEXANE	110-54-3	ug/m ³	-	43.3	21	28.8	45.8	

Table 3
Summary of Soil Vapor Analytical Data
Vacant Parcels, Rockaway Avenue & Chester Street, Brooklyn, NY

				Location ID:	SV-1	SV-2	SV-3	SV-4
				Sample Date:	10/14/2020	10/14/2020	10/14/2020	10/14/2020
Volatile Organic Compounds - VOCs (TO15)	CAS	Units	NYSDOH Soil Vapor/Indoor Air Matrix					
O-XYLENE	95-47-6	ug/m ³	-	4.39	4.47	12.5	4.52	
P/M-XYLENE	179601-23-1	ug/m ³	-	13.2	13.3	43.4	13.4	
STYRENE	100-42-5	ug/m ³	-	ND < 0.924	ND < 0.185	ND < 0.579	ND < 0.617	
TERT-BUTYL ALCOHOL	75-65-0	ug/m ³	-	31.5	5.64	18.3	8.28	
TETRACHLOROETHENE	127-18-4	ug/m ³	B	ND < 2.22	1.79	ND < 1.39	ND < 1.48	
TETRAHYDROFURAN	109-99-9	ug/m ³	-	ND < 0.838	3.51	ND < 0.525	ND < 0.557	
TOLUENE	108-88-3	ug/m ³	-	22.7	19.9	32.8	21.8	
TRANS-1,2-DICHLOROETHENE	156-60-5	ug/m ³	-	ND < 1.28	ND < 0.255	ND < 0.797	ND < 0.848	
TRANS-1,3-DICHLOROPROPENE	10061-02-6	ug/m ³	-	ND < 0.99	ND < 0.198	ND < 0.617	ND < 0.658	
TRICHLOROETHENE	79-01-6	ug/m ³	A	ND < 1.35	ND < 0.271	ND < 0.849	ND < 0.903	
TRICHLOROFLUOROMETHANE	75-69-4	ug/m ³	-	ND < 1.93	2.64	133	ND < 1.29	
VINYL BROMIDE	593-60-2	ug/m ³	-	ND < 1.57	ND < 0.313	ND < 0.979	ND < 1.04	
VINYL CHLORIDE	75-01-4	ug/m ³	C	ND < 0.803	ND < 0.16	ND < 0.501	ND < 0.534	
Helium								
Total Helium	744-59-7	%	-	ND	ND	ND	ND	

Notes:

Units

ug/m³ = micrograms per cubic meter

Data Qualifiers

ND = Not detected above laboratory method detection limit (MDL).

J = Estimated value is greater than MDL and less than Limit of Quantitation (LOQ).

ATTACHMENT C – SITE PHOTOGRAPHS



Photograph No. 1: Representative photograph of soil boring installation at the Site.



Photograph No. 2: Representative photograph of macrocore samples, with fill material horizons observed in mid-range samples throughout the Site.



Photograph No. 3: Marked soil boring location on the subject property and representative photographs of Site conditions.



Photograph No. 4: Representative photograph of soil vapor sampling at the subject property.

ATTACHMENT D – NYCDEP CORRESPONDENCE



September 30, 2019

Callista Nazaire
Director, Environmental Planning
New York City Department of Housing Preservation and Development
100 Gold Street
New York, New York 10038

**Re: Brownsville Site A – Rockaway/Chester
 Block 3499, Lots 15, 17, 20-24, 45-48, 50, 52-54, 56-58
 CEQR # 20HPD019K**

Vincent Sapienza, P.E.
Commissioner

Dear Ms. Nazaire:

The New York City Department of Environmental Protection, Bureau of Sustainability (DEP) has reviewed the March 2019 Phase I Environmental Site Assessment (Phase I), the August 2019 Phase II Environmental Site Assessment Work Plan (Phase II Work Plan) and the August 2019 Project Health and Safety Plan (HASP) prepared by Vanasse Hangen Brustlin, Inc., (VHB), on behalf of Blue Sea Development Company LLC., (applicant). It is our understanding that the applicant is seeking:

1. The disposition of 18 contiguous city-owned lots located between Pitkin Avenue and East New York Avenue in the Brownsville neighborhood of Brooklyn Community District 16;
2. A zoning map amendment from the New York City Department of City Planning to rezone the project area from a R6/C2-4 zoning district to a R7A/C2-4 zoning district;
3. A zoning text amendment to Appendix F of the Zoning Resolution to designate the project site as a Mandatory Inclusionary Housing Area;
4. Project approval and designation of the project site as an Urban Development Action Area Project.

The proposed actions would facilitate the development of a new mixed-use building containing approximately 446 affordable housing units, community facility space as well as retail space. It should be noted that the project site is currently vegetated, undeveloped and is enclosed with a chain-link fence.

The March 2019 Phase I report revealed that historical on-site and surrounding area land-uses consists of residential and commercial uses including churches, an auto garage, Wholesale Wallpaper Company, a cabinet manufacturer, a furniture upholsterer, Crossroads Juvenile Center, Colonial Electric Supply, a beauty salon, a deli and grocery store, a drug clinic, auto repair shops, as well as several residential buildings. Regulatory databases such as the New York State Department of Environmental Conservation (NYSDEC) SPILLS, Leaking Storage Tanks (LTANKS), Resource Conservation and Recovery Act Generators, and Petroleum Bulk Storage (PBS) Underground Storage Tanks (USTs) and PBS Aboveground Storage Tanks (ASTs) identified several sites in close proximity to the project site. The SPILLS database reported 13 spills within a 1/8-mile radius of the project site, the PBS USTs and the PBS ASTs databases reported 15 USTs and 21 ASTs within a 1/4-mile radius of the project site and the LTANKS database reported 29

Angela Licata
Deputy Commissioner of Sustainability

59-17 Junction Blvd.
Flushing, NY 11373

Tel. (718) 595-4398
Fax (718) 595-4422
alicata@dep.nyc.gov

LTANKS within a 1/2-mile radius of the project site. The Phase I also reported two Historical Cleaners within a 1/8-mile radius of the project site.

The August 2019 Phase II Work Plan proposes to install eleven soil borings, three temporary groundwater monitoring wells and four soil vapor probes at the project site. Two soil samples will be collected from each boring; one surficial sample will be taken from the 0-2 feet below grade surface (bgs) interval or just below the grass mat/asphalt pavement and one deeper sample will be taken at the anticipated excavation depth (13-feet bgs) or at refusal, whichever is encountered first. Soil and groundwater samples will be analyzed for volatile organic compounds (VOCs) via United States Environmental Protection Agency (EPA) Method 8260, semi-volatile organic compounds via EPA Method 8270, pesticides via EPA Method 8081, polychlorinated biphenyls via EPA Method 8082 and Target Analyte List metals via EPA Methods 6010 and 7471 (filtered and unfiltered for groundwater samples). Four soil vapor samples will also be collected and analyzed for VOCs via EPA Method TO-15.

Based upon our review of the submitted documentation, we have the following comments/recommendations to HPD:

Phase II Work Plan

- HPD should instruct the applicant that two soil samples should be collected from each test boring, and the samples should be focused on any sections exhibiting evidence of contamination based on field screening. One surface soil sample should be collected from the upper two feet of soil (typically the 0-2 feet bgs interval) and one subsurface soil sample should be collected between 2 feet bgs and the maximum proposed excavation depth (based on visual/olfactory evidence of impacts and/or elevated soil screening readings obtained using accepted field instruments). If no evidence or elevated readings are noted during borehole advancement, the subsurface soil sample should be collected from the two foot interval below the proposed maximum excavation depth and/or the groundwater interface (whichever is encountered first).
- HPD should instruct the applicant that the proposed soil, groundwater and soil vapor sampling locations should also be individually labeled on Figure 3, Proposed Sample Locations Map (e.g. SB-1, GW-1, SV-1, etc.).

DEP finds the August 2019 Phase II Work Plan and HASP for the proposed investigation acceptable, as long as the aforementioned information is incorporated into the Phase II Work Plan. HPD should inform the applicant that upon completion of the investigation activities, the applicant should submit a detailed Phase II report to DEP for review and approval. The report should include, at a minimum, an executive summary, narrative of the field activities, laboratory data and conclusions, comparison of soil, groundwater, and soil vapor analytical results (i.e., NYSDEC 6 NYCRR Part 375, NYSDEC Water Quality Regulations, and New York State Department of Health's October 2006 Guidance for Evaluating Soil Vapor Intrusion in the State of New York), updated site plans depicting sample locations, boring logs, and remedial recommendations, if warranted.

Future correspondence and submittals related to this project should include the following CEQR # **20HPD019K**. If you have any questions, you may contact Ms. Cassandra Scantlebury at (718) 595-6756.

Sincerely,



Wei Yu

Deputy Director, Hazardous Materials

cc: R. Weissbard
T. Estes
C. Scantlebury
M. Wimbish
R. Lucas
M. Juliana - HPD

ATTACHMENT E – LABORATORY DATA SHEETS



ANALYTICAL REPORT

Lab Number:	L2044058
Client:	VHB Engineering, Surveying and Landscape One Penn Plaza Suite 715 New York, NY 10119
ATTN:	Jessica Collins
Phone:	(646) 809-8042
Project Name:	BLUE SEA BACA PHASE II ESA
Project Number:	26979.01
Report Date:	10/21/20

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2044058-01	SB-1 (0'-2')	SOIL	BETWEEN CHESTER AND ROCKAWAY AVE	10/14/20 10:14	10/14/20
L2044058-02	SB-1 (13'-15')	SOIL	BETWEEN CHESTER AND ROCKAWAY AVE	10/14/20 10:24	10/14/20
L2044058-03	SB-2 (0'-2')	SOIL	BETWEEN CHESTER AND ROCKAWAY AVE	10/14/20 11:50	10/14/20
L2044058-04	SB-2 (15'-17')	SOIL	BETWEEN CHESTER AND ROCKAWAY AVE	10/14/20 12:10	10/14/20
L2044058-05	TB-2	TRIP BLANK (AQUEOUS)	BETWEEN CHESTER AND ROCKAWAY AVE	10/14/20 00:00	10/14/20
L2044058-06	GW-1	GROUNDWATER	BETWEEN CHESTER AND ROCKAWAY AVE	10/14/20 11:25	10/14/20
L2044058-07	GW-2	GROUNDWATER	BETWEEN CHESTER AND ROCKAWAY AVE	10/14/20 13:00	10/14/20
L2044058-08	TB-3	TRIP BLANK (AQUEOUS)	BETWEEN CHESTER AND ROCKAWAY AVE	10/14/20 00:00	10/14/20

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

L2044058-05 and -08: At the client's request, the sample was not analyzed.

L2044058-06 and -07: At the client's request, the Dissolved Metals analysis was performed.

Semivolatile Organics

L2044058-01: The sample has elevated detection limits due to the dilution required by the sample matrix.

Total Metals

L2044058-01 through -04: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

L2044058-06: The sample has elevated detection limits for all elements, with the exception of mercury, due to the prep dilution required by the sample matrix.

The WG1423029-1 Method Blank, associated with L2044058-01 through -04, has a concentration above the reporting limit for iron. Since the associated sample concentrations are greater than 10x the blank concentration for this analyte, no corrective action is required.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Melissa Sturgis Melissa Sturgis

Title: Technical Director/Representative

Date: 10/21/20

ORGANICS

VOLATILES

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-01
Client ID: SB-1 (0'-2')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 10:14
Date Received: 10/14/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/19/20 09:43
Analyst: MV
Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.4	3.0	1
1,1-Dichloroethane	ND		ug/kg	1.3	0.19	1
Chloroform	ND		ug/kg	1.9	0.18	1
Carbon tetrachloride	ND		ug/kg	1.3	0.30	1
1,2-Dichloropropane	ND		ug/kg	1.3	0.16	1
Dibromochloromethane	ND		ug/kg	1.3	0.18	1
1,1,2-Trichloroethane	ND		ug/kg	1.3	0.34	1
Tetrachloroethene	ND		ug/kg	0.64	0.25	1
Chlorobenzene	ND		ug/kg	0.64	0.16	1
Trichlorofluoromethane	ND		ug/kg	5.2	0.90	1
1,2-Dichloroethane	ND		ug/kg	1.3	0.33	1
1,1,1-Trichloroethane	ND		ug/kg	0.64	0.22	1
Bromodichloromethane	ND		ug/kg	0.64	0.14	1
trans-1,3-Dichloropropene	ND		ug/kg	1.3	0.35	1
cis-1,3-Dichloropropene	ND		ug/kg	0.64	0.20	1
1,3-Dichloropropene, Total	ND		ug/kg	0.64	0.20	1
1,1-Dichloropropene	ND		ug/kg	0.64	0.20	1
Bromoform	ND		ug/kg	5.2	0.32	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.64	0.21	1
Benzene	ND		ug/kg	0.64	0.21	1
Toluene	ND		ug/kg	1.3	0.70	1
Ethylbenzene	ND		ug/kg	1.3	0.18	1
Chloromethane	ND		ug/kg	5.2	1.2	1
Bromomethane	ND		ug/kg	2.6	0.75	1
Vinyl chloride	ND		ug/kg	1.3	0.43	1
Chloroethane	ND		ug/kg	2.6	0.58	1
1,1-Dichloroethene	ND		ug/kg	1.3	0.31	1
trans-1,2-Dichloroethene	ND		ug/kg	1.9	0.18	1

Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044058**Project Number:** 26979.01**Report Date:** 10/21/20**SAMPLE RESULTS**

Lab ID: L2044058-01
 Client ID: SB-1 (0'-2')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 10:14
 Date Received: 10/14/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.64	0.18	1
1,2-Dichlorobenzene	ND		ug/kg	2.6	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	2.6	0.19	1
1,4-Dichlorobenzene	ND		ug/kg	2.6	0.22	1
Methyl tert butyl ether	ND		ug/kg	2.6	0.26	1
p/m-Xylene	ND		ug/kg	2.6	0.72	1
o-Xylene	ND		ug/kg	1.3	0.38	1
Xylenes, Total	ND		ug/kg	1.3	0.38	1
cis-1,2-Dichloroethene	ND		ug/kg	1.3	0.22	1
1,2-Dichloroethene, Total	ND		ug/kg	1.3	0.18	1
Dibromomethane	ND		ug/kg	2.6	0.31	1
Styrene	0.45	J	ug/kg	1.3	0.25	1
Dichlorodifluoromethane	ND		ug/kg	13	1.2	1
Acetone	ND		ug/kg	13	6.2	1
Carbon disulfide	ND		ug/kg	13	5.9	1
2-Butanone	ND		ug/kg	13	2.9	1
Vinyl acetate	ND		ug/kg	13	2.8	1
4-Methyl-2-pentanone	ND		ug/kg	13	1.6	1
1,2,3-Trichloropropane	ND		ug/kg	2.6	0.16	1
2-Hexanone	ND		ug/kg	13	1.5	1
Bromochloromethane	ND		ug/kg	2.6	0.26	1
2,2-Dichloropropane	ND		ug/kg	2.6	0.26	1
1,2-Dibromoethane	ND		ug/kg	1.3	0.36	1
1,3-Dichloropropane	ND		ug/kg	2.6	0.22	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.64	0.17	1
Bromobenzene	ND		ug/kg	2.6	0.19	1
n-Butylbenzene	ND		ug/kg	1.3	0.22	1
sec-Butylbenzene	ND		ug/kg	1.3	0.19	1
tert-Butylbenzene	ND		ug/kg	2.6	0.15	1
o-Chlorotoluene	ND		ug/kg	2.6	0.25	1
p-Chlorotoluene	ND		ug/kg	2.6	0.14	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.9	1.3	1
Hexachlorobutadiene	ND		ug/kg	5.2	0.22	1
Isopropylbenzene	ND		ug/kg	1.3	0.14	1
p-Isopropyltoluene	45		ug/kg	1.3	0.14	1
Naphthalene	1.6	J	ug/kg	5.2	0.84	1
Acrylonitrile	ND		ug/kg	5.2	1.5	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-01
Client ID: SB-1 (0'-2')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 10:14
Date Received: 10/14/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.3	0.22	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.6	0.42	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.6	0.35	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.6	0.25	1
1,2,4-Trimethylbenzene	1.0	J	ug/kg	2.6	0.43	1
1,4-Dioxane	ND		ug/kg	100	45.	1
p-Diethylbenzene	ND		ug/kg	2.6	0.23	1
p-Ethyltoluene	ND		ug/kg	2.6	0.49	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.6	0.25	1
Ethyl ether	ND		ug/kg	2.6	0.44	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.4	1.8	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	99		70-130

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-02
 Client ID: SB-1 (13'-15')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 10:24
 Date Received: 10/14/20
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 10/19/20 10:09
 Analyst: MV
 Percent Solids: 96%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.2	2.9	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.18	1
Chloroform	ND		ug/kg	1.9	0.18	1
Carbon tetrachloride	ND		ug/kg	1.2	0.29	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.16	1
Dibromochloromethane	ND		ug/kg	1.2	0.18	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.33	1
Tetrachloroethene	ND		ug/kg	0.62	0.24	1
Chlorobenzene	ND		ug/kg	0.62	0.16	1
Trichlorofluoromethane	ND		ug/kg	5.0	0.87	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.32	1
1,1,1-Trichloroethane	ND		ug/kg	0.62	0.21	1
Bromodichloromethane	ND		ug/kg	0.62	0.14	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.34	1
cis-1,3-Dichloropropene	ND		ug/kg	0.62	0.20	1
1,3-Dichloropropene, Total	ND		ug/kg	0.62	0.20	1
1,1-Dichloropropene	ND		ug/kg	0.62	0.20	1
Bromoform	ND		ug/kg	5.0	0.31	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.62	0.21	1
Benzene	ND		ug/kg	0.62	0.21	1
Toluene	ND		ug/kg	1.2	0.68	1
Ethylbenzene	ND		ug/kg	1.2	0.18	1
Chloromethane	ND		ug/kg	5.0	1.2	1
Bromomethane	ND		ug/kg	2.5	0.73	1
Vinyl chloride	ND		ug/kg	1.2	0.42	1
Chloroethane	ND		ug/kg	2.5	0.56	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.30	1
trans-1,2-Dichloroethene	ND		ug/kg	1.9	0.17	1

Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044058**Project Number:** 26979.01**Report Date:** 10/21/20**SAMPLE RESULTS**

Lab ID: L2044058-02
 Client ID: SB-1 (13'-15')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 10:24
 Date Received: 10/14/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.62	0.17	1
1,2-Dichlorobenzene	ND		ug/kg	2.5	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	2.5	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	2.5	0.21	1
Methyl tert butyl ether	ND		ug/kg	2.5	0.25	1
p/m-Xylene	ND		ug/kg	2.5	0.70	1
o-Xylene	ND		ug/kg	1.2	0.36	1
Xylenes, Total	ND		ug/kg	1.2	0.36	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.22	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.17	1
Dibromomethane	ND		ug/kg	2.5	0.30	1
Styrene	ND		ug/kg	1.2	0.24	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	ND		ug/kg	12	6.0	1
Carbon disulfide	ND		ug/kg	12	5.7	1
2-Butanone	ND		ug/kg	12	2.8	1
Vinyl acetate	ND		ug/kg	12	2.7	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.6	1
1,2,3-Trichloropropane	ND		ug/kg	2.5	0.16	1
2-Hexanone	ND		ug/kg	12	1.5	1
Bromochloromethane	ND		ug/kg	2.5	0.26	1
2,2-Dichloropropane	ND		ug/kg	2.5	0.25	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.35	1
1,3-Dichloropropane	ND		ug/kg	2.5	0.21	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.62	0.16	1
Bromobenzene	ND		ug/kg	2.5	0.18	1
n-Butylbenzene	ND		ug/kg	1.2	0.21	1
sec-Butylbenzene	ND		ug/kg	1.2	0.18	1
tert-Butylbenzene	ND		ug/kg	2.5	0.15	1
o-Chlorotoluene	ND		ug/kg	2.5	0.24	1
p-Chlorotoluene	ND		ug/kg	2.5	0.14	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.8	1.2	1
Hexachlorobutadiene	ND		ug/kg	5.0	0.21	1
Isopropylbenzene	ND		ug/kg	1.2	0.14	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.14	1
Naphthalene	ND		ug/kg	5.0	0.81	1
Acrylonitrile	ND		ug/kg	5.0	1.4	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-02
Client ID: SB-1 (13'-15')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 10:24
Date Received: 10/14/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.21	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.5	0.40	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.5	0.34	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.5	0.24	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.5	0.42	1
1,4-Dioxane	ND		ug/kg	100	44.	1
p-Diethylbenzene	ND		ug/kg	2.5	0.22	1
p-Ethyltoluene	ND		ug/kg	2.5	0.48	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.5	0.24	1
Ethyl ether	ND		ug/kg	2.5	0.43	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.2	1.8	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	98		70-130

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-03
Client ID: SB-2 (0'-2')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 11:50
Date Received: 10/14/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/19/20 11:01
Analyst: JC
Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.5	3.0	1
1,1-Dichloroethane	ND		ug/kg	1.3	0.19	1
Chloroform	ND		ug/kg	2.0	0.18	1
Carbon tetrachloride	ND		ug/kg	1.3	0.30	1
1,2-Dichloropropane	ND		ug/kg	1.3	0.16	1
Dibromochloromethane	ND		ug/kg	1.3	0.18	1
1,1,2-Trichloroethane	ND		ug/kg	1.3	0.35	1
Tetrachloroethene	ND		ug/kg	0.65	0.26	1
Chlorobenzene	ND		ug/kg	0.65	0.17	1
Trichlorofluoromethane	ND		ug/kg	5.2	0.91	1
1,2-Dichloroethane	ND		ug/kg	1.3	0.34	1
1,1,1-Trichloroethane	ND		ug/kg	0.65	0.22	1
Bromodichloromethane	ND		ug/kg	0.65	0.14	1
trans-1,3-Dichloropropene	ND		ug/kg	1.3	0.36	1
cis-1,3-Dichloropropene	ND		ug/kg	0.65	0.21	1
1,3-Dichloropropene, Total	ND		ug/kg	0.65	0.21	1
1,1-Dichloropropene	ND		ug/kg	0.65	0.21	1
Bromoform	ND		ug/kg	5.2	0.32	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.65	0.22	1
Benzene	ND		ug/kg	0.65	0.22	1
Toluene	2.6		ug/kg	1.3	0.71	1
Ethylbenzene	45		ug/kg	1.3	0.18	1
Chloromethane	ND		ug/kg	5.2	1.2	1
Bromomethane	ND		ug/kg	2.6	0.76	1
Vinyl chloride	ND		ug/kg	1.3	0.44	1
Chloroethane	ND		ug/kg	2.6	0.59	1
1,1-Dichloroethene	ND		ug/kg	1.3	0.31	1
trans-1,2-Dichloroethene	ND		ug/kg	2.0	0.18	1

Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044058**Project Number:** 26979.01**Report Date:** 10/21/20**SAMPLE RESULTS**

Lab ID: L2044058-03
 Client ID: SB-2 (0'-2')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 11:50
 Date Received: 10/14/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.65	0.18	1
1,2-Dichlorobenzene	ND		ug/kg	2.6	0.19	1
1,3-Dichlorobenzene	ND		ug/kg	2.6	0.19	1
1,4-Dichlorobenzene	ND		ug/kg	2.6	0.22	1
Methyl tert butyl ether	ND		ug/kg	2.6	0.26	1
p/m-Xylene	200		ug/kg	2.6	0.73	1
o-Xylene	75		ug/kg	1.3	0.38	1
Xylenes, Total	280		ug/kg	1.3	0.38	1
cis-1,2-Dichloroethene	ND		ug/kg	1.3	0.23	1
1,2-Dichloroethene, Total	ND		ug/kg	1.3	0.18	1
Dibromomethane	ND		ug/kg	2.6	0.31	1
Styrene	ND		ug/kg	1.3	0.26	1
Dichlorodifluoromethane	ND		ug/kg	13	1.2	1
Acetone	50		ug/kg	13	6.3	1
Carbon disulfide	ND		ug/kg	13	6.0	1
2-Butanone	ND		ug/kg	13	2.9	1
Vinyl acetate	ND		ug/kg	13	2.8	1
4-Methyl-2-pentanone	ND		ug/kg	13	1.7	1
1,2,3-Trichloropropane	ND		ug/kg	2.6	0.17	1
2-Hexanone	ND		ug/kg	13	1.5	1
Bromochloromethane	ND		ug/kg	2.6	0.27	1
2,2-Dichloropropane	ND		ug/kg	2.6	0.26	1
1,2-Dibromoethane	ND		ug/kg	1.3	0.36	1
1,3-Dichloropropane	ND		ug/kg	2.6	0.22	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.65	0.17	1
Bromobenzene	ND		ug/kg	2.6	0.19	1
n-Butylbenzene	ND		ug/kg	1.3	0.22	1
sec-Butylbenzene	ND		ug/kg	1.3	0.19	1
tert-Butylbenzene	ND		ug/kg	2.6	0.15	1
o-Chlorotoluene	ND		ug/kg	2.6	0.25	1
p-Chlorotoluene	ND		ug/kg	2.6	0.14	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.9	1.3	1
Hexachlorobutadiene	ND		ug/kg	5.2	0.22	1
Isopropylbenzene	1.9		ug/kg	1.3	0.14	1
p-Isopropyltoluene	5.2		ug/kg	1.3	0.14	1
Naphthalene	ND		ug/kg	5.2	0.85	1
Acrylonitrile	ND		ug/kg	5.2	1.5	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-03
Client ID: SB-2 (0'-2')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 11:50
Date Received: 10/14/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	1.1	J	ug/kg	1.3	0.22	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.6	0.42	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.6	0.36	1
1,3,5-Trimethylbenzene	1.4	J	ug/kg	2.6	0.25	1
1,2,4-Trimethylbenzene	4.9		ug/kg	2.6	0.44	1
1,4-Dioxane	ND		ug/kg	100	46.	1
p-Diethylbenzene	ND		ug/kg	2.6	0.23	1
p-Ethyltoluene	6.0		ug/kg	2.6	0.50	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.6	0.25	1
Ethyl ether	ND		ug/kg	2.6	0.45	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.5	1.8	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	86		70-130
4-Bromofluorobenzene	114		70-130
Dibromofluoromethane	97		70-130

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-04
Client ID: SB-2 (15'-17')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 12:10
Date Received: 10/14/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/19/20 10:35
Analyst: JC
Percent Solids: 94%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.3	2.4	1
1,1-Dichloroethane	ND		ug/kg	1.0	0.15	1
Chloroform	ND		ug/kg	1.6	0.15	1
Carbon tetrachloride	ND		ug/kg	1.0	0.24	1
1,2-Dichloropropane	ND		ug/kg	1.0	0.13	1
Dibromochloromethane	ND		ug/kg	1.0	0.15	1
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.28	1
Tetrachloroethene	ND		ug/kg	0.53	0.21	1
Chlorobenzene	ND		ug/kg	0.53	0.13	1
Trichlorofluoromethane	ND		ug/kg	4.2	0.73	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.27	1
1,1,1-Trichloroethane	ND		ug/kg	0.53	0.18	1
Bromodichloromethane	ND		ug/kg	0.53	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.29	1
cis-1,3-Dichloropropene	ND		ug/kg	0.53	0.17	1
1,3-Dichloropropene, Total	ND		ug/kg	0.53	0.17	1
1,1-Dichloropropene	ND		ug/kg	0.53	0.17	1
Bromoform	ND		ug/kg	4.2	0.26	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.53	0.18	1
Benzene	ND		ug/kg	0.53	0.18	1
Toluene	ND		ug/kg	1.0	0.57	1
Ethylbenzene	ND		ug/kg	1.0	0.15	1
Chloromethane	ND		ug/kg	4.2	0.98	1
Bromomethane	ND		ug/kg	2.1	0.61	1
Vinyl chloride	ND		ug/kg	1.0	0.35	1
Chloroethane	ND		ug/kg	2.1	0.48	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.25	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.14	1

Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044058**Project Number:** 26979.01**Report Date:** 10/21/20**SAMPLE RESULTS**

Lab ID: L2044058-04
 Client ID: SB-2 (15'-17')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 12:10
 Date Received: 10/14/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.53	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	2.1	0.15	1
1,3-Dichlorobenzene	ND		ug/kg	2.1	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	2.1	0.18	1
Methyl tert butyl ether	ND		ug/kg	2.1	0.21	1
p/m-Xylene	ND		ug/kg	2.1	0.59	1
o-Xylene	ND		ug/kg	1.0	0.31	1
Xylenes, Total	ND		ug/kg	1.0	0.31	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18	1
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14	1
Dibromomethane	ND		ug/kg	2.1	0.25	1
Styrene	ND		ug/kg	1.0	0.21	1
Dichlorodifluoromethane	ND		ug/kg	10	0.96	1
Acetone	ND		ug/kg	10	5.1	1
Carbon disulfide	ND		ug/kg	10	4.8	1
2-Butanone	ND		ug/kg	10	2.3	1
Vinyl acetate	ND		ug/kg	10	2.3	1
4-Methyl-2-pentanone	ND		ug/kg	10	1.4	1
1,2,3-Trichloropropane	ND		ug/kg	2.1	0.13	1
2-Hexanone	ND		ug/kg	10	1.2	1
Bromochloromethane	ND		ug/kg	2.1	0.22	1
2,2-Dichloropropane	ND		ug/kg	2.1	0.21	1
1,2-Dibromoethane	ND		ug/kg	1.0	0.29	1
1,3-Dichloropropane	ND		ug/kg	2.1	0.18	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.53	0.14	1
Bromobenzene	ND		ug/kg	2.1	0.15	1
n-Butylbenzene	ND		ug/kg	1.0	0.18	1
sec-Butylbenzene	ND		ug/kg	1.0	0.15	1
tert-Butylbenzene	ND		ug/kg	2.1	0.12	1
o-Chlorotoluene	ND		ug/kg	2.1	0.20	1
p-Chlorotoluene	ND		ug/kg	2.1	0.11	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.2	1.0	1
Hexachlorobutadiene	ND		ug/kg	4.2	0.18	1
Isopropylbenzene	ND		ug/kg	1.0	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.12	1
Naphthalene	ND		ug/kg	4.2	0.68	1
Acrylonitrile	ND		ug/kg	4.2	1.2	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-04
Client ID: SB-2 (15'-17')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 12:10
Date Received: 10/14/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.0	0.18	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.1	0.34	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.1	0.29	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.1	0.20	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.1	0.35	1
1,4-Dioxane	ND		ug/kg	84	37.	1
p-Diethylbenzene	ND		ug/kg	2.1	0.19	1
p-Ethyltoluene	ND		ug/kg	2.1	0.40	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.1	0.20	1
Ethyl ether	ND		ug/kg	2.1	0.36	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.3	1.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	98		70-130

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-06
Client ID: GW-1
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 11:25
Date Received: 10/14/20
Field Prep: Not Specified

Sample Depth:

Matrix: Groundwater
Analytical Method: 1,8260C
Analytical Date: 10/19/20 09:24
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	1.7	J	ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	0.35	J	ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044058**Project Number:** 26979.01**Report Date:** 10/21/20**SAMPLE RESULTS**

Lab ID: L2044058-06

Date Collected: 10/14/20 11:25

Client ID: GW-1

Date Received: 10/14/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	1.5	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-06
Client ID: GW-1
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 11:25
Date Received: 10/14/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	96		70-130

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-07
Client ID: GW-2
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 13:00
Date Received: 10/14/20
Field Prep: Not Specified

Sample Depth:

Matrix: Groundwater
Analytical Method: 1,8260C
Analytical Date: 10/19/20 09:45
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044058**Project Number:** 26979.01**Report Date:** 10/21/20**SAMPLE RESULTS**

Lab ID: L2044058-07
 Client ID: GW-2
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 13:00
 Date Received: 10/14/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	2.9	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-07
Client ID: GW-2
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 13:00
Date Received: 10/14/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	97		70-130

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/19/20 07:33
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-04 Batch: WG1423645-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	0.59	J	ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/19/20 07:33
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-04 Batch: WG1423645-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/19/20 07:33
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-04 Batch: WG1423645-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	0.33	J	ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	0.29	J	ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	80	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	101		70-130

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/19/20 08:41
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 06-07 Batch: WG1423703-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/19/20 08:41
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 06-07 Batch: WG1423703-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 10/19/20 08:41
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 06-07 Batch: WG1423703-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	97		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044058

Project Number: 26979.01

Report Date: 10/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-04 Batch: WG1423645-3 WG1423645-4								
Methylene chloride	81		81		70-130	0		30
1,1-Dichloroethane	85		87		70-130	2		30
Chloroform	94		96		70-130	2		30
Carbon tetrachloride	95		95		70-130	0		30
1,2-Dichloropropane	88		87		70-130	1		30
Dibromochloromethane	93		92		70-130	1		30
1,1,2-Trichloroethane	87		85		70-130	2		30
Tetrachloroethene	97		96		70-130	1		30
Chlorobenzene	94		94		70-130	0		30
Trichlorofluoromethane	96		95		70-139	1		30
1,2-Dichloroethane	88		88		70-130	0		30
1,1,1-Trichloroethane	90		90		70-130	0		30
Bromodichloromethane	87		86		70-130	1		30
trans-1,3-Dichloropropene	88		88		70-130	0		30
cis-1,3-Dichloropropene	89		90		70-130	1		30
1,1-Dichloropropene	93		94		70-130	1		30
Bromoform	88		86		70-130	2		30
1,1,2,2-Tetrachloroethane	84		82		70-130	2		30
Benzene	89		90		70-130	1		30
Toluene	92		94		70-130	2		30
Ethylbenzene	92		92		70-130	0		30
Chloromethane	64		61		52-130	5		30
Bromomethane	127		122		57-147	4		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044058

Project Number: 26979.01

Report Date: 10/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-04 Batch: WG1423645-3 WG1423645-4								
Vinyl chloride	78		77		67-130	1		30
Chloroethane	85		84		50-151	1		30
1,1-Dichloroethene	81		81		65-135	0		30
trans-1,2-Dichloroethene	88		90		70-130	2		30
Trichloroethene	91		92		70-130	1		30
1,2-Dichlorobenzene	95		95		70-130	0		30
1,3-Dichlorobenzene	95		96		70-130	1		30
1,4-Dichlorobenzene	94		95		70-130	1		30
Methyl tert butyl ether	88		87		66-130	1		30
p/m-Xylene	94		95		70-130	1		30
o-Xylene	94		96		70-130	2		30
cis-1,2-Dichloroethene	91		91		70-130	0		30
Dibromomethane	92		91		70-130	1		30
Styrene	93		93		70-130	0		30
Dichlorodifluoromethane	57		58		30-146	2		30
Acetone	83		75		54-140	10		30
Carbon disulfide	73		74		59-130	1		30
2-Butanone	74		78		70-130	5		30
Vinyl acetate	79		76		70-130	4		30
4-Methyl-2-pentanone	81		77		70-130	5		30
1,2,3-Trichloropropane	88		85		68-130	3		30
2-Hexanone	74		69	Q	70-130	7		30
Bromochloromethane	93		95		70-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044058

Project Number: 26979.01

Report Date: 10/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-04 Batch: WG1423645-3 WG1423645-4								
2,2-Dichloropropane	90		92		70-130	2		30
1,2-Dibromoethane	94		93		70-130	1		30
1,3-Dichloropropane	92		92		69-130	0		30
1,1,1,2-Tetrachloroethane	95		95		70-130	0		30
Bromobenzene	92		92		70-130	0		30
n-Butylbenzene	93		94		70-130	1		30
sec-Butylbenzene	94		95		70-130	1		30
tert-Butylbenzene	94		95		70-130	1		30
o-Chlorotoluene	91		93		70-130	2		30
p-Chlorotoluene	92		92		70-130	0		30
1,2-Dibromo-3-chloropropane	93		90		68-130	3		30
Hexachlorobutadiene	94		95		67-130	1		30
Isopropylbenzene	93		93		70-130	0		30
p-Isopropyltoluene	95		95		70-130	0		30
Naphthalene	93		92		70-130	1		30
Acrylonitrile	77		74		70-130	4		30
n-Propylbenzene	91		92		70-130	1		30
1,2,3-Trichlorobenzene	95		97		70-130	2		30
1,2,4-Trichlorobenzene	97		97		70-130	0		30
1,3,5-Trimethylbenzene	92		93		70-130	1		30
1,2,4-Trimethylbenzene	93		93		70-130	0		30
1,4-Dioxane	123		110		65-136	11		30
p-Diethylbenzene	95		95		70-130	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Project Number: 26979.01

Lab Number: L2044058

Report Date: 10/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-04 Batch: WG1423645-3 WG1423645-4								
p-Ethyltoluene	94		94		70-130	0		30
1,2,4,5-Tetramethylbenzene	93		94		70-130	1		30
Ethyl ether	91		90		67-130	1		30
trans-1,4-Dichloro-2-butene	82		78		70-130	5		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	94		92		70-130
Toluene-d8	98		98		70-130
4-Bromofluorobenzene	96		97		70-130
Dibromofluoromethane	100		99		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044058

Project Number: 26979.01

Report Date: 10/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06-07 Batch: WG1423703-3 WG1423703-4								
Methylene chloride	100		100		70-130	0		20
1,1-Dichloroethane	97		100		70-130	3		20
Chloroform	92		99		70-130	7		20
Carbon tetrachloride	90		97		63-132	7		20
1,2-Dichloropropane	93		100		70-130	7		20
Dibromochloromethane	87		94		63-130	8		20
1,1,2-Trichloroethane	95		97		70-130	2		20
Tetrachloroethene	95		99		70-130	4		20
Chlorobenzene	99		100		75-130	1		20
Trichlorofluoromethane	100		100		62-150	0		20
1,2-Dichloroethane	89		94		70-130	5		20
1,1,1-Trichloroethane	91		98		67-130	7		20
Bromodichloromethane	89		97		67-130	9		20
trans-1,3-Dichloropropene	89		96		70-130	8		20
cis-1,3-Dichloropropene	91		95		70-130	4		20
1,1-Dichloropropene	96		99		70-130	3		20
Bromoform	83		93		54-136	11		20
1,1,2,2-Tetrachloroethane	87		98		67-130	12		20
Benzene	97		100		70-130	3		20
Toluene	97		100		70-130	3		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	100		100		64-130	0		20
Bromomethane	89		93		39-139	4		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044058

Project Number: 26979.01

Report Date: 10/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06-07 Batch: WG1423703-3 WG1423703-4								
Vinyl chloride	100		100		55-140	0		20
Chloroethane	120		130		55-138	8		20
1,1-Dichloroethene	97		100		61-145	3		20
trans-1,2-Dichloroethene	96		100		70-130	4		20
Trichloroethene	94		99		70-130	5		20
1,2-Dichlorobenzene	96		100		70-130	4		20
1,3-Dichlorobenzene	98		100		70-130	2		20
1,4-Dichlorobenzene	95		100		70-130	5		20
Methyl tert butyl ether	88		93		63-130	6		20
p/m-Xylene	105		110		70-130	5		20
o-Xylene	105		110		70-130	5		20
cis-1,2-Dichloroethene	98		99		70-130	1		20
Dibromomethane	93		94		70-130	1		20
1,2,3-Trichloropropane	88		97		64-130	10		20
Acrylonitrile	87		97		70-130	11		20
Styrene	105		110		70-130	5		20
Dichlorodifluoromethane	100		110		36-147	10		20
Acetone	91		100		58-148	9		20
Carbon disulfide	100		100		51-130	0		20
2-Butanone	93		100		63-138	7		20
Vinyl acetate	86		88		70-130	2		20
4-Methyl-2-pentanone	75		85		59-130	13		20
2-Hexanone	72		83		57-130	14		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044058

Project Number: 26979.01

Report Date: 10/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06-07 Batch: WG1423703-3 WG1423703-4								
Bromochloromethane	95		99		70-130	4		20
2,2-Dichloropropane	100		100		63-133	0		20
1,2-Dibromoethane	91		95		70-130	4		20
1,3-Dichloropropane	93		99		70-130	6		20
1,1,1,2-Tetrachloroethane	92		98		64-130	6		20
Bromobenzene	98		100		70-130	2		20
n-Butylbenzene	100		110		53-136	10		20
sec-Butylbenzene	100		110		70-130	10		20
tert-Butylbenzene	87		94		70-130	8		20
o-Chlorotoluene	100		110		70-130	10		20
p-Chlorotoluene	100		110		70-130	10		20
1,2-Dibromo-3-chloropropane	72		88		41-144	20		20
Hexachlorobutadiene	89		97		63-130	9		20
Isopropylbenzene	100		110		70-130	10		20
p-Isopropyltoluene	100		110		70-130	10		20
Naphthalene	78		88		70-130	12		20
n-Propylbenzene	100		110		69-130	10		20
1,2,3-Trichlorobenzene	83		92		70-130	10		20
1,2,4-Trichlorobenzene	89		96		70-130	8		20
1,3,5-Trimethylbenzene	110		110		64-130	0		20
1,2,4-Trimethylbenzene	100		110		70-130	10		20
1,4-Dioxane	84		86		56-162	2		20
p-Diethylbenzene	100		110		70-130	10		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Project Number: 26979.01

Lab Number: L2044058

Report Date: 10/21/20

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06-07 Batch: WG1423703-3 WG1423703-4								
p-Ethyltoluene	100		110		70-130	10		20
1,2,4,5-Tetramethylbenzene	98		100		70-130	2		20
Ethyl ether	95		98		59-134	3		20
trans-1,4-Dichloro-2-butene	81		97		70-130	18		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	93		92		70-130
Toluene-d8	102		101		70-130
4-Bromofluorobenzene	103		106		70-130
Dibromofluoromethane	94		95		70-130

SEMIVOLATILES

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-01 D
Client ID: SB-1 (0'-2')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 10:14
Date Received: 10/14/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 10/18/20 08:26
Analyst: WR
Percent Solids: 86%

Extraction Method: EPA 3546
Extraction Date: 10/17/20 02:41

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	560	J	ug/kg	1500	200	10
1,2,4-Trichlorobenzene	ND		ug/kg	1900	220	10
Hexachlorobenzene	ND		ug/kg	1200	220	10
Bis(2-chloroethyl)ether	ND		ug/kg	1700	260	10
2-Chloronaphthalene	ND		ug/kg	1900	190	10
1,2-Dichlorobenzene	ND		ug/kg	1900	340	10
1,3-Dichlorobenzene	ND		ug/kg	1900	330	10
1,4-Dichlorobenzene	ND		ug/kg	1900	340	10
3,3'-Dichlorobenzidine	ND		ug/kg	1900	510	10
2,4-Dinitrotoluene	ND		ug/kg	1900	380	10
2,6-Dinitrotoluene	ND		ug/kg	1900	330	10
Fluoranthene	11000		ug/kg	1200	220	10
4-Chlorophenyl phenyl ether	ND		ug/kg	1900	200	10
4-Bromophenyl phenyl ether	ND		ug/kg	1900	290	10
Bis(2-chloroisopropyl)ether	ND		ug/kg	2300	330	10
Bis(2-chloroethoxy)methane	ND		ug/kg	2100	190	10
Hexachlorobutadiene	ND		ug/kg	1900	280	10
Hexachlorocyclopentadiene	ND		ug/kg	5500	1700	10
Hexachloroethane	ND		ug/kg	1500	310	10
Isophorone	ND		ug/kg	1700	250	10
Naphthalene	ND		ug/kg	1900	230	10
Nitrobenzene	ND		ug/kg	1700	280	10
NDPA/DPA	ND		ug/kg	1500	220	10
n-Nitrosodi-n-propylamine	ND		ug/kg	1900	300	10
Bis(2-ethylhexyl)phthalate	ND		ug/kg	1900	660	10
Butyl benzyl phthalate	ND		ug/kg	1900	480	10
Di-n-butylphthalate	ND		ug/kg	1900	360	10
Di-n-octylphthalate	ND		ug/kg	1900	650	10

Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044058**Project Number:** 26979.01**Report Date:** 10/21/20**SAMPLE RESULTS**

Lab ID: L2044058-01 D
 Client ID: SB-1 (0'-2')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 10:14
 Date Received: 10/14/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	1900	180	10
Dimethyl phthalate	ND		ug/kg	1900	400	10
Benzo(a)anthracene	5700		ug/kg	1200	220	10
Benzo(a)pyrene	5700		ug/kg	1500	470	10
Benzo(b)fluoranthene	6800		ug/kg	1200	320	10
Benzo(k)fluoranthene	2500		ug/kg	1200	310	10
Chrysene	5400		ug/kg	1200	200	10
Acenaphthylene	320	J	ug/kg	1500	300	10
Anthracene	1800		ug/kg	1200	380	10
Benzo(ghi)perylene	3200		ug/kg	1500	230	10
Fluorene	530	J	ug/kg	1900	190	10
Phenanthrene	6700		ug/kg	1200	230	10
Dibenzo(a,h)anthracene	920	J	ug/kg	1200	220	10
Indeno(1,2,3-cd)pyrene	3400		ug/kg	1500	270	10
Pyrene	9700		ug/kg	1200	190	10
Biphenyl	ND		ug/kg	4400	450	10
4-Chloroaniline	ND		ug/kg	1900	350	10
2-Nitroaniline	ND		ug/kg	1900	370	10
3-Nitroaniline	ND		ug/kg	1900	360	10
4-Nitroaniline	ND		ug/kg	1900	800	10
Dibenzofuran	270	J	ug/kg	1900	180	10
2-Methylnaphthalene	ND		ug/kg	2300	230	10
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	1900	200	10
Acetophenone	ND		ug/kg	1900	240	10
2,4,6-Trichlorophenol	ND		ug/kg	1200	360	10
p-Chloro-m-cresol	ND		ug/kg	1900	290	10
2-Chlorophenol	ND		ug/kg	1900	230	10
2,4-Dichlorophenol	ND		ug/kg	1700	310	10
2,4-Dimethylphenol	ND		ug/kg	1900	630	10
2-Nitrophenol	ND		ug/kg	4200	720	10
4-Nitrophenol	ND		ug/kg	2700	780	10
2,4-Dinitrophenol	ND		ug/kg	9200	900	10
4,6-Dinitro-o-cresol	ND		ug/kg	5000	920	10
Pentachlorophenol	ND		ug/kg	1500	420	10
Phenol	ND		ug/kg	1900	290	10
2-Methylphenol	ND		ug/kg	1900	300	10
3-Methylphenol/4-Methylphenol	ND		ug/kg	2800	300	10

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-01 D
 Client ID: SB-1 (0'-2')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 10:14
 Date Received: 10/14/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	1900	370	10
Benzoic Acid	ND		ug/kg	6200	1900	10
Benzyl Alcohol	ND		ug/kg	1900	590	10
Carbazole	670	J	ug/kg	1900	190	10
1,4-Dioxane	ND		ug/kg	290	88.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	63		25-120
Phenol-d6	60		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	44		30-120
2,4,6-Tribromophenol	63		10-136
4-Terphenyl-d14	31		18-120

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-02
Client ID: SB-1 (13'-15')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 10:24
Date Received: 10/14/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 10/18/20 08:49
Analyst: WR
Percent Solids: 96%

Extraction Method: EPA 3546
Extraction Date: 10/17/20 02:41

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	170	19.	1
Hexachlorobenzene	ND		ug/kg	100	19.	1
Bis(2-chloroethyl)ether	ND		ug/kg	150	23.	1
2-Chloronaphthalene	ND		ug/kg	170	17.	1
1,2-Dichlorobenzene	ND		ug/kg	170	31.	1
1,3-Dichlorobenzene	ND		ug/kg	170	29.	1
1,4-Dichlorobenzene	ND		ug/kg	170	30.	1
3,3'-Dichlorobenzidine	ND		ug/kg	170	45.	1
2,4-Dinitrotoluene	ND		ug/kg	170	34.	1
2,6-Dinitrotoluene	ND		ug/kg	170	29.	1
Fluoranthene	ND		ug/kg	100	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	18.	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	26.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	29.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	180	17.	1
Hexachlorobutadiene	ND		ug/kg	170	25.	1
Hexachlorocyclopentadiene	ND		ug/kg	490	150	1
Hexachloroethane	ND		ug/kg	140	28.	1
Isophorone	ND		ug/kg	150	22.	1
Naphthalene	ND		ug/kg	170	21.	1
Nitrobenzene	ND		ug/kg	150	25.	1
NDPA/DPA	ND		ug/kg	140	19.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	170	26.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	170	59.	1
Butyl benzyl phthalate	ND		ug/kg	170	43.	1
Di-n-butylphthalate	ND		ug/kg	170	32.	1
Di-n-octylphthalate	ND		ug/kg	170	58.	1

Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044058**Project Number:** 26979.01**Report Date:** 10/21/20**SAMPLE RESULTS**

Lab ID: L2044058-02
 Client ID: SB-1 (13'-15')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 10:24
 Date Received: 10/14/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	170	16.	1
Dimethyl phthalate	ND		ug/kg	170	36.	1
Benzo(a)anthracene	ND		ug/kg	100	19.	1
Benzo(a)pyrene	ND		ug/kg	140	42.	1
Benzo(b)fluoranthene	ND		ug/kg	100	29.	1
Benzo(k)fluoranthene	ND		ug/kg	100	27.	1
Chrysene	ND		ug/kg	100	18.	1
Acenaphthylene	ND		ug/kg	140	26.	1
Anthracene	ND		ug/kg	100	33.	1
Benzo(ghi)perylene	ND		ug/kg	140	20.	1
Fluorene	ND		ug/kg	170	16.	1
Phenanthrene	ND		ug/kg	100	21.	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	24.	1
Pyrene	ND		ug/kg	100	17.	1
Biphenyl	ND		ug/kg	390	40.	1
4-Chloroaniline	ND		ug/kg	170	31.	1
2-Nitroaniline	ND		ug/kg	170	33.	1
3-Nitroaniline	ND		ug/kg	170	32.	1
4-Nitroaniline	ND		ug/kg	170	70.	1
Dibenzofuran	ND		ug/kg	170	16.	1
2-Methylnaphthalene	ND		ug/kg	200	20.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	18.	1
Acetophenone	ND		ug/kg	170	21.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	32.	1
p-Chloro-m-cresol	ND		ug/kg	170	25.	1
2-Chlorophenol	ND		ug/kg	170	20.	1
2,4-Dichlorophenol	ND		ug/kg	150	27.	1
2,4-Dimethylphenol	ND		ug/kg	170	56.	1
2-Nitrophenol	ND		ug/kg	370	64.	1
4-Nitrophenol	ND		ug/kg	240	70.	1
2,4-Dinitrophenol	ND		ug/kg	820	79.	1
4,6-Dinitro-o-cresol	ND		ug/kg	440	82.	1
Pentachlorophenol	ND		ug/kg	140	37.	1
Phenol	ND		ug/kg	170	26.	1
2-Methylphenol	ND		ug/kg	170	26.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	27.	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-02
Client ID: SB-1 (13'-15')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 10:24
Date Received: 10/14/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	170	33.	1
Benzoic Acid	ND		ug/kg	550	170	1
Benzyl Alcohol	ND		ug/kg	170	52.	1
Carbazole	ND		ug/kg	170	16.	1
1,4-Dioxane	ND		ug/kg	26	7.8	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	75		25-120
Phenol-d6	77		10-120
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	77		30-120
2,4,6-Tribromophenol	84		10-136
4-Terphenyl-d14	69		18-120

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-03
Client ID: SB-2 (0'-2')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 11:50
Date Received: 10/14/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 10/18/20 09:12
Analyst: WR
Percent Solids: 86%

Extraction Method: EPA 3546
Extraction Date: 10/17/20 02:41

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	37	J	ug/kg	150	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	120	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	33.	1
1,4-Dichlorobenzene	ND		ug/kg	190	34.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	51.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	910		ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	550	170	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	ND		ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	66.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	65.	1

Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044058**Project Number:** 26979.01**Report Date:** 10/21/20**SAMPLE RESULTS**

Lab ID: L2044058-03
 Client ID: SB-2 (0'-2')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 11:50
 Date Received: 10/14/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	480		ug/kg	120	22.	1
Benzo(a)pyrene	500		ug/kg	150	47.	1
Benzo(b)fluoranthene	640		ug/kg	120	32.	1
Benzo(k)fluoranthene	200		ug/kg	120	31.	1
Chrysene	480		ug/kg	120	20.	1
Acenaphthylene	56	J	ug/kg	150	30.	1
Anthracene	140		ug/kg	120	37.	1
Benzo(ghi)perylene	310		ug/kg	150	22.	1
Fluorene	36	J	ug/kg	190	19.	1
Phenanthrene	510		ug/kg	120	23.	1
Dibenzo(a,h)anthracene	74	J	ug/kg	120	22.	1
Indeno(1,2,3-cd)pyrene	300		ug/kg	150	27.	1
Pyrene	820		ug/kg	120	19.	1
Biphenyl	ND		ug/kg	440	44.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	37.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	79.	1
Dibenzofuran	19	J	ug/kg	190	18.	1
2-Methylnaphthalene	ND		ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	29.	1
2-Chlorophenol	ND		ug/kg	190	23.	1
2,4-Dichlorophenol	ND		ug/kg	170	31.	1
2,4-Dimethylphenol	ND		ug/kg	190	63.	1
2-Nitrophenol	ND		ug/kg	410	72.	1
4-Nitrophenol	ND		ug/kg	270	78.	1
2,4-Dinitrophenol	ND		ug/kg	920	89.	1
4,6-Dinitro-o-cresol	ND		ug/kg	500	92.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	30.	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-03
Client ID: SB-2 (0'-2')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 11:50
Date Received: 10/14/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	37.	1
Benzoic Acid	ND		ug/kg	620	190	1
Benzyl Alcohol	ND		ug/kg	190	59.	1
Carbazole	66	J	ug/kg	190	19.	1
1,4-Dioxane	ND		ug/kg	29	8.8	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	67		25-120
Phenol-d6	69		10-120
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	51		30-120
2,4,6-Tribromophenol	77		10-136
4-Terphenyl-d14	35		18-120

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-04
Client ID: SB-2 (15'-17')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 12:10
Date Received: 10/14/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 10/18/20 09:35
Analyst: WR
Percent Solids: 94%

Extraction Method: EPA 3546
Extraction Date: 10/17/20 02:41

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	170	20.	1
Hexachlorobenzene	ND		ug/kg	100	19.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	23.	1
2-Chloronaphthalene	ND		ug/kg	170	17.	1
1,2-Dichlorobenzene	ND		ug/kg	170	31.	1
1,3-Dichlorobenzene	ND		ug/kg	170	30.	1
1,4-Dichlorobenzene	ND		ug/kg	170	30.	1
3,3'-Dichlorobenzidine	ND		ug/kg	170	46.	1
2,4-Dinitrotoluene	ND		ug/kg	170	35.	1
2,6-Dinitrotoluene	ND		ug/kg	170	30.	1
Fluoranthene	ND		ug/kg	100	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	18.	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	26.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	30.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	17.	1
Hexachlorobutadiene	ND		ug/kg	170	25.	1
Hexachlorocyclopentadiene	ND		ug/kg	500	160	1
Hexachloroethane	ND		ug/kg	140	28.	1
Isophorone	ND		ug/kg	160	22.	1
Naphthalene	ND		ug/kg	170	21.	1
Nitrobenzene	ND		ug/kg	160	26.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	170	27.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	170	60.	1
Butyl benzyl phthalate	ND		ug/kg	170	44.	1
Di-n-butylphthalate	ND		ug/kg	170	33.	1
Di-n-octylphthalate	ND		ug/kg	170	59.	1

Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044058**Project Number:** 26979.01**Report Date:** 10/21/20**SAMPLE RESULTS**

Lab ID: L2044058-04
 Client ID: SB-2 (15'-17')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 12:10
 Date Received: 10/14/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	170	16.	1
Dimethyl phthalate	ND		ug/kg	170	36.	1
Benzo(a)anthracene	ND		ug/kg	100	19.	1
Benzo(a)pyrene	ND		ug/kg	140	42.	1
Benzo(b)fluoranthene	ND		ug/kg	100	29.	1
Benzo(k)fluoranthene	ND		ug/kg	100	28.	1
Chrysene	ND		ug/kg	100	18.	1
Acenaphthylene	ND		ug/kg	140	27.	1
Anthracene	ND		ug/kg	100	34.	1
Benzo(ghi)perylene	ND		ug/kg	140	20.	1
Fluorene	ND		ug/kg	170	17.	1
Phenanthrene	ND		ug/kg	100	21.	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	24.	1
Pyrene	ND		ug/kg	100	17.	1
Biphenyl	ND		ug/kg	390	40.	1
4-Chloroaniline	ND		ug/kg	170	32.	1
2-Nitroaniline	ND		ug/kg	170	33.	1
3-Nitroaniline	ND		ug/kg	170	33.	1
4-Nitroaniline	ND		ug/kg	170	72.	1
Dibenzofuran	ND		ug/kg	170	16.	1
2-Methylnaphthalene	ND		ug/kg	210	21.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	18.	1
Acetophenone	ND		ug/kg	170	21.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	33.	1
p-Chloro-m-cresol	ND		ug/kg	170	26.	1
2-Chlorophenol	ND		ug/kg	170	20.	1
2,4-Dichlorophenol	ND		ug/kg	160	28.	1
2,4-Dimethylphenol	ND		ug/kg	170	57.	1
2-Nitrophenol	ND		ug/kg	370	65.	1
4-Nitrophenol	ND		ug/kg	240	71.	1
2,4-Dinitrophenol	ND		ug/kg	830	81.	1
4,6-Dinitro-o-cresol	ND		ug/kg	450	83.	1
Pentachlorophenol	ND		ug/kg	140	38.	1
Phenol	ND		ug/kg	170	26.	1
2-Methylphenol	ND		ug/kg	170	27.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	250	27.	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-04
Client ID: SB-2 (15'-17')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 12:10
Date Received: 10/14/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	170	33.	1
Benzoic Acid	ND		ug/kg	560	180	1
Benzyl Alcohol	ND		ug/kg	170	53.	1
Carbazole	ND		ug/kg	170	17.	1
1,4-Dioxane	ND		ug/kg	26	8.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	82		25-120
Phenol-d6	81		10-120
Nitrobenzene-d5	86		23-120
2-Fluorobiphenyl	80		30-120
2,4,6-Tribromophenol	94		10-136
4-Terphenyl-d14	71		18-120

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-06
Client ID: GW-1
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 11:25
Date Received: 10/14/20
Field Prep: Not Specified

Sample Depth:

Matrix: Groundwater
Analytical Method: 1,8270D
Analytical Date: 10/19/20 03:32
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 10/16/20 17:12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	0.57	J	ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-06
Client ID: GW-1
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 11:25
Date Received: 10/14/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	57		21-120
Phenol-d6	48		10-120
Nitrobenzene-d5	83		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	63		10-120
4-Terphenyl-d14	74		41-149

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-06
Client ID: GW-1
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 11:25
Date Received: 10/14/20
Field Prep: Not Specified

Sample Depth:

Matrix: Groundwater
Analytical Method: 1,8270D-SIM
Analytical Date: 10/17/20 16:31
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 10/16/20 17:13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	0.03	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	0.02	J	ug/l	0.10	0.02	1
2-Methylnaphthalene	0.05	J	ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-06
 Client ID: GW-1
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 11:25
 Date Received: 10/14/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
-----------	--------	-----------	-------	----	-----	-----------------

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	52		21-120
Phenol-d6	43		10-120
Nitrobenzene-d5	91		23-120
2-Fluorobiphenyl	103		15-120
2,4,6-Tribromophenol	64		10-120
4-Terphenyl-d14	97		41-149

Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044058**Project Number:** 26979.01**Report Date:** 10/21/20**SAMPLE RESULTS**

Lab ID: L2044058-07
 Client ID: GW-2
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 13:00
 Date Received: 10/14/20
 Field Prep: Not Specified

Sample Depth:

Matrix: Groundwater
 Analytical Method: 1,8270D
 Analytical Date: 10/19/20 03:56
 Analyst: JG

Extraction Method: EPA 3510C
 Extraction Date: 10/16/20 17:12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	0.49	J	ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-07
Client ID: GW-2
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 13:00
Date Received: 10/14/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	32		21-120
Phenol-d6	31		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	73		15-120
2,4,6-Tribromophenol	42		10-120
4-Terphenyl-d14	80		41-149

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-07
 Client ID: GW-2
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 13:00
 Date Received: 10/14/20
 Field Prep: Not Specified

Sample Depth:

Matrix: Groundwater
 Analytical Method: 1,8270D-SIM
 Analytical Date: 10/17/20 16:52
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 10/16/20 17:13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.04	J	ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.02	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	0.03	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	0.04	J	ug/l	0.10	0.02	1
2-Methylnaphthalene	0.03	J	ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-07
 Client ID: GW-2
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 13:00
 Date Received: 10/14/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
-----------	--------	-----------	-------	----	-----	-----------------

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	34		21-120
Phenol-d6	32		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	81		15-120
2,4,6-Tribromophenol	60		10-120
4-Terphenyl-d14	112		41-149

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 10/16/20 16:11
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 10/16/20 02:45

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 06-07 Batch: WG1422737-1					
Acenaphthene	ND		ug/l	2.0	0.44
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50
Hexachlorobenzene	ND		ug/l	2.0	0.46
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chloronaphthalene	ND		ug/l	2.0	0.44
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Fluoranthene	ND		ug/l	2.0	0.26
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Hexachloroethane	ND		ug/l	2.0	0.58
Isophorone	ND		ug/l	5.0	1.2
Naphthalene	ND		ug/l	2.0	0.46
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 10/16/20 16:11
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 10/16/20 02:45

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 06-07 Batch: WG1422737-1					
Dimethyl phthalate	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Chrysene	ND		ug/l	2.0	0.34
Acenaphthylene	ND		ug/l	2.0	0.46
Anthracene	ND		ug/l	2.0	0.33
Benzo(ghi)perylene	ND		ug/l	2.0	0.30
Fluorene	ND		ug/l	2.0	0.41
Phenanthrene	ND		ug/l	2.0	0.33
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Pyrene	ND		ug/l	2.0	0.28
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
2-Methylnaphthalene	ND		ug/l	2.0	0.45
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 10/16/20 16:11
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 10/16/20 02:45

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 06-07 Batch: WG1422737-1					
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Pentachlorophenol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Benzoic Acid	ND		ug/l	50	2.6
Benzyl Alcohol	ND		ug/l	2.0	0.59
Carbazole	ND		ug/l	2.0	0.49

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	72		21-120
Phenol-d6	59		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	79		15-120
2,4,6-Tribromophenol	110		10-120
4-Terphenyl-d14	88		41-149

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 10/16/20 11:23
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 10/16/20 02:45

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 06-07 Batch: WG1422738-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 10/16/20 11:23
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 10/16/20 02:45

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 06-07 Batch: WG1422738-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	77		21-120
Phenol-d6	74		10-120
Nitrobenzene-d5	102		23-120
2-Fluorobiphenyl	76		15-120
2,4,6-Tribromophenol	60		10-120
4-Terphenyl-d14	67		41-149

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 10/18/20 07:18
Analyst: WR

Extraction Method: EPA 3546
Extraction Date: 10/17/20 02:41

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1423181-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	170	19.
Hexachlorobenzene	ND		ug/kg	100	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	170	16.
1,2-Dichlorobenzene	ND		ug/kg	170	30.
1,3-Dichlorobenzene	ND		ug/kg	170	28.
1,4-Dichlorobenzene	ND		ug/kg	170	29.
3,3'-Dichlorobenzidine	ND		ug/kg	170	44.
2,4-Dinitrotoluene	ND		ug/kg	170	33.
2,6-Dinitrotoluene	ND		ug/kg	170	28.
Fluoranthene	ND		ug/kg	100	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	170	18.
4-Bromophenyl phenyl ether	ND		ug/kg	170	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	17.
Hexachlorobutadiene	ND		ug/kg	170	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	27.
Isophorone	ND		ug/kg	150	22.
Naphthalene	ND		ug/kg	170	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	170	26.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	170	57.
Butyl benzyl phthalate	ND		ug/kg	170	42.
Di-n-butylphthalate	ND		ug/kg	170	31.
Di-n-octylphthalate	ND		ug/kg	170	56.
Diethyl phthalate	ND		ug/kg	170	15.

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 10/18/20 07:18
Analyst: WR

Extraction Method: EPA 3546
Extraction Date: 10/17/20 02:41

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1423181-1					
Dimethyl phthalate	ND		ug/kg	170	35.
Benzo(a)anthracene	ND		ug/kg	100	19.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	100	28.
Benzo(k)fluoranthene	ND		ug/kg	100	26.
Chrysene	ND		ug/kg	100	17.
Acenaphthylene	ND		ug/kg	130	26.
Anthracene	ND		ug/kg	100	32.
Benzo(ghi)perylene	ND		ug/kg	130	20.
Fluorene	ND		ug/kg	170	16.
Phenanthrene	ND		ug/kg	100	20.
Dibenzo(a,h)anthracene	ND		ug/kg	100	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	100	16.
Biphenyl	ND		ug/kg	380	38.
4-Chloroaniline	ND		ug/kg	170	30.
2-Nitroaniline	ND		ug/kg	170	32.
3-Nitroaniline	ND		ug/kg	170	31.
4-Nitroaniline	ND		ug/kg	170	69.
Dibenzofuran	ND		ug/kg	170	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	17.
Acetophenone	ND		ug/kg	170	20.
2,4,6-Trichlorophenol	ND		ug/kg	100	31.
p-Chloro-m-cresol	ND		ug/kg	170	25.
2-Chlorophenol	ND		ug/kg	170	20.
2,4-Dichlorophenol	ND		ug/kg	150	27.
2,4-Dimethylphenol	ND		ug/kg	170	55.
2-Nitrophenol	ND		ug/kg	360	62.

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 10/18/20 07:18
Analyst: WR

Extraction Method: EPA 3546
Extraction Date: 10/17/20 02:41

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1423181-1					
4-Nitrophenol	ND		ug/kg	230	68.
2,4-Dinitrophenol	ND		ug/kg	800	77.
4,6-Dinitro-o-cresol	ND		ug/kg	430	80.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	170	25.
2-Methylphenol	ND		ug/kg	170	26.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	170	32.
Benzoic Acid	ND		ug/kg	540	170
Benzyl Alcohol	ND		ug/kg	170	51.
Carbazole	ND		ug/kg	170	16.
1,4-Dioxane	ND		ug/kg	25	7.6

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	77		25-120
Phenol-d6	77		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	80		30-120
2,4,6-Tribromophenol	83		10-136
4-Terphenyl-d14	80		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044058

Project Number: 26979.01

Report Date: 10/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 06-07 Batch: WG1422737-2 WG1422737-3								
Acenaphthene	68		68		37-111	0		30
1,2,4-Trichlorobenzene	65		67		39-98	3		30
Hexachlorobenzene	89		92		40-140	3		30
Bis(2-chloroethyl)ether	63		61		40-140	3		30
2-Chloronaphthalene	66		73		40-140	10		30
1,2-Dichlorobenzene	58		61		40-140	5		30
1,3-Dichlorobenzene	59		62		40-140	5		30
1,4-Dichlorobenzene	60		62		36-97	3		30
3,3'-Dichlorobenzidine	78		84		40-140	7		30
2,4-Dinitrotoluene	80		78		48-143	3		30
2,6-Dinitrotoluene	86		88		40-140	2		30
Fluoranthene	80		81		40-140	1		30
4-Chlorophenyl phenyl ether	78		80		40-140	3		30
4-Bromophenyl phenyl ether	88		93		40-140	6		30
Bis(2-chloroisopropyl)ether	67		64		40-140	5		30
Bis(2-chloroethoxy)methane	66		66		40-140	0		30
Hexachlorobutadiene	75		87		40-140	15		30
Hexachlorocyclopentadiene	85		95		40-140	11		30
Hexachloroethane	67		69		40-140	3		30
Isophorone	63		65		40-140	3		30
Naphthalene	64		68		40-140	6		30
Nitrobenzene	71		69		40-140	3		30
NDPA/DPA	74		74		40-140	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044058

Project Number: 26979.01

Report Date: 10/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 06-07 Batch: WG1422737-2 WG1422737-3								
n-Nitrosodi-n-propylamine	66		70		29-132	6		30
Bis(2-ethylhexyl)phthalate	78		77		40-140	1		30
Butyl benzyl phthalate	94		96		40-140	2		30
Di-n-butylphthalate	78		78		40-140	0		30
Di-n-octylphthalate	74		75		40-140	1		30
Diethyl phthalate	77		78		40-140	1		30
Dimethyl phthalate	70		75		40-140	7		30
Benzo(a)anthracene	80		83		40-140	4		30
Benzo(a)pyrene	88		88		40-140	0		30
Benzo(b)fluoranthene	84		84		40-140	0		30
Benzo(k)fluoranthene	84		86		40-140	2		30
Chrysene	80		80		40-140	0		30
Acenaphthylene	66		74		45-123	11		30
Anthracene	75		76		40-140	1		30
Benzo(ghi)perylene	79		83		40-140	5		30
Fluorene	70		73		40-140	4		30
Phenanthrene	72		73		40-140	1		30
Dibenzo(a,h)anthracene	76		79		40-140	4		30
Indeno(1,2,3-cd)pyrene	74		77		40-140	4		30
Pyrene	82		82		26-127	0		30
Biphenyl	65		72		40-140	10		30
4-Chloroaniline	63		60		40-140	5		30
2-Nitroaniline	87		91		52-143	4		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044058

Project Number: 26979.01

Report Date: 10/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 06-07 Batch: WG1422737-2 WG1422737-3								
3-Nitroaniline	69		74		25-145	7		30
4-Nitroaniline	71		74		51-143	4		30
Dibenzofuran	69		72		40-140	4		30
2-Methylnaphthalene	63		70		40-140	11		30
1,2,4,5-Tetrachlorobenzene	83		91		2-134	9		30
Acetophenone	63		63		39-129	0		30
2,4,6-Trichlorophenol	90		93		30-130	3		30
p-Chloro-m-cresol	76		84		23-97	10		30
2-Chlorophenol	70		69		27-123	1		30
2,4-Dichlorophenol	74		76		30-130	3		30
2,4-Dimethylphenol	74		69		30-130	7		30
2-Nitrophenol	86		85		30-130	1		30
4-Nitrophenol	78		80		10-80	3		30
2,4-Dinitrophenol	79		73		20-130	8		30
4,6-Dinitro-o-cresol	92		96		20-164	4		30
Pentachlorophenol	91		100		9-103	9		30
Phenol	52		51		12-110	2		30
2-Methylphenol	72		65		30-130	10		30
3-Methylphenol/4-Methylphenol	72		70		30-130	3		30
2,4,5-Trichlorophenol	92		98		30-130	6		30
Benzoic Acid	59		62		10-164	5		30
Benzyl Alcohol	68		68		26-116	0		30
Carbazole	77		78		55-144	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044058

Project Number: 26979.01

Report Date: 10/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
-----------	------------------	------	-------------------	------	---------------------	-----	------	---------------

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 06-07 Batch: WG1422737-2 WG1422737-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	67		68		21-120
Phenol-d6	62		58		10-120
Nitrobenzene-d5	74		73		23-120
2-Fluorobiphenyl	72		80		15-120
2,4,6-Tribromophenol	129	Q	120		10-120
4-Terphenyl-d14	90		89		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044058

Project Number: 26979.01

Report Date: 10/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 06-07 Batch: WG1422738-2 WG1422738-3								
Acenaphthene	81		81		40-140	0		40
2-Chloronaphthalene	65		78		40-140	18		40
Fluoranthene	78		78		40-140	0		40
Hexachlorobutadiene	57		68		40-140	18		40
Naphthalene	67		82		40-140	20		40
Benzo(a)anthracene	79		80		40-140	1		40
Benzo(a)pyrene	91		92		40-140	1		40
Benzo(b)fluoranthene	80		83		40-140	4		40
Benzo(k)fluoranthene	88		86		40-140	2		40
Chrysene	92		92		40-140	0		40
Acenaphthylene	67		92		40-140	31		40
Anthracene	87		87		40-140	0		40
Benzo(ghi)perylene	86		87		40-140	1		40
Fluorene	90		89		40-140	1		40
Phenanthrene	81		81		40-140	0		40
Dibenzo(a,h)anthracene	84		85		40-140	1		40
Indeno(1,2,3-cd)pyrene	73		75		40-140	3		40
Pyrene	79		79		40-140	0		40
2-Methylnaphthalene	63		76		40-140	19		40
Pentachlorophenol	94		102		40-140	8		40
Hexachlorobenzene	76		76		40-140	0		40
Hexachloroethane	86		87		40-140	1		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044058

Project Number: 26979.01

Report Date: 10/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 06-07 Batch: WG1422738-2 WG1422738-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	79		78		21-120
Phenol-d6	69		68		10-120
Nitrobenzene-d5	109		111		23-120
2-Fluorobiphenyl	61		74		15-120
2,4,6-Tribromophenol	70		70		10-120
4-Terphenyl-d14	66		67		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044058

Project Number: 26979.01

Report Date: 10/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1423181-2 WG1423181-3								
Acenaphthene	76		76		31-137	0		50
1,2,4-Trichlorobenzene	82		79		38-107	4		50
Hexachlorobenzene	78		79		40-140	1		50
Bis(2-chloroethyl)ether	74		73		40-140	1		50
2-Chloronaphthalene	78		78		40-140	0		50
1,2-Dichlorobenzene	75		74		40-140	1		50
1,3-Dichlorobenzene	73		72		40-140	1		50
1,4-Dichlorobenzene	74		73		28-104	1		50
3,3'-Dichlorobenzidine	62		64		40-140	3		50
2,4-Dinitrotoluene	80		83		40-132	4		50
2,6-Dinitrotoluene	84		86		40-140	2		50
Fluoranthene	76		76		40-140	0		50
4-Chlorophenyl phenyl ether	78		77		40-140	1		50
4-Bromophenyl phenyl ether	82		82		40-140	0		50
Bis(2-chloroisopropyl)ether	52		55		40-140	6		50
Bis(2-chloroethoxy)methane	73		76		40-117	4		50
Hexachlorobutadiene	83		80		40-140	4		50
Hexachlorocyclopentadiene	95		92		40-140	3		50
Hexachloroethane	73		73		40-140	0		50
Isophorone	74		76		40-140	3		50
Naphthalene	74		74		40-140	0		50
Nitrobenzene	77		77		40-140	0		50
NDPA/DPA	78		78		36-157	0		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044058

Project Number: 26979.01

Report Date: 10/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1423181-2 WG1423181-3								
n-Nitrosodi-n-propylamine	71		70		32-121	1		50
Bis(2-ethylhexyl)phthalate	78		78		40-140	0		50
Butyl benzyl phthalate	76		76		40-140	0		50
Di-n-butylphthalate	76		77		40-140	1		50
Di-n-octylphthalate	77		77		40-140	0		50
Diethyl phthalate	75		73		40-140	3		50
Dimethyl phthalate	79		80		40-140	1		50
Benzo(a)anthracene	77		78		40-140	1		50
Benzo(a)pyrene	85		85		40-140	0		50
Benzo(b)fluoranthene	84		84		40-140	0		50
Benzo(k)fluoranthene	83		82		40-140	1		50
Chrysene	80		81		40-140	1		50
Acenaphthylene	83		85		40-140	2		50
Anthracene	77		77		40-140	0		50
Benzo(ghi)perylene	82		83		40-140	1		50
Fluorene	76		75		40-140	1		50
Phenanthrene	75		75		40-140	0		50
Dibenzo(a,h)anthracene	79		80		40-140	1		50
Indeno(1,2,3-cd)pyrene	79		82		40-140	4		50
Pyrene	77		76		35-142	1		50
Biphenyl	78		78		37-127	0		50
4-Chloroaniline	44		46		40-140	4		50
2-Nitroaniline	90		95		47-134	5		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044058

Project Number: 26979.01

Report Date: 10/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1423181-2 WG1423181-3								
3-Nitroaniline	67		68		26-129	1		50
4-Nitroaniline	82		83		41-125	1		50
Dibenzofuran	74		74		40-140	0		50
2-Methylnaphthalene	77		76		40-140	1		50
1,2,4,5-Tetrachlorobenzene	82		81		40-117	1		50
Acetophenone	78		78		14-144	0		50
2,4,6-Trichlorophenol	89		90		30-130	1		50
p-Chloro-m-cresol	82		84		26-103	2		50
2-Chlorophenol	83		82		25-102	1		50
2,4-Dichlorophenol	86		86		30-130	0		50
2,4-Dimethylphenol	93		96		30-130	3		50
2-Nitrophenol	99		96		30-130	3		50
4-Nitrophenol	79		81		11-114	3		50
2,4-Dinitrophenol	113		116		4-130	3		50
4,6-Dinitro-o-cresol	103		103		10-130	0		50
Pentachlorophenol	90		93		17-109	3		50
Phenol	76		78		26-90	3		50
2-Methylphenol	81		84		30-130.	4		50
3-Methylphenol/4-Methylphenol	82		82		30-130	0		50
2,4,5-Trichlorophenol	88		90		30-130	2		50
Benzoic Acid	79		76		10-110	4		50
Benzyl Alcohol	80		81		40-140	1		50
Carbazole	75		76		54-128	1		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044058

Project Number: 26979.01

Report Date: 10/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1423181-2 WG1423181-3								
1,4-Dioxane	66		67		40-140	2		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	82		79		25-120
Phenol-d6	80		80		10-120
Nitrobenzene-d5	84		85		23-120
2-Fluorobiphenyl	81		81		30-120
2,4,6-Tribromophenol	90		89		10-136
4-Terphenyl-d14	83		81		18-120

PCBS

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-01
Client ID: SB-1 (0'-2')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 10:14
Date Received: 10/14/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 10/17/20 15:09
Analyst: CW
Percent Solids: 86%

Extraction Method: EPA 3546
Extraction Date: 10/17/20 01:27
Cleanup Method: EPA 3665A
Cleanup Date: 10/17/20
Cleanup Method: EPA 3660B
Cleanup Date: 10/17/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.8	3.36	1	A
Aroclor 1221	ND		ug/kg	37.8	3.79	1	A
Aroclor 1232	ND		ug/kg	37.8	8.02	1	A
Aroclor 1242	ND		ug/kg	37.8	5.10	1	A
Aroclor 1248	ND		ug/kg	37.8	5.67	1	A
Aroclor 1254	97.4		ug/kg	37.8	4.14	1	A
Aroclor 1260	42.2		ug/kg	37.8	6.99	1	A
Aroclor 1262	ND		ug/kg	37.8	4.80	1	A
Aroclor 1268	18.7	J	ug/kg	37.8	3.92	1	A
PCBs, Total	158	J	ug/kg	37.8	3.36	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	80		30-150	A
2,4,5,6-Tetrachloro-m-xylene	62		30-150	B
Decachlorobiphenyl	81		30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-02
Client ID: SB-1 (13'-15')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 10:24
Date Received: 10/14/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 10/17/20 15:16
Analyst: CW
Percent Solids: 96%

Extraction Method: EPA 3546
Extraction Date: 10/17/20 01:27
Cleanup Method: EPA 3665A
Cleanup Date: 10/17/20
Cleanup Method: EPA 3660B
Cleanup Date: 10/17/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	33.2	2.95	1	A
Aroclor 1221	ND		ug/kg	33.2	3.32	1	A
Aroclor 1232	ND		ug/kg	33.2	7.03	1	A
Aroclor 1242	ND		ug/kg	33.2	4.47	1	A
Aroclor 1248	ND		ug/kg	33.2	4.98	1	A
Aroclor 1254	ND		ug/kg	33.2	3.63	1	A
Aroclor 1260	ND		ug/kg	33.2	6.13	1	A
Aroclor 1262	ND		ug/kg	33.2	4.21	1	A
Aroclor 1268	ND		ug/kg	33.2	3.44	1	A
PCBs, Total	ND		ug/kg	33.2	2.95	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	74		30-150	A
Decachlorobiphenyl	92		30-150	A
2,4,5,6-Tetrachloro-m-xylene	77		30-150	B
Decachlorobiphenyl	78		30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-03
Client ID: SB-2 (0'-2')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 11:50
Date Received: 10/14/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 10/17/20 15:23
Analyst: CW
Percent Solids: 86%

Extraction Method: EPA 3546
Extraction Date: 10/17/20 01:27
Cleanup Method: EPA 3665A
Cleanup Date: 10/17/20
Cleanup Method: EPA 3660B
Cleanup Date: 10/17/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	38.3	3.40	1	A
Aroclor 1221	ND		ug/kg	38.3	3.84	1	A
Aroclor 1232	ND		ug/kg	38.3	8.12	1	A
Aroclor 1242	ND		ug/kg	38.3	5.16	1	A
Aroclor 1248	ND		ug/kg	38.3	5.74	1	A
Aroclor 1254	17.0	J	ug/kg	38.3	4.19	1	A
Aroclor 1260	10.8	J	ug/kg	38.3	7.08	1	A
Aroclor 1262	ND		ug/kg	38.3	4.86	1	A
Aroclor 1268	ND		ug/kg	38.3	3.97	1	A
PCBs, Total	27.8	J	ug/kg	38.3	3.40	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	59		30-150	A
Decachlorobiphenyl	72		30-150	A
2,4,5,6-Tetrachloro-m-xylene	61		30-150	B
Decachlorobiphenyl	62		30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-04
Client ID: SB-2 (15'-17')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 12:10
Date Received: 10/14/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 10/17/20 15:30
Analyst: CW
Percent Solids: 94%

Extraction Method: EPA 3546
Extraction Date: 10/17/20 01:27
Cleanup Method: EPA 3665A
Cleanup Date: 10/17/20
Cleanup Method: EPA 3660B
Cleanup Date: 10/17/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	33.5	2.98	1	A
Aroclor 1221	ND		ug/kg	33.5	3.36	1	A
Aroclor 1232	ND		ug/kg	33.5	7.10	1	A
Aroclor 1242	ND		ug/kg	33.5	4.52	1	A
Aroclor 1248	ND		ug/kg	33.5	5.03	1	A
Aroclor 1254	ND		ug/kg	33.5	3.66	1	A
Aroclor 1260	ND		ug/kg	33.5	6.19	1	A
Aroclor 1262	ND		ug/kg	33.5	4.26	1	A
Aroclor 1268	ND		ug/kg	33.5	3.47	1	A
PCBs, Total	ND		ug/kg	33.5	2.98	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	67		30-150	A
Decachlorobiphenyl	82		30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	70		30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-06
Client ID: GW-1
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 11:25
Date Received: 10/14/20
Field Prep: Not Specified

Sample Depth:

Matrix: Groundwater
Analytical Method: 1,8082A
Analytical Date: 10/17/20 13:10
Analyst: CW

Extraction Method: EPA 3510C
Extraction Date: 10/16/20 17:14
Cleanup Method: EPA 3665A
Cleanup Date: 10/17/20
Cleanup Method: EPA 3660B
Cleanup Date: 10/17/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.083	0.034	1	A
Aroclor 1221	ND		ug/l	0.083	0.067	1	A
Aroclor 1232	ND		ug/l	0.083	0.046	1	A
Aroclor 1242	ND		ug/l	0.083	0.039	1	A
Aroclor 1248	ND		ug/l	0.083	0.049	1	A
Aroclor 1254	ND		ug/l	0.083	0.039	1	A
Aroclor 1260	ND		ug/l	0.083	0.032	1	A
Aroclor 1262	ND		ug/l	0.083	0.035	1	A
Aroclor 1268	ND		ug/l	0.083	0.034	1	A
PCBs, Total	ND		ug/l	0.083	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	63		30-150	A
Decachlorobiphenyl	43		30-150	A
2,4,5,6-Tetrachloro-m-xylene	63		30-150	B
Decachlorobiphenyl	49		30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-07
Client ID: GW-2
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 13:00
Date Received: 10/14/20
Field Prep: Not Specified

Sample Depth:

Matrix: Groundwater
Analytical Method: 1,8082A
Analytical Date: 10/17/20 13:18
Analyst: CW

Extraction Method: EPA 3510C
Extraction Date: 10/16/20 17:14
Cleanup Method: EPA 3665A
Cleanup Date: 10/17/20
Cleanup Method: EPA 3660B
Cleanup Date: 10/17/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.083	0.034	1	A
Aroclor 1221	ND		ug/l	0.083	0.067	1	A
Aroclor 1232	ND		ug/l	0.083	0.046	1	A
Aroclor 1242	ND		ug/l	0.083	0.039	1	A
Aroclor 1248	ND		ug/l	0.083	0.049	1	A
Aroclor 1254	ND		ug/l	0.083	0.039	1	A
Aroclor 1260	ND		ug/l	0.083	0.032	1	A
Aroclor 1262	ND		ug/l	0.083	0.035	1	A
Aroclor 1268	ND		ug/l	0.083	0.034	1	A
PCBs, Total	ND		ug/l	0.083	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	61		30-150	A
Decachlorobiphenyl	42		30-150	A
2,4,5,6-Tetrachloro-m-xylene	61		30-150	B
Decachlorobiphenyl	49		30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 10/16/20 17:01
Analyst: CW

Extraction Method: EPA 3510C
Extraction Date: 10/16/20 00:23
Cleanup Method: EPA 3665A
Cleanup Date: 10/16/20
Cleanup Method: EPA 3660B
Cleanup Date: 10/16/20

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 06-07 Batch: WG1422727-1						
Aroclor 1016	ND		ug/l	0.083	0.034	A
Aroclor 1221	ND		ug/l	0.083	0.067	A
Aroclor 1232	ND		ug/l	0.083	0.046	A
Aroclor 1242	ND		ug/l	0.083	0.039	A
Aroclor 1248	ND		ug/l	0.083	0.049	A
Aroclor 1254	ND		ug/l	0.083	0.039	A
Aroclor 1260	ND		ug/l	0.083	0.032	A
Aroclor 1262	ND		ug/l	0.083	0.035	A
Aroclor 1268	ND		ug/l	0.083	0.034	A
PCBs, Total	ND		ug/l	0.083	0.032	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	90		30-150	A
Decachlorobiphenyl	56		30-150	A
2,4,5,6-Tetrachloro-m-xylene	86		30-150	B
Decachlorobiphenyl	74		30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 10/17/20 14:48
Analyst: CW

Extraction Method: EPA 3546
Extraction Date: 10/17/20 01:27
Cleanup Method: EPA 3665A
Cleanup Date: 10/17/20
Cleanup Method: EPA 3660B
Cleanup Date: 10/17/20

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-04 Batch: WG1423175-1						
Aroclor 1016	ND		ug/kg	32.5	2.88	A
Aroclor 1221	ND		ug/kg	32.5	3.25	A
Aroclor 1232	ND		ug/kg	32.5	6.88	A
Aroclor 1242	ND		ug/kg	32.5	4.38	A
Aroclor 1248	ND		ug/kg	32.5	4.87	A
Aroclor 1254	ND		ug/kg	32.5	3.55	A
Aroclor 1260	ND		ug/kg	32.5	6.00	A
Aroclor 1262	ND		ug/kg	32.5	4.12	A
Aroclor 1268	ND		ug/kg	32.5	3.36	A
PCBs, Total	ND		ug/kg	32.5	2.88	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	72		30-150	A
Decachlorobiphenyl	92		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		30-150	B
Decachlorobiphenyl	83		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044058

Project Number: 26979.01

Report Date: 10/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 06-07 Batch: WG1422727-2 WG1422727-3									
Aroclor 1016	92		92		40-140	1		50	A
Aroclor 1260	71		72		40-140	2		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	89		87		30-150	A
Decachlorobiphenyl	54		44		30-150	A
2,4,5,6-Tetrachloro-m-xylene	83		83		30-150	B
Decachlorobiphenyl	67		55		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-04 Batch: WG1423175-2 WG1423175-3									
Aroclor 1016	84		84		40-140	0		50	A
Aroclor 1260	84		84		40-140	0		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	72		72		30-150	A
Decachlorobiphenyl	94		93		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		74		30-150	B
Decachlorobiphenyl	79		79		30-150	B

PESTICIDES

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-01
Client ID: SB-1 (0'-2')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 10:14
Date Received: 10/14/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 10/17/20 14:15
Analyst: BM
Percent Solids: 86%

Extraction Method: EPA 3546
Extraction Date: 10/17/20 00:07
Cleanup Method: EPA 3620B
Cleanup Date: 10/17/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.84	0.360	1	A
Lindane	ND		ug/kg	0.766	0.342	1	A
Alpha-BHC	ND		ug/kg	0.766	0.217	1	A
Beta-BHC	ND		ug/kg	1.84	0.697	1	A
Heptachlor	ND		ug/kg	0.919	0.412	1	A
Aldrin	0.907	J	ug/kg	1.84	0.647	1	A
Heptachlor epoxide	1.89	JIP	ug/kg	3.44	1.03	1	A
Endrin	ND		ug/kg	0.766	0.314	1	A
Endrin aldehyde	ND		ug/kg	2.30	0.804	1	A
Endrin ketone	ND		ug/kg	1.84	0.473	1	A
Dieldrin	21.2		ug/kg	1.15	0.574	1	A
4,4'-DDE	29.3	P	ug/kg	1.84	0.425	1	A
4,4'-DDD	11.3		ug/kg	1.84	0.655	1	A
4,4'-DDT	107		ug/kg	3.44	1.48	1	A
Endosulfan I	ND		ug/kg	1.84	0.434	1	A
Endosulfan II	ND		ug/kg	1.84	0.614	1	A
Endosulfan sulfate	ND		ug/kg	0.766	0.364	1	A
Methoxychlor	ND		ug/kg	3.44	1.07	1	A
Toxaphene	ND		ug/kg	34.4	9.65	1	A
cis-Chlordane	22.8	IP	ug/kg	2.30	0.640	1	B
trans-Chlordane	23.2	IP	ug/kg	2.30	0.606	1	A
Chlordane	224	P	ug/kg	15.3	6.09	1	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-01
 Client ID: SB-1 (0'-2')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 10:14
 Date Received: 10/14/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	96		30-150	A
Decachlorobiphenyl	140		30-150	A
2,4,5,6-Tetrachloro-m-xylene	92		30-150	B
Decachlorobiphenyl	292	Q	30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-02
Client ID: SB-1 (13'-15')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 10:24
Date Received: 10/14/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 10/17/20 16:32
Analyst: BM
Percent Solids: 96%

Extraction Method: EPA 3546
Extraction Date: 10/17/20 00:07
Cleanup Method: EPA 3620B
Cleanup Date: 10/17/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.60	0.313	1	A
Lindane	ND		ug/kg	0.666	0.298	1	A
Alpha-BHC	ND		ug/kg	0.666	0.189	1	A
Beta-BHC	ND		ug/kg	1.60	0.606	1	A
Heptachlor	ND		ug/kg	0.800	0.358	1	A
Aldrin	ND		ug/kg	1.60	0.563	1	A
Heptachlor epoxide	ND		ug/kg	3.00	0.900	1	A
Endrin	ND		ug/kg	0.666	0.273	1	A
Endrin aldehyde	ND		ug/kg	2.00	0.700	1	A
Endrin ketone	ND		ug/kg	1.60	0.412	1	A
Dieldrin	ND		ug/kg	1.00	0.500	1	A
4,4'-DDE	ND		ug/kg	1.60	0.370	1	A
4,4'-DDD	ND		ug/kg	1.60	0.570	1	A
4,4'-DDT	ND		ug/kg	3.00	1.29	1	A
Endosulfan I	ND		ug/kg	1.60	0.378	1	A
Endosulfan II	ND		ug/kg	1.60	0.534	1	A
Endosulfan sulfate	ND		ug/kg	0.666	0.317	1	A
Methoxychlor	ND		ug/kg	3.00	0.933	1	A
Toxaphene	ND		ug/kg	30.0	8.40	1	A
cis-Chlordane	ND		ug/kg	2.00	0.557	1	A
trans-Chlordane	ND	IP	ug/kg	2.00	0.528	1	A
Chlordane	ND		ug/kg	13.3	5.30	1	A

Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044058**Project Number:** 26979.01**Report Date:** 10/21/20**SAMPLE RESULTS**

Lab ID: L2044058-02

Date Collected: 10/14/20 10:24

Client ID: SB-1 (13'-15')

Date Received: 10/14/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	114		30-150	A
Decachlorobiphenyl	99		30-150	A
2,4,5,6-Tetrachloro-m-xylene	112		30-150	B
Decachlorobiphenyl	90		30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-03
Client ID: SB-2 (0'-2')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 11:50
Date Received: 10/14/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 10/17/20 14:24
Analyst: BM
Percent Solids: 86%

Extraction Method: EPA 3546
Extraction Date: 10/17/20 00:07
Cleanup Method: EPA 3620B
Cleanup Date: 10/17/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.82	0.355	1	A
Lindane	ND		ug/kg	0.756	0.338	1	A
Alpha-BHC	ND		ug/kg	0.756	0.215	1	A
Beta-BHC	ND		ug/kg	1.82	0.688	1	A
Heptachlor	ND		ug/kg	0.908	0.407	1	A
Aldrin	ND		ug/kg	1.82	0.639	1	A
Heptachlor epoxide	ND		ug/kg	3.40	1.02	1	A
Endrin	ND		ug/kg	0.756	0.310	1	A
Endrin aldehyde	ND		ug/kg	2.27	0.794	1	A
Endrin ketone	ND		ug/kg	1.82	0.467	1	A
Dieldrin	2.34		ug/kg	1.13	0.567	1	B
4,4'-DDE	4.70		ug/kg	1.82	0.420	1	A
4,4'-DDD	2.61		ug/kg	1.82	0.647	1	B
4,4'-DDT	13.3		ug/kg	3.40	1.46	1	A
Endosulfan I	ND		ug/kg	1.82	0.429	1	A
Endosulfan II	ND		ug/kg	1.82	0.606	1	A
Endosulfan sulfate	ND		ug/kg	0.756	0.360	1	A
Methoxychlor	ND		ug/kg	3.40	1.06	1	A
Toxaphene	ND		ug/kg	34.0	9.53	1	A
cis-Chlordane	2.14	JIP	ug/kg	2.27	0.632	1	B
trans-Chlordane	2.19	JIP	ug/kg	2.27	0.599	1	A
Chlordane	ND		ug/kg	15.1	6.01	1	A

Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044058**Project Number:** 26979.01**Report Date:** 10/21/20**SAMPLE RESULTS**

Lab ID: L2044058-03

Date Collected: 10/14/20 11:50

Client ID: SB-2 (0'-2')

Date Received: 10/14/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	93		30-150	A
Decachlorobiphenyl	137		30-150	A
2,4,5,6-Tetrachloro-m-xylene	90		30-150	B
Decachlorobiphenyl	112		30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-04
Client ID: SB-2 (15'-17')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 12:10
Date Received: 10/14/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 10/17/20 16:41
Analyst: BM
Percent Solids: 94%

Extraction Method: EPA 3546
Extraction Date: 10/17/20 00:07
Cleanup Method: EPA 3620B
Cleanup Date: 10/17/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.66	0.324	1	A
Lindane	ND		ug/kg	0.690	0.308	1	A
Alpha-BHC	ND		ug/kg	0.690	0.196	1	A
Beta-BHC	ND		ug/kg	1.66	0.628	1	A
Heptachlor	ND		ug/kg	0.828	0.371	1	A
Aldrin	ND		ug/kg	1.66	0.583	1	A
Heptachlor epoxide	ND		ug/kg	3.10	0.931	1	A
Endrin	ND		ug/kg	0.690	0.283	1	A
Endrin aldehyde	ND		ug/kg	2.07	0.724	1	A
Endrin ketone	ND		ug/kg	1.66	0.426	1	A
Dieldrin	ND		ug/kg	1.03	0.517	1	A
4,4'-DDE	0.737	J	ug/kg	1.66	0.383	1	A
4,4'-DDD	ND		ug/kg	1.66	0.590	1	A
4,4'-DDT	ND		ug/kg	3.10	1.33	1	A
Endosulfan I	ND		ug/kg	1.66	0.391	1	A
Endosulfan II	ND		ug/kg	1.66	0.553	1	A
Endosulfan sulfate	ND		ug/kg	0.690	0.328	1	A
Methoxychlor	ND		ug/kg	3.10	0.966	1	A
Toxaphene	ND		ug/kg	31.0	8.69	1	A
cis-Chlordane	ND		ug/kg	2.07	0.577	1	A
trans-Chlordane	ND	IP	ug/kg	2.07	0.546	1	A
Chlordane	ND		ug/kg	13.8	5.48	1	A

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-04
 Client ID: SB-2 (15'-17')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 12:10
 Date Received: 10/14/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	112		30-150	A
Decachlorobiphenyl	103		30-150	A
2,4,5,6-Tetrachloro-m-xylene	109		30-150	B
Decachlorobiphenyl	94		30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-06
Client ID: GW-1
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 11:25
Date Received: 10/14/20
Field Prep: Not Specified

Sample Depth:

Matrix: Groundwater
Analytical Method: 1,8081B
Analytical Date: 10/19/20 11:40
Analyst: JMC

Extraction Method: EPA 3510C
Extraction Date: 10/17/20 21:23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044058**Project Number:** 26979.01**Report Date:** 10/21/20**SAMPLE RESULTS**

Lab ID: L2044058-06

Date Collected: 10/14/20 11:25

Client ID: GW-1

Date Received: 10/14/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	57		30-150	A
Decachlorobiphenyl	29	Q	30-150	A
2,4,5,6-Tetrachloro-m-xylene	43		30-150	B
Decachlorobiphenyl	36		30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-07
Client ID: GW-2
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 13:00
Date Received: 10/14/20
Field Prep: Not Specified

Sample Depth:

Matrix: Groundwater
Analytical Method: 1,8081B
Analytical Date: 10/19/20 11:51
Analyst: JMC

Extraction Method: EPA 3510C
Extraction Date: 10/17/20 21:23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-07
Client ID: GW-2
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 13:00
Date Received: 10/14/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	59		30-150	A
Decachlorobiphenyl	32		30-150	A
2,4,5,6-Tetrachloro-m-xylene	40		30-150	B
Decachlorobiphenyl	34		30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 10/17/20 14:06
Analyst: BM

Extraction Method: EPA 3546
Extraction Date: 10/17/20 00:07
Cleanup Method: EPA 3620B
Cleanup Date: 10/17/20

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-04 Batch: WG1423167-1						
Delta-BHC	ND		ug/kg	1.54	0.302	A
Lindane	ND		ug/kg	0.643	0.287	A
Alpha-BHC	ND		ug/kg	0.643	0.183	A
Beta-BHC	ND		ug/kg	1.54	0.585	A
Heptachlor	ND		ug/kg	0.772	0.346	A
Aldrin	ND		ug/kg	1.54	0.543	A
Heptachlor epoxide	ND		ug/kg	2.89	0.868	A
Endrin	ND		ug/kg	0.643	0.264	A
Endrin aldehyde	ND		ug/kg	1.93	0.675	A
Endrin ketone	ND		ug/kg	1.54	0.397	A
Dieldrin	ND		ug/kg	0.965	0.482	A
4,4'-DDE	ND		ug/kg	1.54	0.357	A
4,4'-DDD	ND		ug/kg	1.54	0.550	A
4,4'-DDT	ND		ug/kg	2.89	1.24	A
Endosulfan I	ND		ug/kg	1.54	0.365	A
Endosulfan II	ND		ug/kg	1.54	0.516	A
Endosulfan sulfate	ND		ug/kg	0.643	0.306	A
Methoxychlor	ND		ug/kg	2.89	0.900	A
Toxaphene	ND		ug/kg	28.9	8.10	A
cis-Chlordane	ND		ug/kg	1.93	0.538	A
trans-Chlordane	ND		ug/kg	1.93	0.509	A
Chlordane	ND		ug/kg	12.9	5.11	A

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8081B
 Analytical Date: 10/17/20 14:06
 Analyst: BM

Extraction Method: EPA 3546
 Extraction Date: 10/17/20 00:07
 Cleanup Method: EPA 3620B
 Cleanup Date: 10/17/20

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-04 Batch: WG1423167-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	95		30-150	A
Decachlorobiphenyl	102		30-150	A
2,4,5,6-Tetrachloro-m-xylene	93		30-150	B
Decachlorobiphenyl	86		30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 10/19/20 12:36
Analyst: BM

Extraction Method: EPA 3510C
Extraction Date: 10/17/20 21:23

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 06-07 Batch: WG1423370-1						
Delta-BHC	ND		ug/l	0.014	0.003	A
Lindane	ND		ug/l	0.014	0.003	A
Alpha-BHC	ND		ug/l	0.014	0.003	A
Beta-BHC	ND		ug/l	0.014	0.004	A
Heptachlor	ND		ug/l	0.014	0.002	A
Aldrin	ND		ug/l	0.014	0.002	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	A
Endrin	ND		ug/l	0.029	0.003	A
Endrin aldehyde	ND		ug/l	0.029	0.006	A
Endrin ketone	ND		ug/l	0.029	0.003	A
Dieldrin	ND		ug/l	0.029	0.003	A
4,4'-DDE	ND		ug/l	0.029	0.003	A
4,4'-DDD	ND		ug/l	0.029	0.003	A
4,4'-DDT	ND		ug/l	0.029	0.003	A
Endosulfan I	ND		ug/l	0.014	0.002	A
Endosulfan II	ND		ug/l	0.029	0.004	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	A
Methoxychlor	ND		ug/l	0.143	0.005	A
Toxaphene	ND		ug/l	0.143	0.045	A
cis-Chlordane	ND		ug/l	0.014	0.005	A
trans-Chlordane	ND		ug/l	0.014	0.004	A
Chlordane	ND		ug/l	0.143	0.033	A

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 10/19/20 12:36
Analyst: BM

Extraction Method: EPA 3510C
Extraction Date: 10/17/20 21:23

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 06-07 Batch: WG1423370-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	61		30-150	A
Decachlorobiphenyl	49		30-150	A
2,4,5,6-Tetrachloro-m-xylene	42		30-150	B
Decachlorobiphenyl	46		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044058

Project Number: 26979.01

Report Date: 10/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-04 Batch: WG1423167-2 WG1423167-3									
Delta-BHC	87		93		30-150	7		30	A
Lindane	84		90		30-150	7		30	A
Alpha-BHC	90		97		30-150	7		30	A
Beta-BHC	105		112		30-150	6		30	A
Heptachlor	85		90		30-150	6		30	A
Aldrin	96		105		30-150	9		30	A
Heptachlor epoxide	92		101		30-150	9		30	A
Endrin	105		114		30-150	8		30	A
Endrin aldehyde	58		61		30-150	5		30	A
Endrin ketone	86		91		30-150	6		30	A
Dieldrin	109		119		30-150	9		30	A
4,4'-DDE	106		116		30-150	9		30	A
4,4'-DDD	116		128		30-150	10		30	A
4,4'-DDT	92		99		30-150	7		30	A
Endosulfan I	96		106		30-150	10		30	A
Endosulfan II	96		102		30-150	6		30	A
Endosulfan sulfate	79		82		30-150	4		30	A
Methoxychlor	80		84		30-150	5		30	A
cis-Chlordane	95		103		30-150	8		30	A
trans-Chlordane	96		104		30-150	8		30	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-04 Batch: WG1423167-2 WG1423167-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	99		104		30-150	A
Decachlorobiphenyl	91		101		30-150	A
2,4,5,6-Tetrachloro-m-xylene	98		102		30-150	B
Decachlorobiphenyl	78		85		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044058

Project Number: 26979.01

Report Date: 10/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 06-07 Batch: WG1423370-2 WG1423370-3									
Delta-BHC	44		53		30-150	19		20	A
Lindane	49		58		30-150	17		20	A
Alpha-BHC	52		62		30-150	18		20	A
Beta-BHC	52		66		30-150	24	Q	20	A
Heptachlor	43		53		30-150	20		20	A
Aldrin	44		54		30-150	20		20	A
Heptachlor epoxide	47		57		30-150	19		20	A
Endrin	48		55		30-150	13		20	A
Endrin aldehyde	44		50		30-150	13		20	A
Endrin ketone	48		55		30-150	14		20	A
Dieldrin	49		57		30-150	14		20	A
4,4'-DDE	46		54		30-150	15		20	A
4,4'-DDD	52		57		30-150	11		20	A
4,4'-DDT	41		47		30-150	12		20	A
Endosulfan I	43		50		30-150	14		20	A
Endosulfan II	48		55		30-150	13		20	A
Endosulfan sulfate	45		52		30-150	15		20	A
Methoxychlor	43		49		30-150	12		20	A
cis-Chlordane	43		52		30-150	19		20	A
trans-Chlordane	43		51		30-150	16		20	A

Lab Control Sample Analysis Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 06-07 Batch: WG1423370-2 WG1423370-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	51		61		30-150	A
Decachlorobiphenyl	37		43		30-150	A
2,4,5,6-Tetrachloro-m-xylene	38		42		30-150	B
Decachlorobiphenyl	40		41		30-150	B

METALS

Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044058**Project Number:** 26979.01**Report Date:** 10/21/20**SAMPLE RESULTS**

Lab ID: L2044058-01

Date Collected: 10/14/20 10:14

Client ID: SB-1 (0'-2')

Date Received: 10/14/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3860		mg/kg	8.99	2.43	2	10/20/20 07:40	10/20/20 16:54	EPA 3050B	1,6010D	BV
Antimony, Total	1.03	J	mg/kg	4.49	0.341	2	10/20/20 07:40	10/20/20 16:54	EPA 3050B	1,6010D	BV
Arsenic, Total	3.94		mg/kg	0.899	0.187	2	10/20/20 07:40	10/20/20 16:54	EPA 3050B	1,6010D	BV
Barium, Total	343		mg/kg	0.899	0.156	2	10/20/20 07:40	10/20/20 16:54	EPA 3050B	1,6010D	BV
Beryllium, Total	0.611		mg/kg	0.449	0.030	2	10/20/20 07:40	10/20/20 16:54	EPA 3050B	1,6010D	BV
Cadmium, Total	0.234	J	mg/kg	0.899	0.088	2	10/20/20 07:40	10/20/20 16:54	EPA 3050B	1,6010D	BV
Calcium, Total	15800		mg/kg	8.99	3.14	2	10/20/20 07:40	10/20/20 16:54	EPA 3050B	1,6010D	BV
Chromium, Total	23.1		mg/kg	0.899	0.086	2	10/20/20 07:40	10/20/20 16:54	EPA 3050B	1,6010D	BV
Cobalt, Total	5.29		mg/kg	1.80	0.149	2	10/20/20 07:40	10/20/20 16:54	EPA 3050B	1,6010D	BV
Copper, Total	51.3		mg/kg	0.899	0.232	2	10/20/20 07:40	10/20/20 16:54	EPA 3050B	1,6010D	BV
Iron, Total	13200		mg/kg	4.49	0.811	2	10/20/20 07:40	10/20/20 16:54	EPA 3050B	1,6010D	BV
Lead, Total	323		mg/kg	4.49	0.241	2	10/20/20 07:40	10/20/20 16:54	EPA 3050B	1,6010D	BV
Magnesium, Total	2070		mg/kg	8.99	1.38	2	10/20/20 07:40	10/20/20 16:54	EPA 3050B	1,6010D	BV
Manganese, Total	297		mg/kg	0.899	0.143	2	10/20/20 07:40	10/20/20 16:54	EPA 3050B	1,6010D	BV
Mercury, Total	0.284		mg/kg	0.073	0.048	1	10/20/20 08:40	10/20/20 11:58	EPA 7471B	1,7471B	EW
Nickel, Total	10.4		mg/kg	2.25	0.217	2	10/20/20 07:40	10/20/20 16:54	EPA 3050B	1,6010D	BV
Potassium, Total	431		mg/kg	225	12.9	2	10/20/20 07:40	10/20/20 16:54	EPA 3050B	1,6010D	BV
Selenium, Total	ND		mg/kg	1.80	0.232	2	10/20/20 07:40	10/20/20 16:54	EPA 3050B	1,6010D	BV
Silver, Total	ND		mg/kg	0.899	0.254	2	10/20/20 07:40	10/20/20 16:54	EPA 3050B	1,6010D	BV
Sodium, Total	146	J	mg/kg	180	2.83	2	10/20/20 07:40	10/20/20 16:54	EPA 3050B	1,6010D	BV
Thallium, Total	ND		mg/kg	1.80	0.283	2	10/20/20 07:40	10/20/20 16:54	EPA 3050B	1,6010D	BV
Vanadium, Total	17.0		mg/kg	0.899	0.182	2	10/20/20 07:40	10/20/20 16:54	EPA 3050B	1,6010D	BV
Zinc, Total	464		mg/kg	4.49	0.263	2	10/20/20 07:40	10/20/20 16:54	EPA 3050B	1,6010D	BV



Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044058**Project Number:** 26979.01**Report Date:** 10/21/20**SAMPLE RESULTS**

Lab ID: L2044058-02

Date Collected: 10/14/20 10:24

Client ID: SB-1 (13'-15')

Date Received: 10/14/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 96%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	7800		mg/kg	8.11	2.19	2	10/20/20 07:40	10/20/20 16:58	EPA 3050B	1,6010D	BV
Antimony, Total	0.592	J	mg/kg	4.06	0.308	2	10/20/20 07:40	10/20/20 16:58	EPA 3050B	1,6010D	BV
Arsenic, Total	2.45		mg/kg	0.811	0.169	2	10/20/20 07:40	10/20/20 16:58	EPA 3050B	1,6010D	BV
Barium, Total	23.9		mg/kg	0.811	0.141	2	10/20/20 07:40	10/20/20 16:58	EPA 3050B	1,6010D	BV
Beryllium, Total	0.487		mg/kg	0.406	0.027	2	10/20/20 07:40	10/20/20 16:58	EPA 3050B	1,6010D	BV
Cadmium, Total	ND		mg/kg	0.811	0.080	2	10/20/20 07:40	10/20/20 16:58	EPA 3050B	1,6010D	BV
Calcium, Total	851		mg/kg	8.11	2.84	2	10/20/20 07:40	10/20/20 16:58	EPA 3050B	1,6010D	BV
Chromium, Total	19.5		mg/kg	0.811	0.078	2	10/20/20 07:40	10/20/20 16:58	EPA 3050B	1,6010D	BV
Cobalt, Total	9.48		mg/kg	1.62	0.135	2	10/20/20 07:40	10/20/20 16:58	EPA 3050B	1,6010D	BV
Copper, Total	21.1		mg/kg	0.811	0.209	2	10/20/20 07:40	10/20/20 16:58	EPA 3050B	1,6010D	BV
Iron, Total	24600		mg/kg	4.06	0.732	2	10/20/20 07:40	10/20/20 16:58	EPA 3050B	1,6010D	BV
Lead, Total	8.32		mg/kg	4.06	0.217	2	10/20/20 07:40	10/20/20 16:58	EPA 3050B	1,6010D	BV
Magnesium, Total	3630		mg/kg	8.11	1.25	2	10/20/20 07:40	10/20/20 16:58	EPA 3050B	1,6010D	BV
Manganese, Total	520		mg/kg	0.811	0.129	2	10/20/20 07:40	10/20/20 16:58	EPA 3050B	1,6010D	BV
Mercury, Total	ND		mg/kg	0.065	0.043	1	10/20/20 08:40	10/20/20 12:08	EPA 7471B	1,7471B	EW
Nickel, Total	15.1		mg/kg	2.03	0.196	2	10/20/20 07:40	10/20/20 16:58	EPA 3050B	1,6010D	BV
Potassium, Total	971		mg/kg	203	11.7	2	10/20/20 07:40	10/20/20 16:58	EPA 3050B	1,6010D	BV
Selenium, Total	0.268	J	mg/kg	1.62	0.209	2	10/20/20 07:40	10/20/20 16:58	EPA 3050B	1,6010D	BV
Silver, Total	ND		mg/kg	0.811	0.230	2	10/20/20 07:40	10/20/20 16:58	EPA 3050B	1,6010D	BV
Sodium, Total	113	J	mg/kg	162	2.56	2	10/20/20 07:40	10/20/20 16:58	EPA 3050B	1,6010D	BV
Thallium, Total	ND		mg/kg	1.62	0.256	2	10/20/20 07:40	10/20/20 16:58	EPA 3050B	1,6010D	BV
Vanadium, Total	35.0		mg/kg	0.811	0.165	2	10/20/20 07:40	10/20/20 16:58	EPA 3050B	1,6010D	BV
Zinc, Total	29.9		mg/kg	4.06	0.238	2	10/20/20 07:40	10/20/20 16:58	EPA 3050B	1,6010D	BV



Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044058**Project Number:** 26979.01**Report Date:** 10/21/20**SAMPLE RESULTS**

Lab ID: L2044058-03

Date Collected: 10/14/20 11:50

Client ID: SB-2 (0'-2')

Date Received: 10/14/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4670		mg/kg	9.10	2.46	2	10/20/20 07:40	10/20/20 17:02	EPA 3050B	1,6010D	BV
Antimony, Total	0.510	J	mg/kg	4.55	0.346	2	10/20/20 07:40	10/20/20 17:02	EPA 3050B	1,6010D	BV
Arsenic, Total	1.41		mg/kg	0.910	0.189	2	10/20/20 07:40	10/20/20 17:02	EPA 3050B	1,6010D	BV
Barium, Total	74.8		mg/kg	0.910	0.158	2	10/20/20 07:40	10/20/20 17:02	EPA 3050B	1,6010D	BV
Beryllium, Total	0.228	J	mg/kg	0.455	0.030	2	10/20/20 07:40	10/20/20 17:02	EPA 3050B	1,6010D	BV
Cadmium, Total	ND		mg/kg	0.910	0.089	2	10/20/20 07:40	10/20/20 17:02	EPA 3050B	1,6010D	BV
Calcium, Total	3580		mg/kg	9.10	3.19	2	10/20/20 07:40	10/20/20 17:02	EPA 3050B	1,6010D	BV
Chromium, Total	9.65		mg/kg	0.910	0.087	2	10/20/20 07:40	10/20/20 17:02	EPA 3050B	1,6010D	BV
Cobalt, Total	3.77		mg/kg	1.82	0.151	2	10/20/20 07:40	10/20/20 17:02	EPA 3050B	1,6010D	BV
Copper, Total	15.2		mg/kg	0.910	0.235	2	10/20/20 07:40	10/20/20 17:02	EPA 3050B	1,6010D	BV
Iron, Total	11200		mg/kg	4.55	0.822	2	10/20/20 07:40	10/20/20 17:02	EPA 3050B	1,6010D	BV
Lead, Total	54.0		mg/kg	4.55	0.244	2	10/20/20 07:40	10/20/20 17:02	EPA 3050B	1,6010D	BV
Magnesium, Total	2140		mg/kg	9.10	1.40	2	10/20/20 07:40	10/20/20 17:02	EPA 3050B	1,6010D	BV
Manganese, Total	277		mg/kg	0.910	0.145	2	10/20/20 07:40	10/20/20 17:02	EPA 3050B	1,6010D	BV
Mercury, Total	0.104		mg/kg	0.073	0.048	1	10/20/20 08:40	10/20/20 12:11	EPA 7471B	1,7471B	EW
Nickel, Total	8.60		mg/kg	2.28	0.220	2	10/20/20 07:40	10/20/20 17:02	EPA 3050B	1,6010D	BV
Potassium, Total	390		mg/kg	228	13.1	2	10/20/20 07:40	10/20/20 17:02	EPA 3050B	1,6010D	BV
Selenium, Total	0.382	J	mg/kg	1.82	0.235	2	10/20/20 07:40	10/20/20 17:02	EPA 3050B	1,6010D	BV
Silver, Total	ND		mg/kg	0.910	0.258	2	10/20/20 07:40	10/20/20 17:02	EPA 3050B	1,6010D	BV
Sodium, Total	50.5	J	mg/kg	182	2.87	2	10/20/20 07:40	10/20/20 17:02	EPA 3050B	1,6010D	BV
Thallium, Total	ND		mg/kg	1.82	0.287	2	10/20/20 07:40	10/20/20 17:02	EPA 3050B	1,6010D	BV
Vanadium, Total	18.8		mg/kg	0.910	0.185	2	10/20/20 07:40	10/20/20 17:02	EPA 3050B	1,6010D	BV
Zinc, Total	58.5		mg/kg	4.55	0.267	2	10/20/20 07:40	10/20/20 17:02	EPA 3050B	1,6010D	BV



Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044058**Project Number:** 26979.01**Report Date:** 10/21/20**SAMPLE RESULTS**

Lab ID: L2044058-04

Date Collected: 10/14/20 12:10

Client ID: SB-2 (15'-17')

Date Received: 10/14/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 94%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3720		mg/kg	8.04	2.17	2	10/20/20 07:40	10/20/20 17:06	EPA 3050B	1,6010D	BV
Antimony, Total	0.531	J	mg/kg	4.02	0.306	2	10/20/20 07:40	10/20/20 17:06	EPA 3050B	1,6010D	BV
Arsenic, Total	2.53		mg/kg	0.804	0.167	2	10/20/20 07:40	10/20/20 17:06	EPA 3050B	1,6010D	BV
Barium, Total	18.6		mg/kg	0.804	0.140	2	10/20/20 07:40	10/20/20 17:06	EPA 3050B	1,6010D	BV
Beryllium, Total	0.209	J	mg/kg	0.402	0.027	2	10/20/20 07:40	10/20/20 17:06	EPA 3050B	1,6010D	BV
Cadmium, Total	ND		mg/kg	0.804	0.079	2	10/20/20 07:40	10/20/20 17:06	EPA 3050B	1,6010D	BV
Calcium, Total	677		mg/kg	8.04	2.81	2	10/20/20 07:40	10/20/20 17:06	EPA 3050B	1,6010D	BV
Chromium, Total	9.59		mg/kg	0.804	0.077	2	10/20/20 07:40	10/20/20 17:06	EPA 3050B	1,6010D	BV
Cobalt, Total	2.28		mg/kg	1.61	0.134	2	10/20/20 07:40	10/20/20 17:06	EPA 3050B	1,6010D	BV
Copper, Total	13.8		mg/kg	0.804	0.207	2	10/20/20 07:40	10/20/20 17:06	EPA 3050B	1,6010D	BV
Iron, Total	11200		mg/kg	4.02	0.726	2	10/20/20 07:40	10/20/20 17:06	EPA 3050B	1,6010D	BV
Lead, Total	12.8		mg/kg	4.02	0.216	2	10/20/20 07:40	10/20/20 17:06	EPA 3050B	1,6010D	BV
Magnesium, Total	988		mg/kg	8.04	1.24	2	10/20/20 07:40	10/20/20 17:06	EPA 3050B	1,6010D	BV
Manganese, Total	52.0		mg/kg	0.804	0.128	2	10/20/20 07:40	10/20/20 17:06	EPA 3050B	1,6010D	BV
Mercury, Total	0.280		mg/kg	0.067	0.043	1	10/20/20 08:40	10/20/20 12:15	EPA 7471B	1,7471B	EW
Nickel, Total	5.50		mg/kg	2.01	0.195	2	10/20/20 07:40	10/20/20 17:06	EPA 3050B	1,6010D	BV
Potassium, Total	409		mg/kg	201	11.6	2	10/20/20 07:40	10/20/20 17:06	EPA 3050B	1,6010D	BV
Selenium, Total	0.241	J	mg/kg	1.61	0.207	2	10/20/20 07:40	10/20/20 17:06	EPA 3050B	1,6010D	BV
Silver, Total	ND		mg/kg	0.804	0.228	2	10/20/20 07:40	10/20/20 17:06	EPA 3050B	1,6010D	BV
Sodium, Total	43.9	J	mg/kg	161	2.53	2	10/20/20 07:40	10/20/20 17:06	EPA 3050B	1,6010D	BV
Thallium, Total	ND		mg/kg	1.61	0.253	2	10/20/20 07:40	10/20/20 17:06	EPA 3050B	1,6010D	BV
Vanadium, Total	17.8		mg/kg	0.804	0.163	2	10/20/20 07:40	10/20/20 17:06	EPA 3050B	1,6010D	BV
Zinc, Total	18.0		mg/kg	4.02	0.236	2	10/20/20 07:40	10/20/20 17:06	EPA 3050B	1,6010D	BV



Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044058

Project Number: 26979.01

Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-06

Date Collected: 10/14/20 11:25

Client ID: GW-1

Date Received: 10/14/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Matrix: Groundwater

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	251.		mg/l	0.0200	0.00654	1	10/16/20 07:15	10/16/20 14:30	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00800	0.00085	1	10/16/20 07:15	10/16/20 14:30	EPA 3005A	1,6020B	AM
Arsenic, Total	0.03645		mg/l	0.00100	0.00033	1	10/16/20 07:15	10/16/20 14:30	EPA 3005A	1,6020B	AM
Barium, Total	2.627		mg/l	0.00100	0.00034	1	10/16/20 07:15	10/16/20 14:30	EPA 3005A	1,6020B	AM
Beryllium, Total	0.01786		mg/l	0.00100	0.00021	1	10/16/20 07:15	10/16/20 14:30	EPA 3005A	1,6020B	AM
Cadmium, Total	0.00288		mg/l	0.00040	0.00011	1	10/16/20 07:15	10/16/20 14:30	EPA 3005A	1,6020B	AM
Calcium, Total	137.		mg/l	0.200	0.0788	1	10/16/20 07:15	10/16/20 14:30	EPA 3005A	1,6020B	AM
Chromium, Total	0.8658		mg/l	0.00200	0.00035	1	10/16/20 07:15	10/16/20 14:30	EPA 3005A	1,6020B	AM
Cobalt, Total	0.3584		mg/l	0.00100	0.00032	1	10/16/20 07:15	10/16/20 14:30	EPA 3005A	1,6020B	AM
Copper, Total	0.7293		mg/l	0.00200	0.00076	1	10/16/20 07:15	10/16/20 14:30	EPA 3005A	1,6020B	AM
Iron, Total	478.		mg/l	0.100	0.0382	1	10/16/20 07:15	10/16/20 14:30	EPA 3005A	1,6020B	AM
Lead, Total	0.3276		mg/l	0.00200	0.00068	1	10/16/20 07:15	10/16/20 14:30	EPA 3005A	1,6020B	AM
Magnesium, Total	136.		mg/l	0.140	0.0484	1	10/16/20 07:15	10/16/20 14:30	EPA 3005A	1,6020B	AM
Manganese, Total	33.12		mg/l	0.1000	0.04400	50	10/16/20 07:15	10/16/20 16:12	EPA 3005A	1,6020B	AM
Mercury, Total	0.00015	J	mg/l	0.00020	0.00009	1	10/16/20 10:30	10/16/20 16:20	EPA 7470A	1,7470A	EW
Nickel, Total	1.302		mg/l	0.00400	0.00111	1	10/16/20 07:15	10/16/20 14:30	EPA 3005A	1,6020B	AM
Potassium, Total	56.4		mg/l	0.200	0.0618	1	10/16/20 07:15	10/16/20 14:30	EPA 3005A	1,6020B	AM
Selenium, Total	0.0634		mg/l	0.0100	0.00346	1	10/16/20 07:15	10/16/20 14:30	EPA 3005A	1,6020B	AM
Silver, Total	0.00036	J	mg/l	0.00080	0.00032	1	10/16/20 07:15	10/16/20 14:30	EPA 3005A	1,6020B	AM
Sodium, Total	68.7		mg/l	0.200	0.0586	1	10/16/20 07:15	10/16/20 14:30	EPA 3005A	1,6020B	AM
Thallium, Total	0.00388		mg/l	0.00200	0.00028	1	10/16/20 07:15	10/16/20 14:30	EPA 3005A	1,6020B	AM
Vanadium, Total	0.4387		mg/l	0.01000	0.00314	1	10/16/20 07:15	10/16/20 14:30	EPA 3005A	1,6020B	AM
Zinc, Total	1.066		mg/l	0.02000	0.00682	1	10/16/20 07:15	10/16/20 14:30	EPA 3005A	1,6020B	AM
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00594	J	mg/l	0.0100	0.00327	1	10/16/20 18:47	10/19/20 09:38	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00050	J	mg/l	0.00400	0.00042	1	10/16/20 18:47	10/19/20 09:38	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00023	J	mg/l	0.00050	0.00016	1	10/16/20 18:47	10/19/20 09:38	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.02509		mg/l	0.00050	0.00017	1	10/16/20 18:47	10/19/20 09:38	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	10/16/20 18:47	10/19/20 09:38	EPA 3005A	1,6020B	AM



Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044058**Project Number:** 26979.01**Report Date:** 10/21/20**SAMPLE RESULTS**

Lab ID: L2044058-06

Date Collected: 10/14/20 11:25

Client ID: GW-1

Date Received: 10/14/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Matrix: Groundwater

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Cadmium, Dissolved	0.00008	J	mg/l	0.00020	0.00005	1	10/16/20 18:47	10/19/20 09:38	EPA 3005A	1,6020B	AM
Calcium, Dissolved	77.7		mg/l	0.100	0.0394	1	10/16/20 18:47	10/19/20 09:38	EPA 3005A	1,6020B	AM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	10/16/20 18:47	10/19/20 09:38	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00592		mg/l	0.00050	0.00016	1	10/16/20 18:47	10/19/20 09:38	EPA 3005A	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	10/16/20 18:47	10/19/20 09:38	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.0213	J	mg/l	0.0500	0.0191	1	10/16/20 18:47	10/19/20 09:38	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	10/16/20 18:47	10/19/20 09:38	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	9.58		mg/l	0.0700	0.0242	1	10/16/20 18:47	10/19/20 09:38	EPA 3005A	1,6020B	AM
Manganese, Dissolved	1.826		mg/l	0.00100	0.00044	1	10/16/20 18:47	10/19/20 09:38	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	10/16/20 18:51	10/17/20 13:45	EPA 7470A	1,7470A	AL
Nickel, Dissolved	0.02163		mg/l	0.00200	0.00055	1	10/16/20 18:47	10/19/20 09:38	EPA 3005A	1,6020B	AM
Potassium, Dissolved	7.63		mg/l	0.100	0.0309	1	10/16/20 18:47	10/19/20 09:38	EPA 3005A	1,6020B	AM
Selenium, Dissolved	0.00182	J	mg/l	0.00500	0.00173	1	10/16/20 18:47	10/19/20 09:38	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	10/16/20 18:47	10/19/20 09:38	EPA 3005A	1,6020B	AM
Sodium, Dissolved	63.6		mg/l	0.100	0.0293	1	10/16/20 18:47	10/19/20 09:38	EPA 3005A	1,6020B	AM
Thallium, Dissolved	0.00018	J	mg/l	0.00050	0.00014	1	10/16/20 18:47	10/19/20 09:38	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	10/16/20 18:47	10/19/20 09:38	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	10/16/20 18:47	10/19/20 09:38	EPA 3005A	1,6020B	AM



Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044058**Project Number:** 26979.01**Report Date:** 10/21/20**SAMPLE RESULTS**

Lab ID: L2044058-07

Date Collected: 10/14/20 13:00

Client ID: GW-2

Date Received: 10/14/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Matrix: Groundwater

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	103.		mg/l	0.0100	0.00327	1	10/16/20 07:15	10/16/20 14:36	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	10/16/20 07:15	10/16/20 14:36	EPA 3005A	1,6020B	AM
Arsenic, Total	0.01811		mg/l	0.00050	0.00016	1	10/16/20 07:15	10/16/20 14:36	EPA 3005A	1,6020B	AM
Barium, Total	1.819		mg/l	0.00050	0.00017	1	10/16/20 07:15	10/16/20 14:36	EPA 3005A	1,6020B	AM
Beryllium, Total	0.00683		mg/l	0.00050	0.00010	1	10/16/20 07:15	10/16/20 14:36	EPA 3005A	1,6020B	AM
Cadmium, Total	0.00210		mg/l	0.00020	0.00005	1	10/16/20 07:15	10/16/20 14:36	EPA 3005A	1,6020B	AM
Calcium, Total	139.		mg/l	0.100	0.0394	1	10/16/20 07:15	10/16/20 14:36	EPA 3005A	1,6020B	AM
Chromium, Total	0.4262		mg/l	0.00100	0.00017	1	10/16/20 07:15	10/16/20 14:36	EPA 3005A	1,6020B	AM
Cobalt, Total	0.1883		mg/l	0.00050	0.00016	1	10/16/20 07:15	10/16/20 14:36	EPA 3005A	1,6020B	AM
Copper, Total	0.3132		mg/l	0.00100	0.00038	1	10/16/20 07:15	10/16/20 14:36	EPA 3005A	1,6020B	AM
Iron, Total	273.		mg/l	0.0500	0.0191	1	10/16/20 07:15	10/16/20 14:36	EPA 3005A	1,6020B	AM
Lead, Total	0.1500		mg/l	0.00100	0.00034	1	10/16/20 07:15	10/16/20 14:36	EPA 3005A	1,6020B	AM
Magnesium, Total	76.6		mg/l	0.0700	0.0242	1	10/16/20 07:15	10/16/20 14:36	EPA 3005A	1,6020B	AM
Manganese, Total	25.51		mg/l	0.05000	0.02200	50	10/16/20 07:15	10/16/20 16:58	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	10/16/20 10:30	10/16/20 16:23	EPA 7470A	1,7470A	EW
Nickel, Total	0.7910		mg/l	0.00200	0.00055	1	10/16/20 07:15	10/16/20 14:36	EPA 3005A	1,6020B	AM
Potassium, Total	37.7		mg/l	0.100	0.0309	1	10/16/20 07:15	10/16/20 14:36	EPA 3005A	1,6020B	AM
Selenium, Total	0.0246		mg/l	0.00500	0.00173	1	10/16/20 07:15	10/16/20 14:36	EPA 3005A	1,6020B	AM
Silver, Total	0.00020	J	mg/l	0.00040	0.00016	1	10/16/20 07:15	10/16/20 14:36	EPA 3005A	1,6020B	AM
Sodium, Total	24.1		mg/l	0.100	0.0293	1	10/16/20 07:15	10/16/20 14:36	EPA 3005A	1,6020B	AM
Thallium, Total	0.00198		mg/l	0.00100	0.00014	1	10/16/20 07:15	10/16/20 14:36	EPA 3005A	1,6020B	AM
Vanadium, Total	0.2041		mg/l	0.00500	0.00157	1	10/16/20 07:15	10/16/20 14:36	EPA 3005A	1,6020B	AM
Zinc, Total	0.5556		mg/l	0.01000	0.00341	1	10/16/20 07:15	10/16/20 14:36	EPA 3005A	1,6020B	AM
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00500	J	mg/l	0.0100	0.00327	1	10/16/20 18:47	10/19/20 09:43	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00042	J	mg/l	0.00400	0.00042	1	10/16/20 18:47	10/19/20 09:43	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00024	J	mg/l	0.00050	0.00016	1	10/16/20 18:47	10/19/20 09:43	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.03762		mg/l	0.00050	0.00017	1	10/16/20 18:47	10/19/20 09:43	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	10/16/20 18:47	10/19/20 09:43	EPA 3005A	1,6020B	AM



Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044058**Project Number:** 26979.01**Report Date:** 10/21/20**SAMPLE RESULTS**

Lab ID: L2044058-07

Date Collected: 10/14/20 13:00

Client ID: GW-2

Date Received: 10/14/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Matrix: Groundwater

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Cadmium, Dissolved	0.00021		mg/l	0.00020	0.00005	1	10/16/20 18:47	10/19/20 09:43	EPA 3005A	1,6020B	AM
Calcium, Dissolved	116.		mg/l	0.100	0.0394	1	10/16/20 18:47	10/19/20 09:43	EPA 3005A	1,6020B	AM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	10/16/20 18:47	10/19/20 09:43	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00909		mg/l	0.00050	0.00016	1	10/16/20 18:47	10/19/20 09:43	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.00051	J	mg/l	0.00100	0.00038	1	10/16/20 18:47	10/19/20 09:43	EPA 3005A	1,6020B	AM
Iron, Dissolved	ND		mg/l	0.0500	0.0191	1	10/16/20 18:47	10/19/20 09:43	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	10/16/20 18:47	10/19/20 09:43	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	19.4		mg/l	0.0700	0.0242	1	10/16/20 18:47	10/19/20 09:43	EPA 3005A	1,6020B	AM
Manganese, Dissolved	3.766		mg/l	0.00100	0.00044	1	10/16/20 18:47	10/19/20 09:43	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	10/16/20 18:51	10/17/20 13:56	EPA 7470A	1,7470A	AL
Nickel, Dissolved	0.03858		mg/l	0.00200	0.00055	1	10/16/20 18:47	10/19/20 09:43	EPA 3005A	1,6020B	AM
Potassium, Dissolved	15.3		mg/l	0.100	0.0309	1	10/16/20 18:47	10/19/20 09:43	EPA 3005A	1,6020B	AM
Selenium, Dissolved	0.00788		mg/l	0.00500	0.00173	1	10/16/20 18:47	10/19/20 09:43	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	10/16/20 18:47	10/19/20 09:43	EPA 3005A	1,6020B	AM
Sodium, Dissolved	20.9		mg/l	0.100	0.0293	1	10/16/20 18:47	10/19/20 09:43	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	10/16/20 18:47	10/19/20 09:43	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	10/16/20 18:47	10/19/20 09:43	EPA 3005A	1,6020B	AM
Zinc, Dissolved	0.00376	J	mg/l	0.01000	0.00341	1	10/16/20 18:47	10/19/20 09:43	EPA 3005A	1,6020B	AM



Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 06-07 Batch: WG1422487-1									
Mercury, Total	ND	mg/l	0.00020	0.00009	1	10/16/20 10:30	10/16/20 16:02	1,7470A	EW

Prep Information

Digestion Method: EPA 7470A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 06-07 Batch: WG1422790-1									
Aluminum, Total	0.00497 J	mg/l	0.0100	0.00327	1	10/16/20 07:15	10/16/20 13:24	1,6020B	AM
Antimony, Total	ND	mg/l	0.00400	0.00042	1	10/16/20 07:15	10/16/20 13:24	1,6020B	AM
Arsenic, Total	ND	mg/l	0.00050	0.00016	1	10/16/20 07:15	10/16/20 13:24	1,6020B	AM
Barium, Total	ND	mg/l	0.00050	0.00017	1	10/16/20 07:15	10/16/20 13:24	1,6020B	AM
Beryllium, Total	ND	mg/l	0.00050	0.00010	1	10/16/20 07:15	10/16/20 13:24	1,6020B	AM
Cadmium, Total	ND	mg/l	0.00020	0.00005	1	10/16/20 07:15	10/16/20 13:24	1,6020B	AM
Calcium, Total	ND	mg/l	0.100	0.0394	1	10/16/20 07:15	10/16/20 13:24	1,6020B	AM
Chromium, Total	0.00061 J	mg/l	0.00100	0.00017	1	10/16/20 07:15	10/16/20 13:24	1,6020B	AM
Cobalt, Total	ND	mg/l	0.00050	0.00016	1	10/16/20 07:15	10/16/20 13:24	1,6020B	AM
Copper, Total	ND	mg/l	0.00100	0.00038	1	10/16/20 07:15	10/16/20 13:24	1,6020B	AM
Iron, Total	ND	mg/l	0.0500	0.0191	1	10/16/20 07:15	10/16/20 13:24	1,6020B	AM
Lead, Total	ND	mg/l	0.00100	0.00034	1	10/16/20 07:15	10/16/20 13:24	1,6020B	AM
Magnesium, Total	ND	mg/l	0.0700	0.0242	1	10/16/20 07:15	10/16/20 13:24	1,6020B	AM
Manganese, Total	0.00086 J	mg/l	0.00100	0.00044	1	10/16/20 07:15	10/16/20 13:24	1,6020B	AM
Nickel, Total	ND	mg/l	0.00200	0.00055	1	10/16/20 07:15	10/16/20 13:24	1,6020B	AM
Potassium, Total	ND	mg/l	0.100	0.0309	1	10/16/20 07:15	10/16/20 13:24	1,6020B	AM
Selenium, Total	ND	mg/l	0.00500	0.00173	1	10/16/20 07:15	10/16/20 13:24	1,6020B	AM
Silver, Total	ND	mg/l	0.00040	0.00016	1	10/16/20 07:15	10/16/20 13:24	1,6020B	AM
Sodium, Total	ND	mg/l	0.100	0.0293	1	10/16/20 07:15	10/16/20 13:24	1,6020B	AM
Thallium, Total	ND	mg/l	0.00100	0.00014	1	10/16/20 07:15	10/16/20 13:24	1,6020B	AM
Vanadium, Total	ND	mg/l	0.00500	0.00157	1	10/16/20 07:15	10/16/20 13:24	1,6020B	AM
Zinc, Total	ND	mg/l	0.01000	0.00341	1	10/16/20 07:15	10/16/20 13:24	1,6020B	AM

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044058

Project Number: 26979.01

Report Date: 10/21/20

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 06-07 Batch: WG1422984-1										
Aluminum, Dissolved	ND		mg/l	0.0100	0.00327	1	10/16/20 18:47	10/19/20 09:02	1,6020B	AM
Antimony, Dissolved	0.00056	J	mg/l	0.00400	0.00042	1	10/16/20 18:47	10/19/20 09:02	1,6020B	AM
Arsenic, Dissolved	ND		mg/l	0.00050	0.00016	1	10/16/20 18:47	10/19/20 09:02	1,6020B	AM
Barium, Dissolved	ND		mg/l	0.00050	0.00017	1	10/16/20 18:47	10/19/20 09:02	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	10/16/20 18:47	10/19/20 09:02	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	10/16/20 18:47	10/19/20 09:02	1,6020B	AM
Calcium, Dissolved	ND		mg/l	0.100	0.0394	1	10/16/20 18:47	10/19/20 09:02	1,6020B	AM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	10/16/20 18:47	10/19/20 09:02	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	10/16/20 18:47	10/19/20 09:02	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	10/16/20 18:47	10/19/20 09:02	1,6020B	AM
Iron, Dissolved	ND		mg/l	0.0500	0.0191	1	10/16/20 18:47	10/19/20 09:02	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	10/16/20 18:47	10/19/20 09:02	1,6020B	AM
Magnesium, Dissolved	ND		mg/l	0.0700	0.0242	1	10/16/20 18:47	10/19/20 09:02	1,6020B	AM
Manganese, Dissolved	ND		mg/l	0.00100	0.00044	1	10/16/20 18:47	10/19/20 09:02	1,6020B	AM
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	10/16/20 18:47	10/19/20 09:02	1,6020B	AM
Potassium, Dissolved	ND		mg/l	0.100	0.0309	1	10/16/20 18:47	10/19/20 09:02	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	10/16/20 18:47	10/19/20 09:02	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	10/16/20 18:47	10/19/20 09:02	1,6020B	AM
Sodium, Dissolved	0.0304	J	mg/l	0.100	0.0293	1	10/16/20 18:47	10/19/20 09:02	1,6020B	AM
Thallium, Dissolved	0.00021	J	mg/l	0.00050	0.00014	1	10/16/20 18:47	10/19/20 09:02	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	10/16/20 18:47	10/19/20 09:02	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	10/16/20 18:47	10/19/20 09:02	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A



Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 06-07 Batch: WG1422985-1										
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	10/16/20 18:51	10/17/20 13:40	1,7470A	AL

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-04 Batch: WG1423029-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	10/20/20 07:40	10/20/20 13:58	1,6010D	PS
Antimony, Total	ND		mg/kg	2.00	0.152	1	10/20/20 07:40	10/20/20 13:58	1,6010D	PS
Arsenic, Total	ND		mg/kg	0.400	0.083	1	10/20/20 07:40	10/20/20 13:58	1,6010D	PS
Barium, Total	ND		mg/kg	0.400	0.070	1	10/20/20 07:40	10/20/20 13:58	1,6010D	PS
Beryllium, Total	ND		mg/kg	0.200	0.013	1	10/20/20 07:40	10/20/20 13:58	1,6010D	PS
Cadmium, Total	ND		mg/kg	0.400	0.039	1	10/20/20 07:40	10/20/20 13:58	1,6010D	PS
Calcium, Total	ND		mg/kg	4.00	1.40	1	10/20/20 07:40	10/20/20 13:58	1,6010D	PS
Chromium, Total	0.040	J	mg/kg	0.400	0.038	1	10/20/20 07:40	10/20/20 13:58	1,6010D	PS
Cobalt, Total	ND		mg/kg	0.800	0.066	1	10/20/20 07:40	10/20/20 13:58	1,6010D	PS
Copper, Total	ND		mg/kg	0.400	0.103	1	10/20/20 07:40	10/20/20 13:58	1,6010D	PS
Iron, Total	4.55		mg/kg	2.00	0.361	1	10/20/20 07:40	10/20/20 13:58	1,6010D	PS
Lead, Total	ND		mg/kg	2.00	0.107	1	10/20/20 07:40	10/20/20 13:58	1,6010D	PS
Magnesium, Total	ND		mg/kg	4.00	0.616	1	10/20/20 07:40	10/20/20 13:58	1,6010D	PS
Manganese, Total	0.104	J	mg/kg	0.400	0.064	1	10/20/20 07:40	10/20/20 13:58	1,6010D	PS
Nickel, Total	ND		mg/kg	1.00	0.097	1	10/20/20 07:40	10/20/20 13:58	1,6010D	PS
Potassium, Total	ND		mg/kg	100	5.76	1	10/20/20 07:40	10/20/20 13:58	1,6010D	PS
Selenium, Total	ND		mg/kg	0.800	0.103	1	10/20/20 07:40	10/20/20 13:58	1,6010D	PS
Silver, Total	ND		mg/kg	0.400	0.113	1	10/20/20 07:40	10/20/20 13:58	1,6010D	PS
Sodium, Total	ND		mg/kg	80.0	1.26	1	10/20/20 07:40	10/20/20 13:58	1,6010D	PS
Thallium, Total	ND		mg/kg	0.800	0.126	1	10/20/20 07:40	10/20/20 13:58	1,6010D	PS
Vanadium, Total	ND		mg/kg	0.400	0.081	1	10/20/20 07:40	10/20/20 13:58	1,6010D	PS
Zinc, Total	ND		mg/kg	2.00	0.117	1	10/20/20 07:40	10/20/20 13:58	1,6010D	PS

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044058

Project Number: 26979.01

Report Date: 10/21/20

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 3050B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-04 Batch: WG1423033-1									
Mercury, Total	ND	mg/kg	0.083	0.054	1	10/20/20 08:40	10/20/20 11:04	1,7471B	EW

Prep Information

Digestion Method: EPA 7471B

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044058

Project Number: 26979.01

Report Date: 10/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 06-07 Batch: WG1422487-2								
Mercury, Total	104		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044058

Project Number: 26979.01

Report Date: 10/21/20

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 06-07 Batch: WG1422790-2					
Aluminum, Total	108	-	80-120	-	
Antimony, Total	100	-	80-120	-	
Arsenic, Total	108	-	80-120	-	
Barium, Total	102	-	80-120	-	
Beryllium, Total	104	-	80-120	-	
Cadmium, Total	109	-	80-120	-	
Calcium, Total	105	-	80-120	-	
Chromium, Total	100	-	80-120	-	
Cobalt, Total	99	-	80-120	-	
Copper, Total	100	-	80-120	-	
Iron, Total	101	-	80-120	-	
Lead, Total	107	-	80-120	-	
Magnesium, Total	108	-	80-120	-	
Manganese, Total	101	-	80-120	-	
Nickel, Total	94	-	80-120	-	
Potassium, Total	107	-	80-120	-	
Selenium, Total	112	-	80-120	-	
Silver, Total	104	-	80-120	-	
Sodium, Total	107	-	80-120	-	
Thallium, Total	101	-	80-120	-	
Vanadium, Total	99	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044058

Project Number: 26979.01

Report Date: 10/21/20

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 06-07 Batch: WG1422790-2					
Zinc, Total	108	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044058

Project Number: 26979.01

Report Date: 10/21/20

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 06-07 Batch: WG1422984-2					
Aluminum, Dissolved	98	-	80-120	-	
Antimony, Dissolved	90	-	80-120	-	
Arsenic, Dissolved	104	-	80-120	-	
Barium, Dissolved	101	-	80-120	-	
Beryllium, Dissolved	107	-	80-120	-	
Cadmium, Dissolved	110	-	80-120	-	
Calcium, Dissolved	98	-	80-120	-	
Chromium, Dissolved	99	-	80-120	-	
Cobalt, Dissolved	100	-	80-120	-	
Copper, Dissolved	103	-	80-120	-	
Iron, Dissolved	99	-	80-120	-	
Lead, Dissolved	105	-	80-120	-	
Magnesium, Dissolved	97	-	80-120	-	
Manganese, Dissolved	98	-	80-120	-	
Nickel, Dissolved	98	-	80-120	-	
Potassium, Dissolved	99	-	80-120	-	
Selenium, Dissolved	101	-	80-120	-	
Silver, Dissolved	105	-	80-120	-	
Sodium, Dissolved	99	-	80-120	-	
Thallium, Dissolved	102	-	80-120	-	
Vanadium, Dissolved	98	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Project Number: 26979.01

Lab Number: L2044058

Report Date: 10/21/20

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 06-07 Batch: WG1422984-2					
Zinc, Dissolved	107	-	80-120	-	
Dissolved Metals - Mansfield Lab Associated sample(s): 06-07 Batch: WG1422985-2					
Mercury, Dissolved	108	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044058

Project Number: 26979.01

Report Date: 10/21/20

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1423029-2 SRM Lot Number: D109-540					
Aluminum, Total	62	-	50-150	-	
Antimony, Total	133	-	19-250	-	
Arsenic, Total	91	-	70-130	-	
Barium, Total	84	-	75-125	-	
Beryllium, Total	92	-	75-125	-	
Cadmium, Total	86	-	75-125	-	
Calcium, Total	86	-	73-128	-	
Chromium, Total	88	-	70-130	-	
Cobalt, Total	89	-	75-125	-	
Copper, Total	89	-	75-125	-	
Iron, Total	85	-	35-165	-	
Lead, Total	88	-	72-128	-	
Magnesium, Total	81	-	62-138	-	
Manganese, Total	85	-	74-126	-	
Nickel, Total	89	-	70-130	-	
Potassium, Total	78	-	59-141	-	
Selenium, Total	92	-	68-132	-	
Silver, Total	88	-	68-131	-	
Sodium, Total	100	-	35-165	-	
Thallium, Total	87	-	68-131	-	
Vanadium, Total	87	-	59-141	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Project Number: 26979.01

Lab Number: L2044058

Report Date: 10/21/20

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1423029-2 SRM Lot Number: D109-540					
Zinc, Total	89	-	70-130	-	
Total Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1423033-2 SRM Lot Number: D109-540					
Mercury, Total	96	-	60-140	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044058

Project Number: 26979.01

Report Date: 10/21/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 06-07 QC Batch ID: WG1422487-3 QC Sample: L2044112-09 Client ID: MS Sample												
Mercury, Total	ND	0.005	0.00501	100		-	-		75-125	-		20

Matrix Spike Analysis Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 06-07 QC Batch ID: WG1422790-3 QC Sample: L2044030-02 Client ID: MS Sample									
Aluminum, Total	0.011	2	2.32	115	-	-	75-125	-	20
Antimony, Total	ND	0.5	0.5516	110	-	-	75-125	-	20
Arsenic, Total	0.02135	0.12	0.1626	118	-	-	75-125	-	20
Barium, Total	0.01816	2	2.245	111	-	-	75-125	-	20
Beryllium, Total	ND	0.05	0.05313	106	-	-	75-125	-	20
Cadmium, Total	ND	0.051	0.05921	116	-	-	75-125	-	20
Calcium, Total	15.5	10	27.6	121	-	-	75-125	-	20
Chromium, Total	0.00095J	0.2	0.2152	108	-	-	75-125	-	20
Cobalt, Total	0.00327	0.5	0.5295	105	-	-	75-125	-	20
Copper, Total	0.00042J	0.25	0.2667	107	-	-	75-125	-	20
Iron, Total	4.84	1	6.24	140	Q	-	75-125	-	20
Lead, Total	ND	0.51	0.5804	114	-	-	75-125	-	20
Magnesium, Total	4.20	10	15.9	117	-	-	75-125	-	20
Manganese, Total	0.8709	0.5	1.463	118	-	-	75-125	-	20
Nickel, Total	0.00101J	0.5	0.5087	102	-	-	75-125	-	20
Potassium, Total	4.51	10	16.2	117	-	-	75-125	-	20
Selenium, Total	ND	0.12	0.145	121	-	-	75-125	-	20
Silver, Total	ND	0.05	0.05427	108	-	-	75-125	-	20
Sodium, Total	7.93	10	19.9	120	-	-	75-125	-	20
Thallium, Total	0.00020J	0.12	0.1280	107	-	-	75-125	-	20
Vanadium, Total	ND	0.5	0.5249	105	-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044058

Project Number: 26979.01

Report Date: 10/21/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 06-07 QC Batch ID: WG1422790-3 QC Sample: L2044030-02 Client ID: MS Sample									
Zinc, Total	0.00893J	0.5	0.6158	123	-	-	75-125	-	20

Matrix Spike Analysis Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 06-07 QC Batch ID: WG1422984-3 QC Sample: L2044379-01 Client ID: MS Sample									
Aluminum, Dissolved	0.0123	2	1.98	98	-	-	75-125	-	20
Antimony, Dissolved	0.00056J	0.5	0.4881	98	-	-	75-125	-	20
Arsenic, Dissolved	0.00161	0.12	0.1301	107	-	-	75-125	-	20
Barium, Dissolved	0.08860	2	2.090	100	-	-	75-125	-	20
Beryllium, Dissolved	ND	0.05	0.05003	100	-	-	75-125	-	20
Cadmium, Dissolved	ND	0.051	0.05453	107	-	-	75-125	-	20
Calcium, Dissolved	162.	10	178	160	Q	-	75-125	-	20
Chromium, Dissolved	ND	0.2	0.1907	95	-	-	75-125	-	20
Cobalt, Dissolved	0.00209	0.5	0.5046	100	-	-	75-125	-	20
Copper, Dissolved	ND	0.25	0.2569	103	-	-	75-125	-	20
Iron, Dissolved	0.227	1	1.39	116	-	-	75-125	-	20
Lead, Dissolved	ND	0.51	0.5427	106	-	-	75-125	-	20
Magnesium, Dissolved	29.5	10	39.3	98	-	-	75-125	-	20
Manganese, Dissolved	0.7680	0.5	1.313	109	-	-	75-125	-	20
Nickel, Dissolved	0.01017	0.5	0.4944	97	-	-	75-125	-	20
Potassium, Dissolved	4.31	10	14.3	100	-	-	75-125	-	20
Selenium, Dissolved	ND	0.12	0.127	106	-	-	75-125	-	20
Silver, Dissolved	ND	0.05	0.05315	106	-	-	75-125	-	20
Sodium, Dissolved	352.	10	352	0	Q	-	75-125	-	20
Thallium, Dissolved	0.00025J	0.12	0.1271	106	-	-	75-125	-	20
Vanadium, Dissolved	ND	0.5	0.4870	97	-	-	75-125	-	20

Matrix Spike Analysis Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 06-07 QC Batch ID: WG1422984-3 QC Sample: L2044379-01 Client ID: MS Sample									
Zinc, Dissolved	0.00363J	0.5	0.5364	107	-	-	75-125	-	20
Dissolved Metals - Mansfield Lab Associated sample(s): 06-07 QC Batch ID: WG1422985-3 QC Sample: L2044058-06 Client ID: GW-1									
Mercury, Dissolved	ND	0.005	0.00518	104	-	-	75-125	-	20

Matrix Spike Analysis Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1423029-3 QC Sample: L2044116-01 Client ID: MS Sample									
Aluminum, Total	4590	162	5450	529	Q	-	75-125	-	20
Antimony, Total	ND	40.6	38.1	94		-	75-125	-	20
Arsenic, Total	3.13	9.75	11.8	89		-	75-125	-	20
Barium, Total	36.0	162	206	104		-	75-125	-	20
Beryllium, Total	0.118J	4.06	4.30	106		-	75-125	-	20
Cadmium, Total	ND	4.14	4.05	98		-	75-125	-	20
Calcium, Total	123000	813	59800	0	Q	-	75-125	-	20
Chromium, Total	11.6	16.2	27.8	100		-	75-125	-	20
Cobalt, Total	4.80	40.6	42.8	94		-	75-125	-	20
Copper, Total	19.1	20.3	40.8	107		-	75-125	-	20
Iron, Total	9570	81.3	10100	652	Q	-	75-125	-	20
Lead, Total	28.2	41.4	71.6	105		-	75-125	-	20
Magnesium, Total	9020	813	7720	0	Q	-	75-125	-	20
Manganese, Total	164	40.6	177	32	Q	-	75-125	-	20
Nickel, Total	9.87	40.6	46.8	91		-	75-125	-	20
Potassium, Total	1310	813	2740	176	Q	-	75-125	-	20
Selenium, Total	0.363J	9.75	10.5	108		-	75-125	-	20
Silver, Total	ND	24.4	26.0	107		-	75-125	-	20
Sodium, Total	225	813	1140	112		-	75-125	-	20
Thallium, Total	ND	9.75	8.78	90		-	75-125	-	20
Vanadium, Total	19.0	40.6	61.8	105		-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044058

Project Number: 26979.01

Report Date: 10/21/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1423029-3 QC Sample: L2044116-01 Client ID: MS Sample									
Zinc, Total	65.8	40.6	114	119	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1423033-3 QC Sample: L2044004-01 Client ID: MS Sample									
Mercury, Total	ND	0.129	0.161	125	Q	-	80-120	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Project Number: 26979.01

Lab Number: L2044058

Report Date: 10/21/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 06-07 QC Batch ID: WG1422487-4 QC Sample: L2044112-09 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/l	NC		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Project Number: 26979.01

Lab Number: L2044058

Report Date: 10/21/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 06-07 QC Batch ID: WG1422790-4 QC Sample: L2044030-02 Client ID: DUP Sample					
Antimony, Total	ND	0.00049J	mg/l	NC	20
Arsenic, Total	0.02135	0.02168	mg/l	2	20
Barium, Total	0.01816	0.01908	mg/l	5	20
Beryllium, Total	ND	ND	mg/l	NC	20
Cadmium, Total	ND	ND	mg/l	NC	20
Calcium, Total	15.5	16.1	mg/l	4	20
Chromium, Total	0.00095J	0.00092J	mg/l	NC	20
Cobalt, Total	0.00327	0.00326	mg/l	0	20
Copper, Total	0.00042J	ND	mg/l	NC	20
Iron, Total	4.84	5.00	mg/l	3	20
Lead, Total	ND	ND	mg/l	NC	20
Magnesium, Total	4.20	4.33	mg/l	3	20
Manganese, Total	0.8709	0.8994	mg/l	3	20
Nickel, Total	0.00101J	0.00099J	mg/l	NC	20
Potassium, Total	4.51	4.71	mg/l	4	20
Selenium, Total	ND	ND	mg/l	NC	20
Silver, Total	ND	ND	mg/l	NC	20
Sodium, Total	7.93	8.26	mg/l	4	20
Thallium, Total	0.00020J	0.00058J	mg/l	NC	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Project Number: 26979.01

Lab Number: L2044058

Report Date: 10/21/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 06-07 QC Batch ID: WG1422790-4 QC Sample: L2044030-02 Client ID: DUP Sample					
Vanadium, Total	ND	ND	mg/l	NC	20
Zinc, Total	0.00893J	0.00836J	mg/l	NC	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Project Number: 26979.01

Lab Number: L2044058

Report Date: 10/21/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 06-07 QC Batch ID: WG1422984-4 QC Sample: L2044379-01 Client ID: DUP Sample					
Aluminum, Dissolved	0.0123	0.0121	mg/l	2	20
Antimony, Dissolved	0.00056J	0.00084J	mg/l	NC	20
Arsenic, Dissolved	0.00161	0.00166	mg/l	3	20
Barium, Dissolved	0.08860	0.08961	mg/l	1	20
Beryllium, Dissolved	ND	ND	mg/l	NC	20
Cadmium, Dissolved	ND	ND	mg/l	NC	20
Calcium, Dissolved	162.	160	mg/l	1	20
Chromium, Dissolved	ND	ND	mg/l	NC	20
Cobalt, Dissolved	0.00209	0.00213	mg/l	2	20
Copper, Dissolved	ND	ND	mg/l	NC	20
Iron, Dissolved	0.227	0.245	mg/l	8	20
Lead, Dissolved	ND	ND	mg/l	NC	20
Magnesium, Dissolved	29.5	29.1	mg/l	1	20
Manganese, Dissolved	0.7680	0.7647	mg/l	0	20
Nickel, Dissolved	0.01017	0.00973	mg/l	4	20
Potassium, Dissolved	4.31	4.27	mg/l	1	20
Selenium, Dissolved	ND	ND	mg/l	NC	20
Silver, Dissolved	ND	ND	mg/l	NC	20
Sodium, Dissolved	352.	345	mg/l	2	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Project Number: 26979.01

Lab Number: L2044058

Report Date: 10/21/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 06-07 QC Batch ID: WG1422984-4 QC Sample: L2044379-01 Client ID: DUP Sample					
Thallium, Dissolved	0.00025J	0.00059	mg/l	NC	20
Vanadium, Dissolved	ND	ND	mg/l	NC	20
Zinc, Dissolved	0.00363J	ND	mg/l	NC	20
Dissolved Metals - Mansfield Lab Associated sample(s): 06-07 QC Batch ID: WG1422985-4 QC Sample: L2044058-06 Client ID: GW-1					
Mercury, Dissolved	ND	ND	mg/l	NC	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Project Number: 26979.01

Lab Number: L2044058

Report Date: 10/21/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1423029-4 QC Sample: L2044116-01 Client ID: DUP Sample					
Aluminum, Total	4590	4410	mg/kg	4	20
Antimony, Total	ND	ND	mg/kg	NC	20
Arsenic, Total	3.13	2.02	mg/kg	43	Q 20
Barium, Total	36.0	35.4	mg/kg	2	20
Beryllium, Total	0.118J	0.122J	mg/kg	NC	20
Cadmium, Total	ND	0.163J	mg/kg	NC	20
Chromium, Total	11.6	10.6	mg/kg	9	20
Cobalt, Total	4.80	5.07	mg/kg	5	20
Copper, Total	19.1	24.1	mg/kg	23	Q 20
Iron, Total	9570	9870	mg/kg	3	20
Lead, Total	28.2	330	mg/kg	169	Q 20
Magnesium, Total	9020	8740	mg/kg	3	20
Manganese, Total	164	144	mg/kg	13	20
Nickel, Total	9.87	9.95	mg/kg	1	20
Potassium, Total	1310	1300	mg/kg	1	20
Selenium, Total	0.363J	ND	mg/kg	NC	20
Silver, Total	ND	ND	mg/kg	NC	20
Sodium, Total	225	219	mg/kg	3	20
Thallium, Total	ND	ND	mg/kg	NC	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Project Number: 26979.01

Lab Number: L2044058

Report Date: 10/21/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1423029-4 QC Sample: L2044116-01 Client ID: DUP Sample					
Vanadium, Total	19.0	19.5	mg/kg	3	20
Zinc, Total	65.8	97.1	mg/kg	38	20
Total Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1423029-4 QC Sample: L2044116-01 Client ID: DUP Sample					
Calcium, Total	123000	52100	mg/kg	81	20
Total Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1423033-4 QC Sample: L2044004-01 Client ID: DUP Sample					
Mercury, Total	ND	ND	mg/kg	NC	20

INORGANICS & MISCELLANEOUS

Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044058**Project Number:** 26979.01**Report Date:** 10/21/20**SAMPLE RESULTS**

Lab ID: L2044058-01

Date Collected: 10/14/20 10:14

Client ID: SB-1 (0'-2')

Date Received: 10/14/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	86.2		%	0.100	NA	1	-	10/16/20 10:39	121,2540G	RI



Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-02
Client ID: SB-1 (13'-15')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 10:24
Date Received: 10/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	96.3		%	0.100	NA	1	-	10/16/20 10:39	121,2540G	RI



Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-03
Client ID: SB-2 (0'-2')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 11:50
Date Received: 10/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	85.8		%	0.100	NA	1	-	10/16/20 10:39	121,2540G	RI



Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044058-04
Client ID: SB-2 (15'-17')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/14/20 12:10
Date Received: 10/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	94.2		%	0.100	NA	1	-	10/16/20 10:39	121,2540G	RI



Lab Duplicate Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Project Number: 26979.01

Lab Number: L2044058

Report Date: 10/21/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1422821-1 QC Sample: L2044206-01 Client ID: DUP Sample						
Solids, Total	95.1	95.2	%	0		20

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Serial_No:10212012:24
Lab Number: L2044058
Report Date: 10/21/20

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2044058-01A	Vial MeOH preserved	A	NA		2.2	Y	Absent		NYTCL-8260HLW(14)
L2044058-01B	Vial water preserved	A	NA		2.2	Y	Absent	15-OCT-20 14:38	NYTCL-8260HLW(14)
L2044058-01C	Vial water preserved	A	NA		2.2	Y	Absent	15-OCT-20 14:38	NYTCL-8260HLW(14)
L2044058-01D	Plastic 2oz unpreserved for TS	A	NA		2.2	Y	Absent		TS(7)
L2044058-01E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),TL-TI(180),NI-TI(180),SE-TI(180),PB-TI(180),CU-TI(180),ZN-TI(180),SB-TI(180),CO-TI(180),V-TI(180),FE-TI(180),MN-TI(180),HG-T(28),MG-TI(180),CA-TI(180),NA-TI(180),K-TI(180),CD-TI(180)
L2044058-01F	Glass 250ml/8oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2044058-02A	Vial MeOH preserved	A	NA		2.2	Y	Absent		NYTCL-8260HLW(14)
L2044058-02B	Vial water preserved	A	NA		2.2	Y	Absent	15-OCT-20 14:38	NYTCL-8260HLW(14)
L2044058-02C	Vial water preserved	A	NA		2.2	Y	Absent	15-OCT-20 14:38	NYTCL-8260HLW(14)
L2044058-02D	Plastic 2oz unpreserved for TS	A	NA		2.2	Y	Absent		TS(7)
L2044058-02E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.2	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),NI-TI(180),AL-TI(180),CR-TI(180),TL-TI(180),ZN-TI(180),CU-TI(180),PB-TI(180),SE-TI(180),SB-TI(180),CO-TI(180),V-TI(180),HG-T(28),FE-TI(180),MN-TI(180),MG-TI(180),K-TI(180),NA-TI(180),CA-TI(180),CD-TI(180)
L2044058-02F	Glass 250ml/8oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2044058-03A	Vial MeOH preserved	A	NA		2.2	Y	Absent		NYTCL-8260HLW(14)
L2044058-03B	Vial water preserved	A	NA		2.2	Y	Absent	15-OCT-20 14:38	NYTCL-8260HLW(14)
L2044058-03C	Vial water preserved	A	NA		2.2	Y	Absent	15-OCT-20 14:38	NYTCL-8260HLW(14)
L2044058-03D	Plastic 2oz unpreserved for TS	A	NA		2.2	Y	Absent		TS(7)

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Serial_No: 10212012:24
Lab Number: L2044058
Report Date: 10/21/20

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2044058-03E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),AL-TI(180),NI-TI(180),TL-TI(180),ZN-TI(180),CU-TI(180),SB-TI(180),SE-TI(180),PB-TI(180),CO-TI(180),V-TI(180),HG-T(28),MN-TI(180),MG-TI(180),FE-TI(180),CD-TI(180),NA-TI(180),CA-TI(180),K-TI(180)
L2044058-03F	Glass 250ml/8oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2044058-04A	Vial MeOH preserved	A	NA		2.2	Y	Absent		NYTCL-8260HLW(14)
L2044058-04B	Vial water preserved	A	NA		2.2	Y	Absent	15-OCT-20 14:38	NYTCL-8260HLW(14)
L2044058-04C	Vial water preserved	A	NA		2.2	Y	Absent	15-OCT-20 14:38	NYTCL-8260HLW(14)
L2044058-04D	Plastic 2oz unpreserved for TS	A	NA		2.2	Y	Absent		TS(7)
L2044058-04E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),TL-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),PB-TI(180),ZN-TI(180),SE-TI(180),SB-TI(180),CU-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),K-TI(180),NA-TI(180),CD-TI(180)
L2044058-04F	Glass 250ml/8oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2044058-06A	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260(14)
L2044058-06B	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260(14)
L2044058-06C	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260(14)
L2044058-06D	Amber 120ml unpreserved	A	7	7	2.2	Y	Absent		NYTCL-8082-LVI(7)
L2044058-06E	Amber 120ml unpreserved	A	7	7	2.2	Y	Absent		NYTCL-8082-LVI(7)
L2044058-06F	Amber 120ml unpreserved	A	7	7	2.2	Y	Absent		NYTCL-8081(7)
L2044058-06G	Amber 120ml unpreserved	A	7	7	2.2	Y	Absent		NYTCL-8081(7)
L2044058-06H	Plastic 250ml unpreserved	A	7	7	2.2	Y	Absent		-
L2044058-06I	Amber 250ml unpreserved	A	7	7	2.2	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2044058-06J	Amber 250ml unpreserved	A	7	7	2.2	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Serial_No:10212012:24
Lab Number: L2044058
Report Date: 10/21/20

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2044058-06K	Plastic 250ml HNO3 preserved	A	<2	<2	2.2	Y	Absent		FE-6020T(180),TL-6020T(180),BA-6020T(180),SE-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),NA-6020T(180),ZN-6020T(180),CU-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),SB-6020T(180),AS-6020T(180),V-6020T(180),AG-6020T(180),MG-6020T(180),AL-6020T(180),HG-T(28),CD-6020T(180),CO-6020T(180)
L2044058-06X	Plastic 120ml HNO3 preserved Filtrates	A	NA		2.2	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),ZN-6020S(180),MG-6020S(180),CO-6020S(180),FE-6020S(180),CA-6020S(180),CR-6020S(180),BA-6020S(180),TL-6020S(180),PB-6020S(180),NA-6020S(180),NI-6020S(180),SB-6020S(180),AS-6020S(180),AG-6020S(180),CD-6020S(180),AL-6020S(180),HG-S(28)
L2044058-07A	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260(14)
L2044058-07B	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260(14)
L2044058-07C	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260(14)
L2044058-07D	Amber 120ml unpreserved	A	7	7	2.2	Y	Absent		NYTCL-8082-LVI(7)
L2044058-07E	Amber 120ml unpreserved	A	7	7	2.2	Y	Absent		NYTCL-8082-LVI(7)
L2044058-07F	Amber 120ml unpreserved	A	7	7	2.2	Y	Absent		NYTCL-8081(7)
L2044058-07G	Amber 120ml unpreserved	A	7	7	2.2	Y	Absent		NYTCL-8081(7)
L2044058-07H	Plastic 250ml unpreserved	A	7	7	2.2	Y	Absent		-
L2044058-07I	Amber 250ml unpreserved	A	7	7	2.2	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2044058-07J	Amber 250ml unpreserved	A	7	7	2.2	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2044058-07K	Plastic 250ml HNO3 preserved	A	<2	<2	2.2	Y	Absent		BA-6020T(180),SE-6020T(180),FE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),NI-6020T(180),K-6020T(180),ZN-6020T(180),CU-6020T(180),NA-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),AS-6020T(180),V-6020T(180),SB-6020T(180),AL-6020T(180),AG-6020T(180),MG-6020T(180),HG-T(28),CD-6020T(180),CO-6020T(180)

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Serial_No:10212012:24
Lab Number: L2044058
Report Date: 10/21/20

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2044058-07X	Plastic 120ml HNO3 preserved Filtrates	A	NA		2.2	Y	Absent		K-6020S(180),CU-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),MG-6020S(180),ZN-6020S(180),CO-6020S(180),CA-6020S(180),FE-6020S(180),CR-6020S(180),TL-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),AG-6020S(180),SB-6020S(180),AS-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)

*Values in parentheses indicate holding time in days



Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where

Report Format: DU Report with 'J' Qualifiers



Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

Data Qualifiers

the identification is based on a mass spectral library search.

- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044058
Report Date: 10/21/20

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

EPA TO-12 Non-methane organics

EPA 3C Fixed gases

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg. **EPA 522.**

Non-Potable Water


EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

	NEW YORK CHAIN OF CUSTODY	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page 1 of 2	Date Rec'd in Lab 10/14/20	ALPHA Job # 12044058																																																																										
	Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288	Project Information Project Name: <u>Blue Sea Boca Phase II ESH</u> Project Location: <u>Between Chester and Lockway ave</u> Project # <u>20979.01</u> (Use Project name as Project #) <input type="checkbox"/>		Deliverables <input type="checkbox"/> ASP-A <input type="checkbox"/> ASP-B <input type="checkbox"/> EQUIS (1 File) <input type="checkbox"/> EQUIS (4 File) <input type="checkbox"/> Other	Billing Information <input type="checkbox"/> Same as Client Info PO #																																																																									
Client Information Client: <u>VHB</u> Address: <u>100 Motor Parkway</u> <u>Hempstead NY, 11788 Ste 350</u> Phone: <u>631-787-3400</u> Fax: Email: <u>B.marty@vhb.com</u>		Project Manager: <u>Bryan Marty</u> ALPHAQuote #: Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		Regulatory Requirement <input checked="" type="checkbox"/> NY TOGS <input checked="" type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input checked="" type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input checked="" type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge	Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:																																																																										
These samples have been previously analyzed by Alpha <input type="checkbox"/> Other project specific requirements/comments:		ANALYSIS (Handwritten: <u>TU VOCs (8240)</u> , <u>TU SVOCs (8270)</u> , <u>TAL metals (6010) (747)</u> , <u>Pesticides (8081)</u> , <u>PCBs (8082)</u>)		Sample Filtration <input type="checkbox"/> Done <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do (Please Specify below)																																																																											
Please specify Metals or TAL.		<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">ALPHA Lab ID (Lab Use Only)</th> <th rowspan="2">Sample ID</th> <th colspan="2">Collection</th> <th rowspan="2">Sample Matrix</th> <th rowspan="2">Sampler's Initials</th> <th rowspan="2">TU VOCs (8240)</th> <th rowspan="2">TU SVOCs (8270)</th> <th rowspan="2">TAL metals (6010) (747)</th> <th rowspan="2">Pesticides (8081)</th> <th rowspan="2">PCBs (8082)</th> <th rowspan="2">Total</th> </tr> <tr> <th>Date</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>44058-01</td> <td>SB-1 (0'-2')</td> <td>10/14/20</td> <td>10:14</td> <td>S</td> <td>MI</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>7</td> </tr> <tr> <td>02</td> <td>SB-1 (13'-15')</td> <td>10/14/20</td> <td>10:24</td> <td>S</td> <td>MI</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>7</td> </tr> <tr> <td>03</td> <td>SB-2 (2'-2')</td> <td>10/14/20</td> <td>11:50</td> <td>S</td> <td>MI</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>7</td> </tr> <tr> <td>04</td> <td>SB-2 (15'-17')</td> <td>10/14/20</td> <td>12:10</td> <td>S</td> <td>MI</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>7</td> </tr> <tr> <td></td> <td>TB-2</td> <td>10/14/20</td> <td>-</td> <td>DI</td> <td>MI</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> </tr> </tbody> </table>		ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	TU VOCs (8240)	TU SVOCs (8270)	TAL metals (6010) (747)	Pesticides (8081)	PCBs (8082)	Total	Date	Time	44058-01	SB-1 (0'-2')	10/14/20	10:14	S	MI	X	X	X	X	X	7	02	SB-1 (13'-15')	10/14/20	10:24	S	MI	X	X	X	X	X	7	03	SB-2 (2'-2')	10/14/20	11:50	S	MI	X	X	X	X	X	7	04	SB-2 (15'-17')	10/14/20	12:10	S	MI	X	X	X	X	X	7		TB-2	10/14/20	-	DI	MI	X	X	X	X	X		Sample Specific Comments	
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection				Sample Matrix	Sampler's Initials									TU VOCs (8240)	TU SVOCs (8270)	TAL metals (6010) (747)	Pesticides (8081)	PCBs (8082)	Total																																																										
		Date	Time																																																																												
44058-01	SB-1 (0'-2')	10/14/20	10:14	S	MI	X	X	X	X	X	7																																																																				
02	SB-1 (13'-15')	10/14/20	10:24	S	MI	X	X	X	X	X	7																																																																				
03	SB-2 (2'-2')	10/14/20	11:50	S	MI	X	X	X	X	X	7																																																																				
04	SB-2 (15'-17')	10/14/20	12:10	S	MI	X	X	X	X	X	7																																																																				
	TB-2	10/14/20	-	DI	MI	X	X	X	X	X																																																																					
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code: P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type Preservative		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)																																																																							
Form No: 01-25 HC (rev. 30-Sept-2013)		Relinquished By: <u>[Signature]</u> Date/Time: <u>10/14/20 1330</u>		Received By: <u>[Signature]</u> Date/Time: <u>10/14/20 1330</u>		Relinquished By: <u>[Signature]</u> Date/Time: <u>10/14/20 1930</u>		Received By: <u>[Signature]</u> Date/Time: <u>10/14/20 2355</u>		Relinquished By: <u>[Signature]</u> Date/Time: <u>10/14/20 2355</u>																																																																					



ANALYTICAL REPORT

Lab Number:	L2044265
Client:	VHB Engineering, Surveying and Landscape One Penn Plaza Suite 715 New York, NY 10119
ATTN:	Jessica Collins
Phone:	(646) 809-8042
Project Name:	BLUE SEA BACA PHASE II ESA
Project Number:	26979.01
Report Date:	10/22/20

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: BLUE SEA BACA PHASE II ESA

Project Number: 26979.01

Lab Number: L2044265

Report Date: 10/22/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2044265-01	SB-3 (0'-2')	SOIL	BETWEEN CHESTER AND ROCKAWAY AVE	10/15/20 09:10	10/15/20
L2044265-02	SB-3 (5'-7')	SOIL	BETWEEN CHESTER AND ROCKAWAY AVE	10/15/20 09:20	10/15/20
L2044265-03	SB-3 (13'-15')	SOIL	BETWEEN CHESTER AND ROCKAWAY AVE	10/15/20 09:25	10/15/20
L2044265-04	SB-11 (0'-2')	SOIL	BETWEEN CHESTER AND ROCKAWAY AVE	10/15/20 09:30	10/15/20
L2044265-05	SB-11 (2'-5')	SOIL	BETWEEN CHESTER AND ROCKAWAY AVE	10/15/20 09:35	10/15/20
L2044265-06	SB-11 (13'-15')	SOIL	BETWEEN CHESTER AND ROCKAWAY AVE	10/15/20 09:45	10/15/20
L2044265-07	SB-10 (0'-2')	SOIL	BETWEEN CHESTER AND ROCKAWAY AVE	10/15/20 09:55	10/15/20
L2044265-08	SB-10 (4'-6')	SOIL	BETWEEN CHESTER AND ROCKAWAY AVE	10/15/20 10:00	10/15/20
L2044265-09	SB-10 (13'-15')	SOIL	BETWEEN CHESTER AND ROCKAWAY AVE	10/15/20 10:05	10/15/20
L2044265-10	SB-2 (5'-7')	SOIL	BETWEEN CHESTER AND ROCKAWAY AVE	10/15/20 10:35	10/15/20
L2044265-11	SB-6 (2'-4')	SOIL	BETWEEN CHESTER AND ROCKAWAY AVE	10/15/20 10:46	10/15/20
L2044265-12	GW-3	WATER	BETWEEN CHESTER AND ROCKAWAY AVE	10/15/20 08:40	10/15/20
L2044265-13	TB-4	TRIP BLANK (AQUEOUS)	BETWEEN CHESTER AND ROCKAWAY AVE	10/15/20 00:00	10/15/20

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

L2044265-13: At the client's request, "TB-4" was not analyzed.

Semivolatile Organics

L2044265-04 and -07: The sample has elevated detection limits due to the dilution required by the sample matrix.

Pesticides

L2044265-01 and -08: The sample has elevated detection limits due to the dilution required by the sample matrix.

L2044265-08: The internal standard (IS) response for 1-bromo-2-nitrobenzene (668%) was above the acceptance criteria on column A; however, the sample was not re-analyzed due to obvious interferences. The surrogate recoveries are outside the method acceptance criteria for 2,4,5,6-tetrachloro-m-xylene (0%) and decachlorobiphenyl (2%) due to interference with the Internal Standard.

Total Metals

L2044265-01 through -11: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

The WG1423819-1 Method Blank, associated with L2044265-01 through -11, has a concentration above the reporting limit for manganese. Since the associated sample concentrations are greater than 10x the blank concentration for this analyte, no corrective action is required.

The WG1423819-3 MS recoveries for aluminum (1100%), calcium (802%), iron (0%), and manganese (0%), performed on L2044265-01, do not apply because the sample concentrations are greater than four times the

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

Case Narrative (continued)

spike amounts added.

The WG1423819-3 MS recoveries, performed on L2044265-01, are outside the acceptance criteria for barium (154%), lead (16%), magnesium (133%), selenium (59%), sodium (136%), thallium (47%), and zinc (154%). A post digestion spike was performed and was within acceptance criteria.

The WG1423819-4 Laboratory Duplicate RPDs for barium (76%), cobalt (21%), iron (22%), manganese (77%), nickel (43%), and sodium (34%), performed on L2044265-01, are outside the acceptance criteria. The elevated RPDs have been attributed to the non-homogeneous nature of the native sample.

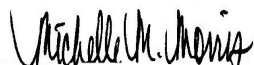
Dissolved Metals

L2044265-12: The sample has elevated detection limits for all elements, with the exception of mercury, due to the prep dilution required by the sample matrix.

The WG1424249-3 MS recovery for sodium (74%), performed on L2044265-12, does not apply because the sample concentration is greater than four times the spike amount added.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Michelle M. Morris

Title: Technical Director/Representative

Date: 10/22/20

ORGANICS

VOLATILES

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-01
Client ID: SB-3 (0'-2')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:10
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/20/20 10:35
Analyst: KJD
Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	8.1	3.7	1
1,1-Dichloroethane	ND		ug/kg	1.6	0.24	1
Chloroform	ND		ug/kg	2.4	0.23	1
Carbon tetrachloride	ND		ug/kg	1.6	0.37	1
1,2-Dichloropropane	ND		ug/kg	1.6	0.20	1
Dibromochloromethane	ND		ug/kg	1.6	0.23	1
1,1,2-Trichloroethane	ND		ug/kg	1.6	0.43	1
Tetrachloroethene	ND		ug/kg	0.81	0.32	1
Chlorobenzene	ND		ug/kg	0.81	0.21	1
Trichlorofluoromethane	ND		ug/kg	6.5	1.1	1
1,2-Dichloroethane	ND		ug/kg	1.6	0.42	1
1,1,1-Trichloroethane	ND		ug/kg	0.81	0.27	1
Bromodichloromethane	ND		ug/kg	0.81	0.18	1
trans-1,3-Dichloropropene	ND		ug/kg	1.6	0.44	1
cis-1,3-Dichloropropene	ND		ug/kg	0.81	0.26	1
1,3-Dichloropropene, Total	ND		ug/kg	0.81	0.26	1
1,1-Dichloropropene	ND		ug/kg	0.81	0.26	1
Bromoform	ND		ug/kg	6.5	0.40	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.81	0.27	1
Benzene	ND		ug/kg	0.81	0.27	1
Toluene	ND		ug/kg	1.6	0.88	1
Ethylbenzene	3.9		ug/kg	1.6	0.23	1
Chloromethane	ND		ug/kg	6.5	1.5	1
Bromomethane	ND		ug/kg	3.2	0.94	1
Vinyl chloride	ND		ug/kg	1.6	0.54	1
Chloroethane	ND		ug/kg	3.2	0.74	1
1,1-Dichloroethene	ND		ug/kg	1.6	0.39	1
trans-1,2-Dichloroethene	ND		ug/kg	2.4	0.22	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-01
Client ID: SB-3 (0'-2')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:10
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.81	0.22	1
1,2-Dichlorobenzene	ND		ug/kg	3.2	0.23	1
1,3-Dichlorobenzene	ND		ug/kg	3.2	0.24	1
1,4-Dichlorobenzene	ND		ug/kg	3.2	0.28	1
Methyl tert butyl ether	ND		ug/kg	3.2	0.33	1
p/m-Xylene	16		ug/kg	3.2	0.91	1
o-Xylene	6.0		ug/kg	1.6	0.47	1
Xylenes, Total	22		ug/kg	1.6	0.47	1
cis-1,2-Dichloroethene	ND		ug/kg	1.6	0.28	1
1,2-Dichloroethene, Total	ND		ug/kg	1.6	0.22	1
Dibromomethane	ND		ug/kg	3.2	0.39	1
Styrene	ND		ug/kg	1.6	0.32	1
Dichlorodifluoromethane	ND		ug/kg	16	1.5	1
Acetone	17		ug/kg	16	7.8	1
Carbon disulfide	ND		ug/kg	16	7.4	1
2-Butanone	ND		ug/kg	16	3.6	1
Vinyl acetate	ND		ug/kg	16	3.5	1
4-Methyl-2-pentanone	ND		ug/kg	16	2.1	1
1,2,3-Trichloropropane	ND		ug/kg	3.2	0.21	1
2-Hexanone	ND		ug/kg	16	1.9	1
Bromochloromethane	ND		ug/kg	3.2	0.33	1
2,2-Dichloropropane	ND		ug/kg	3.2	0.33	1
1,2-Dibromoethane	ND		ug/kg	1.6	0.45	1
1,3-Dichloropropane	ND		ug/kg	3.2	0.27	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.81	0.21	1
Bromobenzene	ND		ug/kg	3.2	0.24	1
n-Butylbenzene	ND		ug/kg	1.6	0.27	1
sec-Butylbenzene	ND		ug/kg	1.6	0.24	1
tert-Butylbenzene	ND		ug/kg	3.2	0.19	1
o-Chlorotoluene	ND		ug/kg	3.2	0.31	1
p-Chlorotoluene	ND		ug/kg	3.2	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.9	1.6	1
Hexachlorobutadiene	ND		ug/kg	6.5	0.28	1
Isopropylbenzene	ND		ug/kg	1.6	0.18	1
p-Isopropyltoluene	0.82	J	ug/kg	1.6	0.18	1
Naphthalene	ND		ug/kg	6.5	1.0	1
Acrylonitrile	ND		ug/kg	6.5	1.9	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-01
Client ID: SB-3 (0'-2')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:10
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.6	0.28	1
1,2,3-Trichlorobenzene	ND		ug/kg	3.2	0.52	1
1,2,4-Trichlorobenzene	ND		ug/kg	3.2	0.44	1
1,3,5-Trimethylbenzene	ND		ug/kg	3.2	0.31	1
1,2,4-Trimethylbenzene	0.62	J	ug/kg	3.2	0.54	1
1,4-Dioxane	ND		ug/kg	130	57.	1
p-Diethylbenzene	ND		ug/kg	3.2	0.29	1
p-Ethyltoluene	1.5	J	ug/kg	3.2	0.62	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	3.2	0.31	1
Ethyl ether	ND		ug/kg	3.2	0.55	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	8.1	2.3	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	117		70-130
Dibromofluoromethane	101		70-130

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-02
Client ID: SB-3 (5'-7')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:20
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/20/20 10:56
Analyst: KJD
Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	7.3	3.4	1
1,1-Dichloroethane	ND		ug/kg	1.5	0.21	1
Chloroform	ND		ug/kg	2.2	0.20	1
Carbon tetrachloride	ND		ug/kg	1.5	0.34	1
1,2-Dichloropropane	ND		ug/kg	1.5	0.18	1
Dibromochloromethane	ND		ug/kg	1.5	0.20	1
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.39	1
Tetrachloroethene	ND		ug/kg	0.73	0.29	1
Chlorobenzene	ND		ug/kg	0.73	0.18	1
Trichlorofluoromethane	ND		ug/kg	5.8	1.0	1
1,2-Dichloroethane	ND		ug/kg	1.5	0.38	1
1,1,1-Trichloroethane	ND		ug/kg	0.73	0.24	1
Bromodichloromethane	ND		ug/kg	0.73	0.16	1
trans-1,3-Dichloropropene	ND		ug/kg	1.5	0.40	1
cis-1,3-Dichloropropene	ND		ug/kg	0.73	0.23	1
1,3-Dichloropropene, Total	ND		ug/kg	0.73	0.23	1
1,1-Dichloropropene	ND		ug/kg	0.73	0.23	1
Bromoform	ND		ug/kg	5.8	0.36	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.73	0.24	1
Benzene	ND		ug/kg	0.73	0.24	1
Toluene	ND		ug/kg	1.5	0.80	1
Ethylbenzene	ND		ug/kg	1.5	0.21	1
Chloromethane	ND		ug/kg	5.8	1.4	1
Bromomethane	ND		ug/kg	2.9	0.85	1
Vinyl chloride	ND		ug/kg	1.5	0.49	1
Chloroethane	ND		ug/kg	2.9	0.66	1
1,1-Dichloroethene	ND		ug/kg	1.5	0.35	1
trans-1,2-Dichloroethene	ND		ug/kg	2.2	0.20	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-02
Client ID: SB-3 (5'-7')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:20
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.73	0.20	1
1,2-Dichlorobenzene	ND		ug/kg	2.9	0.21	1
1,3-Dichlorobenzene	ND		ug/kg	2.9	0.22	1
1,4-Dichlorobenzene	ND		ug/kg	2.9	0.25	1
Methyl tert butyl ether	ND		ug/kg	2.9	0.29	1
p/m-Xylene	ND		ug/kg	2.9	0.82	1
o-Xylene	ND		ug/kg	1.5	0.43	1
Xylenes, Total	ND		ug/kg	1.5	0.43	1
cis-1,2-Dichloroethene	ND		ug/kg	1.5	0.26	1
1,2-Dichloroethene, Total	ND		ug/kg	1.5	0.20	1
Dibromomethane	ND		ug/kg	2.9	0.35	1
Styrene	ND		ug/kg	1.5	0.29	1
Dichlorodifluoromethane	ND		ug/kg	15	1.3	1
Acetone	26		ug/kg	15	7.0	1
Carbon disulfide	ND		ug/kg	15	6.7	1
2-Butanone	ND		ug/kg	15	3.2	1
Vinyl acetate	ND		ug/kg	15	3.1	1
4-Methyl-2-pentanone	ND		ug/kg	15	1.9	1
1,2,3-Trichloropropane	ND		ug/kg	2.9	0.18	1
2-Hexanone	ND		ug/kg	15	1.7	1
Bromochloromethane	ND		ug/kg	2.9	0.30	1
2,2-Dichloropropane	ND		ug/kg	2.9	0.30	1
1,2-Dibromoethane	ND		ug/kg	1.5	0.41	1
1,3-Dichloropropane	ND		ug/kg	2.9	0.24	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.73	0.19	1
Bromobenzene	ND		ug/kg	2.9	0.21	1
n-Butylbenzene	ND		ug/kg	1.5	0.24	1
sec-Butylbenzene	ND		ug/kg	1.5	0.21	1
tert-Butylbenzene	ND		ug/kg	2.9	0.17	1
o-Chlorotoluene	ND		ug/kg	2.9	0.28	1
p-Chlorotoluene	ND		ug/kg	2.9	0.16	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.4	1.5	1
Hexachlorobutadiene	ND		ug/kg	5.8	0.25	1
Isopropylbenzene	ND		ug/kg	1.5	0.16	1
p-Isopropyltoluene	ND		ug/kg	1.5	0.16	1
Naphthalene	2.4	J	ug/kg	5.8	0.95	1
Acrylonitrile	ND		ug/kg	5.8	1.7	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-02
Client ID: SB-3 (5'-7')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:20
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.5	0.25	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.9	0.47	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.9	0.40	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.9	0.28	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.9	0.49	1
1,4-Dioxane	ND		ug/kg	120	51.	1
p-Diethylbenzene	ND		ug/kg	2.9	0.26	1
p-Ethyltoluene	ND		ug/kg	2.9	0.56	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.9	0.28	1
Ethyl ether	ND		ug/kg	2.9	0.50	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	7.3	2.1	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	101		70-130

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-03
Client ID: SB-3 (13'-15')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:25
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/20/20 11:18
Analyst: KJD
Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.2	2.8	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.18	1
Chloroform	ND		ug/kg	1.8	0.17	1
Carbon tetrachloride	ND		ug/kg	1.2	0.28	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.15	1
Dibromochloromethane	ND		ug/kg	1.2	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.33	1
Tetrachloroethene	ND		ug/kg	0.62	0.24	1
Chlorobenzene	ND		ug/kg	0.62	0.16	1
Trichlorofluoromethane	ND		ug/kg	4.9	0.86	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.32	1
1,1,1-Trichloroethane	ND		ug/kg	0.62	0.20	1
Bromodichloromethane	ND		ug/kg	0.62	0.13	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.34	1
cis-1,3-Dichloropropene	ND		ug/kg	0.62	0.19	1
1,3-Dichloropropene, Total	ND		ug/kg	0.62	0.19	1
1,1-Dichloropropene	ND		ug/kg	0.62	0.20	1
Bromoform	ND		ug/kg	4.9	0.30	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.62	0.20	1
Benzene	ND		ug/kg	0.62	0.20	1
Toluene	ND		ug/kg	1.2	0.67	1
Ethylbenzene	ND		ug/kg	1.2	0.17	1
Chloromethane	ND		ug/kg	4.9	1.1	1
Bromomethane	ND		ug/kg	2.5	0.72	1
Vinyl chloride	ND		ug/kg	1.2	0.41	1
Chloroethane	ND		ug/kg	2.5	0.56	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.29	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.17	1

Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044265**Project Number:** 26979.01**Report Date:** 10/22/20**SAMPLE RESULTS**

Lab ID: L2044265-03
 Client ID: SB-3 (13'-15')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:25
 Date Received: 10/15/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.62	0.17	1
1,2-Dichlorobenzene	ND		ug/kg	2.5	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	2.5	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	2.5	0.21	1
Methyl tert butyl ether	ND		ug/kg	2.5	0.25	1
p/m-Xylene	ND		ug/kg	2.5	0.69	1
o-Xylene	ND		ug/kg	1.2	0.36	1
Xylenes, Total	ND		ug/kg	1.2	0.36	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.22	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.17	1
Dibromomethane	ND		ug/kg	2.5	0.29	1
Styrene	ND		ug/kg	1.2	0.24	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	ND		ug/kg	12	5.9	1
Carbon disulfide	ND		ug/kg	12	5.6	1
2-Butanone	ND		ug/kg	12	2.7	1
Vinyl acetate	ND		ug/kg	12	2.6	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.6	1
1,2,3-Trichloropropane	ND		ug/kg	2.5	0.16	1
2-Hexanone	ND		ug/kg	12	1.4	1
Bromochloromethane	ND		ug/kg	2.5	0.25	1
2,2-Dichloropropane	ND		ug/kg	2.5	0.25	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.34	1
1,3-Dichloropropane	ND		ug/kg	2.5	0.20	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.62	0.16	1
Bromobenzene	ND		ug/kg	2.5	0.18	1
n-Butylbenzene	ND		ug/kg	1.2	0.20	1
sec-Butylbenzene	ND		ug/kg	1.2	0.18	1
tert-Butylbenzene	ND		ug/kg	2.5	0.14	1
o-Chlorotoluene	ND		ug/kg	2.5	0.24	1
p-Chlorotoluene	ND		ug/kg	2.5	0.13	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.7	1.2	1
Hexachlorobutadiene	ND		ug/kg	4.9	0.21	1
Isopropylbenzene	ND		ug/kg	1.2	0.13	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.13	1
Naphthalene	ND		ug/kg	4.9	0.80	1
Acrylonitrile	ND		ug/kg	4.9	1.4	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-03
Client ID: SB-3 (13'-15')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:25
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.21	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.5	0.40	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.5	0.33	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.5	0.24	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.5	0.41	1
1,4-Dioxane	ND		ug/kg	98	43.	1
p-Diethylbenzene	ND		ug/kg	2.5	0.22	1
p-Ethyltoluene	ND		ug/kg	2.5	0.47	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.5	0.24	1
Ethyl ether	ND		ug/kg	2.5	0.42	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.2	1.7	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	102		70-130

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-04
 Client ID: SB-11 (0'-2')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:30
 Date Received: 10/15/20
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 10/20/20 11:39
 Analyst: KJD
 Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.8	2.7	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.17	1
Chloroform	ND		ug/kg	1.8	0.16	1
Carbon tetrachloride	ND		ug/kg	1.2	0.27	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.15	1
Dibromochloromethane	ND		ug/kg	1.2	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.31	1
Tetrachloroethene	ND		ug/kg	0.58	0.23	1
Chlorobenzene	ND		ug/kg	0.58	0.15	1
Trichlorofluoromethane	ND		ug/kg	4.7	0.81	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.30	1
1,1,1-Trichloroethane	ND		ug/kg	0.58	0.20	1
Bromodichloromethane	ND		ug/kg	0.58	0.13	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.32	1
cis-1,3-Dichloropropene	ND		ug/kg	0.58	0.18	1
1,3-Dichloropropene, Total	ND		ug/kg	0.58	0.18	1
1,1-Dichloropropene	ND		ug/kg	0.58	0.18	1
Bromoform	ND		ug/kg	4.7	0.29	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.58	0.19	1
Benzene	ND		ug/kg	0.58	0.19	1
Toluene	ND		ug/kg	1.2	0.63	1
Ethylbenzene	ND		ug/kg	1.2	0.16	1
Chloromethane	ND		ug/kg	4.7	1.1	1
Bromomethane	ND		ug/kg	2.3	0.68	1
Vinyl chloride	ND		ug/kg	1.2	0.39	1
Chloroethane	ND		ug/kg	2.3	0.53	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.28	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.16	1

Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044265**Project Number:** 26979.01**Report Date:** 10/22/20**SAMPLE RESULTS**

Lab ID: L2044265-04

Date Collected: 10/15/20 09:30

Client ID: SB-11 (0'-2')

Date Received: 10/15/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.58	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.3	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	2.3	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	2.3	0.20	1
Methyl tert butyl ether	ND		ug/kg	2.3	0.23	1
p/m-Xylene	ND		ug/kg	2.3	0.65	1
o-Xylene	ND		ug/kg	1.2	0.34	1
Xylenes, Total	ND		ug/kg	1.2	0.34	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.20	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.16	1
Dibromomethane	ND		ug/kg	2.3	0.28	1
Styrene	ND		ug/kg	1.2	0.23	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	ND		ug/kg	12	5.6	1
Carbon disulfide	ND		ug/kg	12	5.3	1
2-Butanone	ND		ug/kg	12	2.6	1
Vinyl acetate	ND		ug/kg	12	2.5	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.5	1
1,2,3-Trichloropropane	ND		ug/kg	2.3	0.15	1
2-Hexanone	ND		ug/kg	12	1.4	1
Bromochloromethane	ND		ug/kg	2.3	0.24	1
2,2-Dichloropropane	ND		ug/kg	2.3	0.24	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.33	1
1,3-Dichloropropane	ND		ug/kg	2.3	0.20	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.58	0.15	1
Bromobenzene	ND		ug/kg	2.3	0.17	1
n-Butylbenzene	ND		ug/kg	1.2	0.20	1
sec-Butylbenzene	ND		ug/kg	1.2	0.17	1
tert-Butylbenzene	ND		ug/kg	2.3	0.14	1
o-Chlorotoluene	ND		ug/kg	2.3	0.22	1
p-Chlorotoluene	ND		ug/kg	2.3	0.13	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.5	1.2	1
Hexachlorobutadiene	ND		ug/kg	4.7	0.20	1
Isopropylbenzene	ND		ug/kg	1.2	0.13	1
p-Isopropyltoluene	7.2		ug/kg	1.2	0.13	1
Naphthalene	ND		ug/kg	4.7	0.76	1
Acrylonitrile	ND		ug/kg	4.7	1.3	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-04
Client ID: SB-11 (0'-2')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:30
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.20	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.3	0.38	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.3	0.32	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.3	0.22	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.3	0.39	1
1,4-Dioxane	ND		ug/kg	94	41.	1
p-Diethylbenzene	ND		ug/kg	2.3	0.21	1
p-Ethyltoluene	ND		ug/kg	2.3	0.45	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.3	0.22	1
Ethyl ether	ND		ug/kg	2.3	0.40	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.8	1.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	116		70-130
Dibromofluoromethane	103		70-130

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-05
 Client ID: SB-11 (2'-5')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:35
 Date Received: 10/15/20
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 10/20/20 13:25
 Analyst: KJD
 Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.0	2.8	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.18	1
Chloroform	ND		ug/kg	1.8	0.17	1
Carbon tetrachloride	ND		ug/kg	1.2	0.28	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.15	1
Dibromochloromethane	ND		ug/kg	1.2	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.32	1
Tetrachloroethene	ND		ug/kg	0.60	0.24	1
Chlorobenzene	ND		ug/kg	0.60	0.15	1
Trichlorofluoromethane	ND		ug/kg	4.8	0.84	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.31	1
1,1,1-Trichloroethane	ND		ug/kg	0.60	0.20	1
Bromodichloromethane	ND		ug/kg	0.60	0.13	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.33	1
cis-1,3-Dichloropropene	ND		ug/kg	0.60	0.19	1
1,3-Dichloropropene, Total	ND		ug/kg	0.60	0.19	1
1,1-Dichloropropene	ND		ug/kg	0.60	0.19	1
Bromoform	ND		ug/kg	4.8	0.30	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.60	0.20	1
Benzene	ND		ug/kg	0.60	0.20	1
Toluene	ND		ug/kg	1.2	0.66	1
Ethylbenzene	ND		ug/kg	1.2	0.17	1
Chloromethane	ND		ug/kg	4.8	1.1	1
Bromomethane	ND		ug/kg	2.4	0.70	1
Vinyl chloride	ND		ug/kg	1.2	0.40	1
Chloroethane	ND		ug/kg	2.4	0.55	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.29	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.16	1

Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044265**Project Number:** 26979.01**Report Date:** 10/22/20**SAMPLE RESULTS**

Lab ID: L2044265-05
 Client ID: SB-11 (2'-5')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:35
 Date Received: 10/15/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.60	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.4	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	2.4	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	2.4	0.21	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.24	1
p/m-Xylene	ND		ug/kg	2.4	0.68	1
o-Xylene	ND		ug/kg	1.2	0.35	1
Xylenes, Total	ND		ug/kg	1.2	0.35	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.21	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.16	1
Dibromomethane	ND		ug/kg	2.4	0.29	1
Styrene	ND		ug/kg	1.2	0.24	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	ND		ug/kg	12	5.8	1
Carbon disulfide	ND		ug/kg	12	5.5	1
2-Butanone	ND		ug/kg	12	2.7	1
Vinyl acetate	ND		ug/kg	12	2.6	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.5	1
1,2,3-Trichloropropane	ND		ug/kg	2.4	0.15	1
2-Hexanone	ND		ug/kg	12	1.4	1
Bromochloromethane	ND		ug/kg	2.4	0.25	1
2,2-Dichloropropane	ND		ug/kg	2.4	0.24	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.34	1
1,3-Dichloropropane	ND		ug/kg	2.4	0.20	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.60	0.16	1
Bromobenzene	ND		ug/kg	2.4	0.18	1
n-Butylbenzene	ND		ug/kg	1.2	0.20	1
sec-Butylbenzene	ND		ug/kg	1.2	0.18	1
tert-Butylbenzene	ND		ug/kg	2.4	0.14	1
o-Chlorotoluene	ND		ug/kg	2.4	0.23	1
p-Chlorotoluene	ND		ug/kg	2.4	0.13	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.6	1.2	1
Hexachlorobutadiene	ND		ug/kg	4.8	0.20	1
Isopropylbenzene	ND		ug/kg	1.2	0.13	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.13	1
Naphthalene	ND		ug/kg	4.8	0.78	1
Acrylonitrile	ND		ug/kg	4.8	1.4	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-05
Client ID: SB-11 (2'-5')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:35
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.21	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.4	0.39	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.4	0.33	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.4	0.23	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.4	0.40	1
1,4-Dioxane	ND		ug/kg	97	42.	1
p-Diethylbenzene	ND		ug/kg	2.4	0.21	1
p-Ethyltoluene	ND		ug/kg	2.4	0.46	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.4	0.23	1
Ethyl ether	ND		ug/kg	2.4	0.41	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.0	1.7	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	105		70-130

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-06
 Client ID: SB-11 (13'-15')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:45
 Date Received: 10/15/20
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 10/20/20 13:46
 Analyst: KJD
 Percent Solids: 95%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.2	2.4	1
1,1-Dichloroethane	ND		ug/kg	1.0	0.15	1
Chloroform	ND		ug/kg	1.6	0.15	1
Carbon tetrachloride	ND		ug/kg	1.0	0.24	1
1,2-Dichloropropane	ND		ug/kg	1.0	0.13	1
Dibromochloromethane	ND		ug/kg	1.0	0.15	1
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.28	1
Tetrachloroethene	ND		ug/kg	0.52	0.20	1
Chlorobenzene	ND		ug/kg	0.52	0.13	1
Trichlorofluoromethane	ND		ug/kg	4.2	0.73	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.27	1
1,1,1-Trichloroethane	ND		ug/kg	0.52	0.18	1
Bromodichloromethane	ND		ug/kg	0.52	0.11	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.29	1
cis-1,3-Dichloropropene	ND		ug/kg	0.52	0.17	1
1,3-Dichloropropene, Total	ND		ug/kg	0.52	0.17	1
1,1-Dichloropropene	ND		ug/kg	0.52	0.17	1
Bromoform	ND		ug/kg	4.2	0.26	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.52	0.17	1
Benzene	ND		ug/kg	0.52	0.17	1
Toluene	ND		ug/kg	1.0	0.57	1
Ethylbenzene	ND		ug/kg	1.0	0.15	1
Chloromethane	ND		ug/kg	4.2	0.98	1
Bromomethane	ND		ug/kg	2.1	0.61	1
Vinyl chloride	ND		ug/kg	1.0	0.35	1
Chloroethane	ND		ug/kg	2.1	0.47	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.25	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.14	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-06
Client ID: SB-11 (13'-15')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:45
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.52	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	2.1	0.15	1
1,3-Dichlorobenzene	ND		ug/kg	2.1	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	2.1	0.18	1
Methyl tert butyl ether	ND		ug/kg	2.1	0.21	1
p/m-Xylene	ND		ug/kg	2.1	0.59	1
o-Xylene	ND		ug/kg	1.0	0.30	1
Xylenes, Total	ND		ug/kg	1.0	0.30	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18	1
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14	1
Dibromomethane	ND		ug/kg	2.1	0.25	1
Styrene	ND		ug/kg	1.0	0.20	1
Dichlorodifluoromethane	ND		ug/kg	10	0.96	1
Acetone	ND		ug/kg	10	5.0	1
Carbon disulfide	ND		ug/kg	10	4.8	1
2-Butanone	ND		ug/kg	10	2.3	1
Vinyl acetate	ND		ug/kg	10	2.2	1
4-Methyl-2-pentanone	ND		ug/kg	10	1.3	1
1,2,3-Trichloropropane	ND		ug/kg	2.1	0.13	1
2-Hexanone	ND		ug/kg	10	1.2	1
Bromochloromethane	ND		ug/kg	2.1	0.22	1
2,2-Dichloropropane	ND		ug/kg	2.1	0.21	1
1,2-Dibromoethane	ND		ug/kg	1.0	0.29	1
1,3-Dichloropropane	ND		ug/kg	2.1	0.18	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.52	0.14	1
Bromobenzene	ND		ug/kg	2.1	0.15	1
n-Butylbenzene	ND		ug/kg	1.0	0.18	1
sec-Butylbenzene	ND		ug/kg	1.0	0.15	1
tert-Butylbenzene	ND		ug/kg	2.1	0.12	1
o-Chlorotoluene	ND		ug/kg	2.1	0.20	1
p-Chlorotoluene	ND		ug/kg	2.1	0.11	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.2	1.0	1
Hexachlorobutadiene	ND		ug/kg	4.2	0.18	1
Isopropylbenzene	ND		ug/kg	1.0	0.11	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.11	1
Naphthalene	ND		ug/kg	4.2	0.68	1
Acrylonitrile	ND		ug/kg	4.2	1.2	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-06
Client ID: SB-11 (13'-15')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:45
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.0	0.18	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.1	0.34	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.1	0.28	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.1	0.20	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.1	0.35	1
1,4-Dioxane	ND		ug/kg	84	37.	1
p-Diethylbenzene	ND		ug/kg	2.1	0.18	1
p-Ethyltoluene	ND		ug/kg	2.1	0.40	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.1	0.20	1
Ethyl ether	ND		ug/kg	2.1	0.36	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.2	1.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	105		70-130

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-07
 Client ID: SB-10 (0'-2')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:55
 Date Received: 10/15/20
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 10/20/20 12:00
 Analyst: KJD
 Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.8	2.6	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.17	1
Chloroform	ND		ug/kg	1.7	0.16	1
Carbon tetrachloride	ND		ug/kg	1.2	0.27	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.14	1
Dibromochloromethane	ND		ug/kg	1.2	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.31	1
Tetrachloroethene	ND		ug/kg	0.58	0.23	1
Chlorobenzene	ND		ug/kg	0.58	0.15	1
Trichlorofluoromethane	ND		ug/kg	4.6	0.81	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.30	1
1,1,1-Trichloroethane	ND		ug/kg	0.58	0.19	1
Bromodichloromethane	ND		ug/kg	0.58	0.13	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.32	1
cis-1,3-Dichloropropene	ND		ug/kg	0.58	0.18	1
1,3-Dichloropropene, Total	ND		ug/kg	0.58	0.18	1
1,1-Dichloropropene	ND		ug/kg	0.58	0.18	1
Bromoform	ND		ug/kg	4.6	0.28	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.58	0.19	1
Benzene	ND		ug/kg	0.58	0.19	1
Toluene	ND		ug/kg	1.2	0.63	1
Ethylbenzene	ND		ug/kg	1.2	0.16	1
Chloromethane	ND		ug/kg	4.6	1.1	1
Bromomethane	ND		ug/kg	2.3	0.67	1
Vinyl chloride	ND		ug/kg	1.2	0.39	1
Chloroethane	ND		ug/kg	2.3	0.52	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.28	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.16	1

Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044265**Project Number:** 26979.01**Report Date:** 10/22/20**SAMPLE RESULTS**

Lab ID: L2044265-07
 Client ID: SB-10 (0'-2')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:55
 Date Received: 10/15/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.58	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.3	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	2.3	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	2.3	0.20	1
Methyl tert butyl ether	ND		ug/kg	2.3	0.23	1
p/m-Xylene	ND		ug/kg	2.3	0.65	1
o-Xylene	ND		ug/kg	1.2	0.34	1
Xylenes, Total	ND		ug/kg	1.2	0.34	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.20	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.16	1
Dibromomethane	ND		ug/kg	2.3	0.28	1
Styrene	ND		ug/kg	1.2	0.23	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	6.9	J	ug/kg	12	5.6	1
Carbon disulfide	ND		ug/kg	12	5.3	1
2-Butanone	ND		ug/kg	12	2.6	1
Vinyl acetate	ND		ug/kg	12	2.5	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.5	1
1,2,3-Trichloropropane	ND		ug/kg	2.3	0.15	1
2-Hexanone	ND		ug/kg	12	1.4	1
Bromochloromethane	ND		ug/kg	2.3	0.24	1
2,2-Dichloropropane	ND		ug/kg	2.3	0.23	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.32	1
1,3-Dichloropropane	ND		ug/kg	2.3	0.19	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.58	0.15	1
Bromobenzene	ND		ug/kg	2.3	0.17	1
n-Butylbenzene	ND		ug/kg	1.2	0.19	1
sec-Butylbenzene	ND		ug/kg	1.2	0.17	1
tert-Butylbenzene	ND		ug/kg	2.3	0.14	1
o-Chlorotoluene	ND		ug/kg	2.3	0.22	1
p-Chlorotoluene	ND		ug/kg	2.3	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.5	1.2	1
Hexachlorobutadiene	ND		ug/kg	4.6	0.20	1
Isopropylbenzene	ND		ug/kg	1.2	0.13	1
p-Isopropyltoluene	3.3		ug/kg	1.2	0.13	1
Naphthalene	ND		ug/kg	4.6	0.75	1
Acrylonitrile	ND		ug/kg	4.6	1.3	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-07
Client ID: SB-10 (0'-2')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:55
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.20	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.3	0.37	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.3	0.32	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.3	0.22	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.3	0.39	1
1,4-Dioxane	ND		ug/kg	93	41.	1
p-Diethylbenzene	ND		ug/kg	2.3	0.20	1
p-Ethyltoluene	ND		ug/kg	2.3	0.44	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.3	0.22	1
Ethyl ether	ND		ug/kg	2.3	0.40	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.8	1.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	118		70-130
Dibromofluoromethane	107		70-130

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-08
 Client ID: SB-10 (4'-6')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 10:00
 Date Received: 10/15/20
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 10/20/20 12:21
 Analyst: KJD
 Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.0	2.8	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.18	1
Chloroform	ND		ug/kg	1.8	0.17	1
Carbon tetrachloride	ND		ug/kg	1.2	0.28	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.15	1
Dibromochloromethane	ND		ug/kg	1.2	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.32	1
Tetrachloroethene	ND		ug/kg	0.60	0.24	1
Chlorobenzene	ND		ug/kg	0.60	0.15	1
Trichlorofluoromethane	ND		ug/kg	4.8	0.84	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.31	1
1,1,1-Trichloroethane	ND		ug/kg	0.60	0.20	1
Bromodichloromethane	ND		ug/kg	0.60	0.13	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.33	1
cis-1,3-Dichloropropene	ND		ug/kg	0.60	0.19	1
1,3-Dichloropropene, Total	ND		ug/kg	0.60	0.19	1
1,1-Dichloropropene	ND		ug/kg	0.60	0.19	1
Bromoform	ND		ug/kg	4.8	0.30	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.60	0.20	1
Benzene	0.52	J	ug/kg	0.60	0.20	1
Toluene	ND		ug/kg	1.2	0.66	1
Ethylbenzene	ND		ug/kg	1.2	0.17	1
Chloromethane	ND		ug/kg	4.8	1.1	1
Bromomethane	ND		ug/kg	2.4	0.70	1
Vinyl chloride	ND		ug/kg	1.2	0.40	1
Chloroethane	ND		ug/kg	2.4	0.55	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.29	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.16	1

Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044265**Project Number:** 26979.01**Report Date:** 10/22/20**SAMPLE RESULTS**

Lab ID: L2044265-08

Date Collected: 10/15/20 10:00

Client ID: SB-10 (4'-6')

Date Received: 10/15/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.60	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.4	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	2.4	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	2.4	0.21	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.24	1
p/m-Xylene	ND		ug/kg	2.4	0.68	1
o-Xylene	ND		ug/kg	1.2	0.35	1
Xylenes, Total	ND		ug/kg	1.2	0.35	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.21	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.16	1
Dibromomethane	ND		ug/kg	2.4	0.29	1
Styrene	ND		ug/kg	1.2	0.24	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	25		ug/kg	12	5.8	1
Carbon disulfide	ND		ug/kg	12	5.5	1
2-Butanone	ND		ug/kg	12	2.7	1
Vinyl acetate	ND		ug/kg	12	2.6	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.5	1
1,2,3-Trichloropropane	ND		ug/kg	2.4	0.15	1
2-Hexanone	ND		ug/kg	12	1.4	1
Bromochloromethane	ND		ug/kg	2.4	0.25	1
2,2-Dichloropropane	ND		ug/kg	2.4	0.24	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.34	1
1,3-Dichloropropane	ND		ug/kg	2.4	0.20	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.60	0.16	1
Bromobenzene	ND		ug/kg	2.4	0.18	1
n-Butylbenzene	ND		ug/kg	1.2	0.20	1
sec-Butylbenzene	ND		ug/kg	1.2	0.18	1
tert-Butylbenzene	ND		ug/kg	2.4	0.14	1
o-Chlorotoluene	ND		ug/kg	2.4	0.23	1
p-Chlorotoluene	ND		ug/kg	2.4	0.13	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.6	1.2	1
Hexachlorobutadiene	ND		ug/kg	4.8	0.20	1
Isopropylbenzene	ND		ug/kg	1.2	0.13	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.13	1
Naphthalene	ND		ug/kg	4.8	0.79	1
Acrylonitrile	ND		ug/kg	4.8	1.4	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-08
Client ID: SB-10 (4'-6')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 10:00
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.21	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.4	0.39	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.4	0.33	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.4	0.23	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.4	0.40	1
1,4-Dioxane	ND		ug/kg	97	42.	1
p-Diethylbenzene	ND		ug/kg	2.4	0.21	1
p-Ethyltoluene	ND		ug/kg	2.4	0.46	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.4	0.23	1
Ethyl ether	ND		ug/kg	2.4	0.41	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.0	1.7	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	98		70-130

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-09
Client ID: SB-10 (13'-15')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 10:05
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/20/20 12:42
Analyst: KJD
Percent Solids: 95%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.4	2.5	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.6	0.15	1
Carbon tetrachloride	ND		ug/kg	1.1	0.25	1
1,2-Dichloropropane	ND		ug/kg	1.1	0.14	1
Dibromochloromethane	ND		ug/kg	1.1	0.15	1
1,1,2-Trichloroethane	ND		ug/kg	1.1	0.29	1
Tetrachloroethene	ND		ug/kg	0.54	0.21	1
Chlorobenzene	ND		ug/kg	0.54	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.3	0.75	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.28	1
1,1,1-Trichloroethane	ND		ug/kg	0.54	0.18	1
Bromodichloromethane	ND		ug/kg	0.54	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.30	1
cis-1,3-Dichloropropene	ND		ug/kg	0.54	0.17	1
1,3-Dichloropropene, Total	ND		ug/kg	0.54	0.17	1
1,1-Dichloropropene	ND		ug/kg	0.54	0.17	1
Bromoform	ND		ug/kg	4.3	0.27	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.54	0.18	1
Benzene	ND		ug/kg	0.54	0.18	1
Toluene	0.67	J	ug/kg	1.1	0.59	1
Ethylbenzene	ND		ug/kg	1.1	0.15	1
Chloromethane	ND		ug/kg	4.3	1.0	1
Bromomethane	ND		ug/kg	2.2	0.63	1
Vinyl chloride	ND		ug/kg	1.1	0.36	1
Chloroethane	ND		ug/kg	2.2	0.49	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.26	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.15	1

Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044265**Project Number:** 26979.01**Report Date:** 10/22/20**SAMPLE RESULTS**

Lab ID: L2044265-09
 Client ID: SB-10 (13'-15')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 10:05
 Date Received: 10/15/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.54	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	2.2	0.18	1
Methyl tert butyl ether	ND		ug/kg	2.2	0.22	1
p/m-Xylene	ND		ug/kg	2.2	0.61	1
o-Xylene	ND		ug/kg	1.1	0.32	1
Xylenes, Total	ND		ug/kg	1.1	0.32	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.19	1
1,2-Dichloroethene, Total	ND		ug/kg	1.1	0.15	1
Dibromomethane	ND		ug/kg	2.2	0.26	1
Styrene	ND		ug/kg	1.1	0.21	1
Dichlorodifluoromethane	ND		ug/kg	11	0.99	1
Acetone	ND		ug/kg	11	5.2	1
Carbon disulfide	ND		ug/kg	11	4.9	1
2-Butanone	ND		ug/kg	11	2.4	1
Vinyl acetate	ND		ug/kg	11	2.3	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.4	1
1,2,3-Trichloropropane	ND		ug/kg	2.2	0.14	1
2-Hexanone	ND		ug/kg	11	1.3	1
Bromochloromethane	ND		ug/kg	2.2	0.22	1
2,2-Dichloropropane	ND		ug/kg	2.2	0.22	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.30	1
1,3-Dichloropropane	ND		ug/kg	2.2	0.18	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.54	0.14	1
Bromobenzene	ND		ug/kg	2.2	0.16	1
n-Butylbenzene	ND		ug/kg	1.1	0.18	1
sec-Butylbenzene	ND		ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.2	0.13	1
o-Chlorotoluene	ND		ug/kg	2.2	0.21	1
p-Chlorotoluene	ND		ug/kg	2.2	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.2	1.1	1
Hexachlorobutadiene	ND		ug/kg	4.3	0.18	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.12	1
Naphthalene	ND		ug/kg	4.3	0.70	1
Acrylonitrile	ND		ug/kg	4.3	1.2	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-09
Client ID: SB-10 (13'-15')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 10:05
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.1	0.18	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.2	0.35	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.2	0.30	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.2	0.21	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.2	0.36	1
1,4-Dioxane	ND		ug/kg	87	38.	1
p-Diethylbenzene	ND		ug/kg	2.2	0.19	1
p-Ethyltoluene	ND		ug/kg	2.2	0.42	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.2	0.21	1
Ethyl ether	ND		ug/kg	2.2	0.37	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.4	1.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	105		70-130

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-10
Client ID: SB-2 (5'-7')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 10:35
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/20/20 13:03
Analyst: KJD
Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.1	2.3	1
1,1-Dichloroethane	ND		ug/kg	1.0	0.15	1
Chloroform	ND		ug/kg	1.5	0.14	1
Carbon tetrachloride	ND		ug/kg	1.0	0.23	1
1,2-Dichloropropane	ND		ug/kg	1.0	0.13	1
Dibromochloromethane	ND		ug/kg	1.0	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27	1
Tetrachloroethene	ND		ug/kg	0.51	0.20	1
Chlorobenzene	ND		ug/kg	0.51	0.13	1
Trichlorofluoromethane	ND		ug/kg	4.1	0.71	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.26	1
1,1,1-Trichloroethane	ND		ug/kg	0.51	0.17	1
Bromodichloromethane	ND		ug/kg	0.51	0.11	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.28	1
cis-1,3-Dichloropropene	ND		ug/kg	0.51	0.16	1
1,3-Dichloropropene, Total	ND		ug/kg	0.51	0.16	1
1,1-Dichloropropene	ND		ug/kg	0.51	0.16	1
Bromoform	ND		ug/kg	4.1	0.25	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.51	0.17	1
Benzene	ND		ug/kg	0.51	0.17	1
Toluene	ND		ug/kg	1.0	0.55	1
Ethylbenzene	ND		ug/kg	1.0	0.14	1
Chloromethane	ND		ug/kg	4.1	0.95	1
Bromomethane	ND		ug/kg	2.0	0.59	1
Vinyl chloride	ND		ug/kg	1.0	0.34	1
Chloroethane	ND		ug/kg	2.0	0.46	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.24	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14	1

Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044265**Project Number:** 26979.01**Report Date:** 10/22/20**SAMPLE RESULTS**

Lab ID: L2044265-10
 Client ID: SB-2 (5'-7')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 10:35
 Date Received: 10/15/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.51	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.15	1
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.20	1
p/m-Xylene	ND		ug/kg	2.0	0.57	1
o-Xylene	ND		ug/kg	1.0	0.30	1
Xylenes, Total	ND		ug/kg	1.0	0.30	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18	1
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14	1
Dibromomethane	ND		ug/kg	2.0	0.24	1
Styrene	ND		ug/kg	1.0	0.20	1
Dichlorodifluoromethane	ND		ug/kg	10	0.93	1
Acetone	ND		ug/kg	10	4.9	1
Carbon disulfide	ND		ug/kg	10	4.6	1
2-Butanone	ND		ug/kg	10	2.2	1
Vinyl acetate	ND		ug/kg	10	2.2	1
4-Methyl-2-pentanone	ND		ug/kg	10	1.3	1
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13	1
2-Hexanone	ND		ug/kg	10	1.2	1
Bromochloromethane	ND		ug/kg	2.0	0.21	1
2,2-Dichloropropane	ND		ug/kg	2.0	0.20	1
1,2-Dibromoethane	ND		ug/kg	1.0	0.28	1
1,3-Dichloropropane	ND		ug/kg	2.0	0.17	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.51	0.13	1
Bromobenzene	ND		ug/kg	2.0	0.15	1
n-Butylbenzene	ND		ug/kg	1.0	0.17	1
sec-Butylbenzene	ND		ug/kg	1.0	0.15	1
tert-Butylbenzene	ND		ug/kg	2.0	0.12	1
o-Chlorotoluene	ND		ug/kg	2.0	0.19	1
p-Chlorotoluene	ND		ug/kg	2.0	0.11	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0	1
Hexachlorobutadiene	ND		ug/kg	4.1	0.17	1
Isopropylbenzene	ND		ug/kg	1.0	0.11	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.11	1
Naphthalene	ND		ug/kg	4.1	0.66	1
Acrylonitrile	ND		ug/kg	4.1	1.2	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-10
Client ID: SB-2 (5'-7')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 10:35
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.0	0.17	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.33	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.28	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.20	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.34	1
1,4-Dioxane	ND		ug/kg	81	36.	1
p-Diethylbenzene	ND		ug/kg	2.0	0.18	1
p-Ethyltoluene	ND		ug/kg	2.0	0.39	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19	1
Ethyl ether	ND		ug/kg	2.0	0.35	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.1	1.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	105		70-130

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-11
Client ID: SB-6 (2'-4')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 10:46
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/20/20 14:07
Analyst: KJD
Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.4	2.5	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.6	0.15	1
Carbon tetrachloride	ND		ug/kg	1.1	0.25	1
1,2-Dichloropropane	ND		ug/kg	1.1	0.14	1
Dibromochloromethane	ND		ug/kg	1.1	0.15	1
1,1,2-Trichloroethane	ND		ug/kg	1.1	0.29	1
Tetrachloroethene	ND		ug/kg	0.54	0.21	1
Chlorobenzene	ND		ug/kg	0.54	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.4	0.76	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.28	1
1,1,1-Trichloroethane	ND		ug/kg	0.54	0.18	1
Bromodichloromethane	ND		ug/kg	0.54	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.30	1
cis-1,3-Dichloropropene	ND		ug/kg	0.54	0.17	1
1,3-Dichloropropene, Total	ND		ug/kg	0.54	0.17	1
1,1-Dichloropropene	ND		ug/kg	0.54	0.17	1
Bromoform	ND		ug/kg	4.4	0.27	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.54	0.18	1
Benzene	ND		ug/kg	0.54	0.18	1
Toluene	0.86	J	ug/kg	1.1	0.59	1
Ethylbenzene	ND		ug/kg	1.1	0.15	1
Chloromethane	ND		ug/kg	4.4	1.0	1
Bromomethane	ND		ug/kg	2.2	0.63	1
Vinyl chloride	ND		ug/kg	1.1	0.36	1
Chloroethane	ND		ug/kg	2.2	0.49	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.26	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.15	1

Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044265**Project Number:** 26979.01**Report Date:** 10/22/20**SAMPLE RESULTS**

Lab ID: L2044265-11

Date Collected: 10/15/20 10:46

Client ID: SB-6 (2'-4')

Date Received: 10/15/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.54	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	2.2	0.19	1
Methyl tert butyl ether	ND		ug/kg	2.2	0.22	1
p/m-Xylene	ND		ug/kg	2.2	0.61	1
o-Xylene	ND		ug/kg	1.1	0.32	1
Xylenes, Total	ND		ug/kg	1.1	0.32	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.19	1
1,2-Dichloroethene, Total	ND		ug/kg	1.1	0.15	1
Dibromomethane	ND		ug/kg	2.2	0.26	1
Styrene	ND		ug/kg	1.1	0.21	1
Dichlorodifluoromethane	ND		ug/kg	11	1.0	1
Acetone	15		ug/kg	11	5.2	1
Carbon disulfide	ND		ug/kg	11	5.0	1
2-Butanone	ND		ug/kg	11	2.4	1
Vinyl acetate	ND		ug/kg	11	2.3	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.4	1
1,2,3-Trichloropropane	ND		ug/kg	2.2	0.14	1
2-Hexanone	ND		ug/kg	11	1.3	1
Bromochloromethane	ND		ug/kg	2.2	0.22	1
2,2-Dichloropropane	ND		ug/kg	2.2	0.22	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.30	1
1,3-Dichloropropane	ND		ug/kg	2.2	0.18	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.54	0.14	1
Bromobenzene	ND		ug/kg	2.2	0.16	1
n-Butylbenzene	ND		ug/kg	1.1	0.18	1
sec-Butylbenzene	ND		ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.2	0.13	1
o-Chlorotoluene	ND		ug/kg	2.2	0.21	1
p-Chlorotoluene	ND		ug/kg	2.2	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.3	1.1	1
Hexachlorobutadiene	ND		ug/kg	4.4	0.18	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.12	1
Naphthalene	ND		ug/kg	4.4	0.71	1
Acrylonitrile	ND		ug/kg	4.4	1.2	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-11
Client ID: SB-6 (2'-4')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 10:46
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.1	0.19	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.2	0.35	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.2	0.30	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.2	0.21	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.2	0.36	1
1,4-Dioxane	ND		ug/kg	87	38.	1
p-Diethylbenzene	ND		ug/kg	2.2	0.19	1
p-Ethyltoluene	ND		ug/kg	2.2	0.42	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.2	0.21	1
Ethyl ether	ND		ug/kg	2.2	0.37	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.4	1.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	105		70-130

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-12
Client ID: GW-3
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 08:40
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 10/19/20 20:50
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	0.70	J	ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	5.8		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044265**Project Number:** 26979.01**Report Date:** 10/22/20**SAMPLE RESULTS**

Lab ID: L2044265-12
 Client ID: GW-3
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 08:40
 Date Received: 10/15/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	0.36	J	ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-12
Client ID: GW-3
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 08:40
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	101		70-130

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/19/20 17:58
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 12 Batch: WG1424046-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/19/20 17:58
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 12 Batch: WG1424046-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/19/20 17:58
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 12 Batch: WG1424046-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	99		70-130

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/20/20 07:47
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-11 Batch: WG1424122-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	0.78	J	ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/20/20 07:47
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-11 Batch: WG1424122-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/20/20 07:47
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-11 Batch: WG1424122-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	0.36	J	ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	0.36	J	ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	0.32	J	ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	80	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	106		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044265

Project Number: 26979.01

Report Date: 10/22/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 12 Batch: WG1424046-3 WG1424046-4								
Methylene chloride	96		92		70-130	4		20
1,1-Dichloroethane	93		97		70-130	4		20
Chloroform	92		95		70-130	3		20
Carbon tetrachloride	93		96		63-132	3		20
1,2-Dichloropropane	92		97		70-130	5		20
Dibromochloromethane	89		94		63-130	5		20
1,1,2-Trichloroethane	91		95		70-130	4		20
Tetrachloroethene	94		100		70-130	6		20
Chlorobenzene	95		98		75-130	3		20
Trichlorofluoromethane	94		100		62-150	6		20
1,2-Dichloroethane	90		92		70-130	2		20
1,1,1-Trichloroethane	94		100		67-130	6		20
Bromodichloromethane	89		92		67-130	3		20
trans-1,3-Dichloropropene	88		91		70-130	3		20
cis-1,3-Dichloropropene	88		91		70-130	3		20
1,1-Dichloropropene	95		100		70-130	5		20
Bromoform	87		89		54-136	2		20
1,1,1,2,2-Tetrachloroethane	91		92		67-130	1		20
Benzene	94		96		70-130	2		20
Toluene	96		100		70-130	4		20
Ethylbenzene	98		100		70-130	2		20
Chloromethane	90		98		64-130	9		20
Bromomethane	79		80		39-139	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044265

Project Number: 26979.01

Report Date: 10/22/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 12 Batch: WG1424046-3 WG1424046-4								
Vinyl chloride	93		100		55-140	7		20
Chloroethane	110		110		55-138	0		20
1,1-Dichloroethene	96		100		61-145	4		20
trans-1,2-Dichloroethene	93		100		70-130	7		20
Trichloroethene	86		97		70-130	12		20
1,2-Dichlorobenzene	96		95		70-130	1		20
1,3-Dichlorobenzene	97		99		70-130	2		20
1,4-Dichlorobenzene	94		94		70-130	0		20
Methyl tert butyl ether	90		88		63-130	2		20
p/m-Xylene	100		105		70-130	5		20
o-Xylene	100		105		70-130	5		20
cis-1,2-Dichloroethene	90		97		70-130	7		20
Dibromomethane	93		95		70-130	2		20
1,2,3-Trichloropropane	94		93		64-130	1		20
Acrylonitrile	91		87		70-130	4		20
Styrene	100		110		70-130	10		20
Dichlorodifluoromethane	96		100		36-147	4		20
Acetone	84		84		58-148	0		20
Carbon disulfide	91		97		51-130	6		20
2-Butanone	97		93		63-138	4		20
Vinyl acetate	84		85		70-130	1		20
4-Methyl-2-pentanone	82		88		59-130	7		20
2-Hexanone	84		77		57-130	9		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044265

Project Number: 26979.01

Report Date: 10/22/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 12 Batch: WG1424046-3 WG1424046-4								
Bromochloromethane	98		94		70-130	4		20
2,2-Dichloropropane	94		98		63-133	4		20
1,2-Dibromoethane	91		96		70-130	5		20
1,3-Dichloropropane	93		96		70-130	3		20
1,1,1,2-Tetrachloroethane	92		96		64-130	4		20
Bromobenzene	92		97		70-130	5		20
n-Butylbenzene	100		100		53-136	0		20
sec-Butylbenzene	100		110		70-130	10		20
tert-Butylbenzene	88		91		70-130	3		20
o-Chlorotoluene	100		100		70-130	0		20
p-Chlorotoluene	98		100		70-130	2		20
1,2-Dibromo-3-chloropropane	78		86		41-144	10		20
Hexachlorobutadiene	93		100		63-130	7		20
Isopropylbenzene	100		100		70-130	0		20
p-Isopropyltoluene	100		100		70-130	0		20
Naphthalene	80		78		70-130	3		20
n-Propylbenzene	100		110		69-130	10		20
1,2,3-Trichlorobenzene	85		88		70-130	3		20
1,2,4-Trichlorobenzene	89		92		70-130	3		20
1,3,5-Trimethylbenzene	100		100		64-130	0		20
1,2,4-Trimethylbenzene	100		100		70-130	0		20
1,4-Dioxane	90		84		56-162	7		20
p-Diethylbenzene	95		99		70-130	4		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044265

Project Number: 26979.01

Report Date: 10/22/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 12 Batch: WG1424046-3 WG1424046-4								
p-Ethyltoluene	97		100		70-130	3		20
1,2,4,5-Tetramethylbenzene	91		94		70-130	3		20
Ethyl ether	92		93		59-134	1		20
trans-1,4-Dichloro-2-butene	86		85		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	96		96		70-130
Toluene-d8	100		100		70-130
4-Bromofluorobenzene	102		100		70-130
Dibromofluoromethane	96		98		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044265

Project Number: 26979.01

Report Date: 10/22/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-11 Batch: WG1424122-3 WG1424122-4								
Methylene chloride	92		91		70-130	1		30
1,1-Dichloroethane	115		113		70-130	2		30
Chloroform	99		99		70-130	0		30
Carbon tetrachloride	109		106		70-130	3		30
1,2-Dichloropropane	107		109		70-130	2		30
Dibromochloromethane	91		94		70-130	3		30
1,1,2-Trichloroethane	92		93		70-130	1		30
Tetrachloroethene	109		104		70-130	5		30
Chlorobenzene	102		99		70-130	3		30
Trichlorofluoromethane	109		105		70-139	4		30
1,2-Dichloroethane	91		92		70-130	1		30
1,1,1-Trichloroethane	110		108		70-130	2		30
Bromodichloromethane	91		92		70-130	1		30
trans-1,3-Dichloropropene	97		97		70-130	0		30
cis-1,3-Dichloropropene	95		96		70-130	1		30
1,1-Dichloropropene	114		112		70-130	2		30
Bromoform	84		85		70-130	1		30
1,1,1,2-Tetrachloroethane	89		94		70-130	5		30
Benzene	103		102		70-130	1		30
Toluene	111		108		70-130	3		30
Ethylbenzene	114		110		70-130	4		30
Chloromethane	131	Q	127		52-130	3		30
Bromomethane	84		80		57-147	5		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044265

Project Number: 26979.01

Report Date: 10/22/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-11 Batch: WG1424122-3 WG1424122-4								
Vinyl chloride	121		116		67-130	4		30
Chloroethane	115		111		50-151	4		30
1,1-Dichloroethene	107		103		65-135	4		30
trans-1,2-Dichloroethene	99		98		70-130	1		30
Trichloroethene	104		101		70-130	3		30
1,2-Dichlorobenzene	99		97		70-130	2		30
1,3-Dichlorobenzene	105		102		70-130	3		30
1,4-Dichlorobenzene	102		99		70-130	3		30
Methyl tert butyl ether	83		86		66-130	4		30
p/m-Xylene	114		109		70-130	4		30
o-Xylene	109		105		70-130	4		30
cis-1,2-Dichloroethene	94		93		70-130	1		30
Dibromomethane	80		82		70-130	2		30
Styrene	108		105		70-130	3		30
Dichlorodifluoromethane	119		114		30-146	4		30
Acetone	109		103		54-140	6		30
Carbon disulfide	108		102		59-130	6		30
2-Butanone	117		108		70-130	8		30
Vinyl acetate	86		89		70-130	3		30
4-Methyl-2-pentanone	102		104		70-130	2		30
1,2,3-Trichloropropane	93		97		68-130	4		30
2-Hexanone	118		121		70-130	3		30
Bromochloromethane	81		82		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044265

Project Number: 26979.01

Report Date: 10/22/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-11 Batch: WG1424122-3 WG1424122-4								
2,2-Dichloropropane	107		104		70-130	3		30
1,2-Dibromoethane	85		85		70-130	0		30
1,3-Dichloropropane	92		93		69-130	1		30
1,1,1,2-Tetrachloroethane	104		102		70-130	2		30
Bromobenzene	99		98		70-130	1		30
n-Butylbenzene	130		126		70-130	3		30
sec-Butylbenzene	127		122		70-130	4		30
tert-Butylbenzene	122		117		70-130	4		30
o-Chlorotoluene	139	Q	135	Q	70-130	3		30
p-Chlorotoluene	118		113		70-130	4		30
1,2-Dibromo-3-chloropropane	77		84		68-130	9		30
Hexachlorobutadiene	103		102		67-130	1		30
Isopropylbenzene	123		119		70-130	3		30
p-Isopropyltoluene	125		120		70-130	4		30
Naphthalene	80		82		70-130	2		30
Acrylonitrile	91		101		70-130	10		30
n-Propylbenzene	126		121		70-130	4		30
1,2,3-Trichlorobenzene	93		92		70-130	1		30
1,2,4-Trichlorobenzene	95		94		70-130	1		30
1,3,5-Trimethylbenzene	122		116		70-130	5		30
1,2,4-Trimethylbenzene	118		114		70-130	3		30
1,4-Dioxane	74		59	Q	65-136	23		30
p-Diethylbenzene	121		115		70-130	5		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044265

Project Number: 26979.01

Report Date: 10/22/20

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-11 Batch: WG1424122-3 WG1424122-4								
p-Ethyltoluene	120		116		70-130	3		30
1,2,4,5-Tetramethylbenzene	110		109		70-130	1		30
Ethyl ether	85		87		67-130	2		30
trans-1,4-Dichloro-2-butene	109		109		70-130	0		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	85		90		70-130
Toluene-d8	110		107		70-130
4-Bromofluorobenzene	108		107		70-130
Dibromofluoromethane	88		90		70-130

SEMIVOLATILES

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-01
Client ID: SB-3 (0'-2')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:10
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 10/19/20 15:17
Analyst: IM
Percent Solids: 86%

Extraction Method: EPA 3546
Extraction Date: 10/18/20 02:53

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	23	J	ug/kg	150	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	33.	1
1,4-Dichlorobenzene	ND		ug/kg	190	34.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	51.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	810		ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	550	170	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	ND		ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	30.	1
Bis(2-ethylhexyl)phthalate	78	J	ug/kg	190	66.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	60	J	ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	65.	1

Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044265**Project Number:** 26979.01**Report Date:** 10/22/20**SAMPLE RESULTS**

Lab ID: L2044265-01

Date Collected: 10/15/20 09:10

Client ID: SB-3 (0'-2')

Date Received: 10/15/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	420		ug/kg	120	22.	1
Benzo(a)pyrene	480		ug/kg	150	47.	1
Benzo(b)fluoranthene	580		ug/kg	120	32.	1
Benzo(k)fluoranthene	180		ug/kg	120	31.	1
Chrysene	420		ug/kg	120	20.	1
Acenaphthylene	50	J	ug/kg	150	30.	1
Anthracene	100	J	ug/kg	120	37.	1
Benzo(ghi)perylene	280		ug/kg	150	23.	1
Fluorene	26	J	ug/kg	190	19.	1
Phenanthrene	400		ug/kg	120	23.	1
Dibenzo(a,h)anthracene	72	J	ug/kg	120	22.	1
Indeno(1,2,3-cd)pyrene	300		ug/kg	150	27.	1
Pyrene	720		ug/kg	120	19.	1
Biphenyl	ND		ug/kg	440	44.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	37.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	80.	1
Dibenzofuran	ND		ug/kg	190	18.	1
2-Methylnaphthalene	ND		ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	29.	1
2-Chlorophenol	ND		ug/kg	190	23.	1
2,4-Dichlorophenol	ND		ug/kg	170	31.	1
2,4-Dimethylphenol	ND		ug/kg	190	63.	1
2-Nitrophenol	ND		ug/kg	420	72.	1
4-Nitrophenol	ND		ug/kg	270	78.	1
2,4-Dinitrophenol	ND		ug/kg	920	90.	1
4,6-Dinitro-o-cresol	ND		ug/kg	500	92.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	30.	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-01
Client ID: SB-3 (0'-2')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:10
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	37.	1
Benzoic Acid	ND		ug/kg	620	190	1
Benzyl Alcohol	ND		ug/kg	190	59.	1
Carbazole	51	J	ug/kg	190	19.	1
1,4-Dioxane	ND		ug/kg	29	8.8	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	78		25-120
Phenol-d6	79		10-120
Nitrobenzene-d5	62		23-120
2-Fluorobiphenyl	67		30-120
2,4,6-Tribromophenol	88		10-136
4-Terphenyl-d14	58		18-120

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-02
Client ID: SB-3 (5'-7')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:20
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 10/19/20 14:05
Analyst: IM
Percent Solids: 88%

Extraction Method: EPA 3546
Extraction Date: 10/18/20 02:53

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	240		ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	21.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	190	18.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	32.	1
1,4-Dichlorobenzene	ND		ug/kg	190	33.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	37.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	2800		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	100	J	ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	88	J	ug/kg	190	65.	1
Butyl benzyl phthalate	ND		ug/kg	190	47.	1
Di-n-butylphthalate	ND		ug/kg	190	35.	1
Di-n-octylphthalate	ND		ug/kg	190	64.	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-02
Client ID: SB-3 (5'-7')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:20
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	17.	1
Dimethyl phthalate	ND		ug/kg	190	39.	1
Benzo(a)anthracene	1400		ug/kg	110	21.	1
Benzo(a)pyrene	1400		ug/kg	150	46.	1
Benzo(b)fluoranthene	1600		ug/kg	110	31.	1
Benzo(k)fluoranthene	500		ug/kg	110	30.	1
Chrysene	1400		ug/kg	110	19.	1
Acenaphthylene	160		ug/kg	150	29.	1
Anthracene	500		ug/kg	110	36.	1
Benzo(ghi)perylene	740		ug/kg	150	22.	1
Fluorene	230		ug/kg	190	18.	1
Phenanthrene	2400		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	190		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	790		ug/kg	150	26.	1
Pyrene	2700		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	430	43.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	35.	1
4-Nitroaniline	ND		ug/kg	190	77.	1
Dibenzofuran	100	J	ug/kg	190	18.	1
2-Methylnaphthalene	81	J	ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	62.	1
2-Nitrophenol	ND		ug/kg	400	70.	1
4-Nitrophenol	ND		ug/kg	260	76.	1
2,4-Dinitrophenol	ND		ug/kg	900	87.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	90.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	190	28.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	29.	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-02
Client ID: SB-3 (5'-7')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:20
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	36.	1
Benzoic Acid	ND		ug/kg	600	190	1
Benzyl Alcohol	ND		ug/kg	190	57.	1
Carbazole	230		ug/kg	190	18.	1
1,4-Dioxane	ND		ug/kg	28	8.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	82		25-120
Phenol-d6	83		10-120
Nitrobenzene-d5	62		23-120
2-Fluorobiphenyl	79		30-120
2,4,6-Tribromophenol	95		10-136
4-Terphenyl-d14	73		18-120

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-03
Client ID: SB-3 (13'-15')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:25
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 10/19/20 11:16
Analyst: IM
Percent Solids: 93%

Extraction Method: EPA 3546
Extraction Date: 10/18/20 02:53

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	20.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	32.	1
1,3-Dichlorobenzene	ND		ug/kg	180	30.	1
1,4-Dichlorobenzene	ND		ug/kg	180	31.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	47.	1
2,4-Dinitrotoluene	ND		ug/kg	180	35.	1
2,6-Dinitrotoluene	ND		ug/kg	180	30.	1
Fluoranthene	ND		ug/kg	110	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	27.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	30.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	500	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	ND		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	26.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	27.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	61.	1
Butyl benzyl phthalate	ND		ug/kg	180	44.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	60.	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-03
 Client ID: SB-3 (13'-15')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:25
 Date Received: 10/15/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	16.	1
Dimethyl phthalate	ND		ug/kg	180	37.	1
Benzo(a)anthracene	ND		ug/kg	110	20.	1
Benzo(a)pyrene	ND		ug/kg	140	43.	1
Benzo(b)fluoranthene	ND		ug/kg	110	30.	1
Benzo(k)fluoranthene	ND		ug/kg	110	28.	1
Chrysene	ND		ug/kg	110	18.	1
Acenaphthylene	ND		ug/kg	140	27.	1
Anthracene	ND		ug/kg	110	34.	1
Benzo(ghi)perylene	ND		ug/kg	140	21.	1
Fluorene	ND		ug/kg	180	17.	1
Phenanthrene	ND		ug/kg	110	21.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	20.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	25.	1
Pyrene	ND		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	400	41.	1
4-Chloroaniline	ND		ug/kg	180	32.	1
2-Nitroaniline	ND		ug/kg	180	34.	1
3-Nitroaniline	ND		ug/kg	180	33.	1
4-Nitroaniline	ND		ug/kg	180	73.	1
Dibenzofuran	ND		ug/kg	180	17.	1
2-Methylnaphthalene	ND		ug/kg	210	21.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	18.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	26.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	28.	1
2,4-Dimethylphenol	ND		ug/kg	180	58.	1
2-Nitrophenol	ND		ug/kg	380	66.	1
4-Nitrophenol	ND		ug/kg	250	72.	1
2,4-Dinitrophenol	ND		ug/kg	850	82.	1
4,6-Dinitro-o-cresol	ND		ug/kg	460	85.	1
Pentachlorophenol	ND		ug/kg	140	39.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	27.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	250	28.	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-03
Client ID: SB-3 (13'-15')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:25
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	34.	1
Benzoic Acid	ND		ug/kg	570	180	1
Benzyl Alcohol	ND		ug/kg	180	54.	1
Carbazole	ND		ug/kg	180	17.	1
1,4-Dioxane	ND		ug/kg	26	8.1	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	83		25-120
Phenol-d6	86		10-120
Nitrobenzene-d5	40		23-120
2-Fluorobiphenyl	93		30-120
2,4,6-Tribromophenol	54		10-136
4-Terphenyl-d14	92		18-120

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-04 D
 Client ID: SB-11 (0'-2')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:30
 Date Received: 10/15/20
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 10/20/20 08:48
 Analyst: JG
 Percent Solids: 93%

Extraction Method: EPA 3546
 Extraction Date: 10/18/20 03:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	710	92.	5
1,2,4-Trichlorobenzene	ND		ug/kg	890	100	5
Hexachlorobenzene	ND		ug/kg	530	100	5
Bis(2-chloroethyl)ether	ND		ug/kg	800	120	5
2-Chloronaphthalene	ND		ug/kg	890	88.	5
1,2-Dichlorobenzene	ND		ug/kg	890	160	5
1,3-Dichlorobenzene	ND		ug/kg	890	150	5
1,4-Dichlorobenzene	ND		ug/kg	890	160	5
3,3'-Dichlorobenzidine	ND		ug/kg	890	240	5
2,4-Dinitrotoluene	ND		ug/kg	890	180	5
2,6-Dinitrotoluene	ND		ug/kg	890	150	5
Fluoranthene	780		ug/kg	530	100	5
4-Chlorophenyl phenyl ether	ND		ug/kg	890	95.	5
4-Bromophenyl phenyl ether	ND		ug/kg	890	140	5
Bis(2-chloroisopropyl)ether	ND		ug/kg	1100	150	5
Bis(2-chloroethoxy)methane	ND		ug/kg	960	89.	5
Hexachlorobutadiene	ND		ug/kg	890	130	5
Hexachlorocyclopentadiene	ND		ug/kg	2500	800	5
Hexachloroethane	ND		ug/kg	710	140	5
Isophorone	ND		ug/kg	800	120	5
Naphthalene	ND		ug/kg	890	110	5
Nitrobenzene	ND		ug/kg	800	130	5
NDPA/DPA	ND		ug/kg	710	100	5
n-Nitrosodi-n-propylamine	ND		ug/kg	890	140	5
Bis(2-ethylhexyl)phthalate	ND		ug/kg	890	310	5
Butyl benzyl phthalate	ND		ug/kg	890	220	5
Di-n-butylphthalate	ND		ug/kg	890	170	5
Di-n-octylphthalate	ND		ug/kg	890	300	5

Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044265**Project Number:** 26979.01**Report Date:** 10/22/20**SAMPLE RESULTS**

Lab ID: L2044265-04 D
 Client ID: SB-11 (0'-2')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:30
 Date Received: 10/15/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	890	82.	5
Dimethyl phthalate	ND		ug/kg	890	190	5
Benzo(a)anthracene	420	J	ug/kg	530	100	5
Benzo(a)pyrene	470	J	ug/kg	710	220	5
Benzo(b)fluoranthene	500	J	ug/kg	530	150	5
Benzo(k)fluoranthene	190	J	ug/kg	530	140	5
Chrysene	410	J	ug/kg	530	92.	5
Acenaphthylene	ND		ug/kg	710	140	5
Anthracene	ND		ug/kg	530	170	5
Benzo(ghi)perylene	330	J	ug/kg	710	100	5
Fluorene	ND		ug/kg	890	86.	5
Phenanthrene	400	J	ug/kg	530	110	5
Dibenzo(a,h)anthracene	ND		ug/kg	530	100	5
Indeno(1,2,3-cd)pyrene	270	J	ug/kg	710	120	5
Pyrene	710		ug/kg	530	88.	5
Biphenyl	ND		ug/kg	2000	210	5
4-Chloroaniline	ND		ug/kg	890	160	5
2-Nitroaniline	ND		ug/kg	890	170	5
3-Nitroaniline	ND		ug/kg	890	170	5
4-Nitroaniline	ND		ug/kg	890	370	5
Dibenzofuran	ND		ug/kg	890	84.	5
2-Methylnaphthalene	ND		ug/kg	1100	110	5
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	890	93.	5
Acetophenone	ND		ug/kg	890	110	5
2,4,6-Trichlorophenol	ND		ug/kg	530	170	5
p-Chloro-m-cresol	ND		ug/kg	890	130	5
2-Chlorophenol	ND		ug/kg	890	100	5
2,4-Dichlorophenol	ND		ug/kg	800	140	5
2,4-Dimethylphenol	ND		ug/kg	890	290	5
2-Nitrophenol	ND		ug/kg	1900	330	5
4-Nitrophenol	ND		ug/kg	1200	360	5
2,4-Dinitrophenol	ND		ug/kg	4300	410	5
4,6-Dinitro-o-cresol	ND		ug/kg	2300	430	5
Pentachlorophenol	ND		ug/kg	710	200	5
Phenol	ND		ug/kg	890	130	5
2-Methylphenol	ND		ug/kg	890	140	5
3-Methylphenol/4-Methylphenol	ND		ug/kg	1300	140	5

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-04 D
 Client ID: SB-11 (0'-2')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:30
 Date Received: 10/15/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	890	170	5
Benzoic Acid	ND		ug/kg	2900	900	5
Benzyl Alcohol	ND		ug/kg	890	270	5
Carbazole	ND		ug/kg	890	86.	5
1,4-Dioxane	ND		ug/kg	130	41.	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	44		25-120
Phenol-d6	54		10-120
Nitrobenzene-d5	45		23-120
2-Fluorobiphenyl	56		30-120
2,4,6-Tribromophenol	37		10-136
4-Terphenyl-d14	50		18-120

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-05
Client ID: SB-11 (2'-5')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:35
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 10/19/20 12:53
Analyst: IM
Percent Solids: 90%

Extraction Method: EPA 3546
Extraction Date: 10/18/20 03:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	47	J	ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	160	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	160	24.	1
Naphthalene	ND		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	63.	1
Butyl benzyl phthalate	ND		ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	62.	1

Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044265**Project Number:** 26979.01**Report Date:** 10/22/20**SAMPLE RESULTS**

Lab ID: L2044265-05
 Client ID: SB-11 (2'-5')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:35
 Date Received: 10/15/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	30	J	ug/kg	110	20.	1
Benzo(a)pyrene	ND		ug/kg	150	44.	1
Benzo(b)fluoranthene	31	J	ug/kg	110	31.	1
Benzo(k)fluoranthene	ND		ug/kg	110	29.	1
Chrysene	27	J	ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	150	28.	1
Anthracene	ND		ug/kg	110	36.	1
Benzo(ghi)perylene	ND		ug/kg	150	21.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	36	J	ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	25.	1
Pyrene	51	J	ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	76.	1
Dibenzofuran	ND		ug/kg	180	17.	1
2-Methylnaphthalene	ND		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	60.	1
2-Nitrophenol	ND		ug/kg	390	69.	1
4-Nitrophenol	ND		ug/kg	260	74.	1
2,4-Dinitrophenol	ND		ug/kg	880	85.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	88.	1
Pentachlorophenol	ND		ug/kg	150	40.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	29.	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-05
Client ID: SB-11 (2'-5')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:35
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	590	180	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	ND		ug/kg	180	18.	1
1,4-Dioxane	ND		ug/kg	27	8.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	87		25-120
Phenol-d6	88		10-120
Nitrobenzene-d5	61		23-120
2-Fluorobiphenyl	88		30-120
2,4,6-Tribromophenol	83		10-136
4-Terphenyl-d14	77		18-120

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-06
Client ID: SB-11 (13'-15')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:45
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 10/19/20 10:28
Analyst: IM
Percent Solids: 95%

Extraction Method: EPA 3546
Extraction Date: 10/18/20 03:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	170	20.	1
Hexachlorobenzene	ND		ug/kg	100	19.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	23.	1
2-Chloronaphthalene	ND		ug/kg	170	17.	1
1,2-Dichlorobenzene	ND		ug/kg	170	31.	1
1,3-Dichlorobenzene	ND		ug/kg	170	30.	1
1,4-Dichlorobenzene	ND		ug/kg	170	30.	1
3,3'-Dichlorobenzidine	ND		ug/kg	170	46.	1
2,4-Dinitrotoluene	ND		ug/kg	170	34.	1
2,6-Dinitrotoluene	ND		ug/kg	170	30.	1
Fluoranthene	ND		ug/kg	100	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	18.	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	26.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	29.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	17.	1
Hexachlorobutadiene	ND		ug/kg	170	25.	1
Hexachlorocyclopentadiene	ND		ug/kg	490	160	1
Hexachloroethane	ND		ug/kg	140	28.	1
Isophorone	ND		ug/kg	160	22.	1
Naphthalene	ND		ug/kg	170	21.	1
Nitrobenzene	ND		ug/kg	160	26.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	170	27.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	170	60.	1
Butyl benzyl phthalate	ND		ug/kg	170	43.	1
Di-n-butylphthalate	ND		ug/kg	170	33.	1
Di-n-octylphthalate	ND		ug/kg	170	59.	1

Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044265**Project Number:** 26979.01**Report Date:** 10/22/20**SAMPLE RESULTS**

Lab ID: L2044265-06
 Client ID: SB-11 (13'-15')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:45
 Date Received: 10/15/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	170	16.	1
Dimethyl phthalate	ND		ug/kg	170	36.	1
Benzo(a)anthracene	ND		ug/kg	100	19.	1
Benzo(a)pyrene	ND		ug/kg	140	42.	1
Benzo(b)fluoranthene	ND		ug/kg	100	29.	1
Benzo(k)fluoranthene	ND		ug/kg	100	28.	1
Chrysene	ND		ug/kg	100	18.	1
Acenaphthylene	ND		ug/kg	140	27.	1
Anthracene	ND		ug/kg	100	34.	1
Benzo(ghi)perylene	ND		ug/kg	140	20.	1
Fluorene	ND		ug/kg	170	17.	1
Phenanthrene	ND		ug/kg	100	21.	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	24.	1
Pyrene	ND		ug/kg	100	17.	1
Biphenyl	ND		ug/kg	390	40.	1
4-Chloroaniline	ND		ug/kg	170	31.	1
2-Nitroaniline	ND		ug/kg	170	33.	1
3-Nitroaniline	ND		ug/kg	170	32.	1
4-Nitroaniline	ND		ug/kg	170	71.	1
Dibenzofuran	ND		ug/kg	170	16.	1
2-Methylnaphthalene	ND		ug/kg	210	21.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	18.	1
Acetophenone	ND		ug/kg	170	21.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	33.	1
p-Chloro-m-cresol	ND		ug/kg	170	26.	1
2-Chlorophenol	ND		ug/kg	170	20.	1
2,4-Dichlorophenol	ND		ug/kg	160	28.	1
2,4-Dimethylphenol	ND		ug/kg	170	57.	1
2-Nitrophenol	ND		ug/kg	370	65.	1
4-Nitrophenol	ND		ug/kg	240	70.	1
2,4-Dinitrophenol	ND		ug/kg	830	80.	1
4,6-Dinitro-o-cresol	ND		ug/kg	450	83.	1
Pentachlorophenol	ND		ug/kg	140	38.	1
Phenol	ND		ug/kg	170	26.	1
2-Methylphenol	ND		ug/kg	170	27.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	250	27.	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-06
 Client ID: SB-11 (13'-15')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:45
 Date Received: 10/15/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	170	33.	1
Benzoic Acid	ND		ug/kg	560	170	1
Benzyl Alcohol	ND		ug/kg	170	53.	1
Carbazole	ND		ug/kg	170	17.	1
1,4-Dioxane	ND		ug/kg	26	7.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	80		25-120
Phenol-d6	82		10-120
Nitrobenzene-d5	83		23-120
2-Fluorobiphenyl	97		30-120
2,4,6-Tribromophenol	110		10-136
4-Terphenyl-d14	101		18-120

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-07 D
 Client ID: SB-10 (0'-2')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:55
 Date Received: 10/15/20
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 10/21/20 16:38
 Analyst: IM
 Percent Solids: 93%

Extraction Method: EPA 3546
 Extraction Date: 10/18/20 03:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	260	J	ug/kg	280	36.	2
1,2,4-Trichlorobenzene	ND		ug/kg	350	40.	2
Hexachlorobenzene	ND		ug/kg	210	39.	2
Bis(2-chloroethyl)ether	ND		ug/kg	320	47.	2
2-Chloronaphthalene	ND		ug/kg	350	35.	2
1,2-Dichlorobenzene	ND		ug/kg	350	63.	2
1,3-Dichlorobenzene	ND		ug/kg	350	60.	2
1,4-Dichlorobenzene	ND		ug/kg	350	61.	2
3,3'-Dichlorobenzidine	ND		ug/kg	350	93.	2
2,4-Dinitrotoluene	ND		ug/kg	350	70.	2
2,6-Dinitrotoluene	ND		ug/kg	350	60.	2
Fluoranthene	6600		ug/kg	210	40.	2
4-Chlorophenyl phenyl ether	ND		ug/kg	350	37.	2
4-Bromophenyl phenyl ether	ND		ug/kg	350	53.	2
Bis(2-chloroisopropyl)ether	ND		ug/kg	420	60.	2
Bis(2-chloroethoxy)methane	ND		ug/kg	380	35.	2
Hexachlorobutadiene	ND		ug/kg	350	51.	2
Hexachlorocyclopentadiene	ND		ug/kg	1000	320	2
Hexachloroethane	ND		ug/kg	280	57.	2
Isophorone	ND		ug/kg	320	45.	2
Naphthalene	54	J	ug/kg	350	43.	2
Nitrobenzene	ND		ug/kg	320	52.	2
NDPA/DPA	ND		ug/kg	280	40.	2
n-Nitrosodi-n-propylamine	ND		ug/kg	350	54.	2
Bis(2-ethylhexyl)phthalate	ND		ug/kg	350	120	2
Butyl benzyl phthalate	ND		ug/kg	350	88.	2
Di-n-butylphthalate	ND		ug/kg	350	66.	2
Di-n-octylphthalate	ND		ug/kg	350	120	2

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-07 D
 Client ID: SB-10 (0'-2')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:55
 Date Received: 10/15/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	350	32.	2
Dimethyl phthalate	ND		ug/kg	350	74.	2
Benzo(a)anthracene	2600		ug/kg	210	39.	2
Benzo(a)pyrene	2300		ug/kg	280	85.	2
Benzo(b)fluoranthene	2700		ug/kg	210	59.	2
Benzo(k)fluoranthene	1100		ug/kg	210	56.	2
Chrysene	2400		ug/kg	210	36.	2
Acenaphthylene	370		ug/kg	280	54.	2
Anthracene	1100		ug/kg	210	68.	2
Benzo(ghi)perylene	1000		ug/kg	280	41.	2
Fluorene	570		ug/kg	350	34.	2
Phenanthrene	5200		ug/kg	210	42.	2
Dibenzo(a,h)anthracene	300		ug/kg	210	40.	2
Indeno(1,2,3-cd)pyrene	1200		ug/kg	280	49.	2
Pyrene	5000		ug/kg	210	35.	2
Biphenyl	ND		ug/kg	800	81.	2
4-Chloroaniline	ND		ug/kg	350	64.	2
2-Nitroaniline	ND		ug/kg	350	68.	2
3-Nitroaniline	ND		ug/kg	350	66.	2
4-Nitroaniline	ND		ug/kg	350	140	2
Dibenzofuran	270	J	ug/kg	350	33.	2
2-Methylnaphthalene	66	J	ug/kg	420	42.	2
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	350	36.	2
Acetophenone	ND		ug/kg	350	43.	2
2,4,6-Trichlorophenol	ND		ug/kg	210	66.	2
p-Chloro-m-cresol	ND		ug/kg	350	52.	2
2-Chlorophenol	ND		ug/kg	350	41.	2
2,4-Dichlorophenol	ND		ug/kg	320	56.	2
2,4-Dimethylphenol	ND		ug/kg	350	120	2
2-Nitrophenol	ND		ug/kg	760	130	2
4-Nitrophenol	ND		ug/kg	490	140	2
2,4-Dinitrophenol	ND		ug/kg	1700	160	2
4,6-Dinitro-o-cresol	ND		ug/kg	910	170	2
Pentachlorophenol	ND		ug/kg	280	77.	2
Phenol	ND		ug/kg	350	53.	2
2-Methylphenol	ND		ug/kg	350	54.	2
3-Methylphenol/4-Methylphenol	ND		ug/kg	500	55.	2

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-07 D
 Client ID: SB-10 (0'-2')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:55
 Date Received: 10/15/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	350	67.	2
Benzoic Acid	ND		ug/kg	1100	350	2
Benzyl Alcohol	ND		ug/kg	350	110	2
Carbazole	380		ug/kg	350	34.	2
1,4-Dioxane	ND		ug/kg	52	16.	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	73		25-120
Phenol-d6	72		10-120
Nitrobenzene-d5	63		23-120
2-Fluorobiphenyl	58		30-120
2,4,6-Tribromophenol	89		10-136
4-Terphenyl-d14	47		18-120

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-08
Client ID: SB-10 (4'-6')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 10:00
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 10/19/20 16:29
Analyst: IM
Percent Solids: 87%

Extraction Method: EPA 3546
Extraction Date: 10/18/20 03:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	25	J	ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	21.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	190	18.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	32.	1
1,4-Dichlorobenzene	ND		ug/kg	190	33.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	37.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	770		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	ND		ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	240		ug/kg	190	65.	1
Butyl benzyl phthalate	ND		ug/kg	190	47.	1
Di-n-butylphthalate	56	J	ug/kg	190	35.	1
Di-n-octylphthalate	ND		ug/kg	190	64.	1

Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044265**Project Number:** 26979.01**Report Date:** 10/22/20**SAMPLE RESULTS**

Lab ID: L2044265-08

Date Collected: 10/15/20 10:00

Client ID: SB-10 (4'-6')

Date Received: 10/15/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	17.	1
Dimethyl phthalate	ND		ug/kg	190	39.	1
Benzo(a)anthracene	380		ug/kg	110	21.	1
Benzo(a)pyrene	440		ug/kg	150	46.	1
Benzo(b)fluoranthene	520		ug/kg	110	31.	1
Benzo(k)fluoranthene	200		ug/kg	110	30.	1
Chrysene	360		ug/kg	110	19.	1
Acenaphthylene	47	J	ug/kg	150	29.	1
Anthracene	100	J	ug/kg	110	36.	1
Benzo(ghi)perylene	260		ug/kg	150	22.	1
Fluorene	28	J	ug/kg	190	18.	1
Phenanthrene	320		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	61	J	ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	280		ug/kg	150	26.	1
Pyrene	660		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	430	43.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	35.	1
4-Nitroaniline	ND		ug/kg	190	77.	1
Dibenzofuran	ND		ug/kg	190	18.	1
2-Methylnaphthalene	ND		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	62.	1
2-Nitrophenol	ND		ug/kg	400	70.	1
4-Nitrophenol	ND		ug/kg	260	76.	1
2,4-Dinitrophenol	ND		ug/kg	900	87.	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	90.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	190	28.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	29.	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-08
Client ID: SB-10 (4'-6')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 10:00
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	36.	1
Benzoic Acid	ND		ug/kg	600	190	1
Benzyl Alcohol	ND		ug/kg	190	57.	1
Carbazole	42	J	ug/kg	190	18.	1
1,4-Dioxane	ND		ug/kg	28	8.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	87		25-120
Phenol-d6	88		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	81		30-120
2,4,6-Tribromophenol	115		10-136
4-Terphenyl-d14	68		18-120

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-09
Client ID: SB-10 (13'-15')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 10:05
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 10/19/20 10:04
Analyst: IM
Percent Solids: 95%

Extraction Method: EPA 3546
Extraction Date: 10/18/20 03:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	170	20.	1
Hexachlorobenzene	ND		ug/kg	100	19.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	23.	1
2-Chloronaphthalene	ND		ug/kg	170	17.	1
1,2-Dichlorobenzene	ND		ug/kg	170	31.	1
1,3-Dichlorobenzene	ND		ug/kg	170	30.	1
1,4-Dichlorobenzene	ND		ug/kg	170	30.	1
3,3'-Dichlorobenzidine	ND		ug/kg	170	46.	1
2,4-Dinitrotoluene	ND		ug/kg	170	35.	1
2,6-Dinitrotoluene	ND		ug/kg	170	30.	1
Fluoranthene	ND		ug/kg	100	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	18.	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	26.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	30.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	17.	1
Hexachlorobutadiene	ND		ug/kg	170	25.	1
Hexachlorocyclopentadiene	ND		ug/kg	490	160	1
Hexachloroethane	ND		ug/kg	140	28.	1
Isophorone	ND		ug/kg	160	22.	1
Naphthalene	ND		ug/kg	170	21.	1
Nitrobenzene	ND		ug/kg	160	26.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	170	27.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	170	60.	1
Butyl benzyl phthalate	ND		ug/kg	170	44.	1
Di-n-butylphthalate	ND		ug/kg	170	33.	1
Di-n-octylphthalate	ND		ug/kg	170	59.	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-09
Client ID: SB-10 (13'-15')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 10:05
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	170	16.	1
Dimethyl phthalate	ND		ug/kg	170	36.	1
Benzo(a)anthracene	ND		ug/kg	100	19.	1
Benzo(a)pyrene	ND		ug/kg	140	42.	1
Benzo(b)fluoranthene	ND		ug/kg	100	29.	1
Benzo(k)fluoranthene	ND		ug/kg	100	28.	1
Chrysene	ND		ug/kg	100	18.	1
Acenaphthylene	ND		ug/kg	140	27.	1
Anthracene	ND		ug/kg	100	34.	1
Benzo(ghi)perylene	ND		ug/kg	140	20.	1
Fluorene	ND		ug/kg	170	17.	1
Phenanthrene	ND		ug/kg	100	21.	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	24.	1
Pyrene	ND		ug/kg	100	17.	1
Biphenyl	ND		ug/kg	390	40.	1
4-Chloroaniline	ND		ug/kg	170	31.	1
2-Nitroaniline	ND		ug/kg	170	33.	1
3-Nitroaniline	ND		ug/kg	170	33.	1
4-Nitroaniline	ND		ug/kg	170	72.	1
Dibenzofuran	ND		ug/kg	170	16.	1
2-Methylnaphthalene	ND		ug/kg	210	21.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	18.	1
Acetophenone	ND		ug/kg	170	21.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	33.	1
p-Chloro-m-cresol	ND		ug/kg	170	26.	1
2-Chlorophenol	ND		ug/kg	170	20.	1
2,4-Dichlorophenol	ND		ug/kg	160	28.	1
2,4-Dimethylphenol	ND		ug/kg	170	57.	1
2-Nitrophenol	ND		ug/kg	370	65.	1
4-Nitrophenol	ND		ug/kg	240	71.	1
2,4-Dinitrophenol	ND		ug/kg	830	81.	1
4,6-Dinitro-o-cresol	ND		ug/kg	450	83.	1
Pentachlorophenol	ND		ug/kg	140	38.	1
Phenol	ND		ug/kg	170	26.	1
2-Methylphenol	ND		ug/kg	170	27.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	250	27.	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-09
Client ID: SB-10 (13'-15')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 10:05
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	170	33.	1
Benzoic Acid	ND		ug/kg	560	180	1
Benzyl Alcohol	ND		ug/kg	170	53.	1
Carbazole	ND		ug/kg	170	17.	1
1,4-Dioxane	ND		ug/kg	26	8.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	90		25-120
Phenol-d6	93		10-120
Nitrobenzene-d5	89		23-120
2-Fluorobiphenyl	99		30-120
2,4,6-Tribromophenol	119		10-136
4-Terphenyl-d14	98		18-120

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-10
Client ID: SB-2 (5'-7')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 10:35
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 10/19/20 13:41
Analyst: IM
Percent Solids: 91%

Extraction Method: EPA 3546
Extraction Date: 10/18/20 03:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	88	J	ug/kg	140	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	2500		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	24.	1
Naphthalene	ND		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	140	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	63.	1
Butyl benzyl phthalate	ND		ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	62.	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-10
 Client ID: SB-2 (5'-7')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 10:35
 Date Received: 10/15/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	1100		ug/kg	110	20.	1
Benzo(a)pyrene	1100		ug/kg	140	44.	1
Benzo(b)fluoranthene	1300		ug/kg	110	31.	1
Benzo(k)fluoranthene	500		ug/kg	110	29.	1
Chrysene	970		ug/kg	110	19.	1
Acenaphthylene	79	J	ug/kg	140	28.	1
Anthracene	370		ug/kg	110	36.	1
Benzo(ghi)perylene	610		ug/kg	140	21.	1
Fluorene	93	J	ug/kg	180	18.	1
Phenanthrene	1500		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	150		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	700		ug/kg	140	25.	1
Pyrene	1900		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	75.	1
Dibenzofuran	50	J	ug/kg	180	17.	1
2-Methylnaphthalene	ND		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	60.	1
2-Nitrophenol	ND		ug/kg	390	68.	1
4-Nitrophenol	ND		ug/kg	260	74.	1
2,4-Dinitrophenol	ND		ug/kg	870	85.	1
4,6-Dinitro-o-cresol	ND		ug/kg	470	87.	1
Pentachlorophenol	ND		ug/kg	140	40.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-10
Client ID: SB-2 (5'-7')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 10:35
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	590	180	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	190		ug/kg	180	18.	1
1,4-Dioxane	ND		ug/kg	27	8.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	76		25-120
Phenol-d6	80		10-120
Nitrobenzene-d5	56		23-120
2-Fluorobiphenyl	73		30-120
2,4,6-Tribromophenol	87		10-136
4-Terphenyl-d14	61		18-120

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-11
Client ID: SB-6 (2'-4')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 10:46
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 10/19/20 14:53
Analyst: IM
Percent Solids: 92%

Extraction Method: EPA 3546
Extraction Date: 10/18/20 03:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	120	J	ug/kg	140	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	20.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	32.	1
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1
1,4-Dichlorobenzene	ND		ug/kg	180	31.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	47.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	2800		ug/kg	110	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	27.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	30.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	510	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	58	J	ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	26.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	180		ug/kg	180	62.	1
Butyl benzyl phthalate	ND		ug/kg	180	45.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	61.	1

Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044265**Project Number:** 26979.01**Report Date:** 10/22/20**SAMPLE RESULTS**

Lab ID: L2044265-11
 Client ID: SB-6 (2'-4')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 10:46
 Date Received: 10/15/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	16.	1
Dimethyl phthalate	ND		ug/kg	180	37.	1
Benzo(a)anthracene	1200		ug/kg	110	20.	1
Benzo(a)pyrene	1300		ug/kg	140	44.	1
Benzo(b)fluoranthene	1600		ug/kg	110	30.	1
Benzo(k)fluoranthene	560		ug/kg	110	28.	1
Chrysene	1300		ug/kg	110	18.	1
Acenaphthylene	130	J	ug/kg	140	28.	1
Anthracene	400		ug/kg	110	35.	1
Benzo(ghi)perylene	720		ug/kg	140	21.	1
Fluorene	130	J	ug/kg	180	17.	1
Phenanthrene	1900		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	200		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	820		ug/kg	140	25.	1
Pyrene	2300		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	410	41.	1
4-Chloroaniline	ND		ug/kg	180	32.	1
2-Nitroaniline	ND		ug/kg	180	34.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	74.	1
Dibenzofuran	87	J	ug/kg	180	17.	1
2-Methylnaphthalene	39	J	ug/kg	210	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	26.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	59.	1
2-Nitrophenol	ND		ug/kg	380	67.	1
4-Nitrophenol	ND		ug/kg	250	73.	1
2,4-Dinitrophenol	ND		ug/kg	860	83.	1
4,6-Dinitro-o-cresol	ND		ug/kg	460	86.	1
Pentachlorophenol	ND		ug/kg	140	39.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-11
Client ID: SB-6 (2'-4')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 10:46
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	34.	1
Benzoic Acid	ND		ug/kg	580	180	1
Benzyl Alcohol	ND		ug/kg	180	54.	1
Carbazole	260		ug/kg	180	17.	1
1,4-Dioxane	ND		ug/kg	27	8.2	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	73		25-120
Phenol-d6	77		10-120
Nitrobenzene-d5	59		23-120
2-Fluorobiphenyl	76		30-120
2,4,6-Tribromophenol	88		10-136
4-Terphenyl-d14	70		18-120

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-12
Client ID: GW-3
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 08:40
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 10/19/20 20:39
Analyst: EK

Extraction Method: EPA 3510C
Extraction Date: 10/18/20 16:22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-12
Client ID: GW-3
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 08:40
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	48		21-120
Phenol-d6	44		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	67		15-120
2,4,6-Tribromophenol	32		10-120
4-Terphenyl-d14	64		41-149

Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044265**Project Number:** 26979.01**Report Date:** 10/22/20**SAMPLE RESULTS**

Lab ID: L2044265-12
 Client ID: GW-3
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 08:40
 Date Received: 10/15/20
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 10/20/20 17:01
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 10/18/20 16:23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.03	J	ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-12
 Client ID: GW-3
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 08:40
 Date Received: 10/15/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	41		21-120
Phenol-d6	41		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	32		10-120
4-Terphenyl-d14	73		41-149

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 10/19/20 06:44
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 10/17/20 19:07

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatle Organics by GC/MS - Westborough Lab for sample(s): 12 Batch: WG1423362-1					
Acenaphthene	ND		ug/l	2.0	0.44
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50
Hexachlorobenzene	ND		ug/l	2.0	0.46
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chloronaphthalene	ND		ug/l	2.0	0.44
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Fluoranthene	ND		ug/l	2.0	0.26
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Hexachloroethane	ND		ug/l	2.0	0.58
Isophorone	ND		ug/l	5.0	1.2
Naphthalene	ND		ug/l	2.0	0.46
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 10/19/20 06:44
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 10/17/20 19:07

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 12 Batch: WG1423362-1					
Dimethyl phthalate	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Chrysene	ND		ug/l	2.0	0.34
Acenaphthylene	ND		ug/l	2.0	0.46
Anthracene	ND		ug/l	2.0	0.33
Benzo(ghi)perylene	ND		ug/l	2.0	0.30
Fluorene	ND		ug/l	2.0	0.41
Phenanthrene	ND		ug/l	2.0	0.33
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Pyrene	ND		ug/l	2.0	0.28
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
2-Methylnaphthalene	ND		ug/l	2.0	0.45
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 10/19/20 06:44
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 10/17/20 19:07

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 12 Batch: WG1423362-1					
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Pentachlorophenol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Benzoic Acid	ND		ug/l	50	2.6
Benzyl Alcohol	ND		ug/l	2.0	0.59
Carbazole	ND		ug/l	2.0	0.49

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	43		21-120
Phenol-d6	36		10-120
Nitrobenzene-d5	83		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	31		10-120
4-Terphenyl-d14	72		41-149

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 10/20/20 13:54
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 10/17/20 19:07

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 12 Batch: WG1423363-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 10/20/20 13:54
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 10/17/20 19:07

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 12 Batch: WG1423363-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	28		21-120
Phenol-d6	33		10-120
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	26		10-120
4-Terphenyl-d14	105		41-149

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 10/19/20 08:52
Analyst: IM

Extraction Method: EPA 3546
Extraction Date: 10/18/20 02:53

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatle Organics by GC/MS - Westborough Lab for sample(s): 01-11 Batch: WG1423383-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	19.
Hexachlorobenzene	ND		ug/kg	99	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	30.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	29.
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	99	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	18.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	27.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	26.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	57.
Butyl benzyl phthalate	ND		ug/kg	160	42.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 10/19/20 08:52
Analyst: IM

Extraction Method: EPA 3546
Extraction Date: 10/18/20 02:53

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-11 Batch: WG1423383-1					
Dimethyl phthalate	ND		ug/kg	160	35.
Benzo(a)anthracene	ND		ug/kg	99	19.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	99	28.
Benzo(k)fluoranthene	ND		ug/kg	99	26.
Chrysene	ND		ug/kg	99	17.
Acenaphthylene	ND		ug/kg	130	26.
Anthracene	ND		ug/kg	99	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	99	20.
Dibenzo(a,h)anthracene	ND		ug/kg	99	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	99	16.
Biphenyl	ND		ug/kg	380	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	68.
Dibenzofuran	ND		ug/kg	160	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	99	31.
p-Chloro-m-cresol	ND		ug/kg	160	25.
2-Chlorophenol	ND		ug/kg	160	20.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	360	62.

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 10/19/20 08:52
Analyst: IM

Extraction Method: EPA 3546
Extraction Date: 10/18/20 02:53

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-11 Batch: WG1423383-1					
4-Nitrophenol	ND		ug/kg	230	67.
2,4-Dinitrophenol	ND		ug/kg	790	77.
4,6-Dinitro-o-cresol	ND		ug/kg	430	79.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	26.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	32.
Benzoic Acid	ND		ug/kg	540	170
Benzyl Alcohol	ND		ug/kg	160	50.
Carbazole	ND		ug/kg	160	16.
1,4-Dioxane	ND		ug/kg	25	7.6

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	72		25-120
Phenol-d6	75		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	86		30-120
2,4,6-Tribromophenol	99		10-136
4-Terphenyl-d14	99		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044265

Project Number: 26979.01

Report Date: 10/22/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 12 Batch: WG1423362-2 WG1423362-3								
Acenaphthene	61		63		37-111	3		30
1,2,4-Trichlorobenzene	49		55		39-98	12		30
Hexachlorobenzene	56		55		40-140	2		30
Bis(2-chloroethyl)ether	55		63		40-140	14		30
2-Chloronaphthalene	56		59		40-140	5		30
1,2-Dichlorobenzene	51		57		40-140	11		30
1,3-Dichlorobenzene	49		57		40-140	15		30
1,4-Dichlorobenzene	50		58		36-97	15		30
3,3'-Dichlorobenzidine	66		60		40-140	10		30
2,4-Dinitrotoluene	68		67		48-143	1		30
2,6-Dinitrotoluene	63		64		40-140	2		30
Fluoranthene	71		65		40-140	9		30
4-Chlorophenyl phenyl ether	56		58		40-140	4		30
4-Bromophenyl phenyl ether	60		58		40-140	3		30
Bis(2-chloroisopropyl)ether	60		66		40-140	10		30
Bis(2-chloroethoxy)methane	56		62		40-140	10		30
Hexachlorobutadiene	50		55		40-140	10		30
Hexachlorocyclopentadiene	49		50		40-140	2		30
Hexachloroethane	48		57		40-140	17		30
Isophorone	59		61		40-140	3		30
Naphthalene	56		62		40-140	10		30
Nitrobenzene	62		71		40-140	14		30
NDPA/DPA	61		60		40-140	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044265

Project Number: 26979.01

Report Date: 10/22/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 12 Batch: WG1423362-2 WG1423362-3								
n-Nitrosodi-n-propylamine	60		65		29-132	8		30
Bis(2-ethylhexyl)phthalate	84		68		40-140	21		30
Butyl benzyl phthalate	77		68		40-140	12		30
Di-n-butylphthalate	70		62		40-140	12		30
Di-n-octylphthalate	83		71		40-140	16		30
Diethyl phthalate	62		59		40-140	5		30
Dimethyl phthalate	60		59		40-140	2		30
Benzo(a)anthracene	83		72		40-140	14		30
Benzo(a)pyrene	87		76		40-140	13		30
Benzo(b)fluoranthene	92		79		40-140	15		30
Benzo(k)fluoranthene	81		72		40-140	12		30
Chrysene	76		68		40-140	11		30
Acenaphthylene	61		64		45-123	5		30
Anthracene	73		70		40-140	4		30
Benzo(ghi)perylene	91		81		40-140	12		30
Fluorene	62		62		40-140	0		30
Phenanthrene	72		68		40-140	6		30
Dibenzo(a,h)anthracene	87		78		40-140	11		30
Indeno(1,2,3-cd)pyrene	91		80		40-140	13		30
Pyrene	68		63		26-127	8		30
Biphenyl	59		61		40-140	3		30
4-Chloroaniline	48		50		40-140	4		30
2-Nitroaniline	73		69		52-143	6		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044265

Project Number: 26979.01

Report Date: 10/22/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 12 Batch: WG1423362-2 WG1423362-3								
3-Nitroaniline	55		55		25-145	0		30
4-Nitroaniline	62		60		51-143	3		30
Dibenzofuran	60		61		40-140	2		30
2-Methylnaphthalene	58		61		40-140	5		30
1,2,4,5-Tetrachlorobenzene	56		58		2-134	4		30
Acetophenone	53		59		39-129	11		30
2,4,6-Trichlorophenol	66		66		30-130	0		30
p-Chloro-m-cresol	67		68		23-97	1		30
2-Chlorophenol	58		64		27-123	10		30
2,4-Dichlorophenol	62		65		30-130	5		30
2,4-Dimethylphenol	35		36		30-130	3		30
2-Nitrophenol	79		86		30-130	8		30
4-Nitrophenol	56		53		10-80	6		30
2,4-Dinitrophenol	92		85		20-130	8		30
4,6-Dinitro-o-cresol	84		79		20-164	6		30
Pentachlorophenol	61		57		9-103	7		30
Phenol	42		46		12-110	9		30
2-Methylphenol	51		56		30-130	9		30
3-Methylphenol/4-Methylphenol	58		62		30-130	7		30
2,4,5-Trichlorophenol	64		64		30-130	0		30
Benzoic Acid	70		66		10-164	6		30
Benzyl Alcohol	58		60		26-116	3		30
Carbazole	75		70		55-144	7		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044265

Project Number: 26979.01

Report Date: 10/22/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 12 Batch: WG1423362-2 WG1423362-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	51		58		21-120
Phenol-d6	43		46		10-120
Nitrobenzene-d5	71		80		23-120
2-Fluorobiphenyl	65		67		15-120
2,4,6-Tribromophenol	72		67		10-120
4-Terphenyl-d14	74		66		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044265

Project Number: 26979.01

Report Date: 10/22/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 12 Batch: WG1423363-2 WG1423363-3								
Acenaphthene	58		53		40-140	9		40
2-Chloronaphthalene	59		54		40-140	9		40
Fluoranthene	73		67		40-140	9		40
Hexachlorobutadiene	47		41		40-140	14		40
Naphthalene	55		49		40-140	12		40
Benzo(a)anthracene	74		63		40-140	16		40
Benzo(a)pyrene	79		69		40-140	14		40
Benzo(b)fluoranthene	76		66		40-140	14		40
Benzo(k)fluoranthene	79		69		40-140	14		40
Chrysene	75		65		40-140	14		40
Acenaphthylene	64		56		40-140	13		40
Anthracene	70		65		40-140	7		40
Benzo(ghi)perylene	76		66		40-140	14		40
Fluorene	64		56		40-140	13		40
Phenanthrene	65		56		40-140	15		40
Dibenzo(a,h)anthracene	82		71		40-140	14		40
Indeno(1,2,3-cd)pyrene	78		68		40-140	14		40
Pyrene	72		63		40-140	13		40
2-Methylnaphthalene	59		54		40-140	9		40
Pentachlorophenol	117		95		40-140	21		40
Hexachlorobenzene	50		47		40-140	6		40
Hexachloroethane	46		44		40-140	4		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044265

Project Number: 26979.01

Report Date: 10/22/20

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
-----------	-------------------------	-------------	--------------------------	-------------	----------------------------	------------	-------------	----------------------

Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 12 Batch: WG1423363-2 WG1423363-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	41		35		21-120
Phenol-d6	37		30		10-120
Nitrobenzene-d5	62		59		23-120
2-Fluorobiphenyl	63		59		15-120
2,4,6-Tribromophenol	50		44		10-120
4-Terphenyl-d14	82		76		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044265

Project Number: 26979.01

Report Date: 10/22/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-11 Batch: WG1423383-2 WG1423383-3								
Acenaphthene	84		80		31-137	5		50
1,2,4-Trichlorobenzene	81		78		38-107	4		50
Hexachlorobenzene	94		91		40-140	3		50
Bis(2-chloroethyl)ether	70		67		40-140	4		50
2-Chloronaphthalene	86		83		40-140	4		50
1,2-Dichlorobenzene	71		70		40-140	1		50
1,3-Dichlorobenzene	70		68		40-140	3		50
1,4-Dichlorobenzene	70		68		28-104	3		50
3,3'-Dichlorobenzidine	73		70		40-140	4		50
2,4-Dinitrotoluene	95		91		40-132	4		50
2,6-Dinitrotoluene	100		95		40-140	5		50
Fluoranthene	89		86		40-140	3		50
4-Chlorophenyl phenyl ether	91		88		40-140	3		50
4-Bromophenyl phenyl ether	97		93		40-140	4		50
Bis(2-chloroisopropyl)ether	66		64		40-140	3		50
Bis(2-chloroethoxy)methane	80		77		40-117	4		50
Hexachlorobutadiene	86		82		40-140	5		50
Hexachlorocyclopentadiene	65		66		40-140	2		50
Hexachloroethane	72		70		40-140	3		50
Isophorone	84		78		40-140	7		50
Naphthalene	76		74		40-140	3		50
Nitrobenzene	76		73		40-140	4		50
NDPA/DPA	90		88		36-157	2		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044265

Project Number: 26979.01

Report Date: 10/22/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-11 Batch: WG1423383-2 WG1423383-3								
n-Nitrosodi-n-propylamine	80		78		32-121	3		50
Bis(2-ethylhexyl)phthalate	116		110		40-140	5		50
Butyl benzyl phthalate	108		103		40-140	5		50
Di-n-butylphthalate	103		99		40-140	4		50
Di-n-octylphthalate	106		102		40-140	4		50
Diethyl phthalate	94		90		40-140	4		50
Dimethyl phthalate	94		88		40-140	7		50
Benzo(a)anthracene	85		82		40-140	4		50
Benzo(a)pyrene	94		92		40-140	2		50
Benzo(b)fluoranthene	92		89		40-140	3		50
Benzo(k)fluoranthene	92		87		40-140	6		50
Chrysene	84		83		40-140	1		50
Acenaphthylene	89		85		40-140	5		50
Anthracene	86		83		40-140	4		50
Benzo(ghi)perylene	90		87		40-140	3		50
Fluorene	87		85		40-140	2		50
Phenanthrene	84		82		40-140	2		50
Dibenzo(a,h)anthracene	92		88		40-140	4		50
Indeno(1,2,3-cd)pyrene	96		93		40-140	3		50
Pyrene	86		83		35-142	4		50
Biphenyl	87		85		37-127	2		50
4-Chloroaniline	48		46		40-140	4		50
2-Nitroaniline	99		93		47-134	6		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044265

Project Number: 26979.01

Report Date: 10/22/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-11 Batch: WG1423383-2 WG1423383-3								
3-Nitroaniline	67		66		26-129	2		50
4-Nitroaniline	87		84		41-125	4		50
Dibenzofuran	84		82		40-140	2		50
2-Methylnaphthalene	83		81		40-140	2		50
1,2,4,5-Tetrachlorobenzene	90		88		40-117	2		50
Acetophenone	82		78		14-144	5		50
2,4,6-Trichlorophenol	96		93		30-130	3		50
p-Chloro-m-cresol	92		88		26-103	4		50
2-Chlorophenol	81		79		25-102	3		50
2,4-Dichlorophenol	91		86		30-130	6		50
2,4-Dimethylphenol	87		82		30-130	6		50
2-Nitrophenol	88		85		30-130	3		50
4-Nitrophenol	81		77		11-114	5		50
2,4-Dinitrophenol	73		67		4-130	9		50
4,6-Dinitro-o-cresol	99		95		10-130	4		50
Pentachlorophenol	80		76		17-109	5		50
Phenol	78		74		26-90	5		50
2-Methylphenol	82		78		30-130.	5		50
3-Methylphenol/4-Methylphenol	90		84		30-130	7		50
2,4,5-Trichlorophenol	96		92		30-130	4		50
Benzoic Acid	88		85		10-110	3		50
Benzyl Alcohol	82		79		40-140	4		50
Carbazole	85		81		54-128	5		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044265

Project Number: 26979.01

Report Date: 10/22/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-11 Batch: WG1423383-2 WG1423383-3								
1,4-Dioxane	47		45		40-140	4		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	78		75		25-120
Phenol-d6	79		76		10-120
Nitrobenzene-d5	78		73		23-120
2-Fluorobiphenyl	88		83		30-120
2,4,6-Tribromophenol	107		100		10-136
4-Terphenyl-d14	95		88		18-120

PCBS

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-01
Client ID: SB-3 (0'-2')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:10
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 10/18/20 23:26
Analyst: JAW
Percent Solids: 86%

Extraction Method: EPA 3546
Extraction Date: 10/18/20 01:07
Cleanup Method: EPA 3665A
Cleanup Date: 10/18/20
Cleanup Method: EPA 3660B
Cleanup Date: 10/18/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.3	3.22	1	A
Aroclor 1221	ND		ug/kg	36.3	3.64	1	A
Aroclor 1232	ND		ug/kg	36.3	7.69	1	A
Aroclor 1242	ND		ug/kg	36.3	4.89	1	A
Aroclor 1248	ND		ug/kg	36.3	5.44	1	A
Aroclor 1254	ND		ug/kg	36.3	3.97	1	A
Aroclor 1260	7.56	J	ug/kg	36.3	6.70	1	A
Aroclor 1262	ND		ug/kg	36.3	4.61	1	A
Aroclor 1268	ND		ug/kg	36.3	3.76	1	A
PCBs, Total	7.56	J	ug/kg	36.3	3.22	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	53		30-150	A
Decachlorobiphenyl	59		30-150	A
2,4,5,6-Tetrachloro-m-xylene	53		30-150	B
Decachlorobiphenyl	50		30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-02
Client ID: SB-3 (5'-7')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:20
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 10/18/20 23:33
Analyst: JAW
Percent Solids: 88%

Extraction Method: EPA 3546
Extraction Date: 10/18/20 01:07
Cleanup Method: EPA 3665A
Cleanup Date: 10/18/20
Cleanup Method: EPA 3660B
Cleanup Date: 10/18/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.7	3.34	1	A
Aroclor 1221	ND		ug/kg	37.7	3.78	1	A
Aroclor 1232	ND		ug/kg	37.7	7.99	1	A
Aroclor 1242	ND		ug/kg	37.7	5.08	1	A
Aroclor 1248	ND		ug/kg	37.7	5.65	1	A
Aroclor 1254	ND		ug/kg	37.7	4.12	1	A
Aroclor 1260	ND		ug/kg	37.7	6.96	1	A
Aroclor 1262	ND		ug/kg	37.7	4.78	1	A
Aroclor 1268	ND		ug/kg	37.7	3.90	1	A
PCBs, Total	ND		ug/kg	37.7	3.34	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	50		30-150	A
Decachlorobiphenyl	57		30-150	A
2,4,5,6-Tetrachloro-m-xylene	48		30-150	B
Decachlorobiphenyl	49		30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-03
Client ID: SB-3 (13'-15')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:25
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 10/18/20 23:40
Analyst: JAW
Percent Solids: 93%

Extraction Method: EPA 3546
Extraction Date: 10/18/20 01:07
Cleanup Method: EPA 3665A
Cleanup Date: 10/18/20
Cleanup Method: EPA 3660B
Cleanup Date: 10/18/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.3	3.13	1	A
Aroclor 1221	ND		ug/kg	35.3	3.53	1	A
Aroclor 1232	ND		ug/kg	35.3	7.48	1	A
Aroclor 1242	ND		ug/kg	35.3	4.75	1	A
Aroclor 1248	ND		ug/kg	35.3	5.29	1	A
Aroclor 1254	ND		ug/kg	35.3	3.86	1	A
Aroclor 1260	ND		ug/kg	35.3	6.52	1	A
Aroclor 1262	ND		ug/kg	35.3	4.48	1	A
Aroclor 1268	ND		ug/kg	35.3	3.65	1	A
PCBs, Total	ND		ug/kg	35.3	3.13	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	66		30-150	A
Decachlorobiphenyl	78		30-150	A
2,4,5,6-Tetrachloro-m-xylene	69		30-150	B
Decachlorobiphenyl	65		30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-04
 Client ID: SB-11 (0'-2')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:30
 Date Received: 10/15/20
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 10/18/20 23:46
 Analyst: JAW
 Percent Solids: 93%

Extraction Method: EPA 3546
 Extraction Date: 10/18/20 01:09
 Cleanup Method: EPA 3665A
 Cleanup Date: 10/18/20
 Cleanup Method: EPA 3660B
 Cleanup Date: 10/18/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	34.7	3.08	1	A
Aroclor 1221	ND		ug/kg	34.7	3.47	1	A
Aroclor 1232	ND		ug/kg	34.7	7.35	1	A
Aroclor 1242	ND		ug/kg	34.7	4.67	1	A
Aroclor 1248	ND		ug/kg	34.7	5.20	1	A
Aroclor 1254	19.8	J	ug/kg	34.7	3.79	1	B
Aroclor 1260	12.3	J	ug/kg	34.7	6.41	1	A
Aroclor 1262	ND		ug/kg	34.7	4.40	1	A
Aroclor 1268	ND		ug/kg	34.7	3.59	1	A
PCBs, Total	32.1	J	ug/kg	34.7	3.08	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	59		30-150	A
Decachlorobiphenyl	63		30-150	A
2,4,5,6-Tetrachloro-m-xylene	60		30-150	B
Decachlorobiphenyl	54		30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-05
Client ID: SB-11 (2'-5')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:35
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 10/18/20 23:53
Analyst: JAW
Percent Solids: 90%

Extraction Method: EPA 3546
Extraction Date: 10/18/20 01:09
Cleanup Method: EPA 3665A
Cleanup Date: 10/18/20
Cleanup Method: EPA 3660B
Cleanup Date: 10/18/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.3	3.22	1	A
Aroclor 1221	ND		ug/kg	36.3	3.64	1	A
Aroclor 1232	ND		ug/kg	36.3	7.69	1	A
Aroclor 1242	ND		ug/kg	36.3	4.89	1	A
Aroclor 1248	ND		ug/kg	36.3	5.44	1	A
Aroclor 1254	7.75	J	ug/kg	36.3	3.97	1	B
Aroclor 1260	ND		ug/kg	36.3	6.70	1	A
Aroclor 1262	ND		ug/kg	36.3	4.61	1	A
Aroclor 1268	ND		ug/kg	36.3	3.76	1	A
PCBs, Total	7.75	J	ug/kg	36.3	3.22	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	48		30-150	A
Decachlorobiphenyl	52		30-150	A
2,4,5,6-Tetrachloro-m-xylene	51		30-150	B
Decachlorobiphenyl	44		30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-06
Client ID: SB-11 (13'-15')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:45
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 10/19/20 00:00
Analyst: JAW
Percent Solids: 95%

Extraction Method: EPA 3546
Extraction Date: 10/18/20 01:09
Cleanup Method: EPA 3665A
Cleanup Date: 10/18/20
Cleanup Method: EPA 3660B
Cleanup Date: 10/18/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	33.3	2.96	1	A
Aroclor 1221	ND		ug/kg	33.3	3.34	1	A
Aroclor 1232	ND		ug/kg	33.3	7.06	1	A
Aroclor 1242	ND		ug/kg	33.3	4.49	1	A
Aroclor 1248	ND		ug/kg	33.3	5.00	1	A
Aroclor 1254	ND		ug/kg	33.3	3.64	1	A
Aroclor 1260	ND		ug/kg	33.3	6.16	1	A
Aroclor 1262	ND		ug/kg	33.3	4.23	1	A
Aroclor 1268	ND		ug/kg	33.3	3.45	1	A
PCBs, Total	ND		ug/kg	33.3	2.96	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	50		30-150	A
Decachlorobiphenyl	40		30-150	A
2,4,5,6-Tetrachloro-m-xylene	52		30-150	B
Decachlorobiphenyl	34		30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-07
Client ID: SB-10 (0'-2')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:55
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 10/19/20 00:07
Analyst: JAW
Percent Solids: 93%

Extraction Method: EPA 3546
Extraction Date: 10/18/20 01:09
Cleanup Method: EPA 3665A
Cleanup Date: 10/18/20
Cleanup Method: EPA 3660B
Cleanup Date: 10/18/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.0	3.10	1	A
Aroclor 1221	ND		ug/kg	35.0	3.50	1	A
Aroclor 1232	ND		ug/kg	35.0	7.41	1	A
Aroclor 1242	ND		ug/kg	35.0	4.71	1	A
Aroclor 1248	ND		ug/kg	35.0	5.24	1	A
Aroclor 1254	ND		ug/kg	35.0	3.82	1	A
Aroclor 1260	ND		ug/kg	35.0	6.46	1	A
Aroclor 1262	ND		ug/kg	35.0	4.44	1	A
Aroclor 1268	ND		ug/kg	35.0	3.62	1	A
PCBs, Total	ND		ug/kg	35.0	3.10	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	37		30-150	A
Decachlorobiphenyl	43		30-150	A
2,4,5,6-Tetrachloro-m-xylene	38		30-150	B
Decachlorobiphenyl	36		30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-08
Client ID: SB-10 (4'-6')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 10:00
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 10/19/20 00:14
Analyst: JAW
Percent Solids: 87%

Extraction Method: EPA 3546
Extraction Date: 10/18/20 01:09
Cleanup Method: EPA 3665A
Cleanup Date: 10/18/20
Cleanup Method: EPA 3660B
Cleanup Date: 10/18/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	38.2	3.39	1	A
Aroclor 1221	ND		ug/kg	38.2	3.82	1	A
Aroclor 1232	ND		ug/kg	38.2	8.09	1	A
Aroclor 1242	ND		ug/kg	38.2	5.14	1	A
Aroclor 1248	103		ug/kg	38.2	5.72	1	B
Aroclor 1254	117		ug/kg	38.2	4.17	1	A
Aroclor 1260	ND		ug/kg	38.2	7.05	1	A
Aroclor 1262	ND		ug/kg	38.2	4.85	1	A
Aroclor 1268	ND		ug/kg	38.2	3.95	1	A
PCBs, Total	220		ug/kg	38.2	3.39	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	39		30-150	A
Decachlorobiphenyl	34		30-150	A
2,4,5,6-Tetrachloro-m-xylene	41		30-150	B
Decachlorobiphenyl	76		30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-09
Client ID: SB-10 (13'-15')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 10:05
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 10/19/20 03:33
Analyst: JAW
Percent Solids: 95%

Extraction Method: EPA 3546
Extraction Date: 10/18/20 01:09
Cleanup Method: EPA 3665A
Cleanup Date: 10/18/20
Cleanup Method: EPA 3660B
Cleanup Date: 10/18/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	33.8	3.00	1	A
Aroclor 1221	ND		ug/kg	33.8	3.39	1	A
Aroclor 1232	ND		ug/kg	33.8	7.18	1	A
Aroclor 1242	ND		ug/kg	33.8	4.56	1	A
Aroclor 1248	ND		ug/kg	33.8	5.08	1	A
Aroclor 1254	ND		ug/kg	33.8	3.70	1	A
Aroclor 1260	ND		ug/kg	33.8	6.25	1	A
Aroclor 1262	ND		ug/kg	33.8	4.30	1	A
Aroclor 1268	ND		ug/kg	33.8	3.51	1	A
PCBs, Total	ND		ug/kg	33.8	3.00	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	58		30-150	A
Decachlorobiphenyl	70		30-150	A
2,4,5,6-Tetrachloro-m-xylene	61		30-150	B
Decachlorobiphenyl	60		30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-10
Client ID: SB-2 (5'-7')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 10:35
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 10/19/20 03:40
Analyst: JAW
Percent Solids: 91%

Extraction Method: EPA 3546
Extraction Date: 10/18/20 01:09
Cleanup Method: EPA 3665A
Cleanup Date: 10/18/20
Cleanup Method: EPA 3660B
Cleanup Date: 10/18/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.8	3.18	1	A
Aroclor 1221	ND		ug/kg	35.8	3.58	1	A
Aroclor 1232	ND		ug/kg	35.8	7.58	1	A
Aroclor 1242	ND		ug/kg	35.8	4.82	1	A
Aroclor 1248	ND		ug/kg	35.8	5.36	1	A
Aroclor 1254	ND		ug/kg	35.8	3.91	1	A
Aroclor 1260	ND		ug/kg	35.8	6.61	1	A
Aroclor 1262	ND		ug/kg	35.8	4.54	1	A
Aroclor 1268	ND		ug/kg	35.8	3.70	1	A
PCBs, Total	ND		ug/kg	35.8	3.18	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	70		30-150	A
2,4,5,6-Tetrachloro-m-xylene	65		30-150	B
Decachlorobiphenyl	80		30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-11
Client ID: SB-6 (2'-4')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 10:46
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 10/19/20 03:47
Analyst: JAW
Percent Solids: 92%

Extraction Method: EPA 3546
Extraction Date: 10/18/20 01:09
Cleanup Method: EPA 3665A
Cleanup Date: 10/18/20
Cleanup Method: EPA 3660B
Cleanup Date: 10/18/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.4	3.14	1	A
Aroclor 1221	ND		ug/kg	35.4	3.55	1	A
Aroclor 1232	ND		ug/kg	35.4	7.50	1	A
Aroclor 1242	ND		ug/kg	35.4	4.77	1	A
Aroclor 1248	ND		ug/kg	35.4	5.31	1	A
Aroclor 1254	ND		ug/kg	35.4	3.87	1	A
Aroclor 1260	ND		ug/kg	35.4	6.54	1	A
Aroclor 1262	ND		ug/kg	35.4	4.49	1	A
Aroclor 1268	8.77	J	ug/kg	35.4	3.67	1	A
PCBs, Total	8.77	J	ug/kg	35.4	3.14	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		30-150	A
Decachlorobiphenyl	81		30-150	A
2,4,5,6-Tetrachloro-m-xylene	67		30-150	B
Decachlorobiphenyl	84		30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-12
Client ID: GW-3
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 08:40
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 10/19/20 10:59
Analyst: CW

Extraction Method: EPA 3510C
Extraction Date: 10/18/20 23:08
Cleanup Method: EPA 3665A
Cleanup Date: 10/19/20
Cleanup Method: EPA 3660B
Cleanup Date: 10/19/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.083	0.034	1	A
Aroclor 1221	ND		ug/l	0.083	0.067	1	A
Aroclor 1232	ND		ug/l	0.083	0.046	1	A
Aroclor 1242	ND		ug/l	0.083	0.039	1	A
Aroclor 1248	ND		ug/l	0.083	0.049	1	A
Aroclor 1254	ND		ug/l	0.083	0.039	1	A
Aroclor 1260	ND		ug/l	0.083	0.032	1	A
Aroclor 1262	ND		ug/l	0.083	0.035	1	A
Aroclor 1268	ND		ug/l	0.083	0.034	1	A
PCBs, Total	ND		ug/l	0.083	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65		30-150	A
Decachlorobiphenyl	42		30-150	A
2,4,5,6-Tetrachloro-m-xylene	65		30-150	B
Decachlorobiphenyl	48		30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8082A
 Analytical Date: 10/19/20 00:21
 Analyst: JAW

Extraction Method: EPA 3546
 Extraction Date: 10/18/20 01:07
 Cleanup Method: EPA 3665A
 Cleanup Date: 10/18/20
 Cleanup Method: EPA 3660B
 Cleanup Date: 10/18/20

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-11 Batch: WG1423380-1						
Aroclor 1016	ND		ug/kg	32.3	2.87	A
Aroclor 1221	ND		ug/kg	32.3	3.24	A
Aroclor 1232	ND		ug/kg	32.3	6.85	A
Aroclor 1242	ND		ug/kg	32.3	4.35	A
Aroclor 1248	ND		ug/kg	32.3	4.84	A
Aroclor 1254	ND		ug/kg	32.3	3.53	A
Aroclor 1260	ND		ug/kg	32.3	5.97	A
Aroclor 1262	ND		ug/kg	32.3	4.10	A
Aroclor 1268	ND		ug/kg	32.3	3.35	A
PCBs, Total	ND		ug/kg	32.3	2.87	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69		30-150	A
Decachlorobiphenyl	83		30-150	A
2,4,5,6-Tetrachloro-m-xylene	72		30-150	B
Decachlorobiphenyl	70		30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 10/19/20 09:46
Analyst: CW

Extraction Method: EPA 3510C
Extraction Date: 10/18/20 23:08
Cleanup Method: EPA 3665A
Cleanup Date: 10/19/20
Cleanup Method: EPA 3660B
Cleanup Date: 10/19/20

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 12 Batch: WG1423476-1						
Aroclor 1016	ND		ug/l	0.083	0.034	A
Aroclor 1221	ND		ug/l	0.083	0.067	A
Aroclor 1232	ND		ug/l	0.083	0.046	A
Aroclor 1242	ND		ug/l	0.083	0.039	A
Aroclor 1248	ND		ug/l	0.083	0.049	A
Aroclor 1254	ND		ug/l	0.083	0.039	A
Aroclor 1260	ND		ug/l	0.083	0.032	A
Aroclor 1262	ND		ug/l	0.083	0.035	A
Aroclor 1268	ND		ug/l	0.083	0.034	A
PCBs, Total	ND		ug/l	0.083	0.032	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	67		30-150	A
Decachlorobiphenyl	46		30-150	A
2,4,5,6-Tetrachloro-m-xylene	67		30-150	B
Decachlorobiphenyl	59		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Project Number: 26979.01

Lab Number: L2044265

Report Date: 10/22/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-11 Batch: WG1423380-2 WG1423380-3									
Aroclor 1016	78		76		40-140	3		50	A
Aroclor 1260	70		70		40-140	0		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		65		30-150	A
Decachlorobiphenyl	80		77		30-150	A
2,4,5,6-Tetrachloro-m-xylene	69		67		30-150	B
Decachlorobiphenyl	66		64		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Project Number: 26979.01

Lab Number: L2044265

Report Date: 10/22/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 12 Batch: WG1423476-2 WG1423476-3									
Aroclor 1016	66		69		40-140	5		50	A
Aroclor 1260	55		57		40-140	4		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		63		30-150	A
Decachlorobiphenyl	41		46		30-150	A
2,4,5,6-Tetrachloro-m-xylene	63		64		30-150	B
Decachlorobiphenyl	51		57		30-150	B

PESTICIDES

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-01 D
Client ID: SB-3 (0'-2')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:10
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 10/19/20 20:09
Analyst: EJL
Percent Solids: 86%

Extraction Method: EPA 3546
Extraction Date: 10/17/20 23:49
Cleanup Method: EPA 3620B
Cleanup Date: 10/18/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	3.54	0.694	2	A
Lindane	ND		ug/kg	1.48	0.660	2	A
Alpha-BHC	ND		ug/kg	1.48	0.419	2	A
Beta-BHC	ND		ug/kg	3.54	1.34	2	A
Heptachlor	ND		ug/kg	1.77	0.794	2	A
Aldrin	ND		ug/kg	3.54	1.25	2	A
Heptachlor epoxide	ND		ug/kg	6.64	1.99	2	A
Endrin	ND		ug/kg	1.48	0.605	2	A
Endrin aldehyde	ND		ug/kg	4.43	1.55	2	A
Endrin ketone	ND		ug/kg	3.54	0.912	2	A
Dieldrin	8.96		ug/kg	2.21	1.11	2	A
4,4'-DDE	14.7		ug/kg	3.54	0.819	2	B
4,4'-DDD	2.75	J	ug/kg	3.54	1.26	2	B
4,4'-DDT	30.3		ug/kg	6.64	2.85	2	A
Endosulfan I	ND		ug/kg	3.54	0.837	2	A
Endosulfan II	ND		ug/kg	3.54	1.18	2	A
Endosulfan sulfate	ND		ug/kg	1.48	0.703	2	A
Methoxychlor	ND		ug/kg	6.64	2.07	2	A
Toxaphene	ND		ug/kg	66.4	18.6	2	A
cis-Chlordane	6.06		ug/kg	4.43	1.23	2	B
trans-Chlordane	8.17		ug/kg	4.43	1.17	2	A
Chlordane	69.2	P	ug/kg	29.5	11.7	2	B

Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044265**Project Number:** 26979.01**Report Date:** 10/22/20**SAMPLE RESULTS**

Lab ID: L2044265-01 D

Date Collected: 10/15/20 09:10

Client ID: SB-3 (0'-2')

Date Received: 10/15/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	119		30-150	A
Decachlorobiphenyl	108		30-150	A
2,4,5,6-Tetrachloro-m-xylene	97		30-150	B
Decachlorobiphenyl	134		30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-02
Client ID: SB-3 (5'-7')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:20
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 10/19/20 23:07
Analyst: BM
Percent Solids: 88%

Extraction Method: EPA 3546
Extraction Date: 10/17/20 23:49
Cleanup Method: EPA 3620B
Cleanup Date: 10/18/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.79	0.350	1	A
Lindane	ND		ug/kg	0.745	0.333	1	A
Alpha-BHC	ND		ug/kg	0.745	0.211	1	A
Beta-BHC	ND		ug/kg	1.79	0.678	1	A
Heptachlor	ND		ug/kg	0.894	0.401	1	A
Aldrin	ND		ug/kg	1.79	0.629	1	A
Heptachlor epoxide	ND	IP	ug/kg	3.35	1.00	1	B
Endrin	ND		ug/kg	0.745	0.305	1	A
Endrin aldehyde	ND		ug/kg	2.23	0.782	1	A
Endrin ketone	ND		ug/kg	1.79	0.460	1	A
Dieldrin	69.4		ug/kg	1.12	0.558	1	B
4,4'-DDE	74.4		ug/kg	1.79	0.413	1	A
4,4'-DDD	5.15		ug/kg	1.79	0.637	1	B
4,4'-DDT	308	E	ug/kg	3.35	1.44	1	B
Endosulfan I	ND		ug/kg	1.79	0.422	1	A
Endosulfan II	ND		ug/kg	1.79	0.597	1	A
Endosulfan sulfate	ND		ug/kg	0.745	0.354	1	A
Methoxychlor	ND		ug/kg	3.35	1.04	1	A
Toxaphene	ND		ug/kg	33.5	9.38	1	A
cis-Chlordane	20.8	IP	ug/kg	2.23	0.622	1	B
trans-Chlordane	20.4	IP	ug/kg	2.23	0.590	1	A
Chlordane	144		ug/kg	14.9	5.92	1	A

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-02
Client ID: SB-3 (5'-7')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:20
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	104		30-150	A
Decachlorobiphenyl	47		30-150	A
2,4,5,6-Tetrachloro-m-xylene	58		30-150	B
Decachlorobiphenyl	88		30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-02 D
 Client ID: SB-3 (5'-7')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:20
 Date Received: 10/15/20
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 10/20/20 23:04
 Analyst: BM
 Percent Solids: 88%

Extraction Method: EPA 3546
 Extraction Date: 10/17/20 23:49
 Cleanup Method: EPA 3620B
 Cleanup Date: 10/18/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
4,4'-DDT	339		ug/kg	16.8	7.19	5	A

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-03
Client ID: SB-3 (13'-15')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:25
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 10/19/20 20:21
Analyst: EJL
Percent Solids: 93%

Extraction Method: EPA 3546
Extraction Date: 10/17/20 23:49
Cleanup Method: EPA 3620B
Cleanup Date: 10/18/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.70	0.334	1	A
Lindane	ND		ug/kg	0.710	0.318	1	A
Alpha-BHC	ND		ug/kg	0.710	0.202	1	A
Beta-BHC	ND		ug/kg	1.70	0.646	1	A
Heptachlor	ND		ug/kg	0.852	0.382	1	A
Aldrin	ND		ug/kg	1.70	0.600	1	A
Heptachlor epoxide	ND		ug/kg	3.20	0.959	1	A
Endrin	ND		ug/kg	0.710	0.291	1	A
Endrin aldehyde	ND		ug/kg	2.13	0.746	1	A
Endrin ketone	ND		ug/kg	1.70	0.439	1	A
Dieldrin	ND		ug/kg	1.06	0.533	1	A
4,4'-DDE	ND		ug/kg	1.70	0.394	1	A
4,4'-DDD	ND		ug/kg	1.70	0.608	1	A
4,4'-DDT	ND		ug/kg	3.20	1.37	1	B
Endosulfan I	ND		ug/kg	1.70	0.403	1	A
Endosulfan II	ND		ug/kg	1.70	0.570	1	A
Endosulfan sulfate	ND		ug/kg	0.710	0.338	1	A
Methoxychlor	ND		ug/kg	3.20	0.995	1	A
Toxaphene	ND		ug/kg	32.0	8.95	1	A
cis-Chlordane	ND		ug/kg	2.13	0.594	1	A
trans-Chlordane	ND		ug/kg	2.13	0.563	1	A
Chlordane	ND		ug/kg	14.2	5.65	1	A

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-03
Client ID: SB-3 (13'-15')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:25
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80		30-150	A
Decachlorobiphenyl	71		30-150	A
2,4,5,6-Tetrachloro-m-xylene	72		30-150	B
Decachlorobiphenyl	79		30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-04
Client ID: SB-11 (0'-2')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:30
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 10/19/20 23:18
Analyst: EJL
Percent Solids: 93%

Extraction Method: EPA 3546
Extraction Date: 10/18/20 00:01
Cleanup Method: EPA 3620B
Cleanup Date: 10/18/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.64	0.322	1	A
Lindane	ND		ug/kg	0.684	0.306	1	A
Alpha-BHC	ND		ug/kg	0.684	0.194	1	A
Beta-BHC	ND		ug/kg	1.64	0.623	1	A
Heptachlor	ND		ug/kg	0.821	0.368	1	A
Aldrin	ND		ug/kg	1.64	0.578	1	A
Heptachlor epoxide	ND		ug/kg	3.08	0.924	1	A
Endrin	ND		ug/kg	0.684	0.281	1	A
Endrin aldehyde	ND		ug/kg	2.05	0.719	1	A
Endrin ketone	ND		ug/kg	1.64	0.423	1	A
Dieldrin	0.669	J	ug/kg	1.03	0.513	1	A
4,4'-DDE	0.461	J	ug/kg	1.64	0.380	1	A
4,4'-DDD	0.616	J	ug/kg	1.64	0.586	1	B
4,4'-DDT	1.77	J	ug/kg	3.08	1.32	1	B
Endosulfan I	ND		ug/kg	1.64	0.388	1	A
Endosulfan II	ND		ug/kg	1.64	0.549	1	A
Endosulfan sulfate	ND		ug/kg	0.684	0.326	1	A
Methoxychlor	ND		ug/kg	3.08	0.958	1	A
Toxaphene	ND		ug/kg	30.8	8.62	1	A
cis-Chlordane	ND		ug/kg	2.05	0.572	1	B
trans-Chlordane	0.567	JIP	ug/kg	2.05	0.542	1	B
Chlordane	ND		ug/kg	13.7	5.44	1	A

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-04
 Client ID: SB-11 (0'-2')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:30
 Date Received: 10/15/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	98		30-150	A
Decachlorobiphenyl	46		30-150	A
2,4,5,6-Tetrachloro-m-xylene	72		30-150	B
Decachlorobiphenyl	59		30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-05
Client ID: SB-11 (2'-5')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:35
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 10/19/20 20:32
Analyst: EJL
Percent Solids: 90%

Extraction Method: EPA 3546
Extraction Date: 10/18/20 00:01
Cleanup Method: EPA 3620B
Cleanup Date: 10/18/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.73	0.339	1	A
Lindane	ND		ug/kg	0.720	0.322	1	A
Alpha-BHC	ND		ug/kg	0.720	0.205	1	A
Beta-BHC	ND		ug/kg	1.73	0.656	1	A
Heptachlor	ND		ug/kg	0.865	0.388	1	A
Aldrin	ND		ug/kg	1.73	0.609	1	A
Heptachlor epoxide	ND		ug/kg	3.24	0.973	1	A
Endrin	ND		ug/kg	0.720	0.295	1	A
Endrin aldehyde	ND		ug/kg	2.16	0.756	1	A
Endrin ketone	ND		ug/kg	1.73	0.445	1	A
Dieldrin	ND		ug/kg	1.08	0.540	1	A
4,4'-DDE	0.431	JP	ug/kg	1.73	0.400	1	B
4,4'-DDD	ND		ug/kg	1.73	0.617	1	A
4,4'-DDT	ND		ug/kg	3.24	1.39	1	B
Endosulfan I	ND		ug/kg	1.73	0.408	1	A
Endosulfan II	ND		ug/kg	1.73	0.578	1	A
Endosulfan sulfate	ND		ug/kg	0.720	0.343	1	A
Methoxychlor	ND		ug/kg	3.24	1.01	1	A
Toxaphene	ND		ug/kg	32.4	9.08	1	A
cis-Chlordane	ND		ug/kg	2.16	0.602	1	A
trans-Chlordane	ND		ug/kg	2.16	0.571	1	A
Chlordane	ND		ug/kg	14.4	5.73	1	A

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-05
 Client ID: SB-11 (2'-5')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:35
 Date Received: 10/15/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	84		30-150	A
Decachlorobiphenyl	80		30-150	A
2,4,5,6-Tetrachloro-m-xylene	72		30-150	B
Decachlorobiphenyl	87		30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-06
Client ID: SB-11 (13'-15')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:45
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 10/19/20 20:44
Analyst: EJL
Percent Solids: 95%

Extraction Method: EPA 3546
Extraction Date: 10/18/20 00:01
Cleanup Method: EPA 3620B
Cleanup Date: 10/18/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.63	0.319	1	A
Lindane	ND		ug/kg	0.678	0.303	1	A
Alpha-BHC	ND		ug/kg	0.678	0.193	1	A
Beta-BHC	ND		ug/kg	1.63	0.617	1	A
Heptachlor	ND		ug/kg	0.814	0.365	1	A
Aldrin	ND		ug/kg	1.63	0.573	1	A
Heptachlor epoxide	ND		ug/kg	3.05	0.916	1	A
Endrin	ND		ug/kg	0.678	0.278	1	A
Endrin aldehyde	ND		ug/kg	2.04	0.712	1	A
Endrin ketone	ND		ug/kg	1.63	0.419	1	A
Dieldrin	ND		ug/kg	1.02	0.509	1	A
4,4'-DDE	ND		ug/kg	1.63	0.376	1	A
4,4'-DDD	ND		ug/kg	1.63	0.581	1	A
4,4'-DDT	ND		ug/kg	3.05	1.31	1	A
Endosulfan I	ND		ug/kg	1.63	0.385	1	A
Endosulfan II	ND		ug/kg	1.63	0.544	1	A
Endosulfan sulfate	ND		ug/kg	0.678	0.323	1	A
Methoxychlor	ND		ug/kg	3.05	0.950	1	A
Toxaphene	ND		ug/kg	30.5	8.55	1	A
cis-Chlordane	ND		ug/kg	2.04	0.567	1	A
trans-Chlordane	ND		ug/kg	2.04	0.537	1	A
Chlordane	ND		ug/kg	13.6	5.39	1	A

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-06
 Client ID: SB-11 (13'-15')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:45
 Date Received: 10/15/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	87		30-150	A
Decachlorobiphenyl	76		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	80		30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-07
Client ID: SB-10 (0'-2')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:55
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 10/19/20 23:30
Analyst: EJL
Percent Solids: 93%

Extraction Method: EPA 3546
Extraction Date: 10/18/20 00:01
Cleanup Method: EPA 3620B
Cleanup Date: 10/18/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.64	0.320	1	A
Lindane	ND		ug/kg	0.681	0.305	1	A
Alpha-BHC	ND		ug/kg	0.681	0.194	1	A
Beta-BHC	ND		ug/kg	1.64	0.620	1	A
Heptachlor	ND		ug/kg	0.818	0.367	1	A
Aldrin	ND		ug/kg	1.64	0.576	1	A
Heptachlor epoxide	ND		ug/kg	3.07	0.920	1	A
Endrin	ND		ug/kg	0.681	0.279	1	A
Endrin aldehyde	ND		ug/kg	2.04	0.716	1	A
Endrin ketone	ND		ug/kg	1.64	0.421	1	A
Dieldrin	ND		ug/kg	1.02	0.511	1	A
4,4'-DDE	1.45	J	ug/kg	1.64	0.378	1	A
4,4'-DDD	ND		ug/kg	1.64	0.583	1	A
4,4'-DDT	5.50		ug/kg	3.07	1.32	1	B
Endosulfan I	ND		ug/kg	1.64	0.386	1	A
Endosulfan II	ND		ug/kg	1.64	0.546	1	A
Endosulfan sulfate	ND		ug/kg	0.681	0.324	1	A
Methoxychlor	ND		ug/kg	3.07	0.954	1	A
Toxaphene	ND		ug/kg	30.7	8.59	1	A
cis-Chlordane	1.09	J	ug/kg	2.04	0.570	1	A
trans-Chlordane	ND	IP	ug/kg	2.04	0.540	1	B
Chlordane	ND		ug/kg	13.6	5.42	1	A

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-07
 Client ID: SB-10 (0'-2')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:55
 Date Received: 10/15/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80		30-150	A
Decachlorobiphenyl	53		30-150	A
2,4,5,6-Tetrachloro-m-xylene	62		30-150	B
Decachlorobiphenyl	80		30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-08 D
 Client ID: SB-10 (4'-6')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 10:00
 Date Received: 10/15/20
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 10/21/20 11:24
 Analyst: SL
 Percent Solids: 87%

Extraction Method: EPA 3546
 Extraction Date: 10/18/20 00:01
 Cleanup Method: EPA 3620B
 Cleanup Date: 10/18/20
 Cleanup Method: EPA 3660B
 Cleanup Date: 10/20/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	17.7	3.47	10	B
Lindane	ND		ug/kg	7.38	3.30	10	B
Alpha-BHC	ND		ug/kg	7.38	2.10	10	B
Beta-BHC	ND		ug/kg	17.7	6.72	10	B
Heptachlor	ND		ug/kg	8.86	3.97	10	B
Aldrin	ND		ug/kg	17.7	6.24	10	B
Heptachlor epoxide	ND		ug/kg	33.2	9.97	10	B
Endrin	ND		ug/kg	7.38	3.03	10	B
Endrin aldehyde	ND		ug/kg	22.1	7.75	10	B
Endrin ketone	ND		ug/kg	17.7	4.56	10	B
Dieldrin	ND		ug/kg	11.1	5.54	10	B
4,4'-DDE	ND		ug/kg	17.7	4.10	10	B
4,4'-DDD	ND		ug/kg	17.7	6.32	10	B
4,4'-DDT	ND		ug/kg	33.2	14.2	10	B
Endosulfan I	ND		ug/kg	17.7	4.18	10	B
Endosulfan II	ND		ug/kg	17.7	5.92	10	B
Endosulfan sulfate	ND		ug/kg	7.38	3.51	10	B
Methoxychlor	ND		ug/kg	33.2	10.3	10	B
Toxaphene	ND		ug/kg	332	93.0	10	B
cis-Chlordane	ND		ug/kg	22.1	6.17	10	B
trans-Chlordane	ND		ug/kg	22.1	5.85	10	B
Chlordane	ND		ug/kg	148	58.7	10	B

Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044265**Project Number:** 26979.01**Report Date:** 10/22/20**SAMPLE RESULTS**

Lab ID: L2044265-08 D

Date Collected: 10/15/20 10:00

Client ID: SB-10 (4'-6')

Date Received: 10/15/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	A
Decachlorobiphenyl	2	Q	30-150	A
2,4,5,6-Tetrachloro-m-xylene	98		30-150	B
Decachlorobiphenyl	195	Q	30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-09
Client ID: SB-10 (13'-15')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 10:05
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 10/19/20 23:52
Analyst: EJJ
Percent Solids: 95%

Extraction Method: EPA 3546
Extraction Date: 10/18/20 00:01
Cleanup Method: EPA 3620B
Cleanup Date: 10/18/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.64	0.322	1	A
Lindane	ND		ug/kg	0.685	0.306	1	A
Alpha-BHC	ND		ug/kg	0.685	0.194	1	A
Beta-BHC	ND		ug/kg	1.64	0.623	1	A
Heptachlor	ND		ug/kg	0.822	0.368	1	A
Aldrin	ND		ug/kg	1.64	0.579	1	A
Heptachlor epoxide	ND		ug/kg	3.08	0.924	1	A
Endrin	ND		ug/kg	0.685	0.281	1	A
Endrin aldehyde	ND		ug/kg	2.05	0.719	1	A
Endrin ketone	ND		ug/kg	1.64	0.423	1	A
Dieldrin	ND		ug/kg	1.03	0.514	1	A
4,4'-DDE	ND		ug/kg	1.64	0.380	1	A
4,4'-DDD	ND		ug/kg	1.64	0.586	1	A
4,4'-DDT	ND		ug/kg	3.08	1.32	1	A
Endosulfan I	ND		ug/kg	1.64	0.388	1	A
Endosulfan II	ND		ug/kg	1.64	0.549	1	A
Endosulfan sulfate	ND		ug/kg	0.685	0.326	1	A
Methoxychlor	ND		ug/kg	3.08	0.959	1	A
Toxaphene	ND		ug/kg	30.8	8.63	1	A
cis-Chlordane	ND		ug/kg	2.05	0.572	1	A
trans-Chlordane	ND		ug/kg	2.05	0.542	1	A
Chlordane	ND		ug/kg	13.7	5.44	1	A

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-09
 Client ID: SB-10 (13'-15')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 10:05
 Date Received: 10/15/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	95		30-150	A
Decachlorobiphenyl	56		30-150	A
2,4,5,6-Tetrachloro-m-xylene	69		30-150	B
Decachlorobiphenyl	64		30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-10
Client ID: SB-2 (5'-7')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 10:35
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 10/20/20 00:03
Analyst: EJL
Percent Solids: 91%

Extraction Method: EPA 3546
Extraction Date: 10/18/20 00:01
Cleanup Method: EPA 3620B
Cleanup Date: 10/18/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.67	0.328	1	A
Lindane	ND		ug/kg	0.698	0.312	1	A
Alpha-BHC	ND		ug/kg	0.698	0.198	1	A
Beta-BHC	ND		ug/kg	1.67	0.635	1	A
Heptachlor	ND		ug/kg	0.837	0.375	1	A
Aldrin	ND		ug/kg	1.67	0.589	1	A
Heptachlor epoxide	ND		ug/kg	3.14	0.942	1	A
Endrin	ND		ug/kg	0.698	0.286	1	A
Endrin aldehyde	ND		ug/kg	2.09	0.732	1	A
Endrin ketone	ND		ug/kg	1.67	0.431	1	A
Dieldrin	ND		ug/kg	1.05	0.523	1	A
4,4'-DDE	2.47		ug/kg	1.67	0.387	1	A
4,4'-DDD	3.03		ug/kg	1.67	0.597	1	A
4,4'-DDT	8.61		ug/kg	3.14	1.35	1	A
Endosulfan I	ND		ug/kg	1.67	0.396	1	A
Endosulfan II	ND		ug/kg	1.67	0.559	1	A
Endosulfan sulfate	ND		ug/kg	0.698	0.332	1	A
Methoxychlor	ND		ug/kg	3.14	0.977	1	A
Toxaphene	ND		ug/kg	31.4	8.79	1	A
cis-Chlordane	ND		ug/kg	2.09	0.583	1	A
trans-Chlordane	ND	IP	ug/kg	2.09	0.552	1	B
Chlordane	18.8		ug/kg	14.0	5.54	1	A

Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044265**Project Number:** 26979.01**Report Date:** 10/22/20**SAMPLE RESULTS**

Lab ID: L2044265-10

Date Collected: 10/15/20 10:35

Client ID: SB-2 (5'-7')

Date Received: 10/15/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	84		30-150	A
Decachlorobiphenyl	54		30-150	A
2,4,5,6-Tetrachloro-m-xylene	68		30-150	B
Decachlorobiphenyl	85		30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-11
Client ID: SB-6 (2'-4')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 10:46
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 10/20/20 00:15
Analyst: EJL
Percent Solids: 92%

Extraction Method: EPA 3546
Extraction Date: 10/18/20 00:01
Cleanup Method: EPA 3620B
Cleanup Date: 10/18/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.72	0.338	1	A
Lindane	ND		ug/kg	0.718	0.321	1	A
Alpha-BHC	ND		ug/kg	0.718	0.204	1	A
Beta-BHC	ND		ug/kg	1.72	0.654	1	A
Heptachlor	ND		ug/kg	0.862	0.386	1	A
Aldrin	ND		ug/kg	1.72	0.607	1	A
Heptachlor epoxide	ND	IP	ug/kg	3.23	0.970	1	B
Endrin	ND		ug/kg	0.718	0.295	1	A
Endrin aldehyde	ND		ug/kg	2.16	0.754	1	A
Endrin ketone	ND		ug/kg	1.72	0.444	1	A
Dieldrin	ND		ug/kg	1.08	0.539	1	A
4,4'-DDE	4.96		ug/kg	1.72	0.399	1	A
4,4'-DDD	ND		ug/kg	1.72	0.615	1	A
4,4'-DDT	15.3		ug/kg	3.23	1.39	1	B
Endosulfan I	ND		ug/kg	1.72	0.407	1	A
Endosulfan II	ND		ug/kg	1.72	0.576	1	A
Endosulfan sulfate	ND		ug/kg	0.718	0.342	1	A
Methoxychlor	ND		ug/kg	3.23	1.01	1	A
Toxaphene	ND		ug/kg	32.3	9.05	1	A
cis-Chlordane	1.71	J	ug/kg	2.16	0.601	1	A
trans-Chlordane	1.77	JIP	ug/kg	2.16	0.569	1	A
Chlordane	36.4	P	ug/kg	14.4	5.71	1	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-11
 Client ID: SB-6 (2'-4')
 Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 10:46
 Date Received: 10/15/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	81		30-150	A
Decachlorobiphenyl	67		30-150	A
2,4,5,6-Tetrachloro-m-xylene	68		30-150	B
Decachlorobiphenyl	132		30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-12
Client ID: GW-3
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 08:40
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8081B
Analytical Date: 10/19/20 12:25
Analyst: BM

Extraction Method: EPA 3510C
Extraction Date: 10/18/20 04:55

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044265**Project Number:** 26979.01**Report Date:** 10/22/20**SAMPLE RESULTS**

Lab ID: L2044265-12

Date Collected: 10/15/20 08:40

Client ID: GW-3

Date Received: 10/15/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	54		30-150	A
Decachlorobiphenyl	35		30-150	A
2,4,5,6-Tetrachloro-m-xylene	37		30-150	B
Decachlorobiphenyl	36		30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 10/19/20 12:36
Analyst: BM

Extraction Method: EPA 3510C
Extraction Date: 10/17/20 21:23

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 12 Batch: WG1423370-1						
Delta-BHC	ND		ug/l	0.014	0.003	A
Lindane	ND		ug/l	0.014	0.003	A
Alpha-BHC	ND		ug/l	0.014	0.003	A
Beta-BHC	ND		ug/l	0.014	0.004	A
Heptachlor	ND		ug/l	0.014	0.002	A
Aldrin	ND		ug/l	0.014	0.002	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	A
Endrin	ND		ug/l	0.029	0.003	A
Endrin aldehyde	ND		ug/l	0.029	0.006	A
Endrin ketone	ND		ug/l	0.029	0.003	A
Dieldrin	ND		ug/l	0.029	0.003	A
4,4'-DDE	ND		ug/l	0.029	0.003	A
4,4'-DDD	ND		ug/l	0.029	0.003	A
4,4'-DDT	ND		ug/l	0.029	0.003	A
Endosulfan I	ND		ug/l	0.014	0.002	A
Endosulfan II	ND		ug/l	0.029	0.004	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	A
Methoxychlor	ND		ug/l	0.143	0.005	A
Toxaphene	ND		ug/l	0.143	0.045	A
cis-Chlordane	ND		ug/l	0.014	0.005	A
trans-Chlordane	ND		ug/l	0.014	0.004	A
Chlordane	ND		ug/l	0.143	0.033	A

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8081B
 Analytical Date: 10/19/20 12:36
 Analyst: BM

Extraction Method: EPA 3510C
 Extraction Date: 10/17/20 21:23

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 12 Batch: WG1423370-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	61		30-150	A
Decachlorobiphenyl	49		30-150	A
2,4,5,6-Tetrachloro-m-xylene	42		30-150	B
Decachlorobiphenyl	46		30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 10/19/20 17:13
Analyst: BM

Extraction Method: EPA 3546
Extraction Date: 10/17/20 23:49
Cleanup Method: EPA 3620B
Cleanup Date: 10/18/20

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-07,09-11 Batch: WG1423373-1						
Delta-BHC	ND		ug/kg	1.55	0.304	A
Lindane	ND		ug/kg	0.647	0.289	A
Alpha-BHC	ND		ug/kg	0.647	0.184	A
Beta-BHC	ND		ug/kg	1.55	0.589	A
Heptachlor	ND		ug/kg	0.777	0.348	A
Aldrin	ND		ug/kg	1.55	0.547	A
Heptachlor epoxide	ND		ug/kg	2.91	0.874	A
Endrin	ND		ug/kg	0.647	0.265	A
Endrin aldehyde	ND		ug/kg	1.94	0.680	A
Endrin ketone	ND		ug/kg	1.55	0.400	A
Dieldrin	ND		ug/kg	0.971	0.485	A
4,4'-DDE	ND		ug/kg	1.55	0.359	A
4,4'-DDD	ND		ug/kg	1.55	0.554	A
4,4'-DDT	ND		ug/kg	2.91	1.25	A
Endosulfan I	ND		ug/kg	1.55	0.367	A
Endosulfan II	ND		ug/kg	1.55	0.519	A
Endosulfan sulfate	ND		ug/kg	0.647	0.308	A
Methoxychlor	ND		ug/kg	2.91	0.906	A
Toxaphene	ND		ug/kg	29.1	8.16	A
cis-Chlordane	ND		ug/kg	1.94	0.541	A
trans-Chlordane	ND		ug/kg	1.94	0.513	A
Chlordane	ND		ug/kg	12.9	5.14	A

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 10/19/20 17:13
Analyst: BM

Extraction Method: EPA 3546
Extraction Date: 10/17/20 23:49
Cleanup Method: EPA 3620B
Cleanup Date: 10/18/20

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-07,09-11 Batch: WG1423373-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	97		30-150	A
Decachlorobiphenyl	82		30-150	A
2,4,5,6-Tetrachloro-m-xylene	81		30-150	B
Decachlorobiphenyl	75		30-150	B

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 10/20/20 21:55
Analyst: BM

Extraction Method: EPA 3546
Extraction Date: 10/17/20 23:49
Cleanup Method: EPA 3620B
Cleanup Date: 10/18/20
Cleanup Method: EPA 3660B
Cleanup Date: 10/20/20

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 08 Batch: WG1424402-1						
Delta-BHC	ND		ug/kg	1.55	0.304	A
Lindane	ND		ug/kg	0.647	0.289	A
Alpha-BHC	ND		ug/kg	0.647	0.184	A
Beta-BHC	ND		ug/kg	1.55	0.589	A
Heptachlor	ND		ug/kg	0.777	0.348	A
Aldrin	ND		ug/kg	1.55	0.547	A
Heptachlor epoxide	ND		ug/kg	2.91	0.874	A
Endrin	ND		ug/kg	0.647	0.265	A
Endrin aldehyde	ND		ug/kg	1.94	0.680	A
Endrin ketone	ND		ug/kg	1.55	0.400	A
Dieldrin	ND		ug/kg	0.971	0.485	A
4,4'-DDE	ND		ug/kg	1.55	0.359	A
4,4'-DDD	ND		ug/kg	1.55	0.554	A
4,4'-DDT	ND		ug/kg	2.91	1.25	A
Endosulfan I	ND		ug/kg	1.55	0.367	A
Endosulfan II	ND		ug/kg	1.55	0.519	A
Endosulfan sulfate	ND		ug/kg	0.647	0.308	A
Methoxychlor	ND		ug/kg	2.91	0.906	A
Toxaphene	ND		ug/kg	29.1	8.16	A
cis-Chlordane	ND		ug/kg	1.94	0.541	A
trans-Chlordane	ND		ug/kg	1.94	0.513	A
Chlordane	ND		ug/kg	12.9	5.14	A

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8081B
Analytical Date: 10/20/20 21:55
Analyst: BM

Extraction Method: EPA 3546
Extraction Date: 10/17/20 23:49
Cleanup Method: EPA 3620B
Cleanup Date: 10/18/20
Cleanup Method: EPA 3660B
Cleanup Date: 10/20/20

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 08 Batch: WG1424402-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	79		30-150	A
Decachlorobiphenyl	82		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	88		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044265

Project Number: 26979.01

Report Date: 10/22/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 12 Batch: WG1423370-2 WG1423370-3									
Delta-BHC	44		53		30-150	19		20	A
Lindane	49		58		30-150	17		20	A
Alpha-BHC	52		62		30-150	18		20	A
Beta-BHC	52		66		30-150	24	Q	20	A
Heptachlor	43		53		30-150	20		20	A
Aldrin	44		54		30-150	20		20	A
Heptachlor epoxide	47		57		30-150	19		20	A
Endrin	48		55		30-150	13		20	A
Endrin aldehyde	44		50		30-150	13		20	A
Endrin ketone	48		55		30-150	14		20	A
Dieldrin	49		57		30-150	14		20	A
4,4'-DDE	46		54		30-150	15		20	A
4,4'-DDD	52		57		30-150	11		20	A
4,4'-DDT	41		47		30-150	12		20	A
Endosulfan I	43		50		30-150	14		20	A
Endosulfan II	48		55		30-150	13		20	A
Endosulfan sulfate	45		52		30-150	15		20	A
Methoxychlor	43		49		30-150	12		20	A
cis-Chlordane	43		52		30-150	19		20	A
trans-Chlordane	43		51		30-150	16		20	A

Lab Control Sample Analysis Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
-----------	-------------------------	-------------	--------------------------	-------------	----------------------------	------------	-------------	----------------------

Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 12 Batch: WG1423370-2 WG1423370-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	51		61		30-150	A
Decachlorobiphenyl	37		43		30-150	A
2,4,5,6-Tetrachloro-m-xylene	38		42		30-150	B
Decachlorobiphenyl	40		41		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Project Number: 26979.01

Lab Number: L2044265

Report Date: 10/22/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-07,09-11 Batch: WG1423373-2 WG1423373-3									
Delta-BHC	103		103		30-150	0		30	A
Lindane	99		97		30-150	2		30	A
Alpha-BHC	105		103		30-150	2		30	A
Beta-BHC	91		94		30-150	3		30	A
Heptachlor	104		102		30-150	2		30	A
Aldrin	108		105		30-150	3		30	A
Heptachlor epoxide	100		99		30-150	1		30	A
Endrin	107		107		30-150	0		30	A
Endrin aldehyde	74		69		30-150	7		30	A
Endrin ketone	88		90		30-150	2		30	A
Dieldrin	113		113		30-150	0		30	A
4,4'-DDE	112		110		30-150	2		30	A
4,4'-DDD	116		118		30-150	2		30	A
4,4'-DDT	105		109		30-150	4		30	A
Endosulfan I	102		102		30-150	0		30	A
Endosulfan II	98		100		30-150	2		30	A
Endosulfan sulfate	86		88		30-150	2		30	A
Methoxychlor	89		90		30-150	1		30	A
cis-Chlordane	90		87		30-150	3		30	A
trans-Chlordane	82		82		30-150	0		30	A

Lab Control Sample Analysis Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
-----------	------------------	------	-------------------	------	---------------------	-----	------	---------------

Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-07,09-11 Batch: WG1423373-2 WG1423373-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	102		99		30-150	A
Decachlorobiphenyl	101		93		30-150	A
2,4,5,6-Tetrachloro-m-xylene	91		90		30-150	B
Decachlorobiphenyl	96		96		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044265

Project Number: 26979.01

Report Date: 10/22/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 08 Batch: WG1424402-2 WG1424402-3									
Delta-BHC	76		72		30-150	5		30	A
Lindane	76		72		30-150	5		30	A
Alpha-BHC	78		74		30-150	5		30	A
Beta-BHC	86		81		30-150	6		30	A
Heptachlor	85		80		30-150	6		30	A
Aldrin	71		66		30-150	7		30	A
Heptachlor epoxide	74		69		30-150	7		30	A
Endrin	79		74		30-150	7		30	A
Endrin aldehyde	59		53		30-150	11		30	A
Endrin ketone	65		62		30-150	5		30	A
Dieldrin	65		61		30-150	6		30	A
4,4'-DDE	68		62		30-150	9		30	A
4,4'-DDD	67		62		30-150	8		30	A
4,4'-DDT	75		68		30-150	10		30	A
Endosulfan I	72		68		30-150	6		30	A
Endosulfan II	78		73		30-150	7		30	A
Endosulfan sulfate	69		64		30-150	8		30	A
Methoxychlor	81		76		30-150	6		30	A
cis-Chlordane	67		61		30-150	9		30	A
trans-Chlordane	69		65		30-150	6		30	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044265

Project Number: 26979.01

Report Date: 10/22/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
-----------	------------------	------	-------------------	------	---------------------	-----	------	---------------

Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 08 Batch: WG1424402-2 WG1424402-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	79		75		30-150	A
Decachlorobiphenyl	82		76		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		70		30-150	B
Decachlorobiphenyl	91		84		30-150	B

METALS

Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044265**Project Number:** 26979.01**Report Date:** 10/22/20**SAMPLE RESULTS**

Lab ID: L2044265-01

Date Collected: 10/15/20 09:10

Client ID: SB-3 (0'-2')

Date Received: 10/15/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5210		mg/kg	8.86	2.39	2	10/20/20 14:20	10/21/20 20:59	EPA 3050B	1,6010D	BV
Antimony, Total	ND		mg/kg	4.43	0.337	2	10/20/20 14:20	10/21/20 20:59	EPA 3050B	1,6010D	BV
Arsenic, Total	5.77		mg/kg	0.886	0.184	2	10/20/20 14:20	10/21/20 20:59	EPA 3050B	1,6010D	BV
Barium, Total	294		mg/kg	0.886	0.154	2	10/20/20 14:20	10/21/20 20:59	EPA 3050B	1,6010D	BV
Beryllium, Total	0.283	J	mg/kg	0.443	0.029	2	10/20/20 14:20	10/21/20 20:59	EPA 3050B	1,6010D	BV
Cadmium, Total	0.425	J	mg/kg	0.886	0.087	2	10/20/20 14:20	10/21/20 20:59	EPA 3050B	1,6010D	BV
Calcium, Total	26900		mg/kg	8.86	3.10	2	10/20/20 14:20	10/21/20 20:59	EPA 3050B	1,6010D	BV
Chromium, Total	11.0		mg/kg	0.886	0.085	2	10/20/20 14:20	10/21/20 20:59	EPA 3050B	1,6010D	BV
Cobalt, Total	3.53		mg/kg	1.77	0.147	2	10/20/20 14:20	10/21/20 20:59	EPA 3050B	1,6010D	BV
Copper, Total	13.3		mg/kg	0.886	0.228	2	10/20/20 14:20	10/21/20 20:59	EPA 3050B	1,6010D	BV
Iron, Total	10800		mg/kg	4.43	0.800	2	10/20/20 14:20	10/21/20 20:59	EPA 3050B	1,6010D	BV
Lead, Total	130		mg/kg	4.43	0.237	2	10/20/20 14:20	10/21/20 20:59	EPA 3050B	1,6010D	BV
Magnesium, Total	2930		mg/kg	8.86	1.36	2	10/20/20 14:20	10/21/20 20:59	EPA 3050B	1,6010D	BV
Manganese, Total	630		mg/kg	0.886	0.141	2	10/20/20 14:20	10/21/20 20:59	EPA 3050B	1,6010D	BV
Mercury, Total	0.116		mg/kg	0.078	0.051	1	10/20/20 14:25	10/21/20 13:33	EPA 7471B	1,7471B	EW
Nickel, Total	8.19		mg/kg	2.21	0.214	2	10/20/20 14:20	10/21/20 20:59	EPA 3050B	1,6010D	BV
Potassium, Total	367		mg/kg	221	12.8	2	10/20/20 14:20	10/21/20 20:59	EPA 3050B	1,6010D	BV
Selenium, Total	ND		mg/kg	1.77	0.228	2	10/20/20 14:20	10/21/20 20:59	EPA 3050B	1,6010D	BV
Silver, Total	ND		mg/kg	0.886	0.251	2	10/20/20 14:20	10/21/20 20:59	EPA 3050B	1,6010D	BV
Sodium, Total	446		mg/kg	177	2.79	2	10/20/20 14:20	10/21/20 20:59	EPA 3050B	1,6010D	BV
Thallium, Total	ND		mg/kg	1.77	0.279	2	10/20/20 14:20	10/21/20 20:59	EPA 3050B	1,6010D	BV
Vanadium, Total	16.8		mg/kg	0.886	0.180	2	10/20/20 14:20	10/21/20 20:59	EPA 3050B	1,6010D	BV
Zinc, Total	177		mg/kg	4.43	0.260	2	10/20/20 14:20	10/21/20 20:59	EPA 3050B	1,6010D	BV



Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044265**Project Number:** 26979.01**Report Date:** 10/22/20**SAMPLE RESULTS**

Lab ID: L2044265-02

Date Collected: 10/15/20 09:20

Client ID: SB-3 (5'-7')

Date Received: 10/15/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	6090		mg/kg	8.62	2.33	2	10/20/20 14:20	10/21/20 21:17	EPA 3050B	1,6010D	BV
Antimony, Total	1.59	J	mg/kg	4.31	0.328	2	10/20/20 14:20	10/21/20 21:17	EPA 3050B	1,6010D	BV
Arsenic, Total	6.76		mg/kg	0.862	0.179	2	10/20/20 14:20	10/21/20 21:17	EPA 3050B	1,6010D	BV
Barium, Total	531		mg/kg	0.862	0.150	2	10/20/20 14:20	10/21/20 21:17	EPA 3050B	1,6010D	BV
Beryllium, Total	0.302	J	mg/kg	0.431	0.028	2	10/20/20 14:20	10/21/20 21:17	EPA 3050B	1,6010D	BV
Cadmium, Total	1.32		mg/kg	0.862	0.085	2	10/20/20 14:20	10/21/20 21:17	EPA 3050B	1,6010D	BV
Calcium, Total	22500		mg/kg	8.62	3.02	2	10/20/20 14:20	10/21/20 21:17	EPA 3050B	1,6010D	BV
Chromium, Total	15.3		mg/kg	0.862	0.083	2	10/20/20 14:20	10/21/20 21:17	EPA 3050B	1,6010D	BV
Cobalt, Total	4.14		mg/kg	1.72	0.143	2	10/20/20 14:20	10/21/20 21:17	EPA 3050B	1,6010D	BV
Copper, Total	90.5		mg/kg	0.862	0.222	2	10/20/20 14:20	10/21/20 21:17	EPA 3050B	1,6010D	BV
Iron, Total	21300		mg/kg	4.31	0.778	2	10/20/20 14:20	10/21/20 21:17	EPA 3050B	1,6010D	BV
Lead, Total	2290		mg/kg	4.31	0.231	2	10/20/20 14:20	10/21/20 21:17	EPA 3050B	1,6010D	BV
Magnesium, Total	6060		mg/kg	8.62	1.33	2	10/20/20 14:20	10/21/20 21:17	EPA 3050B	1,6010D	BV
Manganese, Total	365		mg/kg	0.862	0.137	2	10/20/20 14:20	10/21/20 21:17	EPA 3050B	1,6010D	BV
Mercury, Total	0.114		mg/kg	0.075	0.049	1	10/20/20 14:25	10/21/20 13:46	EPA 7471B	1,7471B	EW
Nickel, Total	9.46		mg/kg	2.16	0.209	2	10/20/20 14:20	10/21/20 21:17	EPA 3050B	1,6010D	BV
Potassium, Total	440		mg/kg	216	12.4	2	10/20/20 14:20	10/21/20 21:17	EPA 3050B	1,6010D	BV
Selenium, Total	ND		mg/kg	1.72	0.222	2	10/20/20 14:20	10/21/20 21:17	EPA 3050B	1,6010D	BV
Silver, Total	ND		mg/kg	0.862	0.244	2	10/20/20 14:20	10/21/20 21:17	EPA 3050B	1,6010D	BV
Sodium, Total	229		mg/kg	172	2.72	2	10/20/20 14:20	10/21/20 21:17	EPA 3050B	1,6010D	BV
Thallium, Total	ND		mg/kg	1.72	0.272	2	10/20/20 14:20	10/21/20 21:17	EPA 3050B	1,6010D	BV
Vanadium, Total	25.2		mg/kg	0.862	0.175	2	10/20/20 14:20	10/21/20 21:17	EPA 3050B	1,6010D	BV
Zinc, Total	496		mg/kg	4.31	0.253	2	10/20/20 14:20	10/21/20 21:17	EPA 3050B	1,6010D	BV



Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044265**Project Number:** 26979.01**Report Date:** 10/22/20**SAMPLE RESULTS**

Lab ID: L2044265-03

Date Collected: 10/15/20 09:25

Client ID: SB-3 (13'-15')

Date Received: 10/15/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4540		mg/kg	8.36	2.26	2	10/20/20 14:20	10/21/20 21:21	EPA 3050B	1,6010D	BV
Antimony, Total	ND		mg/kg	4.18	0.318	2	10/20/20 14:20	10/21/20 21:21	EPA 3050B	1,6010D	BV
Arsenic, Total	1.55		mg/kg	0.836	0.174	2	10/20/20 14:20	10/21/20 21:21	EPA 3050B	1,6010D	BV
Barium, Total	29.7		mg/kg	0.836	0.145	2	10/20/20 14:20	10/21/20 21:21	EPA 3050B	1,6010D	BV
Beryllium, Total	0.226	J	mg/kg	0.418	0.028	2	10/20/20 14:20	10/21/20 21:21	EPA 3050B	1,6010D	BV
Cadmium, Total	0.159	J	mg/kg	0.836	0.082	2	10/20/20 14:20	10/21/20 21:21	EPA 3050B	1,6010D	BV
Calcium, Total	548		mg/kg	8.36	2.92	2	10/20/20 14:20	10/21/20 21:21	EPA 3050B	1,6010D	BV
Chromium, Total	12.0		mg/kg	0.836	0.080	2	10/20/20 14:20	10/21/20 21:21	EPA 3050B	1,6010D	BV
Cobalt, Total	4.45		mg/kg	1.67	0.139	2	10/20/20 14:20	10/21/20 21:21	EPA 3050B	1,6010D	BV
Copper, Total	11.2		mg/kg	0.836	0.216	2	10/20/20 14:20	10/21/20 21:21	EPA 3050B	1,6010D	BV
Iron, Total	15900		mg/kg	4.18	0.755	2	10/20/20 14:20	10/21/20 21:21	EPA 3050B	1,6010D	BV
Lead, Total	4.37		mg/kg	4.18	0.224	2	10/20/20 14:20	10/21/20 21:21	EPA 3050B	1,6010D	BV
Magnesium, Total	1900		mg/kg	8.36	1.29	2	10/20/20 14:20	10/21/20 21:21	EPA 3050B	1,6010D	BV
Manganese, Total	484		mg/kg	0.836	0.133	2	10/20/20 14:20	10/21/20 21:21	EPA 3050B	1,6010D	BV
Mercury, Total	ND		mg/kg	0.073	0.048	1	10/20/20 14:25	10/21/20 13:49	EPA 7471B	1,7471B	EW
Nickel, Total	10.0		mg/kg	2.09	0.202	2	10/20/20 14:20	10/21/20 21:21	EPA 3050B	1,6010D	BV
Potassium, Total	447		mg/kg	209	12.0	2	10/20/20 14:20	10/21/20 21:21	EPA 3050B	1,6010D	BV
Selenium, Total	ND		mg/kg	1.67	0.216	2	10/20/20 14:20	10/21/20 21:21	EPA 3050B	1,6010D	BV
Silver, Total	ND		mg/kg	0.836	0.236	2	10/20/20 14:20	10/21/20 21:21	EPA 3050B	1,6010D	BV
Sodium, Total	70.1	J	mg/kg	167	2.63	2	10/20/20 14:20	10/21/20 21:21	EPA 3050B	1,6010D	BV
Thallium, Total	ND		mg/kg	1.67	0.263	2	10/20/20 14:20	10/21/20 21:21	EPA 3050B	1,6010D	BV
Vanadium, Total	18.3		mg/kg	0.836	0.170	2	10/20/20 14:20	10/21/20 21:21	EPA 3050B	1,6010D	BV
Zinc, Total	20.3		mg/kg	4.18	0.245	2	10/20/20 14:20	10/21/20 21:21	EPA 3050B	1,6010D	BV



Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044265**Project Number:** 26979.01**Report Date:** 10/22/20**SAMPLE RESULTS**

Lab ID: L2044265-04

Date Collected: 10/15/20 09:30

Client ID: SB-11 (0'-2')

Date Received: 10/15/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3420		mg/kg	8.30	2.24	2	10/20/20 14:20	10/21/20 21:40	EPA 3050B	1,6010D	BV
Antimony, Total	ND		mg/kg	4.15	0.315	2	10/20/20 14:20	10/21/20 21:40	EPA 3050B	1,6010D	BV
Arsenic, Total	3.15		mg/kg	0.830	0.173	2	10/20/20 14:20	10/21/20 21:40	EPA 3050B	1,6010D	BV
Barium, Total	80.0		mg/kg	0.830	0.144	2	10/20/20 14:20	10/21/20 21:40	EPA 3050B	1,6010D	BV
Beryllium, Total	0.108	J	mg/kg	0.415	0.027	2	10/20/20 14:20	10/21/20 21:40	EPA 3050B	1,6010D	BV
Cadmium, Total	0.938		mg/kg	0.830	0.081	2	10/20/20 14:20	10/21/20 21:40	EPA 3050B	1,6010D	BV
Calcium, Total	20800		mg/kg	8.30	2.90	2	10/20/20 14:20	10/21/20 21:40	EPA 3050B	1,6010D	BV
Chromium, Total	11.3		mg/kg	0.830	0.080	2	10/20/20 14:20	10/21/20 21:40	EPA 3050B	1,6010D	BV
Cobalt, Total	3.22		mg/kg	1.66	0.138	2	10/20/20 14:20	10/21/20 21:40	EPA 3050B	1,6010D	BV
Copper, Total	42.5		mg/kg	0.830	0.214	2	10/20/20 14:20	10/21/20 21:40	EPA 3050B	1,6010D	BV
Iron, Total	8520		mg/kg	4.15	0.749	2	10/20/20 14:20	10/21/20 21:40	EPA 3050B	1,6010D	BV
Lead, Total	161		mg/kg	4.15	0.222	2	10/20/20 14:20	10/21/20 21:40	EPA 3050B	1,6010D	BV
Magnesium, Total	3340		mg/kg	8.30	1.28	2	10/20/20 14:20	10/21/20 21:40	EPA 3050B	1,6010D	BV
Manganese, Total	163		mg/kg	0.830	0.132	2	10/20/20 14:20	10/21/20 21:40	EPA 3050B	1,6010D	BV
Mercury, Total	0.104		mg/kg	0.070	0.046	1	10/20/20 14:25	10/21/20 13:57	EPA 7471B	1,7471B	EW
Nickel, Total	8.65		mg/kg	2.07	0.201	2	10/20/20 14:20	10/21/20 21:40	EPA 3050B	1,6010D	BV
Potassium, Total	410		mg/kg	207	12.0	2	10/20/20 14:20	10/21/20 21:40	EPA 3050B	1,6010D	BV
Selenium, Total	ND		mg/kg	1.66	0.214	2	10/20/20 14:20	10/21/20 21:40	EPA 3050B	1,6010D	BV
Silver, Total	ND		mg/kg	0.830	0.235	2	10/20/20 14:20	10/21/20 21:40	EPA 3050B	1,6010D	BV
Sodium, Total	98.4	J	mg/kg	166	2.61	2	10/20/20 14:20	10/21/20 21:40	EPA 3050B	1,6010D	BV
Thallium, Total	ND		mg/kg	1.66	0.261	2	10/20/20 14:20	10/21/20 21:40	EPA 3050B	1,6010D	BV
Vanadium, Total	21.0		mg/kg	0.830	0.168	2	10/20/20 14:20	10/21/20 21:40	EPA 3050B	1,6010D	BV
Zinc, Total	133		mg/kg	4.15	0.243	2	10/20/20 14:20	10/21/20 21:40	EPA 3050B	1,6010D	BV



Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044265**Project Number:** 26979.01**Report Date:** 10/22/20**SAMPLE RESULTS**

Lab ID: L2044265-05

Date Collected: 10/15/20 09:35

Client ID: SB-11 (2'-5')

Date Received: 10/15/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	8010		mg/kg	8.38	2.26	2	10/20/20 14:20	10/21/20 21:44	EPA 3050B	1,6010D	BV
Antimony, Total	ND		mg/kg	4.19	0.318	2	10/20/20 14:20	10/21/20 21:44	EPA 3050B	1,6010D	BV
Arsenic, Total	6.73		mg/kg	0.838	0.174	2	10/20/20 14:20	10/21/20 21:44	EPA 3050B	1,6010D	BV
Barium, Total	50.9		mg/kg	0.838	0.146	2	10/20/20 14:20	10/21/20 21:44	EPA 3050B	1,6010D	BV
Beryllium, Total	0.469		mg/kg	0.419	0.028	2	10/20/20 14:20	10/21/20 21:44	EPA 3050B	1,6010D	BV
Cadmium, Total	0.168	J	mg/kg	0.838	0.082	2	10/20/20 14:20	10/21/20 21:44	EPA 3050B	1,6010D	BV
Calcium, Total	38500		mg/kg	83.8	29.3	20	10/20/20 14:20	10/22/20 15:20	EPA 3050B	1,6010D	GD
Chromium, Total	16.6		mg/kg	0.838	0.080	2	10/20/20 14:20	10/21/20 21:44	EPA 3050B	1,6010D	BV
Cobalt, Total	6.40		mg/kg	1.68	0.139	2	10/20/20 14:20	10/21/20 21:44	EPA 3050B	1,6010D	BV
Copper, Total	14.1		mg/kg	0.838	0.216	2	10/20/20 14:20	10/21/20 21:44	EPA 3050B	1,6010D	BV
Iron, Total	15200		mg/kg	4.19	0.756	2	10/20/20 14:20	10/21/20 21:44	EPA 3050B	1,6010D	BV
Lead, Total	7.59		mg/kg	4.19	0.224	2	10/20/20 14:20	10/21/20 21:44	EPA 3050B	1,6010D	BV
Magnesium, Total	2400		mg/kg	8.38	1.29	2	10/20/20 14:20	10/21/20 21:44	EPA 3050B	1,6010D	BV
Manganese, Total	397		mg/kg	0.838	0.133	2	10/20/20 14:20	10/21/20 21:44	EPA 3050B	1,6010D	BV
Mercury, Total	ND		mg/kg	0.077	0.050	1	10/20/20 14:25	10/21/20 14:00	EPA 7471B	1,7471B	EW
Nickel, Total	18.7		mg/kg	2.09	0.203	2	10/20/20 14:20	10/21/20 21:44	EPA 3050B	1,6010D	BV
Potassium, Total	675		mg/kg	209	12.1	2	10/20/20 14:20	10/21/20 21:44	EPA 3050B	1,6010D	BV
Selenium, Total	ND		mg/kg	1.68	0.216	2	10/20/20 14:20	10/21/20 21:44	EPA 3050B	1,6010D	BV
Silver, Total	ND		mg/kg	0.838	0.237	2	10/20/20 14:20	10/21/20 21:44	EPA 3050B	1,6010D	BV
Sodium, Total	153	J	mg/kg	168	2.64	2	10/20/20 14:20	10/21/20 21:44	EPA 3050B	1,6010D	BV
Thallium, Total	ND		mg/kg	1.68	0.264	2	10/20/20 14:20	10/21/20 21:44	EPA 3050B	1,6010D	BV
Vanadium, Total	25.2		mg/kg	0.838	0.170	2	10/20/20 14:20	10/21/20 21:44	EPA 3050B	1,6010D	BV
Zinc, Total	30.5		mg/kg	4.19	0.245	2	10/20/20 14:20	10/21/20 21:44	EPA 3050B	1,6010D	BV



Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044265**Project Number:** 26979.01**Report Date:** 10/22/20**SAMPLE RESULTS**

Lab ID: L2044265-06

Date Collected: 10/15/20 09:45

Client ID: SB-11 (13'-15')

Date Received: 10/15/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 95%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	6870		mg/kg	8.06	2.18	2	10/20/20 14:20	10/21/20 21:49	EPA 3050B	1,6010D	BV
Antimony, Total	ND		mg/kg	4.03	0.306	2	10/20/20 14:20	10/21/20 21:49	EPA 3050B	1,6010D	BV
Arsenic, Total	2.01		mg/kg	0.806	0.168	2	10/20/20 14:20	10/21/20 21:49	EPA 3050B	1,6010D	BV
Barium, Total	37.0		mg/kg	0.806	0.140	2	10/20/20 14:20	10/21/20 21:49	EPA 3050B	1,6010D	BV
Beryllium, Total	0.322	J	mg/kg	0.403	0.027	2	10/20/20 14:20	10/21/20 21:49	EPA 3050B	1,6010D	BV
Cadmium, Total	0.209	J	mg/kg	0.806	0.079	2	10/20/20 14:20	10/21/20 21:49	EPA 3050B	1,6010D	BV
Calcium, Total	608		mg/kg	8.06	2.82	2	10/20/20 14:20	10/21/20 21:49	EPA 3050B	1,6010D	BV
Chromium, Total	17.4		mg/kg	0.806	0.077	2	10/20/20 14:20	10/21/20 21:49	EPA 3050B	1,6010D	BV
Cobalt, Total	6.24		mg/kg	1.61	0.134	2	10/20/20 14:20	10/21/20 21:49	EPA 3050B	1,6010D	BV
Copper, Total	12.1		mg/kg	0.806	0.208	2	10/20/20 14:20	10/21/20 21:49	EPA 3050B	1,6010D	BV
Iron, Total	17400		mg/kg	4.03	0.728	2	10/20/20 14:20	10/21/20 21:49	EPA 3050B	1,6010D	BV
Lead, Total	4.26		mg/kg	4.03	0.216	2	10/20/20 14:20	10/21/20 21:49	EPA 3050B	1,6010D	BV
Magnesium, Total	1580		mg/kg	8.06	1.24	2	10/20/20 14:20	10/21/20 21:49	EPA 3050B	1,6010D	BV
Manganese, Total	446		mg/kg	0.806	0.128	2	10/20/20 14:20	10/21/20 21:49	EPA 3050B	1,6010D	BV
Mercury, Total	ND		mg/kg	0.068	0.044	1	10/20/20 14:25	10/21/20 14:10	EPA 7471B	1,7471B	EW
Nickel, Total	12.4		mg/kg	2.01	0.195	2	10/20/20 14:20	10/21/20 21:49	EPA 3050B	1,6010D	BV
Potassium, Total	663		mg/kg	201	11.6	2	10/20/20 14:20	10/21/20 21:49	EPA 3050B	1,6010D	BV
Selenium, Total	ND		mg/kg	1.61	0.208	2	10/20/20 14:20	10/21/20 21:49	EPA 3050B	1,6010D	BV
Silver, Total	ND		mg/kg	0.806	0.228	2	10/20/20 14:20	10/21/20 21:49	EPA 3050B	1,6010D	BV
Sodium, Total	44.3	J	mg/kg	161	2.54	2	10/20/20 14:20	10/21/20 21:49	EPA 3050B	1,6010D	BV
Thallium, Total	ND		mg/kg	1.61	0.254	2	10/20/20 14:20	10/21/20 21:49	EPA 3050B	1,6010D	BV
Vanadium, Total	24.5		mg/kg	0.806	0.164	2	10/20/20 14:20	10/21/20 21:49	EPA 3050B	1,6010D	BV
Zinc, Total	24.4		mg/kg	4.03	0.236	2	10/20/20 14:20	10/21/20 21:49	EPA 3050B	1,6010D	BV



Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044265**Project Number:** 26979.01**Report Date:** 10/22/20**SAMPLE RESULTS**

Lab ID: L2044265-07

Date Collected: 10/15/20 09:55

Client ID: SB-10 (0'-2')

Date Received: 10/15/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4560		mg/kg	8.30	2.24	2	10/20/20 14:20	10/21/20 21:53	EPA 3050B	1,6010D	BV
Antimony, Total	ND		mg/kg	4.15	0.316	2	10/20/20 14:20	10/21/20 21:53	EPA 3050B	1,6010D	BV
Arsenic, Total	2.96		mg/kg	0.830	0.173	2	10/20/20 14:20	10/21/20 21:53	EPA 3050B	1,6010D	BV
Barium, Total	33.1		mg/kg	0.830	0.144	2	10/20/20 14:20	10/21/20 21:53	EPA 3050B	1,6010D	BV
Beryllium, Total	0.241	J	mg/kg	0.415	0.027	2	10/20/20 14:20	10/21/20 21:53	EPA 3050B	1,6010D	BV
Cadmium, Total	0.241	J	mg/kg	0.830	0.081	2	10/20/20 14:20	10/21/20 21:53	EPA 3050B	1,6010D	BV
Calcium, Total	1720		mg/kg	8.30	2.91	2	10/20/20 14:20	10/21/20 21:53	EPA 3050B	1,6010D	BV
Chromium, Total	16.8		mg/kg	0.830	0.080	2	10/20/20 14:20	10/21/20 21:53	EPA 3050B	1,6010D	BV
Cobalt, Total	4.43		mg/kg	1.66	0.138	2	10/20/20 14:20	10/21/20 21:53	EPA 3050B	1,6010D	BV
Copper, Total	15.6		mg/kg	0.830	0.214	2	10/20/20 14:20	10/21/20 21:53	EPA 3050B	1,6010D	BV
Iron, Total	14100		mg/kg	4.15	0.750	2	10/20/20 14:20	10/21/20 21:53	EPA 3050B	1,6010D	BV
Lead, Total	36.9		mg/kg	4.15	0.222	2	10/20/20 14:20	10/21/20 21:53	EPA 3050B	1,6010D	BV
Magnesium, Total	1890		mg/kg	8.30	1.28	2	10/20/20 14:20	10/21/20 21:53	EPA 3050B	1,6010D	BV
Manganese, Total	241		mg/kg	0.830	0.132	2	10/20/20 14:20	10/21/20 21:53	EPA 3050B	1,6010D	BV
Mercury, Total	0.068	J	mg/kg	0.073	0.048	1	10/20/20 14:25	10/21/20 14:14	EPA 7471B	1,7471B	EW
Nickel, Total	8.89		mg/kg	2.08	0.201	2	10/20/20 14:20	10/21/20 21:53	EPA 3050B	1,6010D	BV
Potassium, Total	432		mg/kg	208	12.0	2	10/20/20 14:20	10/21/20 21:53	EPA 3050B	1,6010D	BV
Selenium, Total	ND		mg/kg	1.66	0.214	2	10/20/20 14:20	10/21/20 21:53	EPA 3050B	1,6010D	BV
Silver, Total	ND		mg/kg	0.830	0.235	2	10/20/20 14:20	10/21/20 21:53	EPA 3050B	1,6010D	BV
Sodium, Total	54.5	J	mg/kg	166	2.62	2	10/20/20 14:20	10/21/20 21:53	EPA 3050B	1,6010D	BV
Thallium, Total	ND		mg/kg	1.66	0.262	2	10/20/20 14:20	10/21/20 21:53	EPA 3050B	1,6010D	BV
Vanadium, Total	19.0		mg/kg	0.830	0.168	2	10/20/20 14:20	10/21/20 21:53	EPA 3050B	1,6010D	BV
Zinc, Total	37.8		mg/kg	4.15	0.243	2	10/20/20 14:20	10/21/20 21:53	EPA 3050B	1,6010D	BV



Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044265**Project Number:** 26979.01**Report Date:** 10/22/20**SAMPLE RESULTS**

Lab ID: L2044265-08

Date Collected: 10/15/20 10:00

Client ID: SB-10 (4'-6')

Date Received: 10/15/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4900		mg/kg	8.90	2.40	2	10/20/20 14:20	10/21/20 21:58	EPA 3050B	1,6010D	BV
Antimony, Total	0.347	J	mg/kg	4.45	0.338	2	10/20/20 14:20	10/21/20 21:58	EPA 3050B	1,6010D	BV
Arsenic, Total	4.34		mg/kg	0.890	0.185	2	10/20/20 14:20	10/21/20 21:58	EPA 3050B	1,6010D	BV
Barium, Total	54.3		mg/kg	0.890	0.155	2	10/20/20 14:20	10/21/20 21:58	EPA 3050B	1,6010D	BV
Beryllium, Total	0.222	J	mg/kg	0.445	0.029	2	10/20/20 14:20	10/21/20 21:58	EPA 3050B	1,6010D	BV
Cadmium, Total	0.525	J	mg/kg	0.890	0.087	2	10/20/20 14:20	10/21/20 21:58	EPA 3050B	1,6010D	BV
Calcium, Total	15700		mg/kg	8.90	3.12	2	10/20/20 14:20	10/21/20 21:58	EPA 3050B	1,6010D	BV
Chromium, Total	12.7		mg/kg	0.890	0.086	2	10/20/20 14:20	10/21/20 21:58	EPA 3050B	1,6010D	BV
Cobalt, Total	5.88		mg/kg	1.78	0.148	2	10/20/20 14:20	10/21/20 21:58	EPA 3050B	1,6010D	BV
Copper, Total	26.1		mg/kg	0.890	0.230	2	10/20/20 14:20	10/21/20 21:58	EPA 3050B	1,6010D	BV
Iron, Total	22800		mg/kg	4.45	0.804	2	10/20/20 14:20	10/21/20 21:58	EPA 3050B	1,6010D	BV
Lead, Total	29.1		mg/kg	4.45	0.239	2	10/20/20 14:20	10/21/20 21:58	EPA 3050B	1,6010D	BV
Magnesium, Total	1810		mg/kg	8.90	1.37	2	10/20/20 14:20	10/21/20 21:58	EPA 3050B	1,6010D	BV
Manganese, Total	296		mg/kg	0.890	0.142	2	10/20/20 14:20	10/21/20 21:58	EPA 3050B	1,6010D	BV
Mercury, Total	ND		mg/kg	0.078	0.051	1	10/20/20 14:25	10/21/20 14:17	EPA 7471B	1,7471B	EW
Nickel, Total	7.53		mg/kg	2.22	0.215	2	10/20/20 14:20	10/21/20 21:58	EPA 3050B	1,6010D	BV
Potassium, Total	333		mg/kg	222	12.8	2	10/20/20 14:20	10/21/20 21:58	EPA 3050B	1,6010D	BV
Selenium, Total	ND		mg/kg	1.78	0.230	2	10/20/20 14:20	10/21/20 21:58	EPA 3050B	1,6010D	BV
Silver, Total	ND		mg/kg	0.890	0.252	2	10/20/20 14:20	10/21/20 21:58	EPA 3050B	1,6010D	BV
Sodium, Total	54.6	J	mg/kg	178	2.80	2	10/20/20 14:20	10/21/20 21:58	EPA 3050B	1,6010D	BV
Thallium, Total	ND		mg/kg	1.78	0.280	2	10/20/20 14:20	10/21/20 21:58	EPA 3050B	1,6010D	BV
Vanadium, Total	20.1		mg/kg	0.890	0.181	2	10/20/20 14:20	10/21/20 21:58	EPA 3050B	1,6010D	BV
Zinc, Total	76.3		mg/kg	4.45	0.261	2	10/20/20 14:20	10/21/20 21:58	EPA 3050B	1,6010D	BV



Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044265**Project Number:** 26979.01**Report Date:** 10/22/20**SAMPLE RESULTS**

Lab ID: L2044265-09

Date Collected: 10/15/20 10:05

Client ID: SB-10 (13'-15')

Date Received: 10/15/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 95%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3790		mg/kg	8.07	2.18	2	10/20/20 14:20	10/21/20 22:02	EPA 3050B	1,6010D	BV
Antimony, Total	ND		mg/kg	4.03	0.306	2	10/20/20 14:20	10/21/20 22:02	EPA 3050B	1,6010D	BV
Arsenic, Total	1.88		mg/kg	0.807	0.168	2	10/20/20 14:20	10/21/20 22:02	EPA 3050B	1,6010D	BV
Barium, Total	28.1		mg/kg	0.807	0.140	2	10/20/20 14:20	10/21/20 22:02	EPA 3050B	1,6010D	BV
Beryllium, Total	0.306	J	mg/kg	0.403	0.027	2	10/20/20 14:20	10/21/20 22:02	EPA 3050B	1,6010D	BV
Cadmium, Total	0.242	J	mg/kg	0.807	0.079	2	10/20/20 14:20	10/21/20 22:02	EPA 3050B	1,6010D	BV
Calcium, Total	519		mg/kg	8.07	2.82	2	10/20/20 14:20	10/21/20 22:02	EPA 3050B	1,6010D	BV
Chromium, Total	13.8		mg/kg	0.807	0.077	2	10/20/20 14:20	10/21/20 22:02	EPA 3050B	1,6010D	BV
Cobalt, Total	5.30		mg/kg	1.61	0.134	2	10/20/20 14:20	10/21/20 22:02	EPA 3050B	1,6010D	BV
Copper, Total	9.04		mg/kg	0.807	0.208	2	10/20/20 14:20	10/21/20 22:02	EPA 3050B	1,6010D	BV
Iron, Total	21800		mg/kg	4.03	0.728	2	10/20/20 14:20	10/21/20 22:02	EPA 3050B	1,6010D	BV
Lead, Total	3.64	J	mg/kg	4.03	0.216	2	10/20/20 14:20	10/21/20 22:02	EPA 3050B	1,6010D	BV
Magnesium, Total	1360		mg/kg	8.07	1.24	2	10/20/20 14:20	10/21/20 22:02	EPA 3050B	1,6010D	BV
Manganese, Total	424		mg/kg	0.807	0.128	2	10/20/20 14:20	10/21/20 22:02	EPA 3050B	1,6010D	BV
Mercury, Total	ND		mg/kg	0.069	0.045	1	10/20/20 14:25	10/21/20 14:20	EPA 7471B	1,7471B	EW
Nickel, Total	8.38		mg/kg	2.02	0.195	2	10/20/20 14:20	10/21/20 22:02	EPA 3050B	1,6010D	BV
Potassium, Total	463		mg/kg	202	11.6	2	10/20/20 14:20	10/21/20 22:02	EPA 3050B	1,6010D	BV
Selenium, Total	ND		mg/kg	1.61	0.208	2	10/20/20 14:20	10/21/20 22:02	EPA 3050B	1,6010D	BV
Silver, Total	ND		mg/kg	0.807	0.228	2	10/20/20 14:20	10/21/20 22:02	EPA 3050B	1,6010D	BV
Sodium, Total	47.9	J	mg/kg	161	2.54	2	10/20/20 14:20	10/21/20 22:02	EPA 3050B	1,6010D	BV
Thallium, Total	ND		mg/kg	1.61	0.254	2	10/20/20 14:20	10/21/20 22:02	EPA 3050B	1,6010D	BV
Vanadium, Total	26.2		mg/kg	0.807	0.164	2	10/20/20 14:20	10/21/20 22:02	EPA 3050B	1,6010D	BV
Zinc, Total	19.7		mg/kg	4.03	0.236	2	10/20/20 14:20	10/21/20 22:02	EPA 3050B	1,6010D	BV



Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044265**Project Number:** 26979.01**Report Date:** 10/22/20**SAMPLE RESULTS**

Lab ID: L2044265-10

Date Collected: 10/15/20 10:35

Client ID: SB-2 (5'-7')

Date Received: 10/15/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5400		mg/kg	8.57	2.31	2	10/20/20 14:20	10/21/20 22:07	EPA 3050B	1,6010D	BV
Antimony, Total	ND		mg/kg	4.29	0.326	2	10/20/20 14:20	10/21/20 22:07	EPA 3050B	1,6010D	BV
Arsenic, Total	3.52		mg/kg	0.857	0.178	2	10/20/20 14:20	10/21/20 22:07	EPA 3050B	1,6010D	BV
Barium, Total	73.3		mg/kg	0.857	0.149	2	10/20/20 14:20	10/21/20 22:07	EPA 3050B	1,6010D	BV
Beryllium, Total	0.240	J	mg/kg	0.429	0.028	2	10/20/20 14:20	10/21/20 22:07	EPA 3050B	1,6010D	BV
Cadmium, Total	0.274	J	mg/kg	0.857	0.084	2	10/20/20 14:20	10/21/20 22:07	EPA 3050B	1,6010D	BV
Calcium, Total	5960		mg/kg	8.57	3.00	2	10/20/20 14:20	10/21/20 22:07	EPA 3050B	1,6010D	BV
Chromium, Total	12.3		mg/kg	0.857	0.082	2	10/20/20 14:20	10/21/20 22:07	EPA 3050B	1,6010D	BV
Cobalt, Total	4.05		mg/kg	1.71	0.142	2	10/20/20 14:20	10/21/20 22:07	EPA 3050B	1,6010D	BV
Copper, Total	18.7		mg/kg	0.857	0.221	2	10/20/20 14:20	10/21/20 22:07	EPA 3050B	1,6010D	BV
Iron, Total	12400		mg/kg	4.29	0.774	2	10/20/20 14:20	10/21/20 22:07	EPA 3050B	1,6010D	BV
Lead, Total	51.8		mg/kg	4.29	0.230	2	10/20/20 14:20	10/21/20 22:07	EPA 3050B	1,6010D	BV
Magnesium, Total	1560		mg/kg	8.57	1.32	2	10/20/20 14:20	10/21/20 22:07	EPA 3050B	1,6010D	BV
Manganese, Total	227		mg/kg	0.857	0.136	2	10/20/20 14:20	10/21/20 22:07	EPA 3050B	1,6010D	BV
Mercury, Total	0.096		mg/kg	0.072	0.047	1	10/20/20 14:25	10/21/20 14:24	EPA 7471B	1,7471B	EW
Nickel, Total	8.74		mg/kg	2.14	0.207	2	10/20/20 14:20	10/21/20 22:07	EPA 3050B	1,6010D	BV
Potassium, Total	443		mg/kg	214	12.3	2	10/20/20 14:20	10/21/20 22:07	EPA 3050B	1,6010D	BV
Selenium, Total	ND		mg/kg	1.71	0.221	2	10/20/20 14:20	10/21/20 22:07	EPA 3050B	1,6010D	BV
Silver, Total	ND		mg/kg	0.857	0.242	2	10/20/20 14:20	10/21/20 22:07	EPA 3050B	1,6010D	BV
Sodium, Total	167	J	mg/kg	171	2.70	2	10/20/20 14:20	10/21/20 22:07	EPA 3050B	1,6010D	BV
Thallium, Total	ND		mg/kg	1.71	0.270	2	10/20/20 14:20	10/21/20 22:07	EPA 3050B	1,6010D	BV
Vanadium, Total	19.5		mg/kg	0.857	0.174	2	10/20/20 14:20	10/21/20 22:07	EPA 3050B	1,6010D	BV
Zinc, Total	63.0		mg/kg	4.29	0.251	2	10/20/20 14:20	10/21/20 22:07	EPA 3050B	1,6010D	BV



Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044265**Project Number:** 26979.01**Report Date:** 10/22/20**SAMPLE RESULTS**

Lab ID: L2044265-11

Date Collected: 10/15/20 10:46

Client ID: SB-6 (2'-4')

Date Received: 10/15/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	6390		mg/kg	8.36	2.26	2	10/20/20 14:20	10/21/20 22:11	EPA 3050B	1,6010D	BV
Antimony, Total	1.20	J	mg/kg	4.18	0.318	2	10/20/20 14:20	10/21/20 22:11	EPA 3050B	1,6010D	BV
Arsenic, Total	7.53		mg/kg	0.836	0.174	2	10/20/20 14:20	10/21/20 22:11	EPA 3050B	1,6010D	BV
Barium, Total	497		mg/kg	0.836	0.146	2	10/20/20 14:20	10/21/20 22:11	EPA 3050B	1,6010D	BV
Beryllium, Total	0.334	J	mg/kg	0.418	0.028	2	10/20/20 14:20	10/21/20 22:11	EPA 3050B	1,6010D	BV
Cadmium, Total	1.32		mg/kg	0.836	0.082	2	10/20/20 14:20	10/21/20 22:11	EPA 3050B	1,6010D	BV
Calcium, Total	16100		mg/kg	8.36	2.93	2	10/20/20 14:20	10/21/20 22:11	EPA 3050B	1,6010D	BV
Chromium, Total	22.2		mg/kg	0.836	0.080	2	10/20/20 14:20	10/21/20 22:11	EPA 3050B	1,6010D	BV
Cobalt, Total	6.55		mg/kg	1.67	0.139	2	10/20/20 14:20	10/21/20 22:11	EPA 3050B	1,6010D	BV
Copper, Total	66.3		mg/kg	0.836	0.216	2	10/20/20 14:20	10/21/20 22:11	EPA 3050B	1,6010D	BV
Iron, Total	27600		mg/kg	4.18	0.755	2	10/20/20 14:20	10/21/20 22:11	EPA 3050B	1,6010D	BV
Lead, Total	1290		mg/kg	4.18	0.224	2	10/20/20 14:20	10/21/20 22:11	EPA 3050B	1,6010D	BV
Magnesium, Total	2490		mg/kg	8.36	1.29	2	10/20/20 14:20	10/21/20 22:11	EPA 3050B	1,6010D	BV
Manganese, Total	476		mg/kg	0.836	0.133	2	10/20/20 14:20	10/21/20 22:11	EPA 3050B	1,6010D	BV
Mercury, Total	0.611		mg/kg	0.073	0.048	1	10/20/20 14:25	10/21/20 14:27	EPA 7471B	1,7471B	EW
Nickel, Total	17.9		mg/kg	2.09	0.202	2	10/20/20 14:20	10/21/20 22:11	EPA 3050B	1,6010D	BV
Potassium, Total	466		mg/kg	209	12.0	2	10/20/20 14:20	10/21/20 22:11	EPA 3050B	1,6010D	BV
Selenium, Total	ND		mg/kg	1.67	0.216	2	10/20/20 14:20	10/21/20 22:11	EPA 3050B	1,6010D	BV
Silver, Total	0.242	J	mg/kg	0.836	0.237	2	10/20/20 14:20	10/21/20 22:11	EPA 3050B	1,6010D	BV
Sodium, Total	78.9	J	mg/kg	167	2.63	2	10/20/20 14:20	10/21/20 22:11	EPA 3050B	1,6010D	BV
Thallium, Total	ND		mg/kg	1.67	0.263	2	10/20/20 14:20	10/21/20 22:11	EPA 3050B	1,6010D	BV
Vanadium, Total	46.4		mg/kg	0.836	0.170	2	10/20/20 14:20	10/21/20 22:11	EPA 3050B	1,6010D	BV
Zinc, Total	680		mg/kg	4.18	0.245	2	10/20/20 14:20	10/21/20 22:11	EPA 3050B	1,6010D	BV



Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044265

Project Number: 26979.01

Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-12

Date Collected: 10/15/20 08:40

Client ID: GW-3

Date Received: 10/15/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	28.1		mg/l	0.0100	0.00327	1	10/21/20 06:55	10/21/20 13:20	EPA 3005A	1,6020B	AM
Antimony, Total	0.00049	J	mg/l	0.00400	0.00042	1	10/21/20 06:55	10/21/20 13:20	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00867		mg/l	0.00050	0.00016	1	10/21/20 06:55	10/21/20 13:20	EPA 3005A	1,6020B	AM
Barium, Total	0.7457		mg/l	0.00050	0.00017	1	10/21/20 06:55	10/21/20 13:20	EPA 3005A	1,6020B	AM
Beryllium, Total	0.00178		mg/l	0.00050	0.00010	1	10/21/20 06:55	10/21/20 13:20	EPA 3005A	1,6020B	AM
Cadmium, Total	0.00098		mg/l	0.00020	0.00005	1	10/21/20 06:55	10/21/20 13:20	EPA 3005A	1,6020B	AM
Calcium, Total	117.		mg/l	0.100	0.0394	1	10/21/20 06:55	10/21/20 13:20	EPA 3005A	1,6020B	AM
Chromium, Total	0.07062		mg/l	0.00100	0.00017	1	10/21/20 06:55	10/21/20 13:20	EPA 3005A	1,6020B	AM
Cobalt, Total	0.07046		mg/l	0.00050	0.00016	1	10/21/20 06:55	10/21/20 13:20	EPA 3005A	1,6020B	AM
Copper, Total	0.09946		mg/l	0.00100	0.00038	1	10/21/20 06:55	10/21/20 13:20	EPA 3005A	1,6020B	AM
Iron, Total	79.8		mg/l	0.0500	0.0191	1	10/21/20 06:55	10/21/20 13:20	EPA 3005A	1,6020B	AM
Lead, Total	0.1240		mg/l	0.00100	0.00034	1	10/21/20 06:55	10/21/20 13:20	EPA 3005A	1,6020B	AM
Magnesium, Total	41.7		mg/l	0.0700	0.0242	1	10/21/20 06:55	10/21/20 13:20	EPA 3005A	1,6020B	AM
Manganese, Total	6.247		mg/l	0.00100	0.00044	1	10/21/20 06:55	10/21/20 13:20	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	10/21/20 13:46	10/21/20 19:25	EPA 7470A	1,7470A	AL
Nickel, Total	0.2561		mg/l	0.00200	0.00055	1	10/21/20 06:55	10/21/20 13:20	EPA 3005A	1,6020B	AM
Potassium, Total	15.4		mg/l	0.100	0.0309	1	10/21/20 06:55	10/21/20 13:20	EPA 3005A	1,6020B	AM
Selenium, Total	0.00786		mg/l	0.00500	0.00173	1	10/21/20 06:55	10/21/20 13:20	EPA 3005A	1,6020B	AM
Silver, Total	0.00076		mg/l	0.00040	0.00016	1	10/21/20 06:55	10/21/20 13:20	EPA 3005A	1,6020B	AM
Sodium, Total	197.		mg/l	0.100	0.0293	1	10/21/20 06:55	10/21/20 13:20	EPA 3005A	1,6020B	AM
Thallium, Total	0.00064		mg/l	0.00050	0.00014	1	10/21/20 06:55	10/21/20 13:20	EPA 3005A	1,6020B	AM
Vanadium, Total	0.08826		mg/l	0.00500	0.00157	1	10/21/20 06:55	10/21/20 13:20	EPA 3005A	1,6020B	AM
Zinc, Total	0.1624		mg/l	0.01000	0.00341	1	10/21/20 06:55	10/21/20 13:20	EPA 3005A	1,6020B	AM
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	ND		mg/l	0.0500	0.0164	1	10/21/20 09:21	10/21/20 14:11	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00248	J	mg/l	0.02000	0.00214	1	10/21/20 09:21	10/21/20 14:11	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	ND		mg/l	0.00250	0.00082	1	10/21/20 09:21	10/21/20 14:11	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.06718		mg/l	0.00250	0.00086	1	10/21/20 09:21	10/21/20 14:11	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00250	0.00053	1	10/21/20 09:21	10/21/20 14:11	EPA 3005A	1,6020B	AM



Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044265**Project Number:** 26979.01**Report Date:** 10/22/20**SAMPLE RESULTS**

Lab ID: L2044265-12

Date Collected: 10/15/20 08:40

Client ID: GW-3

Date Received: 10/15/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Cadmium, Dissolved	ND		mg/l	0.00100	0.00029	1	10/21/20 09:21	10/21/20 14:11	EPA 3005A	1,6020B	AM
Calcium, Dissolved	102.		mg/l	0.500	0.197	1	10/21/20 09:21	10/21/20 14:11	EPA 3005A	1,6020B	AM
Chromium, Dissolved	ND		mg/l	0.00500	0.00089	1	10/21/20 09:21	10/21/20 14:11	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00250	0.00081	1	10/21/20 09:21	10/21/20 14:11	EPA 3005A	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00500	0.00192	1	10/21/20 09:21	10/21/20 14:11	EPA 3005A	1,6020B	AM
Iron, Dissolved	ND		mg/l	0.350	0.0955	1	10/21/20 09:21	10/21/20 14:11	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00500	0.00171	1	10/21/20 09:21	10/21/20 14:11	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	16.0		mg/l	0.350	0.121	1	10/21/20 09:21	10/21/20 14:11	EPA 3005A	1,6020B	AM
Manganese, Dissolved	0.00293	J	mg/l	0.00500	0.00220	1	10/21/20 09:21	10/21/20 14:11	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	10/21/20 09:16	10/21/20 19:03	EPA 7470A	1,7470A	AL
Nickel, Dissolved	0.01116		mg/l	0.01000	0.00278	1	10/21/20 09:21	10/21/20 14:11	EPA 3005A	1,6020B	AM
Potassium, Dissolved	7.69		mg/l	0.500	0.154	1	10/21/20 09:21	10/21/20 14:11	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.0250	0.00865	1	10/21/20 09:21	10/21/20 14:11	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00200	0.00081	1	10/21/20 09:21	10/21/20 14:11	EPA 3005A	1,6020B	AM
Sodium, Dissolved	203.		mg/l	0.500	0.146	1	10/21/20 09:21	10/21/20 14:11	EPA 3005A	1,6020B	AM
Thallium, Dissolved	0.00168	J	mg/l	0.00500	0.00071	1	10/21/20 09:21	10/21/20 14:11	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.02500	0.00785	1	10/21/20 09:21	10/21/20 14:11	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.05000	0.01705	1	10/21/20 09:21	10/21/20 14:11	EPA 3005A	1,6020B	AM



Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-11 Batch: WG1423819-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	10/20/20 14:20	10/21/20 20:45	1,6010D	BV
Antimony, Total	ND		mg/kg	2.00	0.152	1	10/20/20 14:20	10/21/20 20:45	1,6010D	BV
Arsenic, Total	ND		mg/kg	0.400	0.083	1	10/20/20 14:20	10/21/20 20:45	1,6010D	BV
Barium, Total	ND		mg/kg	0.400	0.070	1	10/20/20 14:20	10/21/20 20:45	1,6010D	BV
Beryllium, Total	ND		mg/kg	0.200	0.013	1	10/20/20 14:20	10/21/20 20:45	1,6010D	BV
Cadmium, Total	ND		mg/kg	0.400	0.039	1	10/20/20 14:20	10/21/20 20:45	1,6010D	BV
Calcium, Total	ND		mg/kg	4.00	1.40	1	10/20/20 14:20	10/21/20 20:45	1,6010D	BV
Chromium, Total	ND		mg/kg	0.400	0.038	1	10/20/20 14:20	10/21/20 20:45	1,6010D	BV
Cobalt, Total	ND		mg/kg	0.800	0.066	1	10/20/20 14:20	10/21/20 20:45	1,6010D	BV
Copper, Total	ND		mg/kg	0.400	0.103	1	10/20/20 14:20	10/21/20 20:45	1,6010D	BV
Iron, Total	ND		mg/kg	2.00	0.361	1	10/20/20 14:20	10/21/20 20:45	1,6010D	BV
Lead, Total	ND		mg/kg	2.00	0.107	1	10/20/20 14:20	10/21/20 20:45	1,6010D	BV
Magnesium, Total	ND		mg/kg	4.00	0.616	1	10/20/20 14:20	10/21/20 20:45	1,6010D	BV
Manganese, Total	0.624		mg/kg	0.400	0.064	1	10/20/20 14:20	10/21/20 20:45	1,6010D	BV
Nickel, Total	ND		mg/kg	1.00	0.097	1	10/20/20 14:20	10/21/20 20:45	1,6010D	BV
Potassium, Total	9.39	J	mg/kg	100	5.76	1	10/20/20 14:20	10/21/20 20:45	1,6010D	BV
Selenium, Total	ND		mg/kg	0.800	0.103	1	10/20/20 14:20	10/21/20 20:45	1,6010D	BV
Silver, Total	ND		mg/kg	0.400	0.113	1	10/20/20 14:20	10/21/20 20:45	1,6010D	BV
Sodium, Total	12.4	J	mg/kg	80.0	1.26	1	10/20/20 14:20	10/21/20 20:45	1,6010D	BV
Thallium, Total	0.176	J	mg/kg	0.800	0.126	1	10/20/20 14:20	10/21/20 20:45	1,6010D	BV
Vanadium, Total	ND		mg/kg	0.400	0.081	1	10/20/20 14:20	10/21/20 20:45	1,6010D	BV
Zinc, Total	ND		mg/kg	2.00	0.117	1	10/20/20 14:20	10/21/20 20:45	1,6010D	BV

Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-11 Batch: WG1423820-1										
Mercury, Total	ND		mg/kg	0.083	0.054	1	10/20/20 14:25	10/21/20 13:26	1,7471B	EW



Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 7471B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 12 Batch: WG1424249-1										
Aluminum, Dissolved	ND		mg/l	0.0100	0.00327	1	10/21/20 09:21	10/21/20 13:46	1,6020B	AM
Antimony, Dissolved	ND		mg/l	0.00400	0.00042	1	10/21/20 09:21	10/21/20 13:46	1,6020B	AM
Arsenic, Dissolved	ND		mg/l	0.00050	0.00016	1	10/21/20 09:21	10/21/20 13:46	1,6020B	AM
Barium, Dissolved	ND		mg/l	0.00050	0.00017	1	10/21/20 09:21	10/21/20 13:46	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	10/21/20 09:21	10/21/20 13:46	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	10/21/20 09:21	10/21/20 13:46	1,6020B	AM
Calcium, Dissolved	ND		mg/l	0.100	0.0394	1	10/21/20 09:21	10/21/20 13:46	1,6020B	AM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	10/21/20 09:21	10/21/20 13:46	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	10/21/20 09:21	10/21/20 13:46	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	10/21/20 09:21	10/21/20 13:46	1,6020B	AM
Iron, Dissolved	0.0200	J	mg/l	0.0700	0.0191	1	10/21/20 09:21	10/21/20 13:46	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	10/21/20 09:21	10/21/20 13:46	1,6020B	AM
Magnesium, Dissolved	ND		mg/l	0.0700	0.0242	1	10/21/20 09:21	10/21/20 13:46	1,6020B	AM
Manganese, Dissolved	ND		mg/l	0.00100	0.00044	1	10/21/20 09:21	10/21/20 13:46	1,6020B	AM
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	10/21/20 09:21	10/21/20 13:46	1,6020B	AM
Potassium, Dissolved	ND		mg/l	0.100	0.0309	1	10/21/20 09:21	10/21/20 13:46	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	10/21/20 09:21	10/21/20 13:46	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	10/21/20 09:21	10/21/20 13:46	1,6020B	AM
Sodium, Dissolved	ND		mg/l	0.100	0.0293	1	10/21/20 09:21	10/21/20 13:46	1,6020B	AM
Thallium, Dissolved	0.00026	J	mg/l	0.00100	0.00014	1	10/21/20 09:21	10/21/20 13:46	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	10/21/20 09:21	10/21/20 13:46	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	10/21/20 09:21	10/21/20 13:46	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A



Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 12 Batch: WG1424250-1									
Mercury, Dissolved	ND	mg/l	0.00020	0.00009	1	10/21/20 09:16	10/21/20 18:58	1,7470A	AL

Prep Information

Digestion Method: EPA 7470A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst	
Total Metals - Mansfield Lab for sample(s): 12 Batch: WG1424264-1										
Aluminum, Total	ND	mg/l	0.0100	0.00327	1	10/21/20 06:55	10/21/20 12:45	1,6020B	AM	
Antimony, Total	ND	mg/l	0.00400	0.00042	1	10/21/20 06:55	10/21/20 12:45	1,6020B	AM	
Arsenic, Total	ND	mg/l	0.00050	0.00016	1	10/21/20 06:55	10/21/20 12:45	1,6020B	AM	
Barium, Total	ND	mg/l	0.00050	0.00017	1	10/21/20 06:55	10/21/20 12:45	1,6020B	AM	
Beryllium, Total	ND	mg/l	0.00050	0.00010	1	10/21/20 06:55	10/21/20 12:45	1,6020B	AM	
Cadmium, Total	ND	mg/l	0.00020	0.00005	1	10/21/20 06:55	10/21/20 12:45	1,6020B	AM	
Calcium, Total	ND	mg/l	0.100	0.0394	1	10/21/20 06:55	10/21/20 12:45	1,6020B	AM	
Chromium, Total	0.00055	J	mg/l	0.00100	0.00017	1	10/21/20 06:55	10/21/20 12:45	1,6020B	AM
Cobalt, Total	ND	mg/l	0.00050	0.00016	1	10/21/20 06:55	10/21/20 12:45	1,6020B	AM	
Copper, Total	ND	mg/l	0.00100	0.00038	1	10/21/20 06:55	10/21/20 12:45	1,6020B	AM	
Iron, Total	ND	mg/l	0.0500	0.0191	1	10/21/20 06:55	10/21/20 12:45	1,6020B	AM	
Lead, Total	ND	mg/l	0.00100	0.00034	1	10/21/20 06:55	10/21/20 12:45	1,6020B	AM	
Magnesium, Total	ND	mg/l	0.0700	0.0242	1	10/21/20 06:55	10/21/20 12:45	1,6020B	AM	
Manganese, Total	ND	mg/l	0.00100	0.00044	1	10/21/20 06:55	10/21/20 12:45	1,6020B	AM	
Nickel, Total	ND	mg/l	0.00200	0.00055	1	10/21/20 06:55	10/21/20 12:45	1,6020B	AM	
Potassium, Total	ND	mg/l	0.100	0.0309	1	10/21/20 06:55	10/21/20 12:45	1,6020B	AM	
Selenium, Total	ND	mg/l	0.00500	0.00173	1	10/21/20 06:55	10/21/20 12:45	1,6020B	AM	
Silver, Total	ND	mg/l	0.00040	0.00016	1	10/21/20 06:55	10/21/20 12:45	1,6020B	AM	
Sodium, Total	ND	mg/l	0.100	0.0293	1	10/21/20 06:55	10/21/20 12:45	1,6020B	AM	
Thallium, Total	ND	mg/l	0.00050	0.00014	1	10/21/20 06:55	10/21/20 12:45	1,6020B	AM	
Vanadium, Total	ND	mg/l	0.00500	0.00157	1	10/21/20 06:55	10/21/20 12:45	1,6020B	AM	
Zinc, Total	ND	mg/l	0.01000	0.00341	1	10/21/20 06:55	10/21/20 12:45	1,6020B	AM	

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044265

Project Number: 26979.01

Report Date: 10/22/20

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 12 Batch: WG1424702-1									
Mercury, Total	ND	mg/l	0.00020	0.00009	1	10/21/20 13:46	10/21/20 19:09	1,7470A	AL

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044265

Project Number: 26979.01

Report Date: 10/22/20

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Total Metals - Mansfield Lab Associated sample(s): 01-11 Batch: WG1423819-2 SRM Lot Number: D109-540								
Aluminum, Total	62		-		50-150	-		
Antimony, Total	146		-		19-250	-		
Arsenic, Total	97		-		70-130	-		
Barium, Total	91		-		75-125	-		
Beryllium, Total	99		-		75-125	-		
Cadmium, Total	96		-		75-125	-		
Calcium, Total	95		-		73-128	-		
Chromium, Total	98		-		70-130	-		
Cobalt, Total	99		-		75-125	-		
Copper, Total	90		-		75-125	-		
Iron, Total	88		-		35-165	-		
Lead, Total	93		-		72-128	-		
Magnesium, Total	81		-		62-138	-		
Manganese, Total	95		-		74-126	-		
Nickel, Total	97		-		70-130	-		
Potassium, Total	76		-		59-141	-		
Selenium, Total	96		-		68-132	-		
Silver, Total	95		-		68-131	-		
Sodium, Total	102		-		35-165	-		
Thallium, Total	93		-		68-131	-		
Vanadium, Total	94		-		59-141	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Project Number: 26979.01

Lab Number: L2044265

Report Date: 10/22/20

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-11 Batch: WG1423819-2 SRM Lot Number: D109-540					
Zinc, Total	93	-	70-130	-	
Total Metals - Mansfield Lab Associated sample(s): 01-11 Batch: WG1423820-2 SRM Lot Number: D109-540					
Mercury, Total	92	-	60-140	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044265

Project Number: 26979.01

Report Date: 10/22/20

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 12 Batch: WG1424249-2					
Aluminum, Dissolved	103	-	80-120	-	
Antimony, Dissolved	84	-	80-120	-	
Arsenic, Dissolved	108	-	80-120	-	
Barium, Dissolved	103	-	80-120	-	
Beryllium, Dissolved	117	-	80-120	-	
Cadmium, Dissolved	111	-	80-120	-	
Calcium, Dissolved	101	-	80-120	-	
Chromium, Dissolved	101	-	80-120	-	
Cobalt, Dissolved	103	-	80-120	-	
Copper, Dissolved	104	-	80-120	-	
Iron, Dissolved	103	-	80-120	-	
Lead, Dissolved	108	-	80-120	-	
Magnesium, Dissolved	100	-	80-120	-	
Manganese, Dissolved	103	-	80-120	-	
Nickel, Dissolved	97	-	80-120	-	
Potassium, Dissolved	100	-	80-120	-	
Selenium, Dissolved	112	-	80-120	-	
Silver, Dissolved	106	-	80-120	-	
Sodium, Dissolved	102	-	80-120	-	
Thallium, Dissolved	104	-	80-120	-	
Vanadium, Dissolved	100	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Project Number: 26979.01

Lab Number: L2044265

Report Date: 10/22/20

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 12 Batch: WG1424249-2					
Zinc, Dissolved	112	-	80-120	-	
Dissolved Metals - Mansfield Lab Associated sample(s): 12 Batch: WG1424250-2					
Mercury, Dissolved	102	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044265

Project Number: 26979.01

Report Date: 10/22/20

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 12 Batch: WG1424264-2					
Aluminum, Total	101	-	80-120	-	
Antimony, Total	102	-	80-120	-	
Arsenic, Total	106	-	80-120	-	
Barium, Total	101	-	80-120	-	
Beryllium, Total	103	-	80-120	-	
Cadmium, Total	107	-	80-120	-	
Calcium, Total	105	-	80-120	-	
Chromium, Total	98	-	80-120	-	
Cobalt, Total	98	-	80-120	-	
Copper, Total	99	-	80-120	-	
Iron, Total	95	-	80-120	-	
Lead, Total	106	-	80-120	-	
Magnesium, Total	101	-	80-120	-	
Manganese, Total	100	-	80-120	-	
Nickel, Total	94	-	80-120	-	
Potassium, Total	104	-	80-120	-	
Selenium, Total	111	-	80-120	-	
Silver, Total	101	-	80-120	-	
Sodium, Total	101	-	80-120	-	
Thallium, Total	99	-	80-120	-	
Vanadium, Total	96	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Project Number: 26979.01

Lab Number: L2044265

Report Date: 10/22/20

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 12 Batch: WG1424264-2					
Zinc, Total	106	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 12 Batch: WG1424702-2					
Mercury, Total	106	-	80-120	-	

Matrix Spike Analysis Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-11 QC Batch ID: WG1423819-3 QC Sample: L2044265-01 Client ID: SB-3 (0'-2')												
Aluminum, Total	5210	177	7150	1100	Q	-	-		75-125	-		20
Antimony, Total	ND	44.3	37.8	85		-	-		75-125	-		20
Arsenic, Total	5.77	10.6	14.3	80		-	-		75-125	-		20
Barium, Total	294	177	566	154	Q	-	-		75-125	-		20
Beryllium, Total	0.283J	4.43	4.87	110		-	-		75-125	-		20
Cadmium, Total	0.425J	4.51	4.73	105		-	-		75-125	-		20
Calcium, Total	26900	885	34000	802	Q	-	-		75-125	-		20
Chromium, Total	11.0	17.7	27.5	93		-	-		75-125	-		20
Cobalt, Total	3.53	44.3	43.6	90		-	-		75-125	-		20
Copper, Total	13.3	22.1	35.7	101		-	-		75-125	-		20
Iron, Total	10800	88.5	10200	0	Q	-	-		75-125	-		20
Lead, Total	130	45.1	137	16	Q	-	-		75-125	-		20
Magnesium, Total	2930	885	4110	133	Q	-	-		75-125	-		20
Manganese, Total	630	44.3	422	0	Q	-	-		75-125	-		20
Nickel, Total	8.19	44.3	45.4	84		-	-		75-125	-		20
Potassium, Total	367	885	1450	122		-	-		75-125	-		20
Selenium, Total	ND	10.6	6.28	59	Q	-	-		75-125	-		20
Silver, Total	ND	26.6	26.7	100		-	-		75-125	-		20
Sodium, Total	446	885	1650	136	Q	-	-		75-125	-		20
Thallium, Total	ND	10.6	4.96	47	Q	-	-		75-125	-		20
Vanadium, Total	16.8	44.3	61.8	102		-	-		75-125	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-11 QC Batch ID: WG1423819-3 QC Sample: L2044265-01 Client ID: SB-3 (0'-2')									
Zinc, Total	177	44.3	245	154	Q	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 01-11 QC Batch ID: WG1423820-3 QC Sample: L2044265-01 Client ID: SB-3 (0'-2')									
Mercury, Total	0.116	0.155	0.251	87	-	-	80-120	-	20

Matrix Spike Analysis Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 12 QC Batch ID: WG1424249-3 QC Sample: L2044265-12 Client ID: GW-3									
Aluminum, Dissolved	ND	10	9.90	99	-	-	75-125	-	20
Antimony, Dissolved	0.00248J	2.5	1.989	80	-	-	75-125	-	20
Arsenic, Dissolved	ND	0.6	0.5775	96	-	-	75-125	-	20
Barium, Dissolved	0.06718	10	10.11	100	-	-	75-125	-	20
Beryllium, Dissolved	ND	0.25	0.2943	118	-	-	75-125	-	20
Cadmium, Dissolved	ND	0.255	0.2865	112	-	-	75-125	-	20
Calcium, Dissolved	102.	50	158	112	-	-	75-125	-	20
Chromium, Dissolved	ND	1	1.039	104	-	-	75-125	-	20
Cobalt, Dissolved	ND	2.5	2.606	104	-	-	75-125	-	20
Copper, Dissolved	ND	1.25	1.355	108	-	-	75-125	-	20
Iron, Dissolved	ND	5	5.58	112	-	-	75-125	-	20
Lead, Dissolved	ND	2.55	2.758	108	-	-	75-125	-	20
Magnesium, Dissolved	16.0	50	65.9	100	-	-	75-125	-	20
Manganese, Dissolved	0.00293J	2.5	2.561	102	-	-	75-125	-	20
Nickel, Dissolved	0.01116	2.5	2.619	104	-	-	75-125	-	20
Potassium, Dissolved	7.69	50	57.7	100	-	-	75-125	-	20
Selenium, Dissolved	ND	0.6	0.688	115	-	-	75-125	-	20
Silver, Dissolved	ND	0.25	0.2690	108	-	-	75-125	-	20
Sodium, Dissolved	203.	50	240	74	Q	-	75-125	-	20
Thallium, Dissolved	0.00168J	0.6	0.6261	104	-	-	75-125	-	20
Vanadium, Dissolved	ND	2.5	2.478	99	-	-	75-125	-	20

Matrix Spike Analysis Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 12 QC Batch ID: WG1424249-3 QC Sample: L2044265-12 Client ID: GW-3									
Zinc, Dissolved	ND	2.5	2.847	114	-	-	75-125	-	20
Dissolved Metals - Mansfield Lab Associated sample(s): 12 QC Batch ID: WG1424250-3 QC Sample: L2044265-12 Client ID: GW-3									
Mercury, Dissolved	ND	0.005	0.00492	98	-	-	75-125	-	20

Matrix Spike Analysis Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 12 QC Batch ID: WG1424264-3 QC Sample: L2045010-01 Client ID: MS Sample									
Aluminum, Total	0.011	2	2.31	115	-	-	75-125	-	20
Antimony, Total	ND	0.5	0.5726	114	-	-	75-125	-	20
Arsenic, Total	0.2309	0.12	0.3706	116	-	-	75-125	-	20
Barium, Total	0.06758	2	2.236	108	-	-	75-125	-	20
Beryllium, Total	ND	0.05	0.05263	105	-	-	75-125	-	20
Cadmium, Total	ND	0.051	0.05936	116	-	-	75-125	-	20
Calcium, Total	21.9	10	35.2	133	Q	-	75-125	-	20
Chromium, Total	0.00095J	0.2	0.2146	107	-	-	75-125	-	20
Cobalt, Total	0.01884	0.5	0.5495	106	-	-	75-125	-	20
Copper, Total	0.00116	0.25	0.2702	108	-	-	75-125	-	20
Iron, Total	162.	1	147	0	Q	-	75-125	-	20
Lead, Total	ND	0.51	0.5843	114	-	-	75-125	-	20
Magnesium, Total	2.68	10	14.0	113	-	-	75-125	-	20
Manganese, Total	2.347	0.5	2.934	117	-	-	75-125	-	20
Nickel, Total	0.00115J	0.5	0.5071	101	-	-	75-125	-	20
Potassium, Total	4.25	10	16.4	122	-	-	75-125	-	20
Selenium, Total	ND	0.12	0.147	122	-	-	75-125	-	20
Silver, Total	ND	0.05	0.05366	107	-	-	75-125	-	20
Sodium, Total	7.78	10	19.5	117	-	-	75-125	-	20
Thallium, Total	ND	0.12	0.1277	106	-	-	75-125	-	20
Vanadium, Total	ND	0.5	0.5324	106	-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044265

Project Number: 26979.01

Report Date: 10/22/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 12 QC Batch ID: WG1424264-3 QC Sample: L2045010-01 Client ID: MS Sample									
Zinc, Total	0.00891J	0.5	0.5977	120	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 12 QC Batch ID: WG1424702-3 QC Sample: L2044727-05 Client ID: MS Sample									
Mercury, Total	0.00022	0.005	0.00526	101	-	-	75-125	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Project Number: 26979.01

Lab Number: L2044265

Report Date: 10/22/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-11 QC Batch ID: WG1423819-4 QC Sample: L2044265-01 Client ID: SB-3 (0'-2')						
Aluminum, Total	5210	6090	mg/kg	16		20
Antimony, Total	ND	ND	mg/kg	NC		20
Arsenic, Total	5.77	6.23	mg/kg	8		20
Barium, Total	294	651	mg/kg	76	Q	20
Beryllium, Total	0.283J	0.332J	mg/kg	NC		20
Cadmium, Total	0.425J	0.506J	mg/kg	NC		20
Calcium, Total	26900	31900	mg/kg	17		20
Chromium, Total	11.0	9.89	mg/kg	11		20
Cobalt, Total	3.53	2.86	mg/kg	21	Q	20
Copper, Total	13.3	11.2	mg/kg	17		20
Iron, Total	10800	8700	mg/kg	22	Q	20
Lead, Total	130	145	mg/kg	11		20
Magnesium, Total	2930	2930	mg/kg	0		20
Manganese, Total	630	280	mg/kg	77	Q	20
Nickel, Total	8.19	5.29	mg/kg	43	Q	20
Potassium, Total	367	425	mg/kg	15		20
Selenium, Total	ND	ND	mg/kg	NC		20
Silver, Total	ND	ND	mg/kg	NC		20
Sodium, Total	446	627	mg/kg	34	Q	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Project Number: 26979.01

Lab Number: L2044265

Report Date: 10/22/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-11 QC Batch ID: WG1423819-4 QC Sample: L2044265-01 Client ID: SB-3 (0'-2')					
Thallium, Total	ND	ND	mg/kg	NC	20
Vanadium, Total	16.8	18.4	mg/kg	9	20
Zinc, Total	177	203	mg/kg	14	20
Total Metals - Mansfield Lab Associated sample(s): 01-11 QC Batch ID: WG1423820-4 QC Sample: L2044265-01 Client ID: SB-3 (0'-2')					
Mercury, Total	0.116	0.105	mg/kg	10	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Project Number: 26979.01

Lab Number: L2044265

Report Date: 10/22/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 12 QC Batch ID: WG1424249-4 QC Sample: L2044265-12 Client ID: GW-3					
Aluminum, Dissolved	ND	ND	mg/l	NC	20
Antimony, Dissolved	0.00248J	0.00511J	mg/l	NC	20
Arsenic, Dissolved	ND	ND	mg/l	NC	20
Barium, Dissolved	0.06718	0.06386	mg/l	5	20
Beryllium, Dissolved	ND	ND	mg/l	NC	20
Cadmium, Dissolved	ND	ND	mg/l	NC	20
Calcium, Dissolved	102.	98.1	mg/l	4	20
Chromium, Dissolved	ND	ND	mg/l	NC	20
Cobalt, Dissolved	ND	ND	mg/l	NC	20
Copper, Dissolved	ND	ND	mg/l	NC	20
Iron, Dissolved	ND	0.218J	mg/l	NC	20
Lead, Dissolved	ND	ND	mg/l	NC	20
Magnesium, Dissolved	16.0	15.6	mg/l	3	20
Manganese, Dissolved	0.00293J	0.00248J	mg/l	NC	20
Nickel, Dissolved	0.01116	0.00991J	mg/l	NC	20
Potassium, Dissolved	7.69	7.14	mg/l	7	20
Selenium, Dissolved	ND	ND	mg/l	NC	20
Silver, Dissolved	ND	ND	mg/l	NC	20
Sodium, Dissolved	203.	192	mg/l	6	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Project Number: 26979.01

Lab Number: L2044265

Report Date: 10/22/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 12 QC Batch ID: WG1424249-4 QC Sample: L2044265-12 Client ID: GW-3					
Thallium, Dissolved	0.00168J	0.00443J	mg/l	NC	20
Vanadium, Dissolved	ND	ND	mg/l	NC	20
Zinc, Dissolved	ND	ND	mg/l	NC	20
Dissolved Metals - Mansfield Lab Associated sample(s): 12 QC Batch ID: WG1424250-4 QC Sample: L2044265-12 Client ID: GW-3					
Mercury, Dissolved	ND	ND	mg/l	NC	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Project Number: 26979.01

Lab Number: L2044265

Report Date: 10/22/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 12 QC Batch ID: WG1424264-4 QC Sample: L2045010-01 Client ID: DUP Sample					
Antimony, Total	ND	ND	mg/l	NC	20
Arsenic, Total	0.2309	0.2272	mg/l	2	20
Barium, Total	0.06758	0.06821	mg/l	1	20
Beryllium, Total	ND	ND	mg/l	NC	20
Cadmium, Total	ND	ND	mg/l	NC	20
Calcium, Total	21.9	21.9	mg/l	0	20
Chromium, Total	0.00095J	0.00086J	mg/l	NC	20
Cobalt, Total	0.01884	0.01907	mg/l	1	20
Copper, Total	0.00116	0.00095J	mg/l	NC	20
Iron, Total	162.	158	mg/l	3	20
Lead, Total	ND	ND	mg/l	NC	20
Magnesium, Total	2.68	2.64	mg/l	2	20
Manganese, Total	2.347	2.344	mg/l	0	20
Nickel, Total	0.00115J	0.00107J	mg/l	NC	20
Potassium, Total	4.25	4.37	mg/l	3	20
Selenium, Total	ND	ND	mg/l	NC	20
Silver, Total	ND	ND	mg/l	NC	20
Sodium, Total	7.78	7.74	mg/l	1	20
Thallium, Total	ND	0.00033J	mg/l	NC	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Project Number: 26979.01

Lab Number: L2044265

Report Date: 10/22/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 12 QC Batch ID: WG1424264-4 QC Sample: L2045010-01 Client ID: DUP Sample					
Vanadium, Total	ND	ND	mg/l	NC	20
Zinc, Total	0.00891J	0.00916J	mg/l	NC	20
Total Metals - Mansfield Lab Associated sample(s): 12 QC Batch ID: WG1424702-4 QC Sample: L2044727-05 Client ID: DUP Sample					
Mercury, Total	0.00022	0.00020	mg/l	9	20

INORGANICS & MISCELLANEOUS

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-01
Client ID: SB-3 (0'-2')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:10
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	86.3		%	0.100	NA	1	-	10/16/20 12:22	121,2540G	RI



Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044265**Project Number:** 26979.01**Report Date:** 10/22/20**SAMPLE RESULTS**

Lab ID: L2044265-02

Date Collected: 10/15/20 09:20

Client ID: SB-3 (5'-7')

Date Received: 10/15/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	88.0		%	0.100	NA	1	-	10/16/20 12:22	121,2540G	RI



Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044265**Project Number:** 26979.01**Report Date:** 10/22/20**SAMPLE RESULTS**

Lab ID: L2044265-03

Date Collected: 10/15/20 09:25

Client ID: SB-3 (13'-15')

Date Received: 10/15/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	93.4		%	0.100	NA	1	-	10/16/20 12:22	121,2540G	RI



Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044265**Project Number:** 26979.01**Report Date:** 10/22/20**SAMPLE RESULTS**

Lab ID: L2044265-04

Date Collected: 10/15/20 09:30

Client ID: SB-11 (0'-2')

Date Received: 10/15/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	93.4		%	0.100	NA	1	-	10/16/20 12:22	121,2540G	RI



Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044265**Project Number:** 26979.01**Report Date:** 10/22/20**SAMPLE RESULTS**

Lab ID: L2044265-05

Date Collected: 10/15/20 09:35

Client ID: SB-11 (2'-5')

Date Received: 10/15/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90.3		%	0.100	NA	1	-	10/16/20 12:22	121,2540G	RI



Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044265**Project Number:** 26979.01**Report Date:** 10/22/20**SAMPLE RESULTS**

Lab ID: L2044265-06

Date Collected: 10/15/20 09:45

Client ID: SB-11 (13'-15')

Date Received: 10/15/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	94.6		%	0.100	NA	1	-	10/16/20 12:22	121,2540G	RI



Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-07
Client ID: SB-10 (0'-2')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 09:55
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	92.7		%	0.100	NA	1	-	10/16/20 12:22	121,2540G	RI



Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-08
Client ID: SB-10 (4'-6')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 10:00
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.0		%	0.100	NA	1	-	10/16/20 12:22	121,2540G	RI



Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-09
Client ID: SB-10 (13'-15')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 10:05
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	95.0		%	0.100	NA	1	-	10/16/20 12:22	121,2540G	RI



Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

SAMPLE RESULTS

Lab ID: L2044265-10
Client ID: SB-2 (5'-7')
Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Date Collected: 10/15/20 10:35
Date Received: 10/15/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90.5		%	0.100	NA	1	-	10/16/20 12:22	121,2540G	RI



Project Name: BLUE SEA BACA PHASE II ESA**Lab Number:** L2044265**Project Number:** 26979.01**Report Date:** 10/22/20**SAMPLE RESULTS**

Lab ID: L2044265-11

Date Collected: 10/15/20 10:46

Client ID: SB-6 (2'-4')

Date Received: 10/15/20

Sample Location: BETWEEN CHESTER AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	92.1		%	0.100	NA	1	-	10/16/20 12:22	121,2540G	RI



Lab Duplicate Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE II ESA

Project Number: 26979.01

Lab Number: L2044265

Report Date: 10/22/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-11 QC Batch ID: WG1422958-1 QC Sample: L2044265-01 Client ID: SB-3 (0'-2')						
Solids, Total	86.3	87.0	%	1		20

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Serial_No:10222017:04
Lab Number: L2044265
Report Date: 10/22/20

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2044265-01A	Vial MeOH preserved	A	NA		5.8	Y	Absent		NYTCL-8260HLW(14)
L2044265-01B	Vial water preserved	A	NA		5.8	Y	Absent	16-OCT-20 11:43	NYTCL-8260HLW(14)
L2044265-01C	Vial water preserved	A	NA		5.8	Y	Absent	16-OCT-20 11:43	NYTCL-8260HLW(14)
L2044265-01D	Plastic 2oz unpreserved for TS	A	NA		5.8	Y	Absent		TS(7)
L2044265-01E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.8	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),NI-TI(180),CR-TI(180),TL-TI(180),AL-TI(180),ZN-TI(180),SB-TI(180),CU-TI(180),SE-TI(180),PB-TI(180),CO-TI(180),V-TI(180),MG-TI(180),FE-TI(180),MN-TI(180),HG-T(28),K-TI(180),CA-TI(180),NA-TI(180),CD-TI(180)
L2044265-01F	Glass 250ml/8oz unpreserved	A	NA		5.8	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2044265-02A	Vial MeOH preserved	B	NA		2.8	Y	Absent		NYTCL-8260HLW(14)
L2044265-02B	Vial water preserved	B	NA		2.8	Y	Absent	16-OCT-20 11:43	NYTCL-8260HLW(14)
L2044265-02C	Vial water preserved	B	NA		2.8	Y	Absent	16-OCT-20 11:43	NYTCL-8260HLW(14)
L2044265-02D	Plastic 2oz unpreserved for TS	B	NA		2.8	Y	Absent		TS(7)
L2044265-02E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		2.8	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),AL-TI(180),NI-TI(180),TL-TI(180),SB-TI(180),PB-TI(180),SE-TI(180),CU-TI(180),ZN-TI(180),V-TI(180),CO-TI(180),FE-TI(180),MN-TI(180),MG-TI(180),HG-T(28),CD-TI(180),CA-TI(180),NA-TI(180),K-TI(180)
L2044265-02F	Glass 250ml/8oz unpreserved	B	NA		2.8	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2044265-03A	Vial MeOH preserved	B	NA		2.8	Y	Absent		NYTCL-8260HLW(14)
L2044265-03B	Vial water preserved	B	NA		2.8	Y	Absent	16-OCT-20 11:43	NYTCL-8260HLW(14)
L2044265-03C	Vial water preserved	B	NA		2.8	Y	Absent	16-OCT-20 11:43	NYTCL-8260HLW(14)
L2044265-03D	Plastic 2oz unpreserved for TS	B	NA		2.8	Y	Absent		TS(7)

*Values in parentheses indicate holding time in days



Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044265

Project Number: 26979.01

Report Date: 10/22/20

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2044265-03E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		2.8	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),TL-TI(180),NI-TI(180),AL-TI(180),SB-TI(180),CU-TI(180),SE-TI(180),ZN-TI(180),PB-TI(180),V-TI(180),CO-TI(180),MG-TI(180),FE-TI(180),MN-TI(180),HG-T(28),K-TI(180),CA-TI(180),CD-TI(180),NA-TI(180)
L2044265-03F	Glass 250ml/8oz unpreserved	B	NA		2.8	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2044265-04A	Vial MeOH preserved	B	NA		2.8	Y	Absent		NYTCL-8260HLW(14)
L2044265-04B	Vial water preserved	B	NA		2.8	Y	Absent	16-OCT-20 11:43	NYTCL-8260HLW(14)
L2044265-04C	Vial water preserved	B	NA		2.8	Y	Absent	16-OCT-20 11:43	NYTCL-8260HLW(14)
L2044265-04D	Plastic 2oz unpreserved for TS	B	NA		2.8	Y	Absent		TS(7)
L2044265-04E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		2.8	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),NI-TI(180),TL-TI(180),AL-TI(180),CR-TI(180),SE-TI(180),ZN-TI(180),PB-TI(180),SB-TI(180),CU-TI(180),V-TI(180),CO-TI(180),HG-T(28),MG-TI(180),MN-TI(180),FE-TI(180),CA-TI(180),NA-TI(180),CD-TI(180),K-TI(180)
L2044265-04F	Glass 250ml/8oz unpreserved	B	NA		2.8	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2044265-05A	Vial MeOH preserved	A	NA		5.8	Y	Absent		NYTCL-8260HLW(14)
L2044265-05B	Vial water preserved	A	NA		5.8	Y	Absent	16-OCT-20 11:43	NYTCL-8260HLW(14)
L2044265-05C	Vial water preserved	A	NA		5.8	Y	Absent	16-OCT-20 11:43	NYTCL-8260HLW(14)
L2044265-05D	Plastic 2oz unpreserved for TS	A	NA		5.8	Y	Absent		TS(7)
L2044265-05E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.8	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),AL-TI(180),ZN-TI(180),SB-TI(180),PB-TI(180),SE-TI(180),CU-TI(180),CO-TI(180),V-TI(180),HG-T(28),MN-TI(180),MG-TI(180),FE-TI(180),K-TI(180),CD-TI(180),NA-TI(180),CA-TI(180)
L2044265-05F	Glass 250ml/8oz unpreserved	A	NA		5.8	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2044265-06A	Vial MeOH preserved	B	NA		2.8	Y	Absent		NYTCL-8260HLW(14)
L2044265-06B	Vial water preserved	B	NA		2.8	Y	Absent	16-OCT-20 11:43	NYTCL-8260HLW(14)
L2044265-06C	Vial water preserved	B	NA		2.8	Y	Absent	16-OCT-20 11:43	NYTCL-8260HLW(14)
L2044265-06D	Plastic 2oz unpreserved for TS	B	NA		2.8	Y	Absent		TS(7)

Project Name: BLUE SEA BACA PHASE II ESA

Lab Number: L2044265

Project Number: 26979.01

Report Date: 10/22/20

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2044265-06E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		2.8	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),NI-TI(180),TL-TI(180),AL-TI(180),CR-TI(180),SE-TI(180),ZN-TI(180),CU-TI(180),SB-TI(180),PB-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CD-TI(180),NA-TI(180),CA-TI(180),K-TI(180)
L2044265-06F	Glass 250ml/8oz unpreserved	B	NA		2.8	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2044265-07A	Vial MeOH preserved	B	NA		2.8	Y	Absent		NYTCL-8260HLW(14)
L2044265-07B	Vial water preserved	B	NA		2.8	Y	Absent	16-OCT-20 11:43	NYTCL-8260HLW(14)
L2044265-07C	Vial water preserved	B	NA		2.8	Y	Absent	16-OCT-20 11:43	NYTCL-8260HLW(14)
L2044265-07D	Plastic 2oz unpreserved for TS	B	NA		2.8	Y	Absent		TS(7)
L2044265-07E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		2.8	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),CR-TI(180),TL-TI(180),NI-TI(180),AL-TI(180),CU-TI(180),SE-TI(180),PB-TI(180),SB-TI(180),ZN-TI(180),V-TI(180),CO-TI(180),MG-TI(180),MN-TI(180),FE-TI(180),HG-T(28),K-TI(180),CD-TI(180),CA-TI(180),NA-TI(180)
L2044265-07F	Glass 250ml/8oz unpreserved	B	NA		2.8	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2044265-08A	Vial MeOH preserved	A	NA		5.8	Y	Absent		NYTCL-8260HLW(14)
L2044265-08B	Vial water preserved	A	NA		5.8	Y	Absent	16-OCT-20 11:43	NYTCL-8260HLW(14)
L2044265-08C	Vial water preserved	A	NA		5.8	Y	Absent	16-OCT-20 11:43	NYTCL-8260HLW(14)
L2044265-08D	Plastic 2oz unpreserved for TS	A	NA		5.8	Y	Absent		TS(7)
L2044265-08E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.8	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),NI-TI(180),AL-TI(180),TL-TI(180),CR-TI(180),SB-TI(180),ZN-TI(180),CU-TI(180),PB-TI(180),SE-TI(180),CO-TI(180),V-TI(180),MN-TI(180),MG-TI(180),FE-TI(180),HG-T(28),CD-TI(180),K-TI(180),NA-TI(180),CA-TI(180)
L2044265-08F	Glass 250ml/8oz unpreserved	A	NA		5.8	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2044265-09A	Vial MeOH preserved	A	NA		5.8	Y	Absent		NYTCL-8260HLW(14)
L2044265-09B	Vial water preserved	A	NA		5.8	Y	Absent	16-OCT-20 11:43	NYTCL-8260HLW(14)
L2044265-09C	Vial water preserved	A	NA		5.8	Y	Absent	16-OCT-20 11:43	NYTCL-8260HLW(14)
L2044265-09D	Plastic 2oz unpreserved for TS	A	NA		5.8	Y	Absent		TS(7)

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Serial_No:10222017:04
Lab Number: L2044265
Report Date: 10/22/20

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2044265-09E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.8	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),TL-TI(180),AL-TI(180),NI-TI(180),CR-TI(180),SB-TI(180),CU-TI(180),PB-TI(180),ZN-TI(180),SE-TI(180),CO-TI(180),V-TI(180),HG-T(28),MG-TI(180),FE-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),NA-TI(180),K-TI(180)
L2044265-09F	Glass 250ml/8oz unpreserved	A	NA		5.8	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2044265-10A	Vial MeOH preserved	A	NA		5.8	Y	Absent		NYTCL-8260HLW(14)
L2044265-10B	Vial water preserved	A	NA		5.8	Y	Absent	16-OCT-20 11:43	NYTCL-8260HLW(14)
L2044265-10C	Vial water preserved	A	NA		5.8	Y	Absent	16-OCT-20 11:43	NYTCL-8260HLW(14)
L2044265-10D	Plastic 2oz unpreserved for TS	A	NA		5.8	Y	Absent		TS(7)
L2044265-10E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.8	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),AL-TI(180),TL-TI(180),CU-TI(180),SE-TI(180),PB-TI(180),SB-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),MG-TI(180),FE-TI(180),MN-TI(180),HG-T(28),CA-TI(180),NA-TI(180),K-TI(180),CD-TI(180)
L2044265-10F	Glass 250ml/8oz unpreserved	A	NA		5.8	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2044265-11A	Vial MeOH preserved	A	NA		5.8	Y	Absent		NYTCL-8260HLW(14)
L2044265-11B	Vial water preserved	A	NA		5.8	Y	Absent	16-OCT-20 11:43	NYTCL-8260HLW(14)
L2044265-11C	Vial water preserved	A	NA		5.8	Y	Absent	16-OCT-20 11:43	NYTCL-8260HLW(14)
L2044265-11D	Plastic 2oz unpreserved for TS	A	NA		5.8	Y	Absent		TS(7)
L2044265-11E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.8	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),TL-TI(180),AL-TI(180),NI-TI(180),SB-TI(180),PB-TI(180),CU-TI(180),ZN-TI(180),SE-TI(180),V-TI(180),CO-TI(180),MG-TI(180),FE-TI(180),HG-T(28),MN-TI(180),CA-TI(180),NA-TI(180),CD-TI(180),K-TI(180)
L2044265-11F	Glass 250ml/8oz unpreserved	A	NA		5.8	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2044265-12A	Vial HCl preserved	A	NA		5.8	Y	Absent		NYTCL-8260(14)
L2044265-12B	Vial HCl preserved	A	NA		5.8	Y	Absent		NYTCL-8260(14)
L2044265-12C	Vial HCl preserved	A	NA		5.8	Y	Absent		NYTCL-8260(14)
L2044265-12D	Plastic 250ml unpreserved	A	7	7	5.8	Y	Absent		-

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Serial_No:10222017:04
Lab Number: L2044265
Report Date: 10/22/20

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2044265-12E	Plastic 250ml HNO3 preserved	A	<2	<2	5.8	Y	Absent		BA-6020T(180),TL-6020T(180),FE-6020T(180),SE-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),ZN-6020T(180),CU-6020T(180),NA-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),V-6020T(180),AS-6020T(180),SB-6020T(180),MG-6020T(180),AL-6020T(180),CD-6020T(180),AG-6020T(180),HG-T(28),CO-6020T(180)
L2044265-12F	Amber 120ml unpreserved	B	7	7	2.8	Y	Absent		NYTCL-8082-LVI(7)
L2044265-12G	Amber 120ml unpreserved	B	7	7	2.8	Y	Absent		NYTCL-8082-LVI(7)
L2044265-12H	Amber 120ml unpreserved	B	7	7	2.8	Y	Absent		NYTCL-8081(7)
L2044265-12I	Amber 120ml unpreserved	B	7	7	2.8	Y	Absent		NYTCL-8081(7)
L2044265-12J	Amber 250ml unpreserved	A	7	7	5.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2044265-12K	Amber 250ml unpreserved	A	7	7	5.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2044265-12X	Plastic 120ml HNO3 preserved Filtrates	A	NA		5.8	Y	Absent		CU-6020S(180),V-6020S(180),SE-6020S(180),K-6020S(180),MN-6020S(180),CO-6020S(180),BE-6020S(180),ZN-6020S(180),MG-6020S(180),CR-6020S(180),FE-6020S(180),CA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),NA-6020S(180),BA-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)

*Values in parentheses indicate holding time in days



Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where

Report Format: DU Report with 'J' Qualifiers



Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

Data Qualifiers

the identification is based on a mass spectral library search.

- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.

Project Name: BLUE SEA BACA PHASE II ESA
Project Number: 26979.01

Lab Number: L2044265
Report Date: 10/22/20

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

EPA TO-12 Non-methane organics

EPA 3C Fixed gases

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.

EPA 522.

Non-Potable Water


EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.


EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

	NEW YORK CHAIN OF CUSTODY	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page 1 of 2	Date Rec'd in Lab 10/16/20	ALPHA Job # 10044265							
	Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288										
Client Information Client: VHB Address: 100 motor parkway Haverhill MA 01722 Ste 350 Phone: 621-787-3400 Fax: B.murphy@VHB.com Email: B.murphy@VHB.com		Project Information Project Name: Blue Sea BACTA Phase II ESA Project Location: Between Chester and Rockaway Ave Project # 26479.01 (Use Project name as Project #) <input type="checkbox"/>		Deliverables <input type="checkbox"/> ASP-A <input type="checkbox"/> ASP-B <input type="checkbox"/> EQUIS (1 File) <input type="checkbox"/> EQUIS (4 File) <input type="checkbox"/> Other								
Project Manager: B.murphy@VHB.com Bryan Murphy ALPHAQuote #: Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		Regulatory Requirement <input type="checkbox"/> NY TOGS <input checked="" type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input checked="" type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input checked="" type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		Billing Information <input type="checkbox"/> Same as Client Info PO #								
These samples have been previously analyzed by Alpha <input type="checkbox"/>		Other project specific requirements/comments:		ANALYSIS								
Please specify Metals or TAL.		(Use Project name as Project #) <input type="checkbox"/>		Sample Filtration <input type="checkbox"/> Done <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do (Please Specify below)								
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL VOCs (820)	TCL SVOCs (827)	TAL Metals (601)	Pesticides (808)	P (808)	Total Bottle	
44265-01	SB-3 (0'-2')	10/15/20	09:10	S	MI	X	X	X	X	X	6	
-02	SB-3 (5'-7')	10/15/20	09:20	S	MI	X	X	X	X	X	6	
-03	SB-3 (13'-15')	10/15/20	09:25	S	MI	X	X	X	X	X	6	
-04	SB-11 (0'-2')	10/15/20	09:30	S	MI	X	X	X	X	X	6	
-05	SB-11 (2'-5')	10/15/20	09:35	S	MI	X	X	X	X	X	6	
-06	SB-11 (13'-15')	10/15/20	09:45	S	MI	X	X	X	X	X	6	
-07	SB-10 (0'-2')	10/15/20	09:55	S	MI	X	X	X	X	X	6	
-08	SB-10 (4'-6')	10/15/20	10:00	S	MI	X	X	X	X	X	6	
-09	SB-10 (13'-15')	10/15/20	10:05	S	MI	X	X	X	X	X	6	
-10	SB-2 (5'-7')	10/15/20	10:35	S	MI	X	X	X	X	X	6	
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other	Container Code: P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle	Westboro: Certification No: MA935 Mansfield: Certification No: MA015	Container Type Preservative	Relinquished By: [Signature] Date/Time: 10/15/20 11:35 [Signature] Date/Time: 10/15/20 11:15 [Signature] Date/Time: 10/16/20 08:05				Received By: [Signature] Date/Time: 10/15/20 11:35 [Signature] Date/Time: 10/15/20 11:35 [Signature] Date/Time: 10/16/20 08:05				Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

 NEW YORK CHAIN OF CUSTODY Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193		Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105		Page		Date Rec'd in Lab		ALPHA Job #																																																	
				2 of 2		10/16/20		L0044265																																																	
Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288		Project Information Project Name: <u>Blue Sea BACN Phase II ESH</u> Project Location: <u>Between Chester and Rockaway Ave</u> Project # <u>26979,01</u> (Use Project name as Project #) <input type="checkbox"/>				Deliverables <input type="checkbox"/> ASP-A <input type="checkbox"/> ASP-B <input type="checkbox"/> EQUIS (1 File) <input type="checkbox"/> EQUIS (4 File) <input type="checkbox"/> Other		Billing Information <input type="checkbox"/> Same as Client Info PO #																																																	
Client Information Client: <u>VHB</u> Address: <u>100 Motor Parkway</u> <u>Hauppauge NY 11722 Sic 35</u> Phone: <u>631-787-3403</u> Fax: Email: <u>Bmurry@vhb.com</u>		Project Manager: <u>Bmurry@vhb.com Bryan Murty</u> ALPHAQuote #: Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:				Regulatory Requirement <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:																																																	
These samples have been previously analyzed by Alpha <input type="checkbox"/> Other project specific requirements/comments: Please specify Metals or TAL.		ANALYSIS TCL Vol% (8260) TCL SV% (8270) TAL Metals (6010) PCBs (8081) PCBs (8082)				Sample Filtration <input type="checkbox"/> Done <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do (Please Specify below)		Total Bottles																																																	
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">ALPHA Lab ID (Lab Use Only)</th> <th rowspan="2">Sample ID</th> <th colspan="2">Collection</th> <th rowspan="2">Sample Matrix</th> <th rowspan="2">Sampler's Initials</th> <th rowspan="2">TCL Vol% (8260)</th> <th rowspan="2">TCL SV% (8270)</th> <th rowspan="2">TAL Metals (6010)</th> <th rowspan="2">PCBs (8081)</th> <th rowspan="2">PCBs (8082)</th> <th rowspan="2">Sample Specific Comments</th> </tr> <tr> <th>Date</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>44265-11</td> <td>SB-6 (2'-4')</td> <td>10/15/20</td> <td>10:46</td> <td>S</td> <td>MI</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> </tr> <tr> <td>-12</td> <td>GL-3</td> <td>10/15/20</td> <td>08:40</td> <td>GW</td> <td>MI</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>lab filtered / unfiltered</td> </tr> <tr> <td></td> <td>TB-4</td> <td>10/15/20</td> <td>-</td> <td>OI</td> <td>MI</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> </tr> </tbody> </table>		ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials		TCL Vol% (8260)	TCL SV% (8270)	TAL Metals (6010)	PCBs (8081)	PCBs (8082)	Sample Specific Comments	Date	Time	44265-11	SB-6 (2'-4')	10/15/20	10:46	S	MI	X	X	X	X	X		-12	GL-3	10/15/20	08:40	GW	MI	X	X	X	X	X	lab filtered / unfiltered		TB-4	10/15/20	-	OI	MI	X	X	X	X	X		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type Preservative		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)
ALPHA Lab ID (Lab Use Only)	Sample ID			Collection				Sample Matrix							Sampler's Initials	TCL Vol% (8260)	TCL SV% (8270)	TAL Metals (6010)	PCBs (8081)	PCBs (8082)	Sample Specific Comments																																				
		Date	Time																																																						
44265-11	SB-6 (2'-4')	10/15/20	10:46	S	MI	X	X	X	X	X																																															
-12	GL-3	10/15/20	08:40	GW	MI	X	X	X	X	X	lab filtered / unfiltered																																														
	TB-4	10/15/20	-	OI	MI	X	X	X	X	X																																															
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code: P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Relinquished By: <u>Marcello Saboni</u> Date/Time: <u>10/15/20 11:35</u> <u>[Signature]</u> <u>10/15/20 18:15</u> <u>[Signature]</u> <u>10/16/20 00:05</u>		Received By: <u>[Signature]</u> Date/Time: <u>10/15/20 11:45</u> <u>[Signature]</u> <u>10/15/20 2000</u> <u>[Signature]</u> <u>10/16/20 00:05</u>																																																			



ANALYTICAL REPORT

Lab Number:	L2043863
Client:	VHB Engineering, Surveying and Landscape One Penn Plaza Suite 715 New York, NY 10119
ATTN:	Bryan Murty
Phone:	(212) 857-7394
Project Name:	BLUE SEA BACA PHASE 11 ESH
Project Number:	26979.01
Report Date:	10/20/20

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: BLUE SEA BACA PHASE 11 ESH

Project Number: 26979.01

Lab Number: L2043863

Report Date: 10/20/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2043863-01	SB-04 (0'-2')	SOIL	BETWEEN ROCKAWAY AVE + CHESTER ST	10/13/20 09:25	10/13/20
L2043863-02	SB-04 (13'-15')	SOIL	BETWEEN ROCKAWAY AVE + CHESTER ST	10/13/20 10:15	10/13/20
L2043863-03	SB-05 (0'-2')	SOIL	BETWEEN ROCKAWAY AVE + CHESTER ST	10/13/20 10:35	10/13/20
L2043863-04	SB-05 (13'-15')	SOIL	BETWEEN ROCKAWAY AVE + CHESTER ST	10/13/20 10:58	10/13/20
L2043863-05	SB-06 (0'-2')	SOIL	BETWEEN ROCKAWAY AVE + CHESTER ST	10/13/20 11:15	10/13/20
L2043863-06	SB-06 (13'-15')	SOIL	BETWEEN ROCKAWAY AVE + CHESTER ST	10/13/20 11:35	10/13/20
L2043863-07	SB-07 (0'-2')	SOIL	BETWEEN ROCKAWAY AVE + CHESTER ST	10/13/20 11:55	10/13/20
L2043863-08	SB-07 (13'-15')	SOIL	BETWEEN ROCKAWAY AVE + CHESTER ST	10/13/20 12:18	10/13/20
L2043863-09	SB-08 (0'-2')	SOIL	BETWEEN ROCKAWAY AVE + CHESTER ST	10/13/20 12:35	10/13/20
L2043863-10	SB-08 (13'-15')	SOIL	BETWEEN ROCKAWAY AVE + CHESTER ST	10/13/20 12:55	10/13/20
L2043863-11	SB-09 (0'-2')	SOIL	BETWEEN ROCKAWAY AVE + CHESTER ST	10/13/20 13:05	10/13/20
L2043863-12	SB-09 (13'-15')	SOIL	BETWEEN ROCKAWAY AVE + CHESTER ST	10/13/20 13:20	10/13/20
L2043863-13	TB-1	TRIP BLANK (AQUEOUS)	BETWEEN ROCKAWAY AVE + CHESTER ST	10/13/20 00:00	10/13/20
L2043863-14	DUP 101320	SOIL	BETWEEN ROCKAWAY AVE + CHESTER ST	10/13/20 00:00	10/13/20

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

L2043863-11: The collection date and time on the chain of custody was 13-OCT-20 13:05; however, the collection date/time on the container label was 13-OCT-20 13:15. At the client's request, the collection date/time is reported as 13-OCT-20 13:05.

L2043863-13: A sample identified as "TB-1" was listed on the Chain of Custody, but not received. This was verified by the client.

Total Metals

L2043863-01 through -12 and -14: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Melissa Sturgis

Title: Technical Director/Representative

Date: 10/20/20

ORGANICS

VOLATILES

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-01
Client ID: SB-04 (0'-2')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 09:25
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/15/20 19:47
Analyst: JC
Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.3	2.9	1
1,1-Dichloroethane	ND		ug/kg	1.3	0.18	1
Chloroform	ND		ug/kg	1.9	0.18	1
Carbon tetrachloride	ND		ug/kg	1.3	0.29	1
1,2-Dichloropropane	ND		ug/kg	1.3	0.16	1
Dibromochloromethane	ND		ug/kg	1.3	0.18	1
1,1,2-Trichloroethane	ND		ug/kg	1.3	0.34	1
Tetrachloroethene	ND		ug/kg	0.63	0.25	1
Chlorobenzene	ND		ug/kg	0.63	0.16	1
Trichlorofluoromethane	ND		ug/kg	5.0	0.88	1
1,2-Dichloroethane	ND		ug/kg	1.3	0.32	1
1,1,1-Trichloroethane	ND		ug/kg	0.63	0.21	1
Bromodichloromethane	ND		ug/kg	0.63	0.14	1
trans-1,3-Dichloropropene	ND		ug/kg	1.3	0.34	1
cis-1,3-Dichloropropene	ND		ug/kg	0.63	0.20	1
1,3-Dichloropropene, Total	ND		ug/kg	0.63	0.20	1
1,1-Dichloropropene	ND		ug/kg	0.63	0.20	1
Bromoform	ND		ug/kg	5.0	0.31	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.63	0.21	1
Benzene	ND		ug/kg	0.63	0.21	1
Toluene	ND		ug/kg	1.3	0.68	1
Ethylbenzene	ND		ug/kg	1.3	0.18	1
Chloromethane	ND		ug/kg	5.0	1.2	1
Bromomethane	ND		ug/kg	2.5	0.73	1
Vinyl chloride	ND		ug/kg	1.3	0.42	1
Chloroethane	ND		ug/kg	2.5	0.57	1
1,1-Dichloroethene	ND		ug/kg	1.3	0.30	1
trans-1,2-Dichloroethene	ND		ug/kg	1.9	0.17	1

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-01

Date Collected: 10/13/20 09:25

Client ID: SB-04 (0'-2')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.63	0.17	1
1,2-Dichlorobenzene	ND		ug/kg	2.5	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/kg	2.5	0.22	1
Methyl tert butyl ether	ND		ug/kg	2.5	0.25	1
p/m-Xylene	ND		ug/kg	2.5	0.71	1
o-Xylene	ND		ug/kg	1.3	0.37	1
Xylenes, Total	ND		ug/kg	1.3	0.37	1
cis-1,2-Dichloroethene	ND		ug/kg	1.3	0.22	1
1,2-Dichloroethene, Total	ND		ug/kg	1.3	0.17	1
Dibromomethane	ND		ug/kg	2.5	0.30	1
Styrene	ND		ug/kg	1.3	0.25	1
Dichlorodifluoromethane	ND		ug/kg	13	1.2	1
Acetone	ND		ug/kg	13	6.1	1
Carbon disulfide	ND		ug/kg	13	5.7	1
2-Butanone	ND		ug/kg	13	2.8	1
Vinyl acetate	ND		ug/kg	13	2.7	1
4-Methyl-2-pentanone	ND		ug/kg	13	1.6	1
1,2,3-Trichloropropane	ND		ug/kg	2.5	0.16	1
2-Hexanone	ND		ug/kg	13	1.5	1
Bromochloromethane	ND		ug/kg	2.5	0.26	1
2,2-Dichloropropane	ND		ug/kg	2.5	0.25	1
1,2-Dibromoethane	ND		ug/kg	1.3	0.35	1
1,3-Dichloropropane	ND		ug/kg	2.5	0.21	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.63	0.17	1
Bromobenzene	ND		ug/kg	2.5	0.18	1
n-Butylbenzene	ND		ug/kg	1.3	0.21	1
sec-Butylbenzene	ND		ug/kg	1.3	0.18	1
tert-Butylbenzene	ND		ug/kg	2.5	0.15	1
o-Chlorotoluene	ND		ug/kg	2.5	0.24	1
p-Chlorotoluene	ND		ug/kg	2.5	0.14	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.8	1.2	1
Hexachlorobutadiene	ND		ug/kg	5.0	0.21	1
Isopropylbenzene	ND		ug/kg	1.3	0.14	1
p-Isopropyltoluene	ND		ug/kg	1.3	0.14	1
Naphthalene	ND		ug/kg	5.0	0.82	1
Acrylonitrile	ND		ug/kg	5.0	1.4	1

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-01
Client ID: SB-04 (0'-2')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 09:25
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.3	0.22	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.5	0.41	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.5	0.34	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.5	0.24	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.5	0.42	1
1,4-Dioxane	ND		ug/kg	100	44.	1
p-Diethylbenzene	ND		ug/kg	2.5	0.22	1
p-Ethyltoluene	ND		ug/kg	2.5	0.48	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.5	0.24	1
Ethyl ether	ND		ug/kg	2.5	0.43	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.3	1.8	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	88		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	96		70-130

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-02
Client ID: SB-04 (13'-15')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 10:15
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/15/20 20:13
Analyst: JC
Percent Solids: 96%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.2	2.8	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.18	1
Chloroform	ND		ug/kg	1.9	0.17	1
Carbon tetrachloride	ND		ug/kg	1.2	0.28	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.16	1
Dibromochloromethane	ND		ug/kg	1.2	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.33	1
Tetrachloroethene	ND		ug/kg	0.62	0.24	1
Chlorobenzene	ND		ug/kg	0.62	0.16	1
Trichlorofluoromethane	ND		ug/kg	5.0	0.86	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.32	1
1,1,1-Trichloroethane	ND		ug/kg	0.62	0.21	1
Bromodichloromethane	ND		ug/kg	0.62	0.14	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.34	1
cis-1,3-Dichloropropene	ND		ug/kg	0.62	0.20	1
1,3-Dichloropropene, Total	ND		ug/kg	0.62	0.20	1
1,1-Dichloropropene	ND		ug/kg	0.62	0.20	1
Bromoform	ND		ug/kg	5.0	0.30	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.62	0.21	1
Benzene	ND		ug/kg	0.62	0.21	1
Toluene	ND		ug/kg	1.2	0.67	1
Ethylbenzene	ND		ug/kg	1.2	0.18	1
Chloromethane	ND		ug/kg	5.0	1.2	1
Bromomethane	ND		ug/kg	2.5	0.72	1
Vinyl chloride	ND		ug/kg	1.2	0.42	1
Chloroethane	ND		ug/kg	2.5	0.56	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.30	1
trans-1,2-Dichloroethene	ND		ug/kg	1.9	0.17	1

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-02
 Client ID: SB-04 (13'-15')
 Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 10:15
 Date Received: 10/13/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.62	0.17	1
1,2-Dichlorobenzene	ND		ug/kg	2.5	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	2.5	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	2.5	0.21	1
Methyl tert butyl ether	ND		ug/kg	2.5	0.25	1
p/m-Xylene	ND		ug/kg	2.5	0.70	1
o-Xylene	ND		ug/kg	1.2	0.36	1
Xylenes, Total	ND		ug/kg	1.2	0.36	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.22	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.17	1
Dibromomethane	ND		ug/kg	2.5	0.30	1
Styrene	ND		ug/kg	1.2	0.24	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	ND		ug/kg	12	6.0	1
Carbon disulfide	ND		ug/kg	12	5.6	1
2-Butanone	ND		ug/kg	12	2.8	1
Vinyl acetate	ND		ug/kg	12	2.7	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.6	1
1,2,3-Trichloropropane	ND		ug/kg	2.5	0.16	1
2-Hexanone	ND		ug/kg	12	1.5	1
Bromochloromethane	ND		ug/kg	2.5	0.25	1
2,2-Dichloropropane	ND		ug/kg	2.5	0.25	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.35	1
1,3-Dichloropropane	ND		ug/kg	2.5	0.21	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.62	0.16	1
Bromobenzene	ND		ug/kg	2.5	0.18	1
n-Butylbenzene	ND		ug/kg	1.2	0.21	1
sec-Butylbenzene	ND		ug/kg	1.2	0.18	1
tert-Butylbenzene	ND		ug/kg	2.5	0.15	1
o-Chlorotoluene	ND		ug/kg	2.5	0.24	1
p-Chlorotoluene	ND		ug/kg	2.5	0.13	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.7	1.2	1
Hexachlorobutadiene	ND		ug/kg	5.0	0.21	1
Isopropylbenzene	ND		ug/kg	1.2	0.14	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.14	1
Naphthalene	ND		ug/kg	5.0	0.81	1
Acrylonitrile	ND		ug/kg	5.0	1.4	1

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-02
Client ID: SB-04 (13'-15')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 10:15
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.21	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.5	0.40	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.5	0.34	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.5	0.24	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.5	0.41	1
1,4-Dioxane	ND		ug/kg	99	44.	1
p-Diethylbenzene	ND		ug/kg	2.5	0.22	1
p-Ethyltoluene	ND		ug/kg	2.5	0.48	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.5	0.24	1
Ethyl ether	ND		ug/kg	2.5	0.42	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.2	1.8	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	84		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	95		70-130

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-03
 Client ID: SB-05 (0'-2')
 Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 10:35
 Date Received: 10/13/20
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 10/16/20 11:15
 Analyst: JC
 Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.8	2.6	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.17	1
Chloroform	ND		ug/kg	1.7	0.16	1
Carbon tetrachloride	ND		ug/kg	1.2	0.26	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.14	1
Dibromochloromethane	ND		ug/kg	1.2	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.31	1
Tetrachloroethene	ND		ug/kg	0.58	0.22	1
Chlorobenzene	ND		ug/kg	0.58	0.15	1
Trichlorofluoromethane	ND		ug/kg	4.6	0.80	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.30	1
1,1,1-Trichloroethane	ND		ug/kg	0.58	0.19	1
Bromodichloromethane	ND		ug/kg	0.58	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.31	1
cis-1,3-Dichloropropene	ND		ug/kg	0.58	0.18	1
1,3-Dichloropropene, Total	ND		ug/kg	0.58	0.18	1
1,1-Dichloropropene	ND		ug/kg	0.58	0.18	1
Bromoform	ND		ug/kg	4.6	0.28	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.58	0.19	1
Benzene	ND		ug/kg	0.58	0.19	1
Toluene	ND		ug/kg	1.2	0.63	1
Ethylbenzene	ND		ug/kg	1.2	0.16	1
Chloromethane	ND		ug/kg	4.6	1.1	1
Bromomethane	ND		ug/kg	2.3	0.67	1
Vinyl chloride	ND		ug/kg	1.2	0.39	1
Chloroethane	ND		ug/kg	2.3	0.52	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.27	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.16	1

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-03

Date Collected: 10/13/20 10:35

Client ID: SB-05 (0'-2')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.58	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.3	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	2.3	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	2.3	0.20	1
Methyl tert butyl ether	ND		ug/kg	2.3	0.23	1
p/m-Xylene	ND		ug/kg	2.3	0.64	1
o-Xylene	ND		ug/kg	1.2	0.34	1
Xylenes, Total	ND		ug/kg	1.2	0.34	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.20	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.16	1
Dibromomethane	ND		ug/kg	2.3	0.27	1
Styrene	ND		ug/kg	1.2	0.22	1
Dichlorodifluoromethane	ND		ug/kg	12	1.0	1
Acetone	ND		ug/kg	12	5.5	1
Carbon disulfide	ND		ug/kg	12	5.2	1
2-Butanone	ND		ug/kg	12	2.6	1
Vinyl acetate	ND		ug/kg	12	2.5	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.5	1
1,2,3-Trichloropropane	ND		ug/kg	2.3	0.15	1
2-Hexanone	ND		ug/kg	12	1.4	1
Bromochloromethane	ND		ug/kg	2.3	0.24	1
2,2-Dichloropropane	ND		ug/kg	2.3	0.23	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.32	1
1,3-Dichloropropane	ND		ug/kg	2.3	0.19	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.58	0.15	1
Bromobenzene	ND		ug/kg	2.3	0.17	1
n-Butylbenzene	ND		ug/kg	1.2	0.19	1
sec-Butylbenzene	ND		ug/kg	1.2	0.17	1
tert-Butylbenzene	ND		ug/kg	2.3	0.14	1
o-Chlorotoluene	ND		ug/kg	2.3	0.22	1
p-Chlorotoluene	ND		ug/kg	2.3	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.4	1.2	1
Hexachlorobutadiene	ND		ug/kg	4.6	0.19	1
Isopropylbenzene	ND		ug/kg	1.2	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.12	1
Naphthalene	ND		ug/kg	4.6	0.75	1
Acrylonitrile	ND		ug/kg	4.6	1.3	1

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-03
Client ID: SB-05 (0'-2')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 10:35
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.20	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.3	0.37	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.3	0.31	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.3	0.22	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.3	0.38	1
1,4-Dioxane	ND		ug/kg	92	40.	1
p-Diethylbenzene	ND		ug/kg	2.3	0.20	1
p-Ethyltoluene	ND		ug/kg	2.3	0.44	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.3	0.22	1
Ethyl ether	ND		ug/kg	2.3	0.39	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.8	1.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	88		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	92		70-130

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-04
Client ID: SB-05 (13'-15')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 10:58
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/15/20 21:05
Analyst: JC
Percent Solids: 96%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.0	2.3	1
1,1-Dichloroethane	ND		ug/kg	1.0	0.14	1
Chloroform	ND		ug/kg	1.5	0.14	1
Carbon tetrachloride	ND		ug/kg	1.0	0.23	1
1,2-Dichloropropane	ND		ug/kg	1.0	0.12	1
Dibromochloromethane	ND		ug/kg	1.0	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27	1
Tetrachloroethene	ND		ug/kg	0.50	0.20	1
Chlorobenzene	ND		ug/kg	0.50	0.13	1
Trichlorofluoromethane	ND		ug/kg	4.0	0.70	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.26	1
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17	1
Bromodichloromethane	ND		ug/kg	0.50	0.11	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27	1
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16	1
1,1-Dichloropropene	ND		ug/kg	0.50	0.16	1
Bromoform	ND		ug/kg	4.0	0.25	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17	1
Benzene	ND		ug/kg	0.50	0.17	1
Toluene	ND		ug/kg	1.0	0.54	1
Ethylbenzene	ND		ug/kg	1.0	0.14	1
Chloromethane	ND		ug/kg	4.0	0.94	1
Bromomethane	ND		ug/kg	2.0	0.58	1
Vinyl chloride	ND		ug/kg	1.0	0.34	1
Chloroethane	ND		ug/kg	2.0	0.45	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.24	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14	1

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-04

Date Collected: 10/13/20 10:58

Client ID: SB-05 (13'-15')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.50	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.20	1
p/m-Xylene	ND		ug/kg	2.0	0.56	1
o-Xylene	ND		ug/kg	1.0	0.29	1
Xylenes, Total	ND		ug/kg	1.0	0.29	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18	1
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14	1
Dibromomethane	ND		ug/kg	2.0	0.24	1
Styrene	ND		ug/kg	1.0	0.20	1
Dichlorodifluoromethane	ND		ug/kg	10	0.92	1
Acetone	ND		ug/kg	10	4.8	1
Carbon disulfide	ND		ug/kg	10	4.6	1
2-Butanone	ND		ug/kg	10	2.2	1
Vinyl acetate	ND		ug/kg	10	2.2	1
4-Methyl-2-pentanone	ND		ug/kg	10	1.3	1
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13	1
2-Hexanone	ND		ug/kg	10	1.2	1
Bromochloromethane	ND		ug/kg	2.0	0.20	1
2,2-Dichloropropane	ND		ug/kg	2.0	0.20	1
1,2-Dibromoethane	ND		ug/kg	1.0	0.28	1
1,3-Dichloropropane	ND		ug/kg	2.0	0.17	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13	1
Bromobenzene	ND		ug/kg	2.0	0.14	1
n-Butylbenzene	ND		ug/kg	1.0	0.17	1
sec-Butylbenzene	ND		ug/kg	1.0	0.15	1
tert-Butylbenzene	ND		ug/kg	2.0	0.12	1
o-Chlorotoluene	ND		ug/kg	2.0	0.19	1
p-Chlorotoluene	ND		ug/kg	2.0	0.11	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0	1
Hexachlorobutadiene	ND		ug/kg	4.0	0.17	1
Isopropylbenzene	ND		ug/kg	1.0	0.11	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.11	1
Naphthalene	ND		ug/kg	4.0	0.65	1
Acrylonitrile	ND		ug/kg	4.0	1.2	1

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-04

Date Collected: 10/13/20 10:58

Client ID: SB-05 (13'-15')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.0	0.17	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.34	1
1,4-Dioxane	ND		ug/kg	80	35.	1
p-Diethylbenzene	ND		ug/kg	2.0	0.18	1
p-Ethyltoluene	ND		ug/kg	2.0	0.38	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19	1
Ethyl ether	ND		ug/kg	2.0	0.34	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	86		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	95		70-130

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-05
Client ID: SB-06 (0'-2')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 11:15
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/16/20 10:50
Analyst: JC
Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.3	2.9	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.18	1
Chloroform	ND		ug/kg	1.9	0.18	1
Carbon tetrachloride	ND		ug/kg	1.2	0.29	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.16	1
Dibromochloromethane	ND		ug/kg	1.2	0.18	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.33	1
Tetrachloroethene	ND		ug/kg	0.63	0.24	1
Chlorobenzene	ND		ug/kg	0.63	0.16	1
Trichlorofluoromethane	ND		ug/kg	5.0	0.87	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.32	1
1,1,1-Trichloroethane	ND		ug/kg	0.63	0.21	1
Bromodichloromethane	ND		ug/kg	0.63	0.14	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.34	1
cis-1,3-Dichloropropene	ND		ug/kg	0.63	0.20	1
1,3-Dichloropropene, Total	ND		ug/kg	0.63	0.20	1
1,1-Dichloropropene	ND		ug/kg	0.63	0.20	1
Bromoform	ND		ug/kg	5.0	0.31	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.63	0.21	1
Benzene	ND		ug/kg	0.63	0.21	1
Toluene	ND		ug/kg	1.2	0.68	1
Ethylbenzene	ND		ug/kg	1.2	0.18	1
Chloromethane	ND		ug/kg	5.0	1.2	1
Bromomethane	ND		ug/kg	2.5	0.73	1
Vinyl chloride	ND		ug/kg	1.2	0.42	1
Chloroethane	ND		ug/kg	2.5	0.57	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.30	1
trans-1,2-Dichloroethene	ND		ug/kg	1.9	0.17	1

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-05

Date Collected: 10/13/20 11:15

Client ID: SB-06 (0'-2')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.63	0.17	1
1,2-Dichlorobenzene	ND		ug/kg	2.5	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	2.5	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	2.5	0.21	1
Methyl tert butyl ether	ND		ug/kg	2.5	0.25	1
p/m-Xylene	ND		ug/kg	2.5	0.70	1
o-Xylene	ND		ug/kg	1.2	0.36	1
Xylenes, Total	ND		ug/kg	1.2	0.36	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.22	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.17	1
Dibromomethane	ND		ug/kg	2.5	0.30	1
Styrene	ND		ug/kg	1.2	0.24	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	6.8	J	ug/kg	12	6.0	1
Carbon disulfide	ND		ug/kg	12	5.7	1
2-Butanone	ND		ug/kg	12	2.8	1
Vinyl acetate	ND		ug/kg	12	2.7	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.6	1
1,2,3-Trichloropropane	ND		ug/kg	2.5	0.16	1
2-Hexanone	ND		ug/kg	12	1.5	1
Bromochloromethane	ND		ug/kg	2.5	0.26	1
2,2-Dichloropropane	ND		ug/kg	2.5	0.25	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.35	1
1,3-Dichloropropane	ND		ug/kg	2.5	0.21	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.63	0.16	1
Bromobenzene	ND		ug/kg	2.5	0.18	1
n-Butylbenzene	ND		ug/kg	1.2	0.21	1
sec-Butylbenzene	ND		ug/kg	1.2	0.18	1
tert-Butylbenzene	ND		ug/kg	2.5	0.15	1
o-Chlorotoluene	ND		ug/kg	2.5	0.24	1
p-Chlorotoluene	ND		ug/kg	2.5	0.14	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.8	1.2	1
Hexachlorobutadiene	ND		ug/kg	5.0	0.21	1
Isopropylbenzene	ND		ug/kg	1.2	0.14	1
p-Isopropyltoluene	0.21	J	ug/kg	1.2	0.14	1
Naphthalene	ND		ug/kg	5.0	0.82	1
Acrylonitrile	ND		ug/kg	5.0	1.4	1

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-05
Client ID: SB-06 (0'-2')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 11:15
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.21	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.5	0.40	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.5	0.34	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.5	0.24	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.5	0.42	1
1,4-Dioxane	ND		ug/kg	100	44.	1
p-Diethylbenzene	ND		ug/kg	2.5	0.22	1
p-Ethyltoluene	ND		ug/kg	2.5	0.48	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.5	0.24	1
Ethyl ether	ND		ug/kg	2.5	0.43	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.3	1.8	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	88		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	94		70-130

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-06
Client ID: SB-06 (13'-15')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 11:35
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/15/20 21:57
Analyst: JC
Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.9	2.2	1
1,1-Dichloroethane	ND		ug/kg	0.98	0.14	1
Chloroform	ND		ug/kg	1.5	0.14	1
Carbon tetrachloride	ND		ug/kg	0.98	0.22	1
1,2-Dichloropropane	ND		ug/kg	0.98	0.12	1
Dibromochloromethane	ND		ug/kg	0.98	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	0.98	0.26	1
Tetrachloroethene	ND		ug/kg	0.49	0.19	1
Chlorobenzene	ND		ug/kg	0.49	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.9	0.68	1
1,2-Dichloroethane	ND		ug/kg	0.98	0.25	1
1,1,1-Trichloroethane	ND		ug/kg	0.49	0.16	1
Bromodichloromethane	ND		ug/kg	0.49	0.11	1
trans-1,3-Dichloropropene	ND		ug/kg	0.98	0.27	1
cis-1,3-Dichloropropene	ND		ug/kg	0.49	0.15	1
1,3-Dichloropropene, Total	ND		ug/kg	0.49	0.15	1
1,1-Dichloropropene	ND		ug/kg	0.49	0.16	1
Bromoform	ND		ug/kg	3.9	0.24	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.49	0.16	1
Benzene	ND		ug/kg	0.49	0.16	1
Toluene	ND		ug/kg	0.98	0.53	1
Ethylbenzene	ND		ug/kg	0.98	0.14	1
Chloromethane	ND		ug/kg	3.9	0.91	1
Bromomethane	ND		ug/kg	2.0	0.57	1
Vinyl chloride	ND		ug/kg	0.98	0.33	1
Chloroethane	ND		ug/kg	2.0	0.44	1
1,1-Dichloroethene	ND		ug/kg	0.98	0.23	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.13	1

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-06
 Client ID: SB-06 (13'-15')
 Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 11:35
 Date Received: 10/13/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.49	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.20	1
p/m-Xylene	ND		ug/kg	2.0	0.55	1
o-Xylene	ND		ug/kg	0.98	0.28	1
Xylenes, Total	ND		ug/kg	0.98	0.28	1
cis-1,2-Dichloroethene	ND		ug/kg	0.98	0.17	1
1,2-Dichloroethene, Total	ND		ug/kg	0.98	0.13	1
Dibromomethane	ND		ug/kg	2.0	0.23	1
Styrene	ND		ug/kg	0.98	0.19	1
Dichlorodifluoromethane	ND		ug/kg	9.8	0.89	1
Acetone	ND		ug/kg	9.8	4.7	1
Carbon disulfide	ND		ug/kg	9.8	4.4	1
2-Butanone	ND		ug/kg	9.8	2.2	1
Vinyl acetate	ND		ug/kg	9.8	2.1	1
4-Methyl-2-pentanone	ND		ug/kg	9.8	1.2	1
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.12	1
2-Hexanone	ND		ug/kg	9.8	1.2	1
Bromochloromethane	ND		ug/kg	2.0	0.20	1
2,2-Dichloropropane	ND		ug/kg	2.0	0.20	1
1,2-Dibromoethane	ND		ug/kg	0.98	0.27	1
1,3-Dichloropropane	ND		ug/kg	2.0	0.16	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.49	0.13	1
Bromobenzene	ND		ug/kg	2.0	0.14	1
n-Butylbenzene	ND		ug/kg	0.98	0.16	1
sec-Butylbenzene	ND		ug/kg	0.98	0.14	1
tert-Butylbenzene	ND		ug/kg	2.0	0.12	1
o-Chlorotoluene	ND		ug/kg	2.0	0.19	1
p-Chlorotoluene	ND		ug/kg	2.0	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.9	0.98	1
Hexachlorobutadiene	ND		ug/kg	3.9	0.16	1
Isopropylbenzene	ND		ug/kg	0.98	0.11	1
p-Isopropyltoluene	ND		ug/kg	0.98	0.11	1
Naphthalene	ND		ug/kg	3.9	0.64	1
Acrylonitrile	ND		ug/kg	3.9	1.1	1

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-06
Client ID: SB-06 (13'-15')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 11:35
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.98	0.17	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.31	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33	1
1,4-Dioxane	ND		ug/kg	78	34.	1
p-Diethylbenzene	ND		ug/kg	2.0	0.17	1
p-Ethyltoluene	ND		ug/kg	2.0	0.38	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19	1
Ethyl ether	ND		ug/kg	2.0	0.33	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.9	1.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	82		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	92		70-130

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-07
Client ID: SB-07 (0'-2')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 11:55
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/15/20 22:23
Analyst: JC
Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	8.6	3.9	1
1,1-Dichloroethane	ND		ug/kg	1.7	0.25	1
Chloroform	ND		ug/kg	2.6	0.24	1
Carbon tetrachloride	ND		ug/kg	1.7	0.39	1
1,2-Dichloropropane	ND		ug/kg	1.7	0.21	1
Dibromochloromethane	ND		ug/kg	1.7	0.24	1
1,1,2-Trichloroethane	ND		ug/kg	1.7	0.46	1
Tetrachloroethene	ND		ug/kg	0.86	0.34	1
Chlorobenzene	ND		ug/kg	0.86	0.22	1
Trichlorofluoromethane	ND		ug/kg	6.9	1.2	1
1,2-Dichloroethane	ND		ug/kg	1.7	0.44	1
1,1,1-Trichloroethane	ND		ug/kg	0.86	0.29	1
Bromodichloromethane	ND		ug/kg	0.86	0.19	1
trans-1,3-Dichloropropene	ND		ug/kg	1.7	0.47	1
cis-1,3-Dichloropropene	ND		ug/kg	0.86	0.27	1
1,3-Dichloropropene, Total	ND		ug/kg	0.86	0.27	1
1,1-Dichloropropene	ND		ug/kg	0.86	0.27	1
Bromoform	ND		ug/kg	6.9	0.42	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.86	0.28	1
Benzene	0.38	J	ug/kg	0.86	0.28	1
Toluene	ND		ug/kg	1.7	0.93	1
Ethylbenzene	ND		ug/kg	1.7	0.24	1
Chloromethane	ND		ug/kg	6.9	1.6	1
Bromomethane	ND		ug/kg	3.4	1.0	1
Vinyl chloride	ND		ug/kg	1.7	0.57	1
Chloroethane	ND		ug/kg	3.4	0.78	1
1,1-Dichloroethene	ND		ug/kg	1.7	0.41	1
trans-1,2-Dichloroethene	ND		ug/kg	2.6	0.24	1

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-07

Date Collected: 10/13/20 11:55

Client ID: SB-07 (0'-2')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.86	0.24	1
1,2-Dichlorobenzene	ND		ug/kg	3.4	0.25	1
1,3-Dichlorobenzene	ND		ug/kg	3.4	0.25	1
1,4-Dichlorobenzene	ND		ug/kg	3.4	0.29	1
Methyl tert butyl ether	ND		ug/kg	3.4	0.34	1
p/m-Xylene	ND		ug/kg	3.4	0.96	1
o-Xylene	ND		ug/kg	1.7	0.50	1
Xylenes, Total	ND		ug/kg	1.7	0.50	1
cis-1,2-Dichloroethene	ND		ug/kg	1.7	0.30	1
1,2-Dichloroethene, Total	ND		ug/kg	1.7	0.24	1
Dibromomethane	ND		ug/kg	3.4	0.41	1
Styrene	ND		ug/kg	1.7	0.34	1
Dichlorodifluoromethane	ND		ug/kg	17	1.6	1
Acetone	ND		ug/kg	17	8.2	1
Carbon disulfide	ND		ug/kg	17	7.8	1
2-Butanone	ND		ug/kg	17	3.8	1
Vinyl acetate	ND		ug/kg	17	3.7	1
4-Methyl-2-pentanone	ND		ug/kg	17	2.2	1
1,2,3-Trichloropropane	ND		ug/kg	3.4	0.22	1
2-Hexanone	ND		ug/kg	17	2.0	1
Bromochloromethane	ND		ug/kg	3.4	0.35	1
2,2-Dichloropropane	ND		ug/kg	3.4	0.35	1
1,2-Dibromoethane	ND		ug/kg	1.7	0.48	1
1,3-Dichloropropane	ND		ug/kg	3.4	0.29	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.86	0.23	1
Bromobenzene	ND		ug/kg	3.4	0.25	1
n-Butylbenzene	ND		ug/kg	1.7	0.29	1
sec-Butylbenzene	ND		ug/kg	1.7	0.25	1
tert-Butylbenzene	ND		ug/kg	3.4	0.20	1
o-Chlorotoluene	ND		ug/kg	3.4	0.33	1
p-Chlorotoluene	ND		ug/kg	3.4	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.1	1.7	1
Hexachlorobutadiene	ND		ug/kg	6.9	0.29	1
Isopropylbenzene	ND		ug/kg	1.7	0.19	1
p-Isopropyltoluene	ND		ug/kg	1.7	0.19	1
Naphthalene	ND		ug/kg	6.9	1.1	1
Acrylonitrile	ND		ug/kg	6.9	2.0	1

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-07

Date Collected: 10/13/20 11:55

Client ID: SB-07 (0'-2')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.7	0.29	1
1,2,3-Trichlorobenzene	ND		ug/kg	3.4	0.55	1
1,2,4-Trichlorobenzene	ND		ug/kg	3.4	0.47	1
1,3,5-Trimethylbenzene	ND		ug/kg	3.4	0.33	1
1,2,4-Trimethylbenzene	ND		ug/kg	3.4	0.57	1
1,4-Dioxane	ND		ug/kg	140	60.	1
p-Diethylbenzene	ND		ug/kg	3.4	0.30	1
p-Ethyltoluene	ND		ug/kg	3.4	0.66	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	3.4	0.33	1
Ethyl ether	ND		ug/kg	3.4	0.58	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	8.6	2.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	91		70-130
Toluene-d8	84		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	92		70-130

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-08
Client ID: SB-07 (13'-15')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 12:18
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/15/20 22:49
Analyst: JC
Percent Solids: 97%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.0	2.7	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.17	1
Chloroform	ND		ug/kg	1.8	0.17	1
Carbon tetrachloride	ND		ug/kg	1.2	0.28	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.15	1
Dibromochloromethane	ND		ug/kg	1.2	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.32	1
Tetrachloroethene	ND		ug/kg	0.60	0.23	1
Chlorobenzene	ND		ug/kg	0.60	0.15	1
Trichlorofluoromethane	ND		ug/kg	4.8	0.83	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.31	1
1,1,1-Trichloroethane	ND		ug/kg	0.60	0.20	1
Bromodichloromethane	ND		ug/kg	0.60	0.13	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.33	1
cis-1,3-Dichloropropene	ND		ug/kg	0.60	0.19	1
1,3-Dichloropropene, Total	ND		ug/kg	0.60	0.19	1
1,1-Dichloropropene	ND		ug/kg	0.60	0.19	1
Bromoform	ND		ug/kg	4.8	0.29	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.60	0.20	1
Benzene	ND		ug/kg	0.60	0.20	1
Toluene	ND		ug/kg	1.2	0.65	1
Ethylbenzene	ND		ug/kg	1.2	0.17	1
Chloromethane	ND		ug/kg	4.8	1.1	1
Bromomethane	ND		ug/kg	2.4	0.70	1
Vinyl chloride	ND		ug/kg	1.2	0.40	1
Chloroethane	ND		ug/kg	2.4	0.54	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.28	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.16	1

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-08
 Client ID: SB-07 (13'-15')
 Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 12:18
 Date Received: 10/13/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.60	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.4	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	2.4	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	2.4	0.20	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.24	1
p/m-Xylene	ND		ug/kg	2.4	0.67	1
o-Xylene	ND		ug/kg	1.2	0.35	1
Xylenes, Total	ND		ug/kg	1.2	0.35	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.21	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.16	1
Dibromomethane	ND		ug/kg	2.4	0.28	1
Styrene	ND		ug/kg	1.2	0.23	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	ND		ug/kg	12	5.8	1
Carbon disulfide	ND		ug/kg	12	5.4	1
2-Butanone	ND		ug/kg	12	2.6	1
Vinyl acetate	ND		ug/kg	12	2.6	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.5	1
1,2,3-Trichloropropane	ND		ug/kg	2.4	0.15	1
2-Hexanone	ND		ug/kg	12	1.4	1
Bromochloromethane	ND		ug/kg	2.4	0.24	1
2,2-Dichloropropane	ND		ug/kg	2.4	0.24	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.33	1
1,3-Dichloropropane	ND		ug/kg	2.4	0.20	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.60	0.16	1
Bromobenzene	ND		ug/kg	2.4	0.17	1
n-Butylbenzene	ND		ug/kg	1.2	0.20	1
sec-Butylbenzene	ND		ug/kg	1.2	0.17	1
tert-Butylbenzene	ND		ug/kg	2.4	0.14	1
o-Chlorotoluene	ND		ug/kg	2.4	0.23	1
p-Chlorotoluene	ND		ug/kg	2.4	0.13	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.6	1.2	1
Hexachlorobutadiene	ND		ug/kg	4.8	0.20	1
Isopropylbenzene	ND		ug/kg	1.2	0.13	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.13	1
Naphthalene	ND		ug/kg	4.8	0.78	1
Acrylonitrile	ND		ug/kg	4.8	1.4	1

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-08

Date Collected: 10/13/20 12:18

Client ID: SB-07 (13'-15')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.20	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.4	0.38	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.4	0.32	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.4	0.23	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.4	0.40	1
1,4-Dioxane	ND		ug/kg	96	42.	1
p-Diethylbenzene	ND		ug/kg	2.4	0.21	1
p-Ethyltoluene	ND		ug/kg	2.4	0.46	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.4	0.23	1
Ethyl ether	ND		ug/kg	2.4	0.41	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.0	1.7	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	85		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	93		70-130

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-09
Client ID: SB-08 (0'-2')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 12:35
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/15/20 23:15
Analyst: JC
Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.9	2.7	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.17	1
Chloroform	ND		ug/kg	1.8	0.16	1
Carbon tetrachloride	ND		ug/kg	1.2	0.27	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.15	1
Dibromochloromethane	ND		ug/kg	1.2	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.31	1
Tetrachloroethene	ND		ug/kg	0.59	0.23	1
Chlorobenzene	ND		ug/kg	0.59	0.15	1
Trichlorofluoromethane	ND		ug/kg	4.7	0.82	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.30	1
1,1,1-Trichloroethane	ND		ug/kg	0.59	0.20	1
Bromodichloromethane	ND		ug/kg	0.59	0.13	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.32	1
cis-1,3-Dichloropropene	ND		ug/kg	0.59	0.18	1
1,3-Dichloropropene, Total	ND		ug/kg	0.59	0.18	1
1,1-Dichloropropene	ND		ug/kg	0.59	0.19	1
Bromoform	ND		ug/kg	4.7	0.29	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.59	0.20	1
Benzene	ND		ug/kg	0.59	0.20	1
Toluene	ND		ug/kg	1.2	0.64	1
Ethylbenzene	ND		ug/kg	1.2	0.16	1
Chloromethane	ND		ug/kg	4.7	1.1	1
Bromomethane	ND		ug/kg	2.4	0.68	1
Vinyl chloride	ND		ug/kg	1.2	0.39	1
Chloroethane	ND		ug/kg	2.4	0.53	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.28	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.16	1

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-09

Date Collected: 10/13/20 12:35

Client ID: SB-08 (0'-2')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.59	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.4	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	2.4	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	2.4	0.20	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.24	1
p/m-Xylene	ND		ug/kg	2.4	0.66	1
o-Xylene	ND		ug/kg	1.2	0.34	1
Xylenes, Total	ND		ug/kg	1.2	0.34	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.20	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.16	1
Dibromomethane	ND		ug/kg	2.4	0.28	1
Styrene	ND		ug/kg	1.2	0.23	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	ND		ug/kg	12	5.6	1
Carbon disulfide	ND		ug/kg	12	5.4	1
2-Butanone	ND		ug/kg	12	2.6	1
Vinyl acetate	ND		ug/kg	12	2.5	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.5	1
1,2,3-Trichloropropane	ND		ug/kg	2.4	0.15	1
2-Hexanone	ND		ug/kg	12	1.4	1
Bromochloromethane	ND		ug/kg	2.4	0.24	1
2,2-Dichloropropane	ND		ug/kg	2.4	0.24	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.33	1
1,3-Dichloropropane	ND		ug/kg	2.4	0.20	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.59	0.16	1
Bromobenzene	ND		ug/kg	2.4	0.17	1
n-Butylbenzene	ND		ug/kg	1.2	0.20	1
sec-Butylbenzene	ND		ug/kg	1.2	0.17	1
tert-Butylbenzene	ND		ug/kg	2.4	0.14	1
o-Chlorotoluene	ND		ug/kg	2.4	0.22	1
p-Chlorotoluene	ND		ug/kg	2.4	0.13	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.5	1.2	1
Hexachlorobutadiene	ND		ug/kg	4.7	0.20	1
Isopropylbenzene	ND		ug/kg	1.2	0.13	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.13	1
Naphthalene	ND		ug/kg	4.7	0.76	1
Acrylonitrile	ND		ug/kg	4.7	1.4	1

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-09
Client ID: SB-08 (0'-2')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 12:35
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.20	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.4	0.38	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.4	0.32	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.4	0.23	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.4	0.39	1
1,4-Dioxane	ND		ug/kg	94	41.	1
p-Diethylbenzene	ND		ug/kg	2.4	0.21	1
p-Ethyltoluene	ND		ug/kg	2.4	0.45	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.4	0.22	1
Ethyl ether	ND		ug/kg	2.4	0.40	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.9	1.7	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	84		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	95		70-130

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-10
Client ID: SB-08 (13'-15')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 12:55
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/15/20 23:41
Analyst: JC
Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	7.9	3.6	1
1,1-Dichloroethane	ND		ug/kg	1.6	0.23	1
Chloroform	ND		ug/kg	2.4	0.22	1
Carbon tetrachloride	ND		ug/kg	1.6	0.36	1
1,2-Dichloropropane	ND		ug/kg	1.6	0.20	1
Dibromochloromethane	ND		ug/kg	1.6	0.22	1
1,1,2-Trichloroethane	ND		ug/kg	1.6	0.42	1
Tetrachloroethene	ND		ug/kg	0.79	0.31	1
Chlorobenzene	ND		ug/kg	0.79	0.20	1
Trichlorofluoromethane	ND		ug/kg	6.3	1.1	1
1,2-Dichloroethane	ND		ug/kg	1.6	0.41	1
1,1,1-Trichloroethane	ND		ug/kg	0.79	0.26	1
Bromodichloromethane	ND		ug/kg	0.79	0.17	1
trans-1,3-Dichloropropene	ND		ug/kg	1.6	0.43	1
cis-1,3-Dichloropropene	ND		ug/kg	0.79	0.25	1
1,3-Dichloropropene, Total	ND		ug/kg	0.79	0.25	1
1,1-Dichloropropene	ND		ug/kg	0.79	0.25	1
Bromoform	ND		ug/kg	6.3	0.39	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.79	0.26	1
Benzene	ND		ug/kg	0.79	0.26	1
Toluene	ND		ug/kg	1.6	0.86	1
Ethylbenzene	ND		ug/kg	1.6	0.22	1
Chloromethane	ND		ug/kg	6.3	1.5	1
Bromomethane	ND		ug/kg	3.2	0.92	1
Vinyl chloride	ND		ug/kg	1.6	0.53	1
Chloroethane	ND		ug/kg	3.2	0.72	1
1,1-Dichloroethene	ND		ug/kg	1.6	0.38	1
trans-1,2-Dichloroethene	ND		ug/kg	2.4	0.22	1

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-10

Date Collected: 10/13/20 12:55

Client ID: SB-08 (13'-15')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.79	0.22	1
1,2-Dichlorobenzene	ND		ug/kg	3.2	0.23	1
1,3-Dichlorobenzene	ND		ug/kg	3.2	0.23	1
1,4-Dichlorobenzene	ND		ug/kg	3.2	0.27	1
Methyl tert butyl ether	ND		ug/kg	3.2	0.32	1
p/m-Xylene	ND		ug/kg	3.2	0.89	1
o-Xylene	ND		ug/kg	1.6	0.46	1
Xylenes, Total	ND		ug/kg	1.6	0.46	1
cis-1,2-Dichloroethene	ND		ug/kg	1.6	0.28	1
1,2-Dichloroethene, Total	ND		ug/kg	1.6	0.22	1
Dibromomethane	ND		ug/kg	3.2	0.38	1
Styrene	ND		ug/kg	1.6	0.31	1
Dichlorodifluoromethane	ND		ug/kg	16	1.4	1
Acetone	ND		ug/kg	16	7.6	1
Carbon disulfide	ND		ug/kg	16	7.2	1
2-Butanone	ND		ug/kg	16	3.5	1
Vinyl acetate	ND		ug/kg	16	3.4	1
4-Methyl-2-pentanone	ND		ug/kg	16	2.0	1
1,2,3-Trichloropropane	ND		ug/kg	3.2	0.20	1
2-Hexanone	ND		ug/kg	16	1.9	1
Bromochloromethane	ND		ug/kg	3.2	0.32	1
2,2-Dichloropropane	ND		ug/kg	3.2	0.32	1
1,2-Dibromoethane	ND		ug/kg	1.6	0.44	1
1,3-Dichloropropane	ND		ug/kg	3.2	0.26	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.79	0.21	1
Bromobenzene	ND		ug/kg	3.2	0.23	1
n-Butylbenzene	ND		ug/kg	1.6	0.26	1
sec-Butylbenzene	ND		ug/kg	1.6	0.23	1
tert-Butylbenzene	ND		ug/kg	3.2	0.19	1
o-Chlorotoluene	ND		ug/kg	3.2	0.30	1
p-Chlorotoluene	ND		ug/kg	3.2	0.17	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.7	1.6	1
Hexachlorobutadiene	ND		ug/kg	6.3	0.27	1
Isopropylbenzene	ND		ug/kg	1.6	0.17	1
p-Isopropyltoluene	ND		ug/kg	1.6	0.17	1
Naphthalene	ND		ug/kg	6.3	1.0	1
Acrylonitrile	ND		ug/kg	6.3	1.8	1

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-10
Client ID: SB-08 (13'-15')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 12:55
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.6	0.27	1
1,2,3-Trichlorobenzene	ND		ug/kg	3.2	0.51	1
1,2,4-Trichlorobenzene	ND		ug/kg	3.2	0.43	1
1,3,5-Trimethylbenzene	ND		ug/kg	3.2	0.30	1
1,2,4-Trimethylbenzene	ND		ug/kg	3.2	0.53	1
1,4-Dioxane	ND		ug/kg	130	56.	1
p-Diethylbenzene	ND		ug/kg	3.2	0.28	1
p-Ethyltoluene	ND		ug/kg	3.2	0.61	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	3.2	0.30	1
Ethyl ether	ND		ug/kg	3.2	0.54	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	7.9	2.2	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	85		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	93		70-130

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-11
Client ID: SB-09 (0'-2')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 13:05
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/16/20 00:06
Analyst: JC
Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.3	2.9	1
1,1-Dichloroethane	ND		ug/kg	1.3	0.18	1
Chloroform	ND		ug/kg	1.9	0.18	1
Carbon tetrachloride	ND		ug/kg	1.3	0.29	1
1,2-Dichloropropane	ND		ug/kg	1.3	0.16	1
Dibromochloromethane	ND		ug/kg	1.3	0.18	1
1,1,2-Trichloroethane	ND		ug/kg	1.3	0.34	1
Tetrachloroethene	ND		ug/kg	0.63	0.25	1
Chlorobenzene	ND		ug/kg	0.63	0.16	1
Trichlorofluoromethane	ND		ug/kg	5.1	0.88	1
1,2-Dichloroethane	ND		ug/kg	1.3	0.32	1
1,1,1-Trichloroethane	ND		ug/kg	0.63	0.21	1
Bromodichloromethane	ND		ug/kg	0.63	0.14	1
trans-1,3-Dichloropropene	ND		ug/kg	1.3	0.34	1
cis-1,3-Dichloropropene	ND		ug/kg	0.63	0.20	1
1,3-Dichloropropene, Total	ND		ug/kg	0.63	0.20	1
1,1-Dichloropropene	ND		ug/kg	0.63	0.20	1
Bromoform	ND		ug/kg	5.1	0.31	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.63	0.21	1
Benzene	ND		ug/kg	0.63	0.21	1
Toluene	ND		ug/kg	1.3	0.69	1
Ethylbenzene	ND		ug/kg	1.3	0.18	1
Chloromethane	ND		ug/kg	5.1	1.2	1
Bromomethane	ND		ug/kg	2.5	0.74	1
Vinyl chloride	ND		ug/kg	1.3	0.42	1
Chloroethane	ND		ug/kg	2.5	0.57	1
1,1-Dichloroethene	ND		ug/kg	1.3	0.30	1
trans-1,2-Dichloroethene	ND		ug/kg	1.9	0.17	1

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-11

Date Collected: 10/13/20 13:05

Client ID: SB-09 (0'-2')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.63	0.17	1
1,2-Dichlorobenzene	ND		ug/kg	2.5	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/kg	2.5	0.22	1
Methyl tert butyl ether	ND		ug/kg	2.5	0.25	1
p/m-Xylene	ND		ug/kg	2.5	0.71	1
o-Xylene	ND		ug/kg	1.3	0.37	1
Xylenes, Total	ND		ug/kg	1.3	0.37	1
cis-1,2-Dichloroethene	ND		ug/kg	1.3	0.22	1
1,2-Dichloroethene, Total	ND		ug/kg	1.3	0.17	1
Dibromomethane	ND		ug/kg	2.5	0.30	1
Styrene	ND		ug/kg	1.3	0.25	1
Dichlorodifluoromethane	ND		ug/kg	13	1.2	1
Acetone	ND		ug/kg	13	6.1	1
Carbon disulfide	ND		ug/kg	13	5.8	1
2-Butanone	ND		ug/kg	13	2.8	1
Vinyl acetate	ND		ug/kg	13	2.7	1
4-Methyl-2-pentanone	ND		ug/kg	13	1.6	1
1,2,3-Trichloropropane	ND		ug/kg	2.5	0.16	1
2-Hexanone	ND		ug/kg	13	1.5	1
Bromochloromethane	ND		ug/kg	2.5	0.26	1
2,2-Dichloropropane	ND		ug/kg	2.5	0.26	1
1,2-Dibromoethane	ND		ug/kg	1.3	0.35	1
1,3-Dichloropropane	ND		ug/kg	2.5	0.21	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.63	0.17	1
Bromobenzene	ND		ug/kg	2.5	0.18	1
n-Butylbenzene	ND		ug/kg	1.3	0.21	1
sec-Butylbenzene	ND		ug/kg	1.3	0.18	1
tert-Butylbenzene	ND		ug/kg	2.5	0.15	1
o-Chlorotoluene	ND		ug/kg	2.5	0.24	1
p-Chlorotoluene	ND		ug/kg	2.5	0.14	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.8	1.3	1
Hexachlorobutadiene	ND		ug/kg	5.1	0.21	1
Isopropylbenzene	ND		ug/kg	1.3	0.14	1
p-Isopropyltoluene	ND		ug/kg	1.3	0.14	1
Naphthalene	ND		ug/kg	5.1	0.82	1
Acrylonitrile	ND		ug/kg	5.1	1.4	1

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-11
Client ID: SB-09 (0'-2')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 13:05
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.3	0.22	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.5	0.41	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.5	0.34	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.5	0.24	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.5	0.42	1
1,4-Dioxane	ND		ug/kg	100	44.	1
p-Diethylbenzene	ND		ug/kg	2.5	0.22	1
p-Ethyltoluene	ND		ug/kg	2.5	0.48	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.5	0.24	1
Ethyl ether	ND		ug/kg	2.5	0.43	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.3	1.8	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	82		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	96		70-130

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-12
Client ID: SB-09 (13'-15')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 13:20
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/16/20 00:32
Analyst: JC
Percent Solids: 97%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.8	2.6	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.17	1
Chloroform	ND		ug/kg	1.7	0.16	1
Carbon tetrachloride	ND		ug/kg	1.2	0.26	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.14	1
Dibromochloromethane	ND		ug/kg	1.2	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.31	1
Tetrachloroethene	ND		ug/kg	0.58	0.22	1
Chlorobenzene	ND		ug/kg	0.58	0.15	1
Trichlorofluoromethane	ND		ug/kg	4.6	0.80	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.30	1
1,1,1-Trichloroethane	ND		ug/kg	0.58	0.19	1
Bromodichloromethane	ND		ug/kg	0.58	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.31	1
cis-1,3-Dichloropropene	ND		ug/kg	0.58	0.18	1
1,3-Dichloropropene, Total	ND		ug/kg	0.58	0.18	1
1,1-Dichloropropene	ND		ug/kg	0.58	0.18	1
Bromoform	ND		ug/kg	4.6	0.28	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.58	0.19	1
Benzene	ND		ug/kg	0.58	0.19	1
Toluene	ND		ug/kg	1.2	0.62	1
Ethylbenzene	ND		ug/kg	1.2	0.16	1
Chloromethane	ND		ug/kg	4.6	1.1	1
Bromomethane	ND		ug/kg	2.3	0.67	1
Vinyl chloride	ND		ug/kg	1.2	0.38	1
Chloroethane	ND		ug/kg	2.3	0.52	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.27	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.16	1

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-12
 Client ID: SB-09 (13'-15')
 Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 13:20
 Date Received: 10/13/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.58	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.3	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	2.3	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	2.3	0.20	1
Methyl tert butyl ether	ND		ug/kg	2.3	0.23	1
p/m-Xylene	ND		ug/kg	2.3	0.64	1
o-Xylene	ND		ug/kg	1.2	0.34	1
Xylenes, Total	ND		ug/kg	1.2	0.34	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.20	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.16	1
Dibromomethane	ND		ug/kg	2.3	0.27	1
Styrene	ND		ug/kg	1.2	0.22	1
Dichlorodifluoromethane	ND		ug/kg	12	1.0	1
Acetone	ND		ug/kg	12	5.5	1
Carbon disulfide	ND		ug/kg	12	5.2	1
2-Butanone	ND		ug/kg	12	2.6	1
Vinyl acetate	ND		ug/kg	12	2.5	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.5	1
1,2,3-Trichloropropane	ND		ug/kg	2.3	0.15	1
2-Hexanone	ND		ug/kg	12	1.4	1
Bromochloromethane	ND		ug/kg	2.3	0.24	1
2,2-Dichloropropane	ND		ug/kg	2.3	0.23	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.32	1
1,3-Dichloropropane	ND		ug/kg	2.3	0.19	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.58	0.15	1
Bromobenzene	ND		ug/kg	2.3	0.17	1
n-Butylbenzene	ND		ug/kg	1.2	0.19	1
sec-Butylbenzene	ND		ug/kg	1.2	0.17	1
tert-Butylbenzene	ND		ug/kg	2.3	0.14	1
o-Chlorotoluene	ND		ug/kg	2.3	0.22	1
p-Chlorotoluene	ND		ug/kg	2.3	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.4	1.1	1
Hexachlorobutadiene	ND		ug/kg	4.6	0.19	1
Isopropylbenzene	ND		ug/kg	1.2	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.12	1
Naphthalene	ND		ug/kg	4.6	0.75	1
Acrylonitrile	ND		ug/kg	4.6	1.3	1

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-12
Client ID: SB-09 (13'-15')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 13:20
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.20	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.3	0.37	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.3	0.31	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.3	0.22	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.3	0.38	1
1,4-Dioxane	ND		ug/kg	92	40.	1
p-Diethylbenzene	ND		ug/kg	2.3	0.20	1
p-Ethyltoluene	ND		ug/kg	2.3	0.44	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.3	0.22	1
Ethyl ether	ND		ug/kg	2.3	0.39	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.8	1.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	85		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	96		70-130

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-14
Client ID: DUP 101320
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 00:00
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/16/20 00:58
Analyst: JC
Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.9	2.2	1
1,1-Dichloroethane	ND		ug/kg	0.98	0.14	1
Chloroform	ND		ug/kg	1.5	0.14	1
Carbon tetrachloride	ND		ug/kg	0.98	0.22	1
1,2-Dichloropropane	ND		ug/kg	0.98	0.12	1
Dibromochloromethane	ND		ug/kg	0.98	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	0.98	0.26	1
Tetrachloroethene	ND		ug/kg	0.49	0.19	1
Chlorobenzene	ND		ug/kg	0.49	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.9	0.68	1
1,2-Dichloroethane	ND		ug/kg	0.98	0.25	1
1,1,1-Trichloroethane	ND		ug/kg	0.49	0.16	1
Bromodichloromethane	ND		ug/kg	0.49	0.11	1
trans-1,3-Dichloropropene	ND		ug/kg	0.98	0.27	1
cis-1,3-Dichloropropene	ND		ug/kg	0.49	0.15	1
1,3-Dichloropropene, Total	ND		ug/kg	0.49	0.15	1
1,1-Dichloropropene	ND		ug/kg	0.49	0.16	1
Bromoform	ND		ug/kg	3.9	0.24	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.49	0.16	1
Benzene	ND		ug/kg	0.49	0.16	1
Toluene	ND		ug/kg	0.98	0.53	1
Ethylbenzene	ND		ug/kg	0.98	0.14	1
Chloromethane	ND		ug/kg	3.9	0.91	1
Bromomethane	ND		ug/kg	2.0	0.57	1
Vinyl chloride	ND		ug/kg	0.98	0.33	1
Chloroethane	ND		ug/kg	2.0	0.44	1
1,1-Dichloroethene	ND		ug/kg	0.98	0.23	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.13	1

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-14

Date Collected: 10/13/20 00:00

Client ID: DUP 101320

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.49	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.20	1
p/m-Xylene	ND		ug/kg	2.0	0.55	1
o-Xylene	ND		ug/kg	0.98	0.28	1
Xylenes, Total	ND		ug/kg	0.98	0.28	1
cis-1,2-Dichloroethene	ND		ug/kg	0.98	0.17	1
1,2-Dichloroethene, Total	ND		ug/kg	0.98	0.13	1
Dibromomethane	ND		ug/kg	2.0	0.23	1
Styrene	ND		ug/kg	0.98	0.19	1
Dichlorodifluoromethane	ND		ug/kg	9.8	0.90	1
Acetone	ND		ug/kg	9.8	4.7	1
Carbon disulfide	ND		ug/kg	9.8	4.5	1
2-Butanone	ND		ug/kg	9.8	2.2	1
Vinyl acetate	ND		ug/kg	9.8	2.1	1
4-Methyl-2-pentanone	ND		ug/kg	9.8	1.2	1
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.12	1
2-Hexanone	ND		ug/kg	9.8	1.2	1
Bromochloromethane	ND		ug/kg	2.0	0.20	1
2,2-Dichloropropane	ND		ug/kg	2.0	0.20	1
1,2-Dibromoethane	ND		ug/kg	0.98	0.27	1
1,3-Dichloropropane	ND		ug/kg	2.0	0.16	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.49	0.13	1
Bromobenzene	ND		ug/kg	2.0	0.14	1
n-Butylbenzene	ND		ug/kg	0.98	0.16	1
sec-Butylbenzene	ND		ug/kg	0.98	0.14	1
tert-Butylbenzene	ND		ug/kg	2.0	0.12	1
o-Chlorotoluene	ND		ug/kg	2.0	0.19	1
p-Chlorotoluene	ND		ug/kg	2.0	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.9	0.98	1
Hexachlorobutadiene	ND		ug/kg	3.9	0.16	1
Isopropylbenzene	ND		ug/kg	0.98	0.11	1
p-Isopropyltoluene	ND		ug/kg	0.98	0.11	1
Naphthalene	ND		ug/kg	3.9	0.64	1
Acrylonitrile	ND		ug/kg	3.9	1.1	1

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-14
Client ID: DUP 101320
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 00:00
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.98	0.17	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33	1
1,4-Dioxane	ND		ug/kg	78	34.	1
p-Diethylbenzene	ND		ug/kg	2.0	0.17	1
p-Ethyltoluene	ND		ug/kg	2.0	0.38	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19	1
Ethyl ether	ND		ug/kg	2.0	0.33	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.9	1.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	83		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	96		70-130

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/15/20 16:46
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-02,04,06-12,14 Batch: WG1422878-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/15/20 16:46
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-02,04,06-12,14 Batch: WG1422878-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	0.26	J	ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 10/15/20 16:46
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-02,04,06-12,14 Batch: WG1422878-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	0.28	J	ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	0.16	J	ug/kg	1.0	0.11
Naphthalene	0.66	J	ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	0.51	J	ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	0.44	J	ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	80	35.
p-Diethylbenzene	0.22	J	ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	0.33	J	ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	92		70-130
Toluene-d8	82		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	90		70-130

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/16/20 06:19
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 03,05 Batch: WG1423026-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/16/20 06:19
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 03,05 Batch: WG1423026-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/16/20 06:19
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 03,05 Batch: WG1423026-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	0.27	J	ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	1.0	J	ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	1.0	J	ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	0.66	J	ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	80	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	0.20	J	ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	82		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	89		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE 11 ESH

Lab Number: L2043863

Project Number: 26979.01

Report Date: 10/20/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-02,04,06-12,14 Batch: WG1422878-3 WG1422878-4								
Methylene chloride	114		114		70-130	0		30
1,1-Dichloroethane	120		120		70-130	0		30
Chloroform	106		107		70-130	1		30
Carbon tetrachloride	110		110		70-130	0		30
1,2-Dichloropropane	120		123		70-130	2		30
Dibromochloromethane	81		82		70-130	1		30
1,1,2-Trichloroethane	87		90		70-130	3		30
Tetrachloroethene	100		101		70-130	1		30
Chlorobenzene	86		87		70-130	1		30
Trichlorofluoromethane	111		111		70-139	0		30
1,2-Dichloroethane	116		117		70-130	1		30
1,1,1-Trichloroethane	118		118		70-130	0		30
Bromodichloromethane	106		107		70-130	1		30
trans-1,3-Dichloropropene	87		89		70-130	2		30
cis-1,3-Dichloropropene	111		114		70-130	3		30
1,1-Dichloropropene	132	Q	129		70-130	2		30
Bromoform	74		75		70-130	1		30
1,1,2,2-Tetrachloroethane	78		78		70-130	0		30
Benzene	112		112		70-130	0		30
Toluene	91		92		70-130	1		30
Ethylbenzene	96		96		70-130	0		30
Chloromethane	137	Q	136	Q	52-130	1		30
Bromomethane	106		105		57-147	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE 11 ESH

Lab Number: L2043863

Project Number: 26979.01

Report Date: 10/20/20

Parameter	LCS		LCSD		%Recovery		RPD	
	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-02,04,06-12,14 Batch: WG1422878-3 WG1422878-4								
Vinyl chloride	118		116		67-130	2		30
Chloroethane	113		111		50-151	2		30
1,1-Dichloroethene	129		130		65-135	1		30
trans-1,2-Dichloroethene	120		121		70-130	1		30
Trichloroethene	117		116		70-130	1		30
1,2-Dichlorobenzene	83		83		70-130	0		30
1,3-Dichlorobenzene	84		83		70-130	1		30
1,4-Dichlorobenzene	82		81		70-130	1		30
Methyl tert butyl ether	116		116		66-130	0		30
p/m-Xylene	94		96		70-130	2		30
o-Xylene	87		88		70-130	1		30
cis-1,2-Dichloroethene	114		115		70-130	1		30
Dibromomethane	106		107		70-130	1		30
Styrene	88		90		70-130	2		30
Dichlorodifluoromethane	125		124		30-146	1		30
Acetone	127		105		54-140	19		30
Carbon disulfide	99		100		59-130	1		30
2-Butanone	132	Q	119		70-130	10		30
Vinyl acetate	135	Q	137	Q	70-130	1		30
4-Methyl-2-pentanone	100		102		70-130	2		30
1,2,3-Trichloropropane	80		81		68-130	1		30
2-Hexanone	94		95		70-130	1		30
Bromochloromethane	106		107		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE 11 ESH

Lab Number: L2043863

Project Number: 26979.01

Report Date: 10/20/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-02,04,06-12,14 Batch: WG1422878-3 WG1422878-4								
2,2-Dichloropropane	121		120		70-130	1		30
1,2-Dibromoethane	89		91		70-130	2		30
1,3-Dichloropropane	91		92		69-130	1		30
1,1,1,2-Tetrachloroethane	84		84		70-130	0		30
Bromobenzene	78		78		70-130	0		30
n-Butylbenzene	89		89		70-130	0		30
sec-Butylbenzene	92		91		70-130	1		30
tert-Butylbenzene	89		88		70-130	1		30
o-Chlorotoluene	84		84		70-130	0		30
p-Chlorotoluene	84		83		70-130	1		30
1,2-Dibromo-3-chloropropane	85		88		68-130	3		30
Hexachlorobutadiene	86		91		67-130	6		30
Isopropylbenzene	90		90		70-130	0		30
p-Isopropyltoluene	90		90		70-130	0		30
Naphthalene	98		104		70-130	6		30
Acrylonitrile	140	Q	143	Q	70-130	2		30
n-Propylbenzene	90		88		70-130	2		30
1,2,3-Trichlorobenzene	86		90		70-130	5		30
1,2,4-Trichlorobenzene	88		92		70-130	4		30
1,3,5-Trimethylbenzene	88		87		70-130	1		30
1,2,4-Trimethylbenzene	86		86		70-130	0		30
1,4-Dioxane	194	Q	157	Q	65-136	21		30
p-Diethylbenzene	91		90		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE 11 ESH

Lab Number: L2043863

Project Number: 26979.01

Report Date: 10/20/20

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-02,04,06-12,14 Batch: WG1422878-3 WG1422878-4								
p-Ethyltoluene	90		89		70-130	1		30
1,2,4,5-Tetramethylbenzene	91		94		70-130	3		30
Ethyl ether	116		118		67-130	2		30
trans-1,4-Dichloro-2-butene	88		98		70-130	11		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	92		93		70-130
Toluene-d8	84		83		70-130
4-Bromofluorobenzene	97		97		70-130
Dibromofluoromethane	93		92		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE 11 ESH

Lab Number: L2043863

Project Number: 26979.01

Report Date: 10/20/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 03,05 Batch: WG1423026-3 WG1423026-4								
Methylene chloride	78		75		70-130	4		30
1,1-Dichloroethane	87		82		70-130	6		30
Chloroform	85		82		70-130	4		30
Carbon tetrachloride	99		92		70-130	7		30
1,2-Dichloropropane	91		88		70-130	3		30
Dibromochloromethane	96		95		70-130	1		30
1,1,2-Trichloroethane	92		91		70-130	1		30
Tetrachloroethene	117		111		70-130	5		30
Chlorobenzene	93		91		70-130	2		30
Trichlorofluoromethane	105		98		70-139	7		30
1,2-Dichloroethane	79		77		70-130	3		30
1,1,1-Trichloroethane	96		90		70-130	6		30
Bromodichloromethane	89		87		70-130	2		30
trans-1,3-Dichloropropene	96		95		70-130	1		30
cis-1,3-Dichloropropene	96		94		70-130	2		30
1,1-Dichloropropene	100		94		70-130	6		30
Bromoform	98		98		70-130	0		30
1,1,2,2-Tetrachloroethane	85		85		70-130	0		30
Benzene	92		87		70-130	6		30
Toluene	90		88		70-130	2		30
Ethylbenzene	100		95		70-130	5		30
Chloromethane	74		69		52-130	7		30
Bromomethane	104		97		57-147	7		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE 11 ESH

Lab Number: L2043863

Project Number: 26979.01

Report Date: 10/20/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 03,05 Batch: WG1423026-3 WG1423026-4								
Vinyl chloride	92		84		67-130	9		30
Chloroethane	93		87		50-151	7		30
1,1-Dichloroethene	102		93		65-135	9		30
trans-1,2-Dichloroethene	95		89		70-130	7		30
Trichloroethene	99		94		70-130	5		30
1,2-Dichlorobenzene	92		90		70-130	2		30
1,3-Dichlorobenzene	98		94		70-130	4		30
1,4-Dichlorobenzene	96		92		70-130	4		30
Methyl tert butyl ether	83		82		66-130	1		30
p/m-Xylene	106		101		70-130	5		30
o-Xylene	109		106		70-130	3		30
cis-1,2-Dichloroethene	92		88		70-130	4		30
Dibromomethane	87		86		70-130	1		30
Styrene	105		102		70-130	3		30
Dichlorodifluoromethane	71		65		30-146	9		30
Acetone	74		71		54-140	4		30
Carbon disulfide	86		79		59-130	8		30
2-Butanone	79		77		70-130	3		30
Vinyl acetate	80		78		70-130	3		30
4-Methyl-2-pentanone	89		88		70-130	1		30
1,2,3-Trichloropropane	84		82		68-130	2		30
2-Hexanone	78		77		70-130	1		30
Bromochloromethane	91		89		70-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE 11 ESH

Lab Number: L2043863

Project Number: 26979.01

Report Date: 10/20/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 03,05 Batch: WG1423026-3 WG1423026-4								
2,2-Dichloropropane	98		92		70-130	6		30
1,2-Dibromoethane	89		89		70-130	0		30
1,3-Dichloropropane	86		87		69-130	1		30
1,1,1,2-Tetrachloroethane	99		98		70-130	1		30
Bromobenzene	100		96		70-130	4		30
n-Butylbenzene	102		96		70-130	6		30
sec-Butylbenzene	103		97		70-130	6		30
tert-Butylbenzene	106		100		70-130	6		30
o-Chlorotoluene	95		90		70-130	5		30
p-Chlorotoluene	98		92		70-130	6		30
1,2-Dibromo-3-chloropropane	97		95		68-130	2		30
Hexachlorobutadiene	114		108		67-130	5		30
Isopropylbenzene	105		100		70-130	5		30
p-Isopropyltoluene	108		102		70-130	6		30
Naphthalene	97		95		70-130	2		30
Acrylonitrile	82		82		70-130	0		30
n-Propylbenzene	102		96		70-130	6		30
1,2,3-Trichlorobenzene	99		97		70-130	2		30
1,2,4-Trichlorobenzene	103		101		70-130	2		30
1,3,5-Trimethylbenzene	102		96		70-130	6		30
1,2,4-Trimethylbenzene	101		96		70-130	5		30
1,4-Dioxane	123		117		65-136	5		30
p-Diethylbenzene	105		99		70-130	6		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE 11 ESH

Lab Number: L2043863

Project Number: 26979.01

Report Date: 10/20/20

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 03,05 Batch: WG1423026-3 WG1423026-4								
p-Ethyltoluene	102		97		70-130	5		30
1,2,4,5-Tetramethylbenzene	97		94		70-130	3		30
Ethyl ether	86		83		67-130	4		30
trans-1,4-Dichloro-2-butene	92		89		70-130	3		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	85		84		70-130
Toluene-d8	97		98		70-130
4-Bromofluorobenzene	98		97		70-130
Dibromofluoromethane	92		91		70-130

SEMIVOLATILES

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-01
Client ID: SB-04 (0'-2')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 09:25
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 10/15/20 20:17
Analyst: JRW
Percent Solids: 93%

Extraction Method: EPA 3546
Extraction Date: 10/15/20 01:21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	20.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	32.	1
1,3-Dichlorobenzene	ND		ug/kg	180	30.	1
1,4-Dichlorobenzene	ND		ug/kg	180	31.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	47.	1
2,4-Dinitrotoluene	ND		ug/kg	180	35.	1
2,6-Dinitrotoluene	ND		ug/kg	180	30.	1
Fluoranthene	390		ug/kg	110	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	27.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	30.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	510	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	ND		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	26.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	27.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	61.	1
Butyl benzyl phthalate	ND		ug/kg	180	45.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	60.	1

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-01

Date Collected: 10/13/20 09:25

Client ID: SB-04 (0'-2')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	16.	1
Dimethyl phthalate	ND		ug/kg	180	37.	1
Benzo(a)anthracene	200		ug/kg	110	20.	1
Benzo(a)pyrene	230		ug/kg	140	43.	1
Benzo(b)fluoranthene	240		ug/kg	110	30.	1
Benzo(k)fluoranthene	83	J	ug/kg	110	28.	1
Chrysene	220		ug/kg	110	18.	1
Acenaphthylene	32	J	ug/kg	140	27.	1
Anthracene	58	J	ug/kg	110	34.	1
Benzo(ghi)perylene	120	J	ug/kg	140	21.	1
Fluorene	19	J	ug/kg	180	17.	1
Phenanthrene	260		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	30	J	ug/kg	110	20.	1
Indeno(1,2,3-cd)pyrene	120	J	ug/kg	140	25.	1
Pyrene	420		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	400	41.	1
4-Chloroaniline	ND		ug/kg	180	32.	1
2-Nitroaniline	ND		ug/kg	180	34.	1
3-Nitroaniline	ND		ug/kg	180	33.	1
4-Nitroaniline	ND		ug/kg	180	73.	1
Dibenzofuran	ND		ug/kg	180	17.	1
2-Methylnaphthalene	ND		ug/kg	210	21.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	18.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	26.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	28.	1
2,4-Dimethylphenol	ND		ug/kg	180	58.	1
2-Nitrophenol	ND		ug/kg	380	66.	1
4-Nitrophenol	ND		ug/kg	250	72.	1
2,4-Dinitrophenol	ND		ug/kg	850	82.	1
4,6-Dinitro-o-cresol	ND		ug/kg	460	85.	1
Pentachlorophenol	ND		ug/kg	140	39.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	27.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	250	28.	1

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-01

Date Collected: 10/13/20 09:25

Client ID: SB-04 (0'-2')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	34.	1
Benzoic Acid	ND		ug/kg	570	180	1
Benzyl Alcohol	ND		ug/kg	180	54.	1
Carbazole	20	J	ug/kg	180	17.	1
1,4-Dioxane	ND		ug/kg	26	8.1	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	56		25-120
Phenol-d6	59		10-120
Nitrobenzene-d5	55		23-120
2-Fluorobiphenyl	63		30-120
2,4,6-Tribromophenol	83		10-136
4-Terphenyl-d14	64		18-120

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-02
Client ID: SB-04 (13'-15')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 10:15
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 10/15/20 13:51
Analyst: IM
Percent Solids: 96%

Extraction Method: EPA 3546
Extraction Date: 10/15/20 01:21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	170	19.	1
Hexachlorobenzene	ND		ug/kg	100	19.	1
Bis(2-chloroethyl)ether	ND		ug/kg	150	23.	1
2-Chloronaphthalene	ND		ug/kg	170	17.	1
1,2-Dichlorobenzene	ND		ug/kg	170	30.	1
1,3-Dichlorobenzene	ND		ug/kg	170	29.	1
1,4-Dichlorobenzene	ND		ug/kg	170	30.	1
3,3'-Dichlorobenzidine	ND		ug/kg	170	45.	1
2,4-Dinitrotoluene	ND		ug/kg	170	34.	1
2,6-Dinitrotoluene	ND		ug/kg	170	29.	1
Fluoranthene	ND		ug/kg	100	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	18.	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	26.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	29.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	180	17.	1
Hexachlorobutadiene	ND		ug/kg	170	25.	1
Hexachlorocyclopentadiene	ND		ug/kg	490	150	1
Hexachloroethane	ND		ug/kg	140	28.	1
Isophorone	ND		ug/kg	150	22.	1
Naphthalene	ND		ug/kg	170	21.	1
Nitrobenzene	ND		ug/kg	150	25.	1
NDPA/DPA	ND		ug/kg	140	19.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	170	26.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	170	59.	1
Butyl benzyl phthalate	ND		ug/kg	170	43.	1
Di-n-butylphthalate	ND		ug/kg	170	32.	1
Di-n-octylphthalate	ND		ug/kg	170	58.	1

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-02
 Client ID: SB-04 (13'-15')
 Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 10:15
 Date Received: 10/13/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	170	16.	1
Dimethyl phthalate	ND		ug/kg	170	36.	1
Benzo(a)anthracene	ND		ug/kg	100	19.	1
Benzo(a)pyrene	ND		ug/kg	140	42.	1
Benzo(b)fluoranthene	ND		ug/kg	100	29.	1
Benzo(k)fluoranthene	ND		ug/kg	100	27.	1
Chrysene	ND		ug/kg	100	18.	1
Acenaphthylene	ND		ug/kg	140	26.	1
Anthracene	ND		ug/kg	100	33.	1
Benzo(ghi)perylene	ND		ug/kg	140	20.	1
Fluorene	ND		ug/kg	170	16.	1
Phenanthrene	ND		ug/kg	100	21.	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	24.	1
Pyrene	ND		ug/kg	100	17.	1
Biphenyl	ND		ug/kg	390	40.	1
4-Chloroaniline	ND		ug/kg	170	31.	1
2-Nitroaniline	ND		ug/kg	170	33.	1
3-Nitroaniline	ND		ug/kg	170	32.	1
4-Nitroaniline	ND		ug/kg	170	70.	1
Dibenzofuran	ND		ug/kg	170	16.	1
2-Methylnaphthalene	ND		ug/kg	200	20.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	18.	1
Acetophenone	ND		ug/kg	170	21.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	32.	1
p-Chloro-m-cresol	ND		ug/kg	170	25.	1
2-Chlorophenol	ND		ug/kg	170	20.	1
2,4-Dichlorophenol	ND		ug/kg	150	27.	1
2,4-Dimethylphenol	ND		ug/kg	170	56.	1
2-Nitrophenol	ND		ug/kg	370	64.	1
4-Nitrophenol	ND		ug/kg	240	70.	1
2,4-Dinitrophenol	ND		ug/kg	820	79.	1
4,6-Dinitro-o-cresol	ND		ug/kg	440	82.	1
Pentachlorophenol	ND		ug/kg	140	37.	1
Phenol	ND		ug/kg	170	26.	1
2-Methylphenol	ND		ug/kg	170	26.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	27.	1

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-02

Date Collected: 10/13/20 10:15

Client ID: SB-04 (13'-15')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	170	33.	1
Benzoic Acid	ND		ug/kg	550	170	1
Benzyl Alcohol	ND		ug/kg	170	52.	1
Carbazole	ND		ug/kg	170	16.	1
1,4-Dioxane	ND		ug/kg	26	7.8	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	52		25-120
Phenol-d6	53		10-120
Nitrobenzene-d5	51		23-120
2-Fluorobiphenyl	57		30-120
2,4,6-Tribromophenol	71		10-136
4-Terphenyl-d14	64		18-120

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-03
Client ID: SB-05 (0'-2')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 10:35
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 10/15/20 17:33
Analyst: WR
Percent Solids: 90%

Extraction Method: EPA 3546
Extraction Date: 10/15/20 01:21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	99	J	ug/kg	140	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	2600		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	24.	1
Naphthalene	31	J	ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	140	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	63.	1
Butyl benzyl phthalate	ND		ug/kg	180	46.	1
Di-n-butylphthalate	34	J	ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	62.	1

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-03

Date Collected: 10/13/20 10:35

Client ID: SB-05 (0'-2')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	1300		ug/kg	110	20.	1
Benzo(a)pyrene	1400		ug/kg	140	44.	1
Benzo(b)fluoranthene	1700		ug/kg	110	31.	1
Benzo(k)fluoranthene	560		ug/kg	110	29.	1
Chrysene	1300		ug/kg	110	19.	1
Acenaphthylene	94	J	ug/kg	140	28.	1
Anthracene	330		ug/kg	110	35.	1
Benzo(ghi)perylene	840		ug/kg	140	21.	1
Fluorene	100	J	ug/kg	180	18.	1
Phenanthrene	1600		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	220		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	910		ug/kg	140	25.	1
Pyrene	2400		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	410	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	75.	1
Dibenzofuran	53	J	ug/kg	180	17.	1
2-Methylnaphthalene	ND		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	28	J	ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	60.	1
2-Nitrophenol	ND		ug/kg	390	68.	1
4-Nitrophenol	ND		ug/kg	250	74.	1
2,4-Dinitrophenol	ND		ug/kg	870	85.	1
4,6-Dinitro-o-cresol	ND		ug/kg	470	87.	1
Pentachlorophenol	ND		ug/kg	140	40.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-03

Date Collected: 10/13/20 10:35

Client ID: SB-05 (0'-2')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	590	180	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	190		ug/kg	180	18.	1
1,4-Dioxane	ND		ug/kg	27	8.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	74		25-120
Phenol-d6	72		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	64		30-120
2,4,6-Tribromophenol	73		10-136
4-Terphenyl-d14	57		18-120

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-04
Client ID: SB-05 (13'-15')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 10:58
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 10/15/20 14:15
Analyst: IM
Percent Solids: 96%

Extraction Method: EPA 3546
Extraction Date: 10/15/20 01:21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	170	20.	1
Hexachlorobenzene	ND		ug/kg	100	19.	1
Bis(2-chloroethyl)ether	ND		ug/kg	150	23.	1
2-Chloronaphthalene	ND		ug/kg	170	17.	1
1,2-Dichlorobenzene	ND		ug/kg	170	31.	1
1,3-Dichlorobenzene	ND		ug/kg	170	30.	1
1,4-Dichlorobenzene	ND		ug/kg	170	30.	1
3,3'-Dichlorobenzidine	ND		ug/kg	170	46.	1
2,4-Dinitrotoluene	ND		ug/kg	170	34.	1
2,6-Dinitrotoluene	ND		ug/kg	170	30.	1
Fluoranthene	ND		ug/kg	100	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	18.	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	26.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	29.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	180	17.	1
Hexachlorobutadiene	ND		ug/kg	170	25.	1
Hexachlorocyclopentadiene	ND		ug/kg	490	160	1
Hexachloroethane	ND		ug/kg	140	28.	1
Isophorone	ND		ug/kg	150	22.	1
Naphthalene	ND		ug/kg	170	21.	1
Nitrobenzene	ND		ug/kg	150	25.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	170	26.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	170	60.	1
Butyl benzyl phthalate	ND		ug/kg	170	43.	1
Di-n-butylphthalate	ND		ug/kg	170	33.	1
Di-n-octylphthalate	ND		ug/kg	170	58.	1

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-04

Date Collected: 10/13/20 10:58

Client ID: SB-05 (13'-15')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	170	16.	1
Dimethyl phthalate	ND		ug/kg	170	36.	1
Benzo(a)anthracene	ND		ug/kg	100	19.	1
Benzo(a)pyrene	ND		ug/kg	140	42.	1
Benzo(b)fluoranthene	ND		ug/kg	100	29.	1
Benzo(k)fluoranthene	ND		ug/kg	100	28.	1
Chrysene	ND		ug/kg	100	18.	1
Acenaphthylene	ND		ug/kg	140	26.	1
Anthracene	ND		ug/kg	100	34.	1
Benzo(ghi)perylene	ND		ug/kg	140	20.	1
Fluorene	ND		ug/kg	170	17.	1
Phenanthrene	ND		ug/kg	100	21.	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	24.	1
Pyrene	ND		ug/kg	100	17.	1
Biphenyl	ND		ug/kg	390	40.	1
4-Chloroaniline	ND		ug/kg	170	31.	1
2-Nitroaniline	ND		ug/kg	170	33.	1
3-Nitroaniline	ND		ug/kg	170	32.	1
4-Nitroaniline	ND		ug/kg	170	71.	1
Dibenzofuran	ND		ug/kg	170	16.	1
2-Methylnaphthalene	ND		ug/kg	210	21.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	18.	1
Acetophenone	ND		ug/kg	170	21.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	33.	1
p-Chloro-m-cresol	ND		ug/kg	170	26.	1
2-Chlorophenol	ND		ug/kg	170	20.	1
2,4-Dichlorophenol	ND		ug/kg	150	28.	1
2,4-Dimethylphenol	ND		ug/kg	170	57.	1
2-Nitrophenol	ND		ug/kg	370	65.	1
4-Nitrophenol	ND		ug/kg	240	70.	1
2,4-Dinitrophenol	ND		ug/kg	820	80.	1
4,6-Dinitro-o-cresol	ND		ug/kg	450	82.	1
Pentachlorophenol	ND		ug/kg	140	38.	1
Phenol	ND		ug/kg	170	26.	1
2-Methylphenol	ND		ug/kg	170	27.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	250	27.	1

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-04
Client ID: SB-05 (13'-15')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 10:58
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	170	33.	1
Benzoic Acid	ND		ug/kg	560	170	1
Benzyl Alcohol	ND		ug/kg	170	53.	1
Carbazole	ND		ug/kg	170	17.	1
1,4-Dioxane	ND		ug/kg	26	7.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	68		25-120
Phenol-d6	68		10-120
Nitrobenzene-d5	67		23-120
2-Fluorobiphenyl	71		30-120
2,4,6-Tribromophenol	84		10-136
4-Terphenyl-d14	70		18-120

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-05
 Client ID: SB-06 (0'-2')
 Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 11:15
 Date Received: 10/13/20
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 10/16/20 13:33
 Analyst: SZ
 Percent Solids: 88%

Extraction Method: EPA 3546
 Extraction Date: 10/15/20 01:21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	330		ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	21.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	190	18.	1
1,2-Dichlorobenzene	ND		ug/kg	190	33.	1
1,3-Dichlorobenzene	ND		ug/kg	190	32.	1
1,4-Dichlorobenzene	ND		ug/kg	190	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	37.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	7200		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	120	J	ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	190		ug/kg	190	64.	1
Butyl benzyl phthalate	ND		ug/kg	190	47.	1
Di-n-butylphthalate	59	J	ug/kg	190	35.	1
Di-n-octylphthalate	ND		ug/kg	190	63.	1

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-05

Date Collected: 10/13/20 11:15

Client ID: SB-06 (0'-2')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	17.	1
Dimethyl phthalate	ND		ug/kg	190	39.	1
Benzo(a)anthracene	4800		ug/kg	110	21.	1
Benzo(a)pyrene	4200		ug/kg	150	45.	1
Benzo(b)fluoranthene	6000		ug/kg	110	31.	1
Benzo(k)fluoranthene	1400		ug/kg	110	30.	1
Chrysene	4100		ug/kg	110	19.	1
Acenaphthylene	360		ug/kg	150	29.	1
Anthracene	1100		ug/kg	110	36.	1
Benzo(ghi)perylene	2400		ug/kg	150	22.	1
Fluorene	360		ug/kg	190	18.	1
Phenanthrene	4900		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	650		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	2900		ug/kg	150	26.	1
Pyrene	6300		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	43.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	35.	1
4-Nitroaniline	ND		ug/kg	190	77.	1
Dibenzofuran	190		ug/kg	190	18.	1
2-Methylnaphthalene	80	J	ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	19.	1
Acetophenone	ND		ug/kg	190	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	61.	1
2-Nitrophenol	ND		ug/kg	400	70.	1
4-Nitrophenol	ND		ug/kg	260	76.	1
2,4-Dinitrophenol	ND		ug/kg	890	87.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	89.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	190	28.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	29.	1

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-05
Client ID: SB-06 (0'-2')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 11:15
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	36.	1
Benzoic Acid	ND		ug/kg	600	190	1
Benzyl Alcohol	ND		ug/kg	190	57.	1
Carbazole	600		ug/kg	190	18.	1
1,4-Dioxane	ND		ug/kg	28	8.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	73		25-120
Phenol-d6	76		10-120
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	67		30-120
2,4,6-Tribromophenol	88		10-136
4-Terphenyl-d14	56		18-120

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-06
Client ID: SB-06 (13'-15')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 11:35
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 10/15/20 11:07
Analyst: JRW
Percent Solids: 91%

Extraction Method: EPA 3546
Extraction Date: 10/15/20 01:21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	ND		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	160	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	160	24.	1
Naphthalene	ND		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	63.	1
Butyl benzyl phthalate	ND		ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	62.	1

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-06

Date Collected: 10/13/20 11:35

Client ID: SB-06 (13'-15')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	ND		ug/kg	110	20.	1
Benzo(a)pyrene	ND		ug/kg	150	44.	1
Benzo(b)fluoranthene	ND		ug/kg	110	31.	1
Benzo(k)fluoranthene	ND		ug/kg	110	29.	1
Chrysene	ND		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	150	28.	1
Anthracene	ND		ug/kg	110	36.	1
Benzo(ghi)perylene	ND		ug/kg	150	21.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	ND		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	25.	1
Pyrene	ND		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	76.	1
Dibenzofuran	ND		ug/kg	180	17.	1
2-Methylnaphthalene	ND		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	60.	1
2-Nitrophenol	ND		ug/kg	390	69.	1
4-Nitrophenol	ND		ug/kg	260	74.	1
2,4-Dinitrophenol	ND		ug/kg	880	85.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	88.	1
Pentachlorophenol	ND		ug/kg	150	40.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	29.	1

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-06

Date Collected: 10/13/20 11:35

Client ID: SB-06 (13'-15')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	590	180	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	ND		ug/kg	180	18.	1
1,4-Dioxane	ND		ug/kg	27	8.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	76		25-120
Phenol-d6	75		10-120
Nitrobenzene-d5	68		23-120
2-Fluorobiphenyl	74		30-120
2,4,6-Tribromophenol	76		10-136
4-Terphenyl-d14	75		18-120

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-07
Client ID: SB-07 (0'-2')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 11:55
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 10/15/20 17:08
Analyst: JRW
Percent Solids: 89%

Extraction Method: EPA 3546
Extraction Date: 10/15/20 01:23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	1200		ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1
1,3-Dichlorobenzene	ND		ug/kg	180	32.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	37.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	9300	E	ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	160	24.	1
Naphthalene	150	J	ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	63.	1
Butyl benzyl phthalate	ND		ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	62.	1

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-07

Date Collected: 10/13/20 11:55

Client ID: SB-07 (0'-2')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	5200		ug/kg	110	21.	1
Benzo(a)pyrene	4500		ug/kg	150	45.	1
Benzo(b)fluoranthene	5500		ug/kg	110	31.	1
Benzo(k)fluoranthene	1900		ug/kg	110	29.	1
Chrysene	4600		ug/kg	110	19.	1
Acenaphthylene	62	J	ug/kg	150	28.	1
Anthracene	2500		ug/kg	110	36.	1
Benzo(ghi)perylene	2000		ug/kg	150	22.	1
Fluorene	950		ug/kg	180	18.	1
Phenanthrene	9600	E	ug/kg	110	22.	1
Dibenzo(a,h)anthracene	650		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	2400		ug/kg	150	26.	1
Pyrene	8200	E	ug/kg	110	18.	1
Biphenyl	51	J	ug/kg	420	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	76.	1
Dibenzofuran	620		ug/kg	180	17.	1
2-Methylnaphthalene	230		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	60.	1
2-Nitrophenol	ND		ug/kg	400	69.	1
4-Nitrophenol	ND		ug/kg	260	75.	1
2,4-Dinitrophenol	ND		ug/kg	880	85.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	88.	1
Pentachlorophenol	ND		ug/kg	150	40.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	29.	1

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-07
Client ID: SB-07 (0'-2')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 11:55
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	590	180	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	1200		ug/kg	180	18.	1
1,4-Dioxane	ND		ug/kg	28	8.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	47		25-120
Phenol-d6	67		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	72		30-120
2,4,6-Tribromophenol	32		10-136
4-Terphenyl-d14	67		18-120

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-07 D
 Client ID: SB-07 (0'-2')
 Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 11:55
 Date Received: 10/13/20
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 10/16/20 13:56
 Analyst: SZ
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 10/15/20 01:23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Fluoranthene	9200		ug/kg	220	42.	2
Phenanthrene	9000		ug/kg	220	45.	2
Pyrene	7900		ug/kg	220	36.	2

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-08
Client ID: SB-07 (13'-15')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 12:18
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 10/15/20 14:39
Analyst: IM
Percent Solids: 97%

Extraction Method: EPA 3546
Extraction Date: 10/15/20 01:23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	170	20.	1
Hexachlorobenzene	ND		ug/kg	100	19.	1
Bis(2-chloroethyl)ether	ND		ug/kg	150	23.	1
2-Chloronaphthalene	ND		ug/kg	170	17.	1
1,2-Dichlorobenzene	ND		ug/kg	170	31.	1
1,3-Dichlorobenzene	ND		ug/kg	170	29.	1
1,4-Dichlorobenzene	ND		ug/kg	170	30.	1
3,3'-Dichlorobenzidine	ND		ug/kg	170	45.	1
2,4-Dinitrotoluene	ND		ug/kg	170	34.	1
2,6-Dinitrotoluene	ND		ug/kg	170	29.	1
Fluoranthene	ND		ug/kg	100	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	18.	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	26.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	29.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	180	17.	1
Hexachlorobutadiene	ND		ug/kg	170	25.	1
Hexachlorocyclopentadiene	ND		ug/kg	490	150	1
Hexachloroethane	ND		ug/kg	140	28.	1
Isophorone	ND		ug/kg	150	22.	1
Naphthalene	ND		ug/kg	170	21.	1
Nitrobenzene	ND		ug/kg	150	25.	1
NDPA/DPA	ND		ug/kg	140	19.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	170	26.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	170	59.	1
Butyl benzyl phthalate	ND		ug/kg	170	43.	1
Di-n-butylphthalate	ND		ug/kg	170	32.	1
Di-n-octylphthalate	ND		ug/kg	170	58.	1

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-08

Date Collected: 10/13/20 12:18

Client ID: SB-07 (13'-15')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	170	16.	1
Dimethyl phthalate	ND		ug/kg	170	36.	1
Benzo(a)anthracene	ND		ug/kg	100	19.	1
Benzo(a)pyrene	ND		ug/kg	140	42.	1
Benzo(b)fluoranthene	ND		ug/kg	100	29.	1
Benzo(k)fluoranthene	ND		ug/kg	100	27.	1
Chrysene	ND		ug/kg	100	18.	1
Acenaphthylene	ND		ug/kg	140	26.	1
Anthracene	ND		ug/kg	100	33.	1
Benzo(ghi)perylene	ND		ug/kg	140	20.	1
Fluorene	ND		ug/kg	170	17.	1
Phenanthrene	ND		ug/kg	100	21.	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	24.	1
Pyrene	ND		ug/kg	100	17.	1
Biphenyl	ND		ug/kg	390	40.	1
4-Chloroaniline	ND		ug/kg	170	31.	1
2-Nitroaniline	ND		ug/kg	170	33.	1
3-Nitroaniline	ND		ug/kg	170	32.	1
4-Nitroaniline	ND		ug/kg	170	71.	1
Dibenzofuran	ND		ug/kg	170	16.	1
2-Methylnaphthalene	ND		ug/kg	200	21.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	18.	1
Acetophenone	ND		ug/kg	170	21.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	32.	1
p-Chloro-m-cresol	ND		ug/kg	170	25.	1
2-Chlorophenol	ND		ug/kg	170	20.	1
2,4-Dichlorophenol	ND		ug/kg	150	27.	1
2,4-Dimethylphenol	ND		ug/kg	170	56.	1
2-Nitrophenol	ND		ug/kg	370	64.	1
4-Nitrophenol	ND		ug/kg	240	70.	1
2,4-Dinitrophenol	ND		ug/kg	820	80.	1
4,6-Dinitro-o-cresol	ND		ug/kg	440	82.	1
Pentachlorophenol	ND		ug/kg	140	38.	1
Phenol	ND		ug/kg	170	26.	1
2-Methylphenol	ND		ug/kg	170	26.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	27.	1

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-08
Client ID: SB-07 (13'-15')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 12:18
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	170	33.	1
Benzoic Acid	ND		ug/kg	550	170	1
Benzyl Alcohol	ND		ug/kg	170	52.	1
Carbazole	ND		ug/kg	170	17.	1
1,4-Dioxane	ND		ug/kg	26	7.8	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	66		25-120
Phenol-d6	67		10-120
Nitrobenzene-d5	64		23-120
2-Fluorobiphenyl	70		30-120
2,4,6-Tribromophenol	80		10-136
4-Terphenyl-d14	65		18-120

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-09
Client ID: SB-08 (0'-2')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 12:35
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 10/15/20 19:05
Analyst: JRW
Percent Solids: 91%

Extraction Method: EPA 3546
Extraction Date: 10/15/20 01:23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	24	J	ug/kg	140	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	20.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	32.	1
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1
1,4-Dichlorobenzene	ND		ug/kg	180	31.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	630		ug/kg	110	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	27.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	30.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	510	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	ND		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	26.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	79	J	ug/kg	180	62.	1
Butyl benzyl phthalate	ND		ug/kg	180	45.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	61.	1

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-09

Date Collected: 10/13/20 12:35

Client ID: SB-08 (0'-2')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	16.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	330		ug/kg	110	20.	1
Benzo(a)pyrene	360		ug/kg	140	44.	1
Benzo(b)fluoranthene	440		ug/kg	110	30.	1
Benzo(k)fluoranthene	150		ug/kg	110	29.	1
Chrysene	320		ug/kg	110	18.	1
Acenaphthylene	51	J	ug/kg	140	28.	1
Anthracene	86	J	ug/kg	110	35.	1
Benzo(ghi)perylene	200		ug/kg	140	21.	1
Fluorene	31	J	ug/kg	180	17.	1
Phenanthrene	390		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	57	J	ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	230		ug/kg	140	25.	1
Pyrene	600		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	410	41.	1
4-Chloroaniline	ND		ug/kg	180	32.	1
2-Nitroaniline	ND		ug/kg	180	34.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	74.	1
Dibenzofuran	ND		ug/kg	180	17.	1
2-Methylnaphthalene	ND		ug/kg	210	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	59.	1
2-Nitrophenol	ND		ug/kg	390	67.	1
4-Nitrophenol	ND		ug/kg	250	73.	1
2,4-Dinitrophenol	ND		ug/kg	860	83.	1
4,6-Dinitro-o-cresol	ND		ug/kg	460	86.	1
Pentachlorophenol	ND		ug/kg	140	39.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-09

Date Collected: 10/13/20 12:35

Client ID: SB-08 (0'-2')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	34.	1
Benzoic Acid	ND		ug/kg	580	180	1
Benzyl Alcohol	ND		ug/kg	180	55.	1
Carbazole	30	J	ug/kg	180	17.	1
1,4-Dioxane	ND		ug/kg	27	8.2	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	67		25-120
Phenol-d6	68		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	63		30-120
2,4,6-Tribromophenol	82		10-136
4-Terphenyl-d14	57		18-120

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-10
Client ID: SB-08 (13'-15')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 12:55
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 10/15/20 15:56
Analyst: JRW
Percent Solids: 88%

Extraction Method: EPA 3546
Extraction Date: 10/15/20 01:23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	32.	1
1,4-Dichlorobenzene	ND		ug/kg	190	33.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	36	J	ug/kg	110	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	ND		ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	65.	1
Butyl benzyl phthalate	ND		ug/kg	190	47.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	64.	1

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-10
 Client ID: SB-08 (13'-15')
 Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 12:55
 Date Received: 10/13/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	17.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	22	J	ug/kg	110	21.	1
Benzo(a)pyrene	ND		ug/kg	150	46.	1
Benzo(b)fluoranthene	ND		ug/kg	110	32.	1
Benzo(k)fluoranthene	ND		ug/kg	110	30.	1
Chrysene	20	J	ug/kg	110	20.	1
Acenaphthylene	ND		ug/kg	150	29.	1
Anthracene	ND		ug/kg	110	37.	1
Benzo(ghi)perylene	ND		ug/kg	150	22.	1
Fluorene	ND		ug/kg	190	18.	1
Phenanthrene	ND		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	26.	1
Pyrene	34	J	ug/kg	110	19.	1
Biphenyl	ND		ug/kg	430	44.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	78.	1
Dibenzofuran	ND		ug/kg	190	18.	1
2-Methylnaphthalene	ND		ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	62.	1
2-Nitrophenol	ND		ug/kg	410	71.	1
4-Nitrophenol	ND		ug/kg	260	77.	1
2,4-Dinitrophenol	ND		ug/kg	900	88.	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	90.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	190	28.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	29.	1

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-10
Client ID: SB-08 (13'-15')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 12:55
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	36.	1
Benzoic Acid	ND		ug/kg	610	190	1
Benzyl Alcohol	ND		ug/kg	190	58.	1
Carbazole	ND		ug/kg	190	18.	1
1,4-Dioxane	ND		ug/kg	28	8.7	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	78		25-120
Phenol-d6	75		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	71		30-120
2,4,6-Tribromophenol	72		10-136
4-Terphenyl-d14	62		18-120

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-11
Client ID: SB-09 (0'-2')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 13:05
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 10/15/20 16:44
Analyst: JRW
Percent Solids: 89%

Extraction Method: EPA 3546
Extraction Date: 10/15/20 01:23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	30	J	ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1
1,3-Dichlorobenzene	ND		ug/kg	180	32.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	37.	1
2,6-Dinitrotoluene	ND		ug/kg	180	32.	1
Fluoranthene	860		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	ND		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	170	27.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	64.	1
Butyl benzyl phthalate	ND		ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	63.	1

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-11

Date Collected: 10/13/20 13:05

Client ID: SB-09 (0'-2')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	39.	1
Benzo(a)anthracene	470		ug/kg	110	21.	1
Benzo(a)pyrene	540		ug/kg	150	45.	1
Benzo(b)fluoranthene	630		ug/kg	110	31.	1
Benzo(k)fluoranthene	250		ug/kg	110	30.	1
Chrysene	450		ug/kg	110	19.	1
Acenaphthylene	41	J	ug/kg	150	28.	1
Anthracene	100	J	ug/kg	110	36.	1
Benzo(ghi)perylene	340		ug/kg	150	22.	1
Fluorene	27	J	ug/kg	180	18.	1
Phenanthrene	420		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	85	J	ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	350		ug/kg	150	26.	1
Pyrene	780		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	43.	1
4-Chloroaniline	ND		ug/kg	180	34.	1
2-Nitroaniline	ND		ug/kg	180	36.	1
3-Nitroaniline	ND		ug/kg	180	35.	1
4-Nitroaniline	ND		ug/kg	180	76.	1
Dibenzofuran	ND		ug/kg	180	17.	1
2-Methylnaphthalene	ND		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	180	28.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	180	61.	1
2-Nitrophenol	ND		ug/kg	400	69.	1
4-Nitrophenol	ND		ug/kg	260	75.	1
2,4-Dinitrophenol	ND		ug/kg	890	86.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	89.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	29.	1

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-11
Client ID: SB-09 (0'-2')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 13:05
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	600	190	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	49	J	ug/kg	180	18.	1
1,4-Dioxane	ND		ug/kg	28	8.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	75		25-120
Phenol-d6	71		10-120
Nitrobenzene-d5	68		23-120
2-Fluorobiphenyl	64		30-120
2,4,6-Tribromophenol	70		10-136
4-Terphenyl-d14	50		18-120

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-12
Client ID: SB-09 (13'-15')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 13:20
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 10/15/20 15:27
Analyst: JRW
Percent Solids: 97%

Extraction Method: EPA 3546
Extraction Date: 10/15/20 01:23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	170	19.	1
Hexachlorobenzene	ND		ug/kg	100	19.	1
Bis(2-chloroethyl)ether	ND		ug/kg	150	23.	1
2-Chloronaphthalene	ND		ug/kg	170	17.	1
1,2-Dichlorobenzene	ND		ug/kg	170	31.	1
1,3-Dichlorobenzene	ND		ug/kg	170	29.	1
1,4-Dichlorobenzene	ND		ug/kg	170	30.	1
3,3'-Dichlorobenzidine	ND		ug/kg	170	45.	1
2,4-Dinitrotoluene	ND		ug/kg	170	34.	1
2,6-Dinitrotoluene	ND		ug/kg	170	29.	1
Fluoranthene	ND		ug/kg	100	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	18.	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	26.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	29.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	180	17.	1
Hexachlorobutadiene	ND		ug/kg	170	25.	1
Hexachlorocyclopentadiene	ND		ug/kg	490	150	1
Hexachloroethane	ND		ug/kg	140	28.	1
Isophorone	ND		ug/kg	150	22.	1
Naphthalene	ND		ug/kg	170	21.	1
Nitrobenzene	ND		ug/kg	150	25.	1
NDPA/DPA	ND		ug/kg	140	19.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	170	26.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	170	59.	1
Butyl benzyl phthalate	ND		ug/kg	170	43.	1
Di-n-butylphthalate	ND		ug/kg	170	32.	1
Di-n-octylphthalate	ND		ug/kg	170	58.	1

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-12

Date Collected: 10/13/20 13:20

Client ID: SB-09 (13'-15')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	170	16.	1
Dimethyl phthalate	ND		ug/kg	170	36.	1
Benzo(a)anthracene	ND		ug/kg	100	19.	1
Benzo(a)pyrene	ND		ug/kg	140	42.	1
Benzo(b)fluoranthene	ND		ug/kg	100	29.	1
Benzo(k)fluoranthene	ND		ug/kg	100	27.	1
Chrysene	ND		ug/kg	100	18.	1
Acenaphthylene	ND		ug/kg	140	26.	1
Anthracene	ND		ug/kg	100	33.	1
Benzo(ghi)perylene	ND		ug/kg	140	20.	1
Fluorene	ND		ug/kg	170	16.	1
Phenanthrene	ND		ug/kg	100	21.	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	24.	1
Pyrene	ND		ug/kg	100	17.	1
Biphenyl	ND		ug/kg	390	40.	1
4-Chloroaniline	ND		ug/kg	170	31.	1
2-Nitroaniline	ND		ug/kg	170	33.	1
3-Nitroaniline	ND		ug/kg	170	32.	1
4-Nitroaniline	ND		ug/kg	170	70.	1
Dibenzofuran	ND		ug/kg	170	16.	1
2-Methylnaphthalene	ND		ug/kg	200	20.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	18.	1
Acetophenone	ND		ug/kg	170	21.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	32.	1
p-Chloro-m-cresol	ND		ug/kg	170	25.	1
2-Chlorophenol	ND		ug/kg	170	20.	1
2,4-Dichlorophenol	ND		ug/kg	150	27.	1
2,4-Dimethylphenol	ND		ug/kg	170	56.	1
2-Nitrophenol	ND		ug/kg	370	64.	1
4-Nitrophenol	ND		ug/kg	240	70.	1
2,4-Dinitrophenol	ND		ug/kg	820	79.	1
4,6-Dinitro-o-cresol	ND		ug/kg	440	82.	1
Pentachlorophenol	ND		ug/kg	140	37.	1
Phenol	ND		ug/kg	170	26.	1
2-Methylphenol	ND		ug/kg	170	26.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	27.	1

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-12
Client ID: SB-09 (13'-15')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 13:20
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	170	33.	1
Benzoic Acid	ND		ug/kg	550	170	1
Benzyl Alcohol	ND		ug/kg	170	52.	1
Carbazole	ND		ug/kg	170	16.	1
1,4-Dioxane	ND		ug/kg	26	7.8	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	69		25-120
Phenol-d6	70		10-120
Nitrobenzene-d5	68		23-120
2-Fluorobiphenyl	73		30-120
2,4,6-Tribromophenol	84		10-136
4-Terphenyl-d14	73		18-120

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-14
Client ID: DUP 101320
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 00:00
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 10/15/20 11:31
Analyst: JRW
Percent Solids: 89%

Extraction Method: EPA 3546
Extraction Date: 10/15/20 01:23

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1
1,3-Dichlorobenzene	ND		ug/kg	180	32.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	37.	1
2,6-Dinitrotoluene	ND		ug/kg	180	32.	1
Fluoranthene	ND		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	160	24.	1
Naphthalene	ND		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	64.	1
Butyl benzyl phthalate	ND		ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	63.	1

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-14

Date Collected: 10/13/20 00:00

Client ID: DUP 101320

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	39.	1
Benzo(a)anthracene	ND		ug/kg	110	21.	1
Benzo(a)pyrene	ND		ug/kg	150	45.	1
Benzo(b)fluoranthene	ND		ug/kg	110	31.	1
Benzo(k)fluoranthene	ND		ug/kg	110	29.	1
Chrysene	ND		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	150	28.	1
Anthracene	ND		ug/kg	110	36.	1
Benzo(ghi)perylene	ND		ug/kg	150	22.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	ND		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	26.	1
Pyrene	ND		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	43.	1
4-Chloroaniline	ND		ug/kg	180	34.	1
2-Nitroaniline	ND		ug/kg	180	36.	1
3-Nitroaniline	ND		ug/kg	180	35.	1
4-Nitroaniline	ND		ug/kg	180	76.	1
Dibenzofuran	ND		ug/kg	180	17.	1
2-Methylnaphthalene	ND		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	160	30.	1
2,4-Dimethylphenol	ND		ug/kg	180	61.	1
2-Nitrophenol	ND		ug/kg	400	69.	1
4-Nitrophenol	ND		ug/kg	260	75.	1
2,4-Dinitrophenol	ND		ug/kg	880	86.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	88.	1
Pentachlorophenol	ND		ug/kg	150	40.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	29.	1

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-14
Client ID: DUP 101320
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 00:00
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	600	190	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	ND		ug/kg	180	18.	1
1,4-Dioxane	ND		ug/kg	28	8.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	83		25-120
Phenol-d6	81		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	79		30-120
2,4,6-Tribromophenol	83		10-136
4-Terphenyl-d14	74		18-120

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 10/15/20 09:06
Analyst: SZ

Extraction Method: EPA 3546
Extraction Date: 10/15/20 01:21

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatle Organics by GC/MS - Westborough Lab for sample(s): 01-12,14 Batch: WG1422231-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	18.
Hexachlorobenzene	ND		ug/kg	97	18.
Bis(2-chloroethyl)ether	ND		ug/kg	140	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	29.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	28.
3,3'-Dichlorobenzidine	ND		ug/kg	160	43.
2,4-Dinitrotoluene	ND		ug/kg	160	32.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	97	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	17.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	190	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	460	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	140	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	140	24.
NDPA/DPA	ND		ug/kg	130	18.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	56.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	55.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 10/15/20 09:06
Analyst: SZ

Extraction Method: EPA 3546
Extraction Date: 10/15/20 01:21

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-12,14 Batch: WG1422231-1					
Dimethyl phthalate	ND		ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	97	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	97	27.
Benzo(k)fluoranthene	ND		ug/kg	97	26.
Chrysene	ND		ug/kg	97	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	97	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	97	20.
Dibenzo(a,h)anthracene	ND		ug/kg	97	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	97	16.
Biphenyl	ND		ug/kg	370	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	31.
3-Nitroaniline	ND		ug/kg	160	30.
4-Nitroaniline	ND		ug/kg	160	67.
Dibenzofuran	ND		ug/kg	160	15.
2-Methylnaphthalene	ND		ug/kg	190	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	97	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	140	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	350	61.

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 10/15/20 09:06
Analyst: SZ

Extraction Method: EPA 3546
Extraction Date: 10/15/20 01:21

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-12,14 Batch: WG1422231-1					
4-Nitrophenol	ND		ug/kg	230	66.
2,4-Dinitrophenol	ND		ug/kg	780	76.
4,6-Dinitro-o-cresol	ND		ug/kg	420	78.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	24.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	230	25.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Benzoic Acid	ND		ug/kg	520	160
Benzyl Alcohol	ND		ug/kg	160	50.
Carbazole	ND		ug/kg	160	16.
1,4-Dioxane	ND		ug/kg	24	7.5

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	62		25-120
Phenol-d6	60		10-120
Nitrobenzene-d5	52		23-120
2-Fluorobiphenyl	57		30-120
2,4,6-Tribromophenol	61		10-136
4-Terphenyl-d14	71		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE 11 ESH

Lab Number: L2043863

Project Number: 26979.01

Report Date: 10/20/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-12,14 Batch: WG1422231-2 WG1422231-3								
Acenaphthene	78		81		31-137	4		50
1,2,4-Trichlorobenzene	74		75		38-107	1		50
Hexachlorobenzene	69		70		40-140	1		50
Bis(2-chloroethyl)ether	70		70		40-140	0		50
2-Chloronaphthalene	72		75		40-140	4		50
1,2-Dichlorobenzene	73		74		40-140	1		50
1,3-Dichlorobenzene	72		74		40-140	3		50
1,4-Dichlorobenzene	72		72		28-104	0		50
3,3'-Dichlorobenzidine	76		78		40-140	3		50
2,4-Dinitrotoluene	77		80		40-132	4		50
2,6-Dinitrotoluene	74		79		40-140	7		50
Fluoranthene	74		77		40-140	4		50
4-Chlorophenyl phenyl ether	70		73		40-140	4		50
4-Bromophenyl phenyl ether	69		71		40-140	3		50
Bis(2-chloroisopropyl)ether	53		54		40-140	2		50
Bis(2-chloroethoxy)methane	69		71		40-117	3		50
Hexachlorobutadiene	68		69		40-140	1		50
Hexachlorocyclopentadiene	65		64		40-140	2		50
Hexachloroethane	68		68		40-140	0		50
Isophorone	69		70		40-140	1		50
Naphthalene	71		74		40-140	4		50
Nitrobenzene	68		71		40-140	4		50
NDPA/DPA	72		75		36-157	4		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE 11 ESH

Lab Number: L2043863

Project Number: 26979.01

Report Date: 10/20/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-12,14 Batch: WG1422231-2 WG1422231-3								
n-Nitrosodi-n-propylamine	68		68		32-121	0		50
Bis(2-ethylhexyl)phthalate	81		82		40-140	1		50
Butyl benzyl phthalate	79		79		40-140	0		50
Di-n-butylphthalate	76		78		40-140	3		50
Di-n-octylphthalate	80		83		40-140	4		50
Diethyl phthalate	71		73		40-140	3		50
Dimethyl phthalate	72		74		40-140	3		50
Benzo(a)anthracene	78		82		40-140	5		50
Benzo(a)pyrene	85		90		40-140	6		50
Benzo(b)fluoranthene	85		90		40-140	6		50
Benzo(k)fluoranthene	81		84		40-140	4		50
Chrysene	77		81		40-140	5		50
Acenaphthylene	78		81		40-140	4		50
Anthracene	78		81		40-140	4		50
Benzo(ghi)perylene	88		92		40-140	4		50
Fluorene	73		76		40-140	4		50
Phenanthrene	76		79		40-140	4		50
Dibenzo(a,h)anthracene	85		90		40-140	6		50
Indeno(1,2,3-cd)pyrene	89		94		40-140	5		50
Pyrene	76		78		35-142	3		50
Biphenyl	79		81		37-127	3		50
4-Chloroaniline	62		57		40-140	8		50
2-Nitroaniline	79		85		47-134	7		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE 11 ESH

Lab Number: L2043863

Project Number: 26979.01

Report Date: 10/20/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-12,14 Batch: WG1422231-2 WG1422231-3								
3-Nitroaniline	73		75		26-129	3		50
4-Nitroaniline	78		82		41-125	5		50
Dibenzofuran	75		76		40-140	1		50
2-Methylnaphthalene	76		78		40-140	3		50
1,2,4,5-Tetrachlorobenzene	71		73		40-117	3		50
Acetophenone	76		78		14-144	3		50
2,4,6-Trichlorophenol	72		76		30-130	5		50
p-Chloro-m-cresol	76		79		26-103	4		50
2-Chlorophenol	78		80		25-102	3		50
2,4-Dichlorophenol	80		83		30-130	4		50
2,4-Dimethylphenol	82		86		30-130	5		50
2-Nitrophenol	79		83		30-130	5		50
4-Nitrophenol	65		70		11-114	7		50
2,4-Dinitrophenol	64		67		4-130	5		50
4,6-Dinitro-o-cresol	68		72		10-130	6		50
Pentachlorophenol	68		71		17-109	4		50
Phenol	74		77		26-90	4		50
2-Methylphenol	76		80		30-130.	5		50
3-Methylphenol/4-Methylphenol	78		79		30-130	1		50
2,4,5-Trichlorophenol	74		79		30-130	7		50
Benzoic Acid	42		47		10-110	11		50
Benzyl Alcohol	76		79		40-140	4		50
Carbazole	80		84		54-128	5		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE 11 ESH

Lab Number: L2043863

Project Number: 26979.01

Report Date: 10/20/20

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-12,14 Batch: WG1422231-2 WG1422231-3								
1,4-Dioxane	52		52		40-140	0		50

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
2-Fluorophenol	78		83		25-120
Phenol-d6	75		79		10-120
Nitrobenzene-d5	70		73		23-120
2-Fluorobiphenyl	73		77		30-120
2,4,6-Tribromophenol	76		80		10-136
4-Terphenyl-d14	74		78		18-120

PCBS

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-01
Client ID: SB-04 (0'-2')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 09:25
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 10/16/20 02:41
Analyst: JM
Percent Solids: 93%

Extraction Method: EPA 3546
Extraction Date: 10/14/20 23:52
Cleanup Method: EPA 3665A
Cleanup Date: 10/15/20
Cleanup Method: EPA 3660B
Cleanup Date: 10/16/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.0	3.11	1	A
Aroclor 1221	ND		ug/kg	35.0	3.51	1	A
Aroclor 1232	ND		ug/kg	35.0	7.42	1	A
Aroclor 1242	ND		ug/kg	35.0	4.72	1	A
Aroclor 1248	ND		ug/kg	35.0	5.25	1	A
Aroclor 1254	ND		ug/kg	35.0	3.83	1	A
Aroclor 1260	ND		ug/kg	35.0	6.47	1	A
Aroclor 1262	ND		ug/kg	35.0	4.45	1	A
Aroclor 1268	21.8	J	ug/kg	35.0	3.63	1	B
PCBs, Total	21.8	J	ug/kg	35.0	3.11	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	67		30-150	A
2,4,5,6-Tetrachloro-m-xylene	83		30-150	B
Decachlorobiphenyl	98		30-150	B

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-02
Client ID: SB-04 (13'-15')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 10:15
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 10/16/20 02:48
Analyst: JM
Percent Solids: 96%

Extraction Method: EPA 3546
Extraction Date: 10/14/20 23:52
Cleanup Method: EPA 3665A
Cleanup Date: 10/15/20
Cleanup Method: EPA 3660B
Cleanup Date: 10/16/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	33.2	2.95	1	A
Aroclor 1221	ND		ug/kg	33.2	3.32	1	A
Aroclor 1232	ND		ug/kg	33.2	7.04	1	A
Aroclor 1242	ND		ug/kg	33.2	4.47	1	A
Aroclor 1248	ND		ug/kg	33.2	4.98	1	A
Aroclor 1254	ND		ug/kg	33.2	3.63	1	A
Aroclor 1260	ND		ug/kg	33.2	6.13	1	A
Aroclor 1262	ND		ug/kg	33.2	4.21	1	A
Aroclor 1268	ND		ug/kg	33.2	3.44	1	A
PCBs, Total	ND		ug/kg	33.2	2.95	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65		30-150	A
Decachlorobiphenyl	64		30-150	A
2,4,5,6-Tetrachloro-m-xylene	87		30-150	B
Decachlorobiphenyl	91		30-150	B

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-03
Client ID: SB-05 (0'-2')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 10:35
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 10/16/20 02:56
Analyst: JM
Percent Solids: 90%

Extraction Method: EPA 3546
Extraction Date: 10/14/20 23:52
Cleanup Method: EPA 3665A
Cleanup Date: 10/15/20
Cleanup Method: EPA 3660B
Cleanup Date: 10/16/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.7	3.26	1	A
Aroclor 1221	ND		ug/kg	36.7	3.67	1	A
Aroclor 1232	ND		ug/kg	36.7	7.77	1	A
Aroclor 1242	ND		ug/kg	36.7	4.94	1	A
Aroclor 1248	ND		ug/kg	36.7	5.50	1	A
Aroclor 1254	ND		ug/kg	36.7	4.01	1	A
Aroclor 1260	17.2	J	ug/kg	36.7	6.78	1	B
Aroclor 1262	ND		ug/kg	36.7	4.66	1	A
Aroclor 1268	6.52	J	ug/kg	36.7	3.80	1	B
PCBs, Total	23.7	J	ug/kg	36.7	3.26	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	60		30-150	A
Decachlorobiphenyl	60		30-150	A
2,4,5,6-Tetrachloro-m-xylene	78		30-150	B
Decachlorobiphenyl	93		30-150	B

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-04
Client ID: SB-05 (13'-15')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 10:58
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 10/16/20 03:03
Analyst: JM
Percent Solids: 96%

Extraction Method: EPA 3546
Extraction Date: 10/14/20 23:52
Cleanup Method: EPA 3665A
Cleanup Date: 10/15/20
Cleanup Method: EPA 3660B
Cleanup Date: 10/16/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	34.2	3.04	1	A
Aroclor 1221	ND		ug/kg	34.2	3.43	1	A
Aroclor 1232	ND		ug/kg	34.2	7.25	1	A
Aroclor 1242	ND		ug/kg	34.2	4.61	1	A
Aroclor 1248	ND		ug/kg	34.2	5.13	1	A
Aroclor 1254	ND		ug/kg	34.2	3.74	1	A
Aroclor 1260	ND		ug/kg	34.2	6.32	1	A
Aroclor 1262	ND		ug/kg	34.2	4.34	1	A
Aroclor 1268	ND		ug/kg	34.2	3.54	1	A
PCBs, Total	ND		ug/kg	34.2	3.04	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	56		30-150	A
Decachlorobiphenyl	53		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	79		30-150	B

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-05
Client ID: SB-06 (0'-2')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 11:15
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 10/16/20 03:10
Analyst: JM
Percent Solids: 88%

Extraction Method: EPA 3546
Extraction Date: 10/14/20 23:52
Cleanup Method: EPA 3665A
Cleanup Date: 10/15/20
Cleanup Method: EPA 3660B
Cleanup Date: 10/16/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.5	3.24	1	A
Aroclor 1221	ND		ug/kg	36.5	3.66	1	A
Aroclor 1232	ND		ug/kg	36.5	7.74	1	A
Aroclor 1242	ND		ug/kg	36.5	4.92	1	A
Aroclor 1248	ND		ug/kg	36.5	5.48	1	A
Aroclor 1254	ND		ug/kg	36.5	4.00	1	A
Aroclor 1260	9.45	J	ug/kg	36.5	6.75	1	A
Aroclor 1262	ND		ug/kg	36.5	4.64	1	A
Aroclor 1268	5.40	J	ug/kg	36.5	3.78	1	B
PCBs, Total	14.9	J	ug/kg	36.5	3.24	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	47		30-150	A
Decachlorobiphenyl	49		30-150	A
2,4,5,6-Tetrachloro-m-xylene	61		30-150	B
Decachlorobiphenyl	81		30-150	B

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-06
Client ID: SB-06 (13'-15')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 11:35
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 10/16/20 03:18
Analyst: JM
Percent Solids: 91%

Extraction Method: EPA 3546
Extraction Date: 10/14/20 23:52
Cleanup Method: EPA 3665A
Cleanup Date: 10/15/20
Cleanup Method: EPA 3660B
Cleanup Date: 10/16/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.4	3.23	1	A
Aroclor 1221	ND		ug/kg	36.4	3.64	1	A
Aroclor 1232	ND		ug/kg	36.4	7.71	1	A
Aroclor 1242	ND		ug/kg	36.4	4.90	1	A
Aroclor 1248	ND		ug/kg	36.4	5.46	1	A
Aroclor 1254	ND		ug/kg	36.4	3.98	1	A
Aroclor 1260	ND		ug/kg	36.4	6.72	1	A
Aroclor 1262	ND		ug/kg	36.4	4.62	1	A
Aroclor 1268	ND		ug/kg	36.4	3.77	1	A
PCBs, Total	ND		ug/kg	36.4	3.23	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65		30-150	A
Decachlorobiphenyl	63		30-150	A
2,4,5,6-Tetrachloro-m-xylene	84		30-150	B
Decachlorobiphenyl	93		30-150	B

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-07
Client ID: SB-07 (0'-2')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 11:55
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 10/16/20 03:25
Analyst: JM
Percent Solids: 89%

Extraction Method: EPA 3546
Extraction Date: 10/14/20 23:52
Cleanup Method: EPA 3665A
Cleanup Date: 10/15/20
Cleanup Method: EPA 3660B
Cleanup Date: 10/16/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.7	3.26	1	A
Aroclor 1221	ND		ug/kg	36.7	3.68	1	A
Aroclor 1232	ND		ug/kg	36.7	7.78	1	A
Aroclor 1242	ND		ug/kg	36.7	4.95	1	A
Aroclor 1248	ND		ug/kg	36.7	5.50	1	A
Aroclor 1254	ND		ug/kg	36.7	4.02	1	A
Aroclor 1260	ND		ug/kg	36.7	6.78	1	A
Aroclor 1262	ND		ug/kg	36.7	4.66	1	A
Aroclor 1268	ND		ug/kg	36.7	3.80	1	A
PCBs, Total	ND		ug/kg	36.7	3.26	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	60		30-150	A
Decachlorobiphenyl	62		30-150	A
2,4,5,6-Tetrachloro-m-xylene	78		30-150	B
Decachlorobiphenyl	101		30-150	B

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-08
Client ID: SB-07 (13'-15')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 12:18
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 10/16/20 03:32
Analyst: JM
Percent Solids: 97%

Extraction Method: EPA 3546
Extraction Date: 10/14/20 23:52
Cleanup Method: EPA 3665A
Cleanup Date: 10/15/20
Cleanup Method: EPA 3660B
Cleanup Date: 10/16/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	33.7	2.99	1	A
Aroclor 1221	ND		ug/kg	33.7	3.38	1	A
Aroclor 1232	ND		ug/kg	33.7	7.15	1	A
Aroclor 1242	ND		ug/kg	33.7	4.54	1	A
Aroclor 1248	ND		ug/kg	33.7	5.06	1	A
Aroclor 1254	ND		ug/kg	33.7	3.69	1	A
Aroclor 1260	ND		ug/kg	33.7	6.23	1	A
Aroclor 1262	ND		ug/kg	33.7	4.28	1	A
Aroclor 1268	ND		ug/kg	33.7	3.49	1	A
PCBs, Total	ND		ug/kg	33.7	2.99	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	66		30-150	A
Decachlorobiphenyl	66		30-150	A
2,4,5,6-Tetrachloro-m-xylene	85		30-150	B
Decachlorobiphenyl	97		30-150	B

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-09
Client ID: SB-08 (0'-2')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 12:35
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 10/16/20 03:40
Analyst: JM
Percent Solids: 91%

Extraction Method: EPA 3546
Extraction Date: 10/14/20 23:52
Cleanup Method: EPA 3665A
Cleanup Date: 10/15/20
Cleanup Method: EPA 3660B
Cleanup Date: 10/16/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.2	3.12	1	A
Aroclor 1221	ND		ug/kg	35.2	3.52	1	A
Aroclor 1232	ND		ug/kg	35.2	7.45	1	A
Aroclor 1242	ND		ug/kg	35.2	4.74	1	A
Aroclor 1248	ND		ug/kg	35.2	5.27	1	A
Aroclor 1254	ND		ug/kg	35.2	3.85	1	A
Aroclor 1260	ND		ug/kg	35.2	6.50	1	B
Aroclor 1262	ND		ug/kg	35.2	4.46	1	A
Aroclor 1268	ND		ug/kg	35.2	3.64	1	A
PCBs, Total	ND		ug/kg	35.2	3.12	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	59		30-150	A
2,4,5,6-Tetrachloro-m-xylene	80		30-150	B
Decachlorobiphenyl	90		30-150	B

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-10
Client ID: SB-08 (13'-15')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 12:55
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 10/16/20 03:47
Analyst: JM
Percent Solids: 88%

Extraction Method: EPA 3546
Extraction Date: 10/14/20 23:52
Cleanup Method: EPA 3665A
Cleanup Date: 10/15/20
Cleanup Method: EPA 3660B
Cleanup Date: 10/16/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	38.0	3.38	1	A
Aroclor 1221	ND		ug/kg	38.0	3.81	1	A
Aroclor 1232	ND		ug/kg	38.0	8.06	1	A
Aroclor 1242	ND		ug/kg	38.0	5.12	1	A
Aroclor 1248	ND		ug/kg	38.0	5.70	1	B
Aroclor 1254	7.14	J	ug/kg	38.0	4.16	1	B
Aroclor 1260	ND		ug/kg	38.0	7.02	1	A
Aroclor 1262	ND		ug/kg	38.0	4.83	1	A
Aroclor 1268	ND		ug/kg	38.0	3.94	1	A
PCBs, Total	7.14	J	ug/kg	38.0	3.38	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	57		30-150	A
Decachlorobiphenyl	46		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	67		30-150	B

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-11
Client ID: SB-09 (0'-2')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 13:05
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 10/16/20 03:54
Analyst: JM
Percent Solids: 89%

Extraction Method: EPA 3546
Extraction Date: 10/14/20 23:52
Cleanup Method: EPA 3665A
Cleanup Date: 10/15/20
Cleanup Method: EPA 3660B
Cleanup Date: 10/16/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.2	3.31	1	A
Aroclor 1221	ND		ug/kg	37.2	3.73	1	A
Aroclor 1232	ND		ug/kg	37.2	7.89	1	A
Aroclor 1242	ND		ug/kg	37.2	5.02	1	A
Aroclor 1248	ND		ug/kg	37.2	5.58	1	A
Aroclor 1254	ND		ug/kg	37.2	4.07	1	A
Aroclor 1260	7.51	J	ug/kg	37.2	6.88	1	A
Aroclor 1262	ND		ug/kg	37.2	4.73	1	A
Aroclor 1268	ND		ug/kg	37.2	3.86	1	A
PCBs, Total	7.51	J	ug/kg	37.2	3.31	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	58		30-150	A
Decachlorobiphenyl	57		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	86		30-150	B

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-12
Client ID: SB-09 (13'-15')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 13:20
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 10/16/20 04:31
Analyst: JM
Percent Solids: 97%

Extraction Method: EPA 3546
Extraction Date: 10/14/20 23:52
Cleanup Method: EPA 3665A
Cleanup Date: 10/15/20
Cleanup Method: EPA 3660B
Cleanup Date: 10/16/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	32.8	2.91	1	B
Aroclor 1221	ND		ug/kg	32.8	3.28	1	B
Aroclor 1232	ND		ug/kg	32.8	6.95	1	B
Aroclor 1242	ND		ug/kg	32.8	4.42	1	B
Aroclor 1248	ND		ug/kg	32.8	4.92	1	B
Aroclor 1254	ND		ug/kg	32.8	3.58	1	B
Aroclor 1260	ND		ug/kg	32.8	6.06	1	B
Aroclor 1262	ND		ug/kg	32.8	4.16	1	B
Aroclor 1268	ND		ug/kg	32.8	3.40	1	B
PCBs, Total	ND		ug/kg	32.8	2.91	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65		30-150	A
Decachlorobiphenyl	63		30-150	A
2,4,5,6-Tetrachloro-m-xylene	82		30-150	B
Decachlorobiphenyl	88		30-150	B

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-14
Client ID: DUP 101320
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 00:00
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 10/16/20 04:38
Analyst: JM
Percent Solids: 89%

Extraction Method: EPA 3546
Extraction Date: 10/14/20 23:52
Cleanup Method: EPA 3665A
Cleanup Date: 10/15/20
Cleanup Method: EPA 3660B
Cleanup Date: 10/16/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.3	3.32	1	B
Aroclor 1221	ND		ug/kg	37.3	3.74	1	B
Aroclor 1232	ND		ug/kg	37.3	7.92	1	B
Aroclor 1242	ND		ug/kg	37.3	5.03	1	B
Aroclor 1248	ND		ug/kg	37.3	5.60	1	B
Aroclor 1254	ND		ug/kg	37.3	4.08	1	B
Aroclor 1260	ND		ug/kg	37.3	6.90	1	B
Aroclor 1262	ND		ug/kg	37.3	4.74	1	B
Aroclor 1268	ND		ug/kg	37.3	3.87	1	B
PCBs, Total	ND		ug/kg	37.3	3.32	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		30-150	A
Decachlorobiphenyl	65		30-150	A
2,4,5,6-Tetrachloro-m-xylene	89		30-150	B
Decachlorobiphenyl	93		30-150	B

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 10/16/20 04:01
Analyst: JM

Extraction Method: EPA 3546
Extraction Date: 10/14/20 23:52
Cleanup Method: EPA 3665A
Cleanup Date: 10/15/20
Cleanup Method: EPA 3660B
Cleanup Date: 10/16/20

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-12,14 Batch: WG1422225-1						
Aroclor 1016	ND		ug/kg	31.7	2.82	A
Aroclor 1221	ND		ug/kg	31.7	3.18	A
Aroclor 1232	ND		ug/kg	31.7	6.73	A
Aroclor 1242	ND		ug/kg	31.7	4.28	A
Aroclor 1248	ND		ug/kg	31.7	4.76	A
Aroclor 1254	ND		ug/kg	31.7	3.47	A
Aroclor 1260	ND		ug/kg	31.7	5.87	A
Aroclor 1262	ND		ug/kg	31.7	4.03	A
Aroclor 1268	ND		ug/kg	31.7	3.29	A
PCBs, Total	ND		ug/kg	31.7	2.82	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65		30-150	A
Decachlorobiphenyl	62		30-150	A
2,4,5,6-Tetrachloro-m-xylene	84		30-150	B
Decachlorobiphenyl	91		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE 11 ESH

Project Number: 26979.01

Lab Number: L2043863

Report Date: 10/20/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-12,14 Batch: WG1422225-2 WG1422225-3									
Aroclor 1016	71		75		40-140	5		50	A
Aroclor 1260	63		65		40-140	3		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	63		65		30-150	A
Decachlorobiphenyl	60		61		30-150	A
2,4,5,6-Tetrachloro-m-xylene	81		84		30-150	B
Decachlorobiphenyl	87		89		30-150	B

PESTICIDES

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-01
Client ID: SB-04 (0'-2')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 09:25
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 10/16/20 10:05
Analyst: BM
Percent Solids: 93%

Extraction Method: EPA 3546
Extraction Date: 10/15/20 00:40
Cleanup Method: EPA 3620B
Cleanup Date: 10/15/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.70	0.333	1	A
Lindane	ND		ug/kg	0.708	0.316	1	A
Alpha-BHC	ND		ug/kg	0.708	0.201	1	A
Beta-BHC	ND		ug/kg	1.70	0.644	1	A
Heptachlor	ND		ug/kg	0.849	0.381	1	A
Aldrin	ND		ug/kg	1.70	0.598	1	A
Heptachlor epoxide	ND		ug/kg	3.18	0.955	1	A
Endrin	ND		ug/kg	0.708	0.290	1	A
Endrin aldehyde	ND		ug/kg	2.12	0.743	1	A
Endrin ketone	ND		ug/kg	1.70	0.437	1	A
Dieldrin	ND		ug/kg	1.06	0.531	1	A
4,4'-DDE	ND		ug/kg	1.70	0.393	1	A
4,4'-DDD	ND		ug/kg	1.70	0.606	1	A
4,4'-DDT	ND		ug/kg	3.18	1.36	1	A
Endosulfan I	ND		ug/kg	1.70	0.401	1	A
Endosulfan II	ND		ug/kg	1.70	0.568	1	A
Endosulfan sulfate	ND		ug/kg	0.708	0.337	1	A
Methoxychlor	ND		ug/kg	3.18	0.991	1	A
Toxaphene	ND		ug/kg	31.8	8.92	1	A
cis-Chlordane	ND		ug/kg	2.12	0.592	1	A
trans-Chlordane	ND		ug/kg	2.12	0.560	1	A
Chlordane	ND		ug/kg	14.2	5.63	1	A

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-01
Client ID: SB-04 (0'-2')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 09:25
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	88		30-150	A
Decachlorobiphenyl	108		30-150	A
2,4,5,6-Tetrachloro-m-xylene	88		30-150	B
Decachlorobiphenyl	98		30-150	B

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-02
Client ID: SB-04 (13'-15')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 10:15
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 10/16/20 10:14
Analyst: BM
Percent Solids: 96%

Extraction Method: EPA 3546
Extraction Date: 10/15/20 00:40
Cleanup Method: EPA 3620B
Cleanup Date: 10/15/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.66	0.324	1	A
Lindane	ND		ug/kg	0.690	0.309	1	A
Alpha-BHC	ND		ug/kg	0.690	0.196	1	A
Beta-BHC	ND		ug/kg	1.66	0.628	1	A
Heptachlor	ND		ug/kg	0.828	0.371	1	A
Aldrin	ND		ug/kg	1.66	0.583	1	A
Heptachlor epoxide	ND		ug/kg	3.11	0.932	1	A
Endrin	ND		ug/kg	0.690	0.283	1	A
Endrin aldehyde	ND		ug/kg	2.07	0.725	1	A
Endrin ketone	ND		ug/kg	1.66	0.427	1	A
Dieldrin	ND		ug/kg	1.04	0.518	1	A
4,4'-DDE	ND		ug/kg	1.66	0.383	1	A
4,4'-DDD	ND		ug/kg	1.66	0.591	1	A
4,4'-DDT	ND		ug/kg	3.11	1.33	1	A
Endosulfan I	ND		ug/kg	1.66	0.391	1	A
Endosulfan II	ND		ug/kg	1.66	0.554	1	A
Endosulfan sulfate	ND		ug/kg	0.690	0.329	1	A
Methoxychlor	ND		ug/kg	3.11	0.967	1	A
Toxaphene	ND		ug/kg	31.1	8.70	1	A
cis-Chlordane	ND		ug/kg	2.07	0.577	1	A
trans-Chlordane	0.549	JIP	ug/kg	2.07	0.547	1	A
Chlordane	ND		ug/kg	13.8	5.49	1	A

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-02

Date Collected: 10/13/20 10:15

Client ID: SB-04 (13'-15')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	96		30-150	A
Decachlorobiphenyl	99		30-150	A
2,4,5,6-Tetrachloro-m-xylene	96		30-150	B
Decachlorobiphenyl	89		30-150	B

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-03
Client ID: SB-05 (0'-2')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 10:35
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 10/16/20 08:52
Analyst: BM
Percent Solids: 90%

Extraction Method: EPA 3546
Extraction Date: 10/15/20 00:40
Cleanup Method: EPA 3620B
Cleanup Date: 10/15/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.75	0.343	1	A
Lindane	ND		ug/kg	0.730	0.326	1	A
Alpha-BHC	ND		ug/kg	0.730	0.207	1	A
Beta-BHC	ND		ug/kg	1.75	0.664	1	A
Heptachlor	ND		ug/kg	0.876	0.393	1	A
Aldrin	ND		ug/kg	1.75	0.617	1	A
Heptachlor epoxide	ND		ug/kg	3.28	0.985	1	A
Endrin	ND		ug/kg	0.730	0.299	1	A
Endrin aldehyde	ND		ug/kg	2.19	0.766	1	A
Endrin ketone	ND		ug/kg	1.75	0.451	1	A
Dieldrin	2.10		ug/kg	1.09	0.547	1	B
4,4'-DDE	2.58		ug/kg	1.75	0.405	1	B
4,4'-DDD	2.23		ug/kg	1.75	0.625	1	A
4,4'-DDT	15.2		ug/kg	3.28	1.41	1	B
Endosulfan I	ND		ug/kg	1.75	0.414	1	A
Endosulfan II	ND		ug/kg	1.75	0.585	1	A
Endosulfan sulfate	ND		ug/kg	0.730	0.347	1	A
Methoxychlor	ND		ug/kg	3.28	1.02	1	A
Toxaphene	ND		ug/kg	32.8	9.20	1	A
cis-Chlordane	3.29	IP	ug/kg	2.19	0.610	1	B
trans-Chlordane	2.56	IP	ug/kg	2.19	0.578	1	A
Chlordane	ND		ug/kg	14.6	5.80	1	A

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-03

Date Collected: 10/13/20 10:35

Client ID: SB-05 (0'-2')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80		30-150	A
Decachlorobiphenyl	67		30-150	A
2,4,5,6-Tetrachloro-m-xylene	108		30-150	B
Decachlorobiphenyl	126		30-150	B

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-04
Client ID: SB-05 (13'-15')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 10:58
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 10/16/20 10:23
Analyst: BM
Percent Solids: 96%

Extraction Method: EPA 3546
Extraction Date: 10/15/20 00:40
Cleanup Method: EPA 3620B
Cleanup Date: 10/15/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.65	0.323	1	A
Lindane	ND		ug/kg	0.686	0.307	1	A
Alpha-BHC	ND		ug/kg	0.686	0.195	1	A
Beta-BHC	ND		ug/kg	1.65	0.625	1	A
Heptachlor	ND		ug/kg	0.824	0.369	1	A
Aldrin	ND		ug/kg	1.65	0.580	1	A
Heptachlor epoxide	ND		ug/kg	3.09	0.927	1	A
Endrin	ND		ug/kg	0.686	0.281	1	A
Endrin aldehyde	ND		ug/kg	2.06	0.721	1	A
Endrin ketone	ND		ug/kg	1.65	0.424	1	A
Dieldrin	ND		ug/kg	1.03	0.515	1	A
4,4'-DDE	ND		ug/kg	1.65	0.381	1	A
4,4'-DDD	ND		ug/kg	1.65	0.588	1	A
4,4'-DDT	ND		ug/kg	3.09	1.32	1	A
Endosulfan I	ND		ug/kg	1.65	0.389	1	A
Endosulfan II	ND		ug/kg	1.65	0.551	1	A
Endosulfan sulfate	ND		ug/kg	0.686	0.327	1	A
Methoxychlor	ND		ug/kg	3.09	0.961	1	A
Toxaphene	ND		ug/kg	30.9	8.65	1	A
cis-Chlordane	ND		ug/kg	2.06	0.574	1	A
trans-Chlordane	ND	IP	ug/kg	2.06	0.544	1	A
Chlordane	ND		ug/kg	13.7	5.46	1	A

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-04

Date Collected: 10/13/20 10:58

Client ID: SB-05 (13'-15')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	109		30-150	A
Decachlorobiphenyl	126		30-150	A
2,4,5,6-Tetrachloro-m-xylene	107		30-150	B
Decachlorobiphenyl	101		30-150	B

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-05
Client ID: SB-06 (0'-2')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 11:15
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 10/16/20 08:34
Analyst: BM
Percent Solids: 88%

Extraction Method: EPA 3546
Extraction Date: 10/15/20 00:40
Cleanup Method: EPA 3620B
Cleanup Date: 10/15/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.78	0.349	1	A
Lindane	ND		ug/kg	0.742	0.332	1	A
Alpha-BHC	ND		ug/kg	0.742	0.211	1	A
Beta-BHC	ND		ug/kg	1.78	0.675	1	A
Heptachlor	ND		ug/kg	0.890	0.399	1	A
Aldrin	ND		ug/kg	1.78	0.627	1	A
Heptachlor epoxide	ND	IP	ug/kg	3.34	1.00	1	A
Endrin	ND		ug/kg	0.742	0.304	1	A
Endrin aldehyde	ND		ug/kg	2.22	0.779	1	A
Endrin ketone	ND		ug/kg	1.78	0.458	1	A
Dieldrin	5.27		ug/kg	1.11	0.556	1	A
4,4'-DDE	6.15		ug/kg	1.78	0.412	1	A
4,4'-DDD	7.83		ug/kg	1.78	0.635	1	B
4,4'-DDT	31.6		ug/kg	3.34	1.43	1	A
Endosulfan I	ND		ug/kg	1.78	0.421	1	A
Endosulfan II	ND		ug/kg	1.78	0.595	1	A
Endosulfan sulfate	ND		ug/kg	0.742	0.353	1	A
Methoxychlor	ND		ug/kg	3.34	1.04	1	A
Toxaphene	ND		ug/kg	33.4	9.35	1	A
cis-Chlordane	4.95	IP	ug/kg	2.22	0.620	1	B
trans-Chlordane	4.23	IP	ug/kg	2.22	0.588	1	A
Chlordane	ND		ug/kg	14.8	5.90	1	A

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-05
Client ID: SB-06 (0'-2')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 11:15
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	90		30-150	A
Decachlorobiphenyl	140		30-150	A
2,4,5,6-Tetrachloro-m-xylene	82		30-150	B
Decachlorobiphenyl	231	Q	30-150	B

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-06
Client ID: SB-06 (13'-15')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 11:35
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 10/16/20 09:20
Analyst: BM
Percent Solids: 91%

Extraction Method: EPA 3546
Extraction Date: 10/15/20 00:40
Cleanup Method: EPA 3620B
Cleanup Date: 10/15/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.74	0.340	1	A
Lindane	ND		ug/kg	0.724	0.323	1	A
Alpha-BHC	ND		ug/kg	0.724	0.206	1	A
Beta-BHC	ND		ug/kg	1.74	0.658	1	A
Heptachlor	ND		ug/kg	0.868	0.389	1	A
Aldrin	ND		ug/kg	1.74	0.611	1	A
Heptachlor epoxide	ND		ug/kg	3.26	0.977	1	A
Endrin	ND		ug/kg	0.724	0.297	1	A
Endrin aldehyde	ND		ug/kg	2.17	0.760	1	A
Endrin ketone	ND		ug/kg	1.74	0.447	1	A
Dieldrin	ND		ug/kg	1.08	0.543	1	A
4,4'-DDE	ND		ug/kg	1.74	0.402	1	A
4,4'-DDD	ND		ug/kg	1.74	0.619	1	A
4,4'-DDT	ND		ug/kg	3.26	1.40	1	A
Endosulfan I	ND		ug/kg	1.74	0.410	1	A
Endosulfan II	ND		ug/kg	1.74	0.580	1	A
Endosulfan sulfate	ND		ug/kg	0.724	0.344	1	A
Methoxychlor	ND		ug/kg	3.26	1.01	1	A
Toxaphene	ND		ug/kg	32.6	9.12	1	A
cis-Chlordane	ND		ug/kg	2.17	0.605	1	A
trans-Chlordane	ND	IP	ug/kg	2.17	0.573	1	A
Chlordane	ND		ug/kg	14.5	5.75	1	A

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-06

Date Collected: 10/13/20 11:35

Client ID: SB-06 (13'-15')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	97		30-150	A
Decachlorobiphenyl	93		30-150	A
2,4,5,6-Tetrachloro-m-xylene	96		30-150	B
Decachlorobiphenyl	96		30-150	B

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-07
Client ID: SB-07 (0'-2')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 11:55
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 10/16/20 09:10
Analyst: BM
Percent Solids: 89%

Extraction Method: EPA 3546
Extraction Date: 10/15/20 00:41
Cleanup Method: EPA 3620B
Cleanup Date: 10/15/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.71	0.335	1	A
Lindane	ND		ug/kg	0.712	0.318	1	A
Alpha-BHC	ND		ug/kg	0.712	0.202	1	A
Beta-BHC	ND		ug/kg	1.71	0.648	1	A
Heptachlor	ND		ug/kg	0.855	0.383	1	A
Aldrin	ND		ug/kg	1.71	0.602	1	A
Heptachlor epoxide	ND		ug/kg	3.21	0.962	1	A
Endrin	ND		ug/kg	0.712	0.292	1	A
Endrin aldehyde	ND		ug/kg	2.14	0.748	1	A
Endrin ketone	ND		ug/kg	1.71	0.440	1	A
Dieldrin	2.74		ug/kg	1.07	0.534	1	B
4,4'-DDE	0.541	JIP	ug/kg	1.71	0.395	1	B
4,4'-DDD	ND		ug/kg	1.71	0.610	1	A
4,4'-DDT	ND		ug/kg	3.21	1.38	1	A
Endosulfan I	ND		ug/kg	1.71	0.404	1	A
Endosulfan II	ND		ug/kg	1.71	0.571	1	A
Endosulfan sulfate	ND		ug/kg	0.712	0.339	1	A
Methoxychlor	ND		ug/kg	3.21	0.998	1	A
Toxaphene	ND		ug/kg	32.1	8.98	1	A
cis-Chlordane	ND		ug/kg	2.14	0.596	1	A
trans-Chlordane	ND		ug/kg	2.14	0.564	1	A
Chlordane	ND		ug/kg	14.2	5.66	1	A

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-07
Client ID: SB-07 (0'-2')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 11:55
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	101		30-150	A
Decachlorobiphenyl	112		30-150	A
2,4,5,6-Tetrachloro-m-xylene	100		30-150	B
Decachlorobiphenyl	201	Q	30-150	B

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-08
Client ID: SB-07 (13'-15')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 12:18
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 10/16/20 09:29
Analyst: BM
Percent Solids: 97%

Extraction Method: EPA 3546
Extraction Date: 10/15/20 00:41
Cleanup Method: EPA 3620B
Cleanup Date: 10/15/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.61	0.315	1	A
Lindane	ND		ug/kg	0.670	0.300	1	A
Alpha-BHC	ND		ug/kg	0.670	0.190	1	A
Beta-BHC	ND		ug/kg	1.61	0.610	1	A
Heptachlor	ND		ug/kg	0.804	0.361	1	A
Aldrin	ND		ug/kg	1.61	0.566	1	A
Heptachlor epoxide	ND		ug/kg	3.02	0.905	1	A
Endrin	ND		ug/kg	0.670	0.275	1	A
Endrin aldehyde	ND		ug/kg	2.01	0.704	1	A
Endrin ketone	ND		ug/kg	1.61	0.414	1	A
Dieldrin	ND		ug/kg	1.00	0.503	1	A
4,4'-DDE	ND		ug/kg	1.61	0.372	1	A
4,4'-DDD	ND		ug/kg	1.61	0.574	1	A
4,4'-DDT	ND		ug/kg	3.02	1.29	1	A
Endosulfan I	ND		ug/kg	1.61	0.380	1	A
Endosulfan II	ND		ug/kg	1.61	0.538	1	A
Endosulfan sulfate	ND		ug/kg	0.670	0.319	1	A
Methoxychlor	ND		ug/kg	3.02	0.939	1	A
Toxaphene	ND		ug/kg	30.2	8.45	1	A
cis-Chlordane	ND		ug/kg	2.01	0.560	1	A
trans-Chlordane	ND	IP	ug/kg	2.01	0.531	1	A
Chlordane	ND		ug/kg	13.4	5.33	1	A

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-08

Date Collected: 10/13/20 12:18

Client ID: SB-07 (13'-15')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	87		30-150	A
Decachlorobiphenyl	87		30-150	A
2,4,5,6-Tetrachloro-m-xylene	87		30-150	B
Decachlorobiphenyl	75		30-150	B

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-09
Client ID: SB-08 (0'-2')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 12:35
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 10/16/20 09:01
Analyst: BM
Percent Solids: 91%

Extraction Method: EPA 3546
Extraction Date: 10/15/20 00:41
Cleanup Method: EPA 3620B
Cleanup Date: 10/15/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.73	0.339	1	A
Lindane	ND		ug/kg	0.721	0.322	1	A
Alpha-BHC	ND		ug/kg	0.721	0.205	1	A
Beta-BHC	ND		ug/kg	1.73	0.656	1	A
Heptachlor	ND		ug/kg	0.865	0.388	1	A
Aldrin	ND		ug/kg	1.73	0.609	1	A
Heptachlor epoxide	ND		ug/kg	3.24	0.973	1	A
Endrin	ND		ug/kg	0.721	0.296	1	A
Endrin aldehyde	ND		ug/kg	2.16	0.757	1	A
Endrin ketone	ND		ug/kg	1.73	0.445	1	A
Dieldrin	0.736	J	ug/kg	1.08	0.540	1	A
4,4'-DDE	0.948	J	ug/kg	1.73	0.400	1	A
4,4'-DDD	1.96		ug/kg	1.73	0.617	1	A
4,4'-DDT	5.24		ug/kg	3.24	1.39	1	A
Endosulfan I	ND		ug/kg	1.73	0.409	1	A
Endosulfan II	ND		ug/kg	1.73	0.578	1	A
Endosulfan sulfate	ND		ug/kg	0.721	0.343	1	A
Methoxychlor	ND		ug/kg	3.24	1.01	1	A
Toxaphene	ND		ug/kg	32.4	9.08	1	A
cis-Chlordane	ND		ug/kg	2.16	0.602	1	A
trans-Chlordane	ND		ug/kg	2.16	0.571	1	A
Chlordane	ND		ug/kg	14.4	5.73	1	A

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-09

Date Collected: 10/13/20 12:35

Client ID: SB-08 (0'-2')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	106		30-150	A
Decachlorobiphenyl	94		30-150	A
2,4,5,6-Tetrachloro-m-xylene	100		30-150	B
Decachlorobiphenyl	98		30-150	B

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-10
Client ID: SB-08 (13'-15')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 12:55
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 10/16/20 09:38
Analyst: BM
Percent Solids: 88%

Extraction Method: EPA 3546
Extraction Date: 10/15/20 00:41
Cleanup Method: EPA 3620B
Cleanup Date: 10/15/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.73	0.339	1	A
Lindane	ND		ug/kg	0.722	0.323	1	A
Alpha-BHC	ND		ug/kg	0.722	0.205	1	A
Beta-BHC	ND		ug/kg	1.73	0.657	1	A
Heptachlor	ND		ug/kg	0.866	0.388	1	A
Aldrin	ND		ug/kg	1.73	0.610	1	A
Heptachlor epoxide	ND		ug/kg	3.25	0.975	1	A
Endrin	ND		ug/kg	0.722	0.296	1	A
Endrin aldehyde	ND		ug/kg	2.16	0.758	1	A
Endrin ketone	ND		ug/kg	1.73	0.446	1	A
Dieldrin	ND		ug/kg	1.08	0.541	1	A
4,4'-DDE	ND		ug/kg	1.73	0.401	1	A
4,4'-DDD	ND		ug/kg	1.73	0.618	1	A
4,4'-DDT	ND		ug/kg	3.25	1.39	1	A
Endosulfan I	ND		ug/kg	1.73	0.409	1	A
Endosulfan II	ND		ug/kg	1.73	0.579	1	A
Endosulfan sulfate	ND		ug/kg	0.722	0.344	1	A
Methoxychlor	ND		ug/kg	3.25	1.01	1	A
Toxaphene	ND		ug/kg	32.5	9.10	1	A
cis-Chlordane	ND		ug/kg	2.16	0.604	1	A
trans-Chlordane	ND	IP	ug/kg	2.16	0.572	1	A
Chlordane	ND		ug/kg	14.4	5.74	1	A

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-10
Client ID: SB-08 (13'-15')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 12:55
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	102		30-150	A
Decachlorobiphenyl	100		30-150	A
2,4,5,6-Tetrachloro-m-xylene	97		30-150	B
Decachlorobiphenyl	90		30-150	B

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-11
Client ID: SB-09 (0'-2')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 13:05
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 10/16/20 08:43
Analyst: BM
Percent Solids: 89%

Extraction Method: EPA 3546
Extraction Date: 10/15/20 00:41
Cleanup Method: EPA 3620B
Cleanup Date: 10/15/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.71	0.336	1	A
Lindane	ND		ug/kg	0.714	0.319	1	A
Alpha-BHC	ND		ug/kg	0.714	0.203	1	A
Beta-BHC	ND		ug/kg	1.71	0.650	1	A
Heptachlor	ND		ug/kg	0.857	0.384	1	A
Aldrin	ND		ug/kg	1.71	0.604	1	A
Heptachlor epoxide	ND		ug/kg	3.22	0.965	1	A
Endrin	ND		ug/kg	0.714	0.293	1	A
Endrin aldehyde	ND		ug/kg	2.14	0.750	1	A
Endrin ketone	ND		ug/kg	1.71	0.442	1	A
Dieldrin	ND		ug/kg	1.07	0.536	1	A
4,4'-DDE	ND		ug/kg	1.71	0.396	1	A
4,4'-DDD	ND		ug/kg	1.71	0.612	1	A
4,4'-DDT	ND		ug/kg	3.22	1.38	1	A
Endosulfan I	ND		ug/kg	1.71	0.405	1	A
Endosulfan II	ND		ug/kg	1.71	0.573	1	A
Endosulfan sulfate	ND		ug/kg	0.714	0.340	1	A
Methoxychlor	ND		ug/kg	3.22	1.00	1	A
Toxaphene	ND		ug/kg	32.2	9.00	1	A
cis-Chlordane	ND		ug/kg	2.14	0.597	1	A
trans-Chlordane	ND		ug/kg	2.14	0.566	1	A
Chlordane	ND		ug/kg	14.3	5.68	1	A

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-11

Date Collected: 10/13/20 13:05

Client ID: SB-09 (0'-2')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	108		30-150	A
Decachlorobiphenyl	142		30-150	A
2,4,5,6-Tetrachloro-m-xylene	94		30-150	B
Decachlorobiphenyl	493	Q	30-150	B

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-12
Client ID: SB-09 (13'-15')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 13:20
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 10/16/20 09:47
Analyst: BM
Percent Solids: 97%

Extraction Method: EPA 3546
Extraction Date: 10/15/20 00:41
Cleanup Method: EPA 3620B
Cleanup Date: 10/15/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.58	0.309	1	A
Lindane	ND		ug/kg	0.658	0.294	1	A
Alpha-BHC	ND		ug/kg	0.658	0.187	1	A
Beta-BHC	ND		ug/kg	1.58	0.599	1	A
Heptachlor	ND		ug/kg	0.790	0.354	1	A
Aldrin	ND		ug/kg	1.58	0.556	1	A
Heptachlor epoxide	ND		ug/kg	2.96	0.889	1	A
Endrin	ND		ug/kg	0.658	0.270	1	A
Endrin aldehyde	ND		ug/kg	1.98	0.691	1	A
Endrin ketone	ND		ug/kg	1.58	0.407	1	A
Dieldrin	ND		ug/kg	0.988	0.494	1	A
4,4'-DDE	ND		ug/kg	1.58	0.365	1	A
4,4'-DDD	ND		ug/kg	1.58	0.564	1	A
4,4'-DDT	ND		ug/kg	2.96	1.27	1	A
Endosulfan I	ND		ug/kg	1.58	0.373	1	A
Endosulfan II	ND		ug/kg	1.58	0.528	1	A
Endosulfan sulfate	ND		ug/kg	0.658	0.313	1	A
Methoxychlor	ND		ug/kg	2.96	0.922	1	A
Toxaphene	ND		ug/kg	29.6	8.30	1	A
cis-Chlordane	ND		ug/kg	1.98	0.550	1	A
trans-Chlordane	ND	IP	ug/kg	1.98	0.521	1	A
Chlordane	ND		ug/kg	13.2	5.23	1	A

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-12
 Client ID: SB-09 (13'-15')
 Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 13:20
 Date Received: 10/13/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	96		30-150	A
Decachlorobiphenyl	98		30-150	A
2,4,5,6-Tetrachloro-m-xylene	95		30-150	B
Decachlorobiphenyl	85		30-150	B

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-14
Client ID: DUP 101320
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 00:00
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 10/16/20 09:56
Analyst: BM
Percent Solids: 89%

Extraction Method: EPA 3546
Extraction Date: 10/15/20 00:41
Cleanup Method: EPA 3620B
Cleanup Date: 10/15/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.74	0.341	1	A
Lindane	ND		ug/kg	0.726	0.325	1	A
Alpha-BHC	ND		ug/kg	0.726	0.206	1	A
Beta-BHC	ND		ug/kg	1.74	0.661	1	A
Heptachlor	ND		ug/kg	0.871	0.391	1	A
Aldrin	ND		ug/kg	1.74	0.614	1	A
Heptachlor epoxide	ND		ug/kg	3.27	0.980	1	A
Endrin	ND		ug/kg	0.726	0.298	1	A
Endrin aldehyde	ND		ug/kg	2.18	0.762	1	A
Endrin ketone	ND		ug/kg	1.74	0.449	1	A
Dieldrin	ND		ug/kg	1.09	0.545	1	A
4,4'-DDE	ND		ug/kg	1.74	0.403	1	A
4,4'-DDD	ND		ug/kg	1.74	0.622	1	A
4,4'-DDT	ND		ug/kg	3.27	1.40	1	A
Endosulfan I	ND		ug/kg	1.74	0.412	1	A
Endosulfan II	ND		ug/kg	1.74	0.582	1	A
Endosulfan sulfate	ND		ug/kg	0.726	0.346	1	A
Methoxychlor	ND		ug/kg	3.27	1.02	1	A
Toxaphene	ND		ug/kg	32.7	9.15	1	A
cis-Chlordane	ND		ug/kg	2.18	0.607	1	A
trans-Chlordane	ND	IP	ug/kg	2.18	0.575	1	A
Chlordane	ND		ug/kg	14.5	5.77	1	A

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-14

Date Collected: 10/13/20 00:00

Client ID: DUP 101320

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	102		30-150	A
Decachlorobiphenyl	116		30-150	A
2,4,5,6-Tetrachloro-m-xylene	101		30-150	B
Decachlorobiphenyl	104		30-150	B

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 10/15/20 07:19
Analyst: BM

Extraction Method: EPA 3546
Extraction Date: 10/15/20 00:40
Cleanup Method: EPA 3620B
Cleanup Date: 10/15/20

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-12,14 Batch: WG1422229-1						
Delta-BHC	ND		ug/kg	1.51	0.296	A
Lindane	ND		ug/kg	0.630	0.282	A
Alpha-BHC	ND		ug/kg	0.630	0.179	A
Beta-BHC	ND		ug/kg	1.51	0.573	A
Heptachlor	ND		ug/kg	0.756	0.339	A
Aldrin	ND		ug/kg	1.51	0.532	A
Heptachlor epoxide	ND		ug/kg	2.84	0.851	A
Endrin	ND		ug/kg	0.630	0.258	A
Endrin aldehyde	ND		ug/kg	1.89	0.662	A
Endrin ketone	ND		ug/kg	1.51	0.389	A
Dieldrin	ND		ug/kg	0.945	0.472	A
4,4'-DDE	ND		ug/kg	1.51	0.350	A
4,4'-DDD	ND		ug/kg	1.51	0.539	A
4,4'-DDT	ND		ug/kg	2.84	1.22	A
Endosulfan I	ND		ug/kg	1.51	0.357	A
Endosulfan II	ND		ug/kg	1.51	0.505	A
Endosulfan sulfate	ND		ug/kg	0.630	0.300	A
Methoxychlor	ND		ug/kg	2.84	0.882	A
Toxaphene	ND		ug/kg	28.4	7.94	A
cis-Chlordane	ND		ug/kg	1.89	0.527	A
trans-Chlordane	ND		ug/kg	1.89	0.499	A
Chlordane	ND		ug/kg	12.6	5.01	A

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 10/15/20 07:19
Analyst: BM

Extraction Method: EPA 3546
Extraction Date: 10/15/20 00:40
Cleanup Method: EPA 3620B
Cleanup Date: 10/15/20

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-12,14 Batch: WG1422229-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80		30-150	A
Decachlorobiphenyl	76		30-150	A
2,4,5,6-Tetrachloro-m-xylene	77		30-150	B
Decachlorobiphenyl	79		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE 11 ESH

Project Number: 26979.01

Lab Number: L2043863

Report Date: 10/20/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-12,14 Batch: WG1422229-2 WG1422229-3									
Delta-BHC	87		112		30-150	25		30	A
Lindane	86		110		30-150	24		30	A
Alpha-BHC	91		116		30-150	24		30	A
Beta-BHC	79		97		30-150	20		30	A
Heptachlor	84		107		30-150	24		30	A
Aldrin	87		113		30-150	26		30	A
Heptachlor epoxide	83		107		30-150	25		30	A
Endrin	89		115		30-150	25		30	A
Endrin aldehyde	64		91		30-150	35	Q	30	A
Endrin ketone	76		105		30-150	32	Q	30	A
Dieldrin	94		122		30-150	26		30	A
4,4'-DDE	87		115		30-150	28		30	A
4,4'-DDD	95		125		30-150	27		30	A
4,4'-DDT	86		115		30-150	29		30	A
Endosulfan I	84		109		30-150	26		30	A
Endosulfan II	83		110		30-150	28		30	A
Endosulfan sulfate	61		90		30-150	38	Q	30	A
Methoxychlor	75		100		30-150	29		30	A
cis-Chlordane	75		99		30-150	28		30	A
trans-Chlordane	61		81		30-150	28		30	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE 11 ESH

Lab Number: L2043863

Project Number: 26979.01

Report Date: 10/20/20

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
-----------	-------------------------	-------------	--------------------------	-------------	----------------------------	------------	-------------	----------------------

Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-12,14 Batch: WG1422229-2 WG1422229-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	78		100		30-150	A
Decachlorobiphenyl	86		107		30-150	A
2,4,5,6-Tetrachloro-m-xylene	80		96		30-150	B
Decachlorobiphenyl	95		112		30-150	B

METALS

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-01

Date Collected: 10/13/20 09:25

Client ID: SB-04 (0'-2')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	2650		mg/kg	8.29	2.24	2	10/17/20 12:00	10/19/20 20:43	EPA 3050B	1,6010D	BV
Antimony, Total	0.473	J	mg/kg	4.14	0.315	2	10/17/20 12:00	10/19/20 20:43	EPA 3050B	1,6010D	BV
Arsenic, Total	3.15		mg/kg	0.829	0.172	2	10/17/20 12:00	10/19/20 20:43	EPA 3050B	1,6010D	BV
Barium, Total	31.3		mg/kg	0.829	0.144	2	10/17/20 12:00	10/19/20 20:43	EPA 3050B	1,6010D	BV
Beryllium, Total	0.207	J	mg/kg	0.414	0.027	2	10/17/20 12:00	10/19/20 20:43	EPA 3050B	1,6010D	BV
Cadmium, Total	ND		mg/kg	0.829	0.081	2	10/17/20 12:00	10/19/20 20:43	EPA 3050B	1,6010D	BV
Calcium, Total	472		mg/kg	8.29	2.90	2	10/17/20 12:00	10/19/20 20:43	EPA 3050B	1,6010D	BV
Chromium, Total	6.14		mg/kg	0.829	0.080	2	10/17/20 12:00	10/19/20 20:43	EPA 3050B	1,6010D	BV
Cobalt, Total	3.34		mg/kg	1.66	0.138	2	10/17/20 12:00	10/19/20 20:43	EPA 3050B	1,6010D	BV
Copper, Total	18.2		mg/kg	0.829	0.214	2	10/17/20 12:00	10/19/20 20:43	EPA 3050B	1,6010D	BV
Iron, Total	7290		mg/kg	4.14	0.749	2	10/17/20 12:00	10/19/20 20:43	EPA 3050B	1,6010D	BV
Lead, Total	18.1		mg/kg	4.14	0.222	2	10/17/20 12:00	10/19/20 20:43	EPA 3050B	1,6010D	BV
Magnesium, Total	1130		mg/kg	8.29	1.28	2	10/17/20 12:00	10/19/20 20:43	EPA 3050B	1,6010D	BV
Manganese, Total	160		mg/kg	0.829	0.132	2	10/17/20 12:00	10/19/20 20:43	EPA 3050B	1,6010D	BV
Mercury, Total	ND		mg/kg	0.067	0.044	1	10/15/20 09:50	10/15/20 15:20	EPA 7471B	1,7471B	EW
Nickel, Total	14.3		mg/kg	2.07	0.201	2	10/17/20 12:00	10/19/20 20:43	EPA 3050B	1,6010D	BV
Potassium, Total	317		mg/kg	207	11.9	2	10/17/20 12:00	10/19/20 20:43	EPA 3050B	1,6010D	BV
Selenium, Total	ND		mg/kg	1.66	0.214	2	10/17/20 12:00	10/19/20 20:43	EPA 3050B	1,6010D	BV
Silver, Total	ND		mg/kg	0.829	0.235	2	10/17/20 12:00	10/19/20 20:43	EPA 3050B	1,6010D	BV
Sodium, Total	20.2	J	mg/kg	166	2.61	2	10/17/20 12:00	10/19/20 20:43	EPA 3050B	1,6010D	BV
Thallium, Total	ND		mg/kg	1.66	0.261	2	10/17/20 12:00	10/19/20 20:43	EPA 3050B	1,6010D	BV
Vanadium, Total	9.14		mg/kg	0.829	0.168	2	10/17/20 12:00	10/19/20 20:43	EPA 3050B	1,6010D	BV
Zinc, Total	35.1		mg/kg	4.14	0.243	2	10/17/20 12:00	10/19/20 20:43	EPA 3050B	1,6010D	BV



Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-02

Date Collected: 10/13/20 10:15

Client ID: SB-04 (13'-15')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 96%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3410		mg/kg	7.85	2.12	2	10/17/20 12:00	10/19/20 20:47	EPA 3050B	1,6010D	BV
Antimony, Total	0.770	J	mg/kg	3.93	0.298	2	10/17/20 12:00	10/19/20 20:47	EPA 3050B	1,6010D	BV
Arsenic, Total	1.17		mg/kg	0.785	0.163	2	10/17/20 12:00	10/19/20 20:47	EPA 3050B	1,6010D	BV
Barium, Total	24.6		mg/kg	0.785	0.137	2	10/17/20 12:00	10/19/20 20:47	EPA 3050B	1,6010D	BV
Beryllium, Total	0.259	J	mg/kg	0.393	0.026	2	10/17/20 12:00	10/19/20 20:47	EPA 3050B	1,6010D	BV
Cadmium, Total	ND		mg/kg	0.785	0.077	2	10/17/20 12:00	10/19/20 20:47	EPA 3050B	1,6010D	BV
Calcium, Total	571		mg/kg	7.85	2.75	2	10/17/20 12:00	10/19/20 20:47	EPA 3050B	1,6010D	BV
Chromium, Total	11.3		mg/kg	0.785	0.075	2	10/17/20 12:00	10/19/20 20:47	EPA 3050B	1,6010D	BV
Cobalt, Total	4.80		mg/kg	1.57	0.130	2	10/17/20 12:00	10/19/20 20:47	EPA 3050B	1,6010D	BV
Copper, Total	11.2		mg/kg	0.785	0.203	2	10/17/20 12:00	10/19/20 20:47	EPA 3050B	1,6010D	BV
Iron, Total	18000		mg/kg	3.93	0.709	2	10/17/20 12:00	10/19/20 20:47	EPA 3050B	1,6010D	BV
Lead, Total	3.79	J	mg/kg	3.93	0.210	2	10/17/20 12:00	10/19/20 20:47	EPA 3050B	1,6010D	BV
Magnesium, Total	1100		mg/kg	7.85	1.21	2	10/17/20 12:00	10/19/20 20:47	EPA 3050B	1,6010D	BV
Manganese, Total	404		mg/kg	0.785	0.125	2	10/17/20 12:00	10/19/20 20:47	EPA 3050B	1,6010D	BV
Mercury, Total	ND		mg/kg	0.066	0.043	1	10/15/20 09:50	10/15/20 15:24	EPA 7471B	1,7471B	EW
Nickel, Total	8.50		mg/kg	1.96	0.190	2	10/17/20 12:00	10/19/20 20:47	EPA 3050B	1,6010D	BV
Potassium, Total	336		mg/kg	196	11.3	2	10/17/20 12:00	10/19/20 20:47	EPA 3050B	1,6010D	BV
Selenium, Total	ND		mg/kg	1.57	0.203	2	10/17/20 12:00	10/19/20 20:47	EPA 3050B	1,6010D	BV
Silver, Total	ND		mg/kg	0.785	0.222	2	10/17/20 12:00	10/19/20 20:47	EPA 3050B	1,6010D	BV
Sodium, Total	54.4	J	mg/kg	157	2.47	2	10/17/20 12:00	10/19/20 20:47	EPA 3050B	1,6010D	BV
Thallium, Total	0.298	J	mg/kg	1.57	0.247	2	10/17/20 12:00	10/19/20 20:47	EPA 3050B	1,6010D	BV
Vanadium, Total	21.8		mg/kg	0.785	0.159	2	10/17/20 12:00	10/19/20 20:47	EPA 3050B	1,6010D	BV
Zinc, Total	15.9		mg/kg	3.93	0.230	2	10/17/20 12:00	10/19/20 20:47	EPA 3050B	1,6010D	BV



Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-03

Date Collected: 10/13/20 10:35

Client ID: SB-05 (0'-2')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4910		mg/kg	8.58	2.32	2	10/17/20 12:00	10/19/20 20:52	EPA 3050B	1,6010D	BV
Antimony, Total	1.83	J	mg/kg	4.29	0.326	2	10/17/20 12:00	10/19/20 20:52	EPA 3050B	1,6010D	BV
Arsenic, Total	5.34		mg/kg	0.858	0.178	2	10/17/20 12:00	10/19/20 20:52	EPA 3050B	1,6010D	BV
Barium, Total	186		mg/kg	0.858	0.149	2	10/17/20 12:00	10/19/20 20:52	EPA 3050B	1,6010D	BV
Beryllium, Total	0.249	J	mg/kg	0.429	0.028	2	10/17/20 12:00	10/19/20 20:52	EPA 3050B	1,6010D	BV
Cadmium, Total	0.472	J	mg/kg	0.858	0.084	2	10/17/20 12:00	10/19/20 20:52	EPA 3050B	1,6010D	BV
Calcium, Total	13000		mg/kg	8.58	3.00	2	10/17/20 12:00	10/19/20 20:52	EPA 3050B	1,6010D	BV
Chromium, Total	13.4		mg/kg	0.858	0.082	2	10/17/20 12:00	10/19/20 20:52	EPA 3050B	1,6010D	BV
Cobalt, Total	5.45		mg/kg	1.72	0.142	2	10/17/20 12:00	10/19/20 20:52	EPA 3050B	1,6010D	BV
Copper, Total	82.0		mg/kg	0.858	0.221	2	10/17/20 12:00	10/19/20 20:52	EPA 3050B	1,6010D	BV
Iron, Total	28200		mg/kg	4.29	0.775	2	10/17/20 12:00	10/19/20 20:52	EPA 3050B	1,6010D	BV
Lead, Total	251		mg/kg	4.29	0.230	2	10/17/20 12:00	10/19/20 20:52	EPA 3050B	1,6010D	BV
Magnesium, Total	2850		mg/kg	8.58	1.32	2	10/17/20 12:00	10/19/20 20:52	EPA 3050B	1,6010D	BV
Manganese, Total	274		mg/kg	0.858	0.136	2	10/17/20 12:00	10/19/20 20:52	EPA 3050B	1,6010D	BV
Mercury, Total	0.341		mg/kg	0.070	0.046	1	10/15/20 09:50	10/15/20 15:27	EPA 7471B	1,7471B	EW
Nickel, Total	14.1		mg/kg	2.15	0.208	2	10/17/20 12:00	10/19/20 20:52	EPA 3050B	1,6010D	BV
Potassium, Total	564		mg/kg	215	12.4	2	10/17/20 12:00	10/19/20 20:52	EPA 3050B	1,6010D	BV
Selenium, Total	0.318	J	mg/kg	1.72	0.221	2	10/17/20 12:00	10/19/20 20:52	EPA 3050B	1,6010D	BV
Silver, Total	ND		mg/kg	0.858	0.243	2	10/17/20 12:00	10/19/20 20:52	EPA 3050B	1,6010D	BV
Sodium, Total	110	J	mg/kg	172	2.70	2	10/17/20 12:00	10/19/20 20:52	EPA 3050B	1,6010D	BV
Thallium, Total	ND		mg/kg	1.72	0.270	2	10/17/20 12:00	10/19/20 20:52	EPA 3050B	1,6010D	BV
Vanadium, Total	18.8		mg/kg	0.858	0.174	2	10/17/20 12:00	10/19/20 20:52	EPA 3050B	1,6010D	BV
Zinc, Total	602		mg/kg	4.29	0.252	2	10/17/20 12:00	10/19/20 20:52	EPA 3050B	1,6010D	BV



Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-04

Date Collected: 10/13/20 10:58

Client ID: SB-05 (13'-15')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 96%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	6530		mg/kg	7.86	2.12	2	10/17/20 12:00	10/19/20 20:56	EPA 3050B	1,6010D	BV
Antimony, Total	0.589	J	mg/kg	3.93	0.298	2	10/17/20 12:00	10/19/20 20:56	EPA 3050B	1,6010D	BV
Arsenic, Total	1.02		mg/kg	0.786	0.163	2	10/17/20 12:00	10/19/20 20:56	EPA 3050B	1,6010D	BV
Barium, Total	15.8		mg/kg	0.786	0.137	2	10/17/20 12:00	10/19/20 20:56	EPA 3050B	1,6010D	BV
Beryllium, Total	0.369	J	mg/kg	0.393	0.026	2	10/17/20 12:00	10/19/20 20:56	EPA 3050B	1,6010D	BV
Cadmium, Total	ND		mg/kg	0.786	0.077	2	10/17/20 12:00	10/19/20 20:56	EPA 3050B	1,6010D	BV
Calcium, Total	471		mg/kg	7.86	2.75	2	10/17/20 12:00	10/19/20 20:56	EPA 3050B	1,6010D	BV
Chromium, Total	16.1		mg/kg	0.786	0.075	2	10/17/20 12:00	10/19/20 20:56	EPA 3050B	1,6010D	BV
Cobalt, Total	11.2		mg/kg	1.57	0.130	2	10/17/20 12:00	10/19/20 20:56	EPA 3050B	1,6010D	BV
Copper, Total	12.8		mg/kg	0.786	0.203	2	10/17/20 12:00	10/19/20 20:56	EPA 3050B	1,6010D	BV
Iron, Total	20200		mg/kg	3.93	0.709	2	10/17/20 12:00	10/19/20 20:56	EPA 3050B	1,6010D	BV
Lead, Total	5.02		mg/kg	3.93	0.210	2	10/17/20 12:00	10/19/20 20:56	EPA 3050B	1,6010D	BV
Magnesium, Total	1730		mg/kg	7.86	1.21	2	10/17/20 12:00	10/19/20 20:56	EPA 3050B	1,6010D	BV
Manganese, Total	621		mg/kg	0.786	0.125	2	10/17/20 12:00	10/19/20 20:56	EPA 3050B	1,6010D	BV
Mercury, Total	ND		mg/kg	0.066	0.043	1	10/15/20 09:50	10/15/20 15:30	EPA 7471B	1,7471B	EW
Nickel, Total	12.3		mg/kg	1.96	0.190	2	10/17/20 12:00	10/19/20 20:56	EPA 3050B	1,6010D	BV
Potassium, Total	579		mg/kg	196	11.3	2	10/17/20 12:00	10/19/20 20:56	EPA 3050B	1,6010D	BV
Selenium, Total	ND		mg/kg	1.57	0.203	2	10/17/20 12:00	10/19/20 20:56	EPA 3050B	1,6010D	BV
Silver, Total	ND		mg/kg	0.786	0.222	2	10/17/20 12:00	10/19/20 20:56	EPA 3050B	1,6010D	BV
Sodium, Total	27.2	J	mg/kg	157	2.47	2	10/17/20 12:00	10/19/20 20:56	EPA 3050B	1,6010D	BV
Thallium, Total	0.298	J	mg/kg	1.57	0.247	2	10/17/20 12:00	10/19/20 20:56	EPA 3050B	1,6010D	BV
Vanadium, Total	27.5		mg/kg	0.786	0.159	2	10/17/20 12:00	10/19/20 20:56	EPA 3050B	1,6010D	BV
Zinc, Total	34.8		mg/kg	3.93	0.230	2	10/17/20 12:00	10/19/20 20:56	EPA 3050B	1,6010D	BV



Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-05

Date Collected: 10/13/20 11:15

Client ID: SB-06 (0'-2')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5460		mg/kg	8.94	2.41	2	10/17/20 12:00	10/19/20 21:00	EPA 3050B	1,6010D	BV
Antimony, Total	0.778	J	mg/kg	4.47	0.340	2	10/17/20 12:00	10/19/20 21:00	EPA 3050B	1,6010D	BV
Arsenic, Total	3.92		mg/kg	0.894	0.186	2	10/17/20 12:00	10/19/20 21:00	EPA 3050B	1,6010D	BV
Barium, Total	396		mg/kg	0.894	0.156	2	10/17/20 12:00	10/19/20 21:00	EPA 3050B	1,6010D	BV
Beryllium, Total	0.268	J	mg/kg	0.447	0.030	2	10/17/20 12:00	10/19/20 21:00	EPA 3050B	1,6010D	BV
Cadmium, Total	0.161	J	mg/kg	0.894	0.088	2	10/17/20 12:00	10/19/20 21:00	EPA 3050B	1,6010D	BV
Calcium, Total	18300		mg/kg	8.94	3.13	2	10/17/20 12:00	10/19/20 21:00	EPA 3050B	1,6010D	BV
Chromium, Total	11.7		mg/kg	0.894	0.086	2	10/17/20 12:00	10/19/20 21:00	EPA 3050B	1,6010D	BV
Cobalt, Total	4.25		mg/kg	1.79	0.148	2	10/17/20 12:00	10/19/20 21:00	EPA 3050B	1,6010D	BV
Copper, Total	20.9		mg/kg	0.894	0.231	2	10/17/20 12:00	10/19/20 21:00	EPA 3050B	1,6010D	BV
Iron, Total	11900		mg/kg	4.47	0.807	2	10/17/20 12:00	10/19/20 21:00	EPA 3050B	1,6010D	BV
Lead, Total	200		mg/kg	4.47	0.240	2	10/17/20 12:00	10/19/20 21:00	EPA 3050B	1,6010D	BV
Magnesium, Total	5800		mg/kg	8.94	1.38	2	10/17/20 12:00	10/19/20 21:00	EPA 3050B	1,6010D	BV
Manganese, Total	318		mg/kg	0.894	0.142	2	10/17/20 12:00	10/19/20 21:00	EPA 3050B	1,6010D	BV
Mercury, Total	0.303		mg/kg	0.072	0.047	1	10/15/20 09:50	10/15/20 15:34	EPA 7471B	1,7471B	EW
Nickel, Total	8.74		mg/kg	2.23	0.216	2	10/17/20 12:00	10/19/20 21:00	EPA 3050B	1,6010D	BV
Potassium, Total	300		mg/kg	223	12.9	2	10/17/20 12:00	10/19/20 21:00	EPA 3050B	1,6010D	BV
Selenium, Total	ND		mg/kg	1.79	0.231	2	10/17/20 12:00	10/19/20 21:00	EPA 3050B	1,6010D	BV
Silver, Total	ND		mg/kg	0.894	0.253	2	10/17/20 12:00	10/19/20 21:00	EPA 3050B	1,6010D	BV
Sodium, Total	55.2	J	mg/kg	179	2.82	2	10/17/20 12:00	10/19/20 21:00	EPA 3050B	1,6010D	BV
Thallium, Total	ND		mg/kg	1.79	0.282	2	10/17/20 12:00	10/19/20 21:00	EPA 3050B	1,6010D	BV
Vanadium, Total	15.9		mg/kg	0.894	0.181	2	10/17/20 12:00	10/19/20 21:00	EPA 3050B	1,6010D	BV
Zinc, Total	288		mg/kg	4.47	0.262	2	10/17/20 12:00	10/19/20 21:00	EPA 3050B	1,6010D	BV



Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-06

Date Collected: 10/13/20 11:35

Client ID: SB-06 (13'-15')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4730		mg/kg	8.40	2.27	2	10/17/20 12:00	10/19/20 21:05	EPA 3050B	1,6010D	BV
Antimony, Total	0.689	J	mg/kg	4.20	0.319	2	10/17/20 12:00	10/19/20 21:05	EPA 3050B	1,6010D	BV
Arsenic, Total	0.916		mg/kg	0.840	0.175	2	10/17/20 12:00	10/19/20 21:05	EPA 3050B	1,6010D	BV
Barium, Total	24.7		mg/kg	0.840	0.146	2	10/17/20 12:00	10/19/20 21:05	EPA 3050B	1,6010D	BV
Beryllium, Total	0.353	J	mg/kg	0.420	0.028	2	10/17/20 12:00	10/19/20 21:05	EPA 3050B	1,6010D	BV
Cadmium, Total	ND		mg/kg	0.840	0.082	2	10/17/20 12:00	10/19/20 21:05	EPA 3050B	1,6010D	BV
Calcium, Total	575		mg/kg	8.40	2.94	2	10/17/20 12:00	10/19/20 21:05	EPA 3050B	1,6010D	BV
Chromium, Total	14.4		mg/kg	0.840	0.081	2	10/17/20 12:00	10/19/20 21:05	EPA 3050B	1,6010D	BV
Cobalt, Total	6.33		mg/kg	1.68	0.139	2	10/17/20 12:00	10/19/20 21:05	EPA 3050B	1,6010D	BV
Copper, Total	15.4		mg/kg	0.840	0.217	2	10/17/20 12:00	10/19/20 21:05	EPA 3050B	1,6010D	BV
Iron, Total	19800		mg/kg	4.20	0.758	2	10/17/20 12:00	10/19/20 21:05	EPA 3050B	1,6010D	BV
Lead, Total	5.09		mg/kg	4.20	0.225	2	10/17/20 12:00	10/19/20 21:05	EPA 3050B	1,6010D	BV
Magnesium, Total	1780		mg/kg	8.40	1.29	2	10/17/20 12:00	10/19/20 21:05	EPA 3050B	1,6010D	BV
Manganese, Total	455		mg/kg	0.840	0.134	2	10/17/20 12:00	10/19/20 21:05	EPA 3050B	1,6010D	BV
Mercury, Total	ND		mg/kg	0.069	0.045	1	10/15/20 09:50	10/15/20 15:43	EPA 7471B	1,7471B	EW
Nickel, Total	11.4		mg/kg	2.10	0.203	2	10/17/20 12:00	10/19/20 21:05	EPA 3050B	1,6010D	BV
Potassium, Total	409		mg/kg	210	12.1	2	10/17/20 12:00	10/19/20 21:05	EPA 3050B	1,6010D	BV
Selenium, Total	ND		mg/kg	1.68	0.217	2	10/17/20 12:00	10/19/20 21:05	EPA 3050B	1,6010D	BV
Silver, Total	ND		mg/kg	0.840	0.238	2	10/17/20 12:00	10/19/20 21:05	EPA 3050B	1,6010D	BV
Sodium, Total	42.1	J	mg/kg	168	2.65	2	10/17/20 12:00	10/19/20 21:05	EPA 3050B	1,6010D	BV
Thallium, Total	0.361	J	mg/kg	1.68	0.265	2	10/17/20 12:00	10/19/20 21:05	EPA 3050B	1,6010D	BV
Vanadium, Total	26.8		mg/kg	0.840	0.170	2	10/17/20 12:00	10/19/20 21:05	EPA 3050B	1,6010D	BV
Zinc, Total	24.6		mg/kg	4.20	0.246	2	10/17/20 12:00	10/19/20 21:05	EPA 3050B	1,6010D	BV



Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-07

Date Collected: 10/13/20 11:55

Client ID: SB-07 (0'-2')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	2920		mg/kg	8.56	2.31	2	10/17/20 12:00	10/19/20 21:09	EPA 3050B	1,6010D	BV
Antimony, Total	ND		mg/kg	4.28	0.325	2	10/17/20 12:00	10/19/20 21:09	EPA 3050B	1,6010D	BV
Arsenic, Total	4.01		mg/kg	0.856	0.178	2	10/17/20 12:00	10/19/20 21:09	EPA 3050B	1,6010D	BV
Barium, Total	96.6		mg/kg	0.856	0.149	2	10/17/20 12:00	10/19/20 21:09	EPA 3050B	1,6010D	BV
Beryllium, Total	0.231	J	mg/kg	0.428	0.028	2	10/17/20 12:00	10/19/20 21:09	EPA 3050B	1,6010D	BV
Cadmium, Total	ND		mg/kg	0.856	0.084	2	10/17/20 12:00	10/19/20 21:09	EPA 3050B	1,6010D	BV
Calcium, Total	35000		mg/kg	8.56	3.00	2	10/17/20 12:00	10/19/20 21:09	EPA 3050B	1,6010D	BV
Chromium, Total	7.34		mg/kg	0.856	0.082	2	10/17/20 12:00	10/19/20 21:09	EPA 3050B	1,6010D	BV
Cobalt, Total	4.66		mg/kg	1.71	0.142	2	10/17/20 12:00	10/19/20 21:09	EPA 3050B	1,6010D	BV
Copper, Total	26.7		mg/kg	0.856	0.221	2	10/17/20 12:00	10/19/20 21:09	EPA 3050B	1,6010D	BV
Iron, Total	7920		mg/kg	4.28	0.773	2	10/17/20 12:00	10/19/20 21:09	EPA 3050B	1,6010D	BV
Lead, Total	179		mg/kg	4.28	0.229	2	10/17/20 12:00	10/19/20 21:09	EPA 3050B	1,6010D	BV
Magnesium, Total	1260		mg/kg	8.56	1.32	2	10/17/20 12:00	10/19/20 21:09	EPA 3050B	1,6010D	BV
Manganese, Total	93.8		mg/kg	0.856	0.136	2	10/17/20 12:00	10/19/20 21:09	EPA 3050B	1,6010D	BV
Mercury, Total	0.171		mg/kg	0.070	0.046	1	10/15/20 09:50	10/15/20 15:47	EPA 7471B	1,7471B	EW
Nickel, Total	10.5		mg/kg	2.14	0.207	2	10/17/20 12:00	10/19/20 21:09	EPA 3050B	1,6010D	BV
Potassium, Total	875		mg/kg	214	12.3	2	10/17/20 12:00	10/19/20 21:09	EPA 3050B	1,6010D	BV
Selenium, Total	ND		mg/kg	1.71	0.221	2	10/17/20 12:00	10/19/20 21:09	EPA 3050B	1,6010D	BV
Silver, Total	ND		mg/kg	0.856	0.242	2	10/17/20 12:00	10/19/20 21:09	EPA 3050B	1,6010D	BV
Sodium, Total	200		mg/kg	171	2.70	2	10/17/20 12:00	10/19/20 21:09	EPA 3050B	1,6010D	BV
Thallium, Total	ND		mg/kg	1.71	0.270	2	10/17/20 12:00	10/19/20 21:09	EPA 3050B	1,6010D	BV
Vanadium, Total	14.0		mg/kg	0.856	0.174	2	10/17/20 12:00	10/19/20 21:09	EPA 3050B	1,6010D	BV
Zinc, Total	89.6		mg/kg	4.28	0.251	2	10/17/20 12:00	10/19/20 21:09	EPA 3050B	1,6010D	BV



Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-08

Date Collected: 10/13/20 12:18

Client ID: SB-07 (13'-15')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 97%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	6200		mg/kg	8.01	2.16	2	10/17/20 12:00	10/19/20 21:13	EPA 3050B	1,6010D	BV
Antimony, Total	ND		mg/kg	4.01	0.304	2	10/17/20 12:00	10/19/20 21:13	EPA 3050B	1,6010D	BV
Arsenic, Total	1.04		mg/kg	0.801	0.167	2	10/17/20 12:00	10/19/20 21:13	EPA 3050B	1,6010D	BV
Barium, Total	24.3		mg/kg	0.801	0.139	2	10/17/20 12:00	10/19/20 21:13	EPA 3050B	1,6010D	BV
Beryllium, Total	0.344	J	mg/kg	0.401	0.026	2	10/17/20 12:00	10/19/20 21:13	EPA 3050B	1,6010D	BV
Cadmium, Total	ND		mg/kg	0.801	0.079	2	10/17/20 12:00	10/19/20 21:13	EPA 3050B	1,6010D	BV
Calcium, Total	505		mg/kg	8.01	2.80	2	10/17/20 12:00	10/19/20 21:13	EPA 3050B	1,6010D	BV
Chromium, Total	10.9		mg/kg	0.801	0.077	2	10/17/20 12:00	10/19/20 21:13	EPA 3050B	1,6010D	BV
Cobalt, Total	5.06		mg/kg	1.60	0.133	2	10/17/20 12:00	10/19/20 21:13	EPA 3050B	1,6010D	BV
Copper, Total	10.5		mg/kg	0.801	0.207	2	10/17/20 12:00	10/19/20 21:13	EPA 3050B	1,6010D	BV
Iron, Total	11600		mg/kg	4.01	0.724	2	10/17/20 12:00	10/19/20 21:13	EPA 3050B	1,6010D	BV
Lead, Total	4.29		mg/kg	4.01	0.215	2	10/17/20 12:00	10/19/20 21:13	EPA 3050B	1,6010D	BV
Magnesium, Total	1620		mg/kg	8.01	1.23	2	10/17/20 12:00	10/19/20 21:13	EPA 3050B	1,6010D	BV
Manganese, Total	305		mg/kg	0.801	0.127	2	10/17/20 12:00	10/19/20 21:13	EPA 3050B	1,6010D	BV
Mercury, Total	ND		mg/kg	0.066	0.043	1	10/15/20 09:50	10/15/20 15:50	EPA 7471B	1,7471B	EW
Nickel, Total	9.94		mg/kg	2.00	0.194	2	10/17/20 12:00	10/19/20 21:13	EPA 3050B	1,6010D	BV
Potassium, Total	517		mg/kg	200	11.5	2	10/17/20 12:00	10/19/20 21:13	EPA 3050B	1,6010D	BV
Selenium, Total	ND		mg/kg	1.60	0.207	2	10/17/20 12:00	10/19/20 21:13	EPA 3050B	1,6010D	BV
Silver, Total	ND		mg/kg	0.801	0.227	2	10/17/20 12:00	10/19/20 21:13	EPA 3050B	1,6010D	BV
Sodium, Total	24.0	J	mg/kg	160	2.52	2	10/17/20 12:00	10/19/20 21:13	EPA 3050B	1,6010D	BV
Thallium, Total	ND		mg/kg	1.60	0.252	2	10/17/20 12:00	10/19/20 21:13	EPA 3050B	1,6010D	BV
Vanadium, Total	19.4		mg/kg	0.801	0.163	2	10/17/20 12:00	10/19/20 21:13	EPA 3050B	1,6010D	BV
Zinc, Total	21.1		mg/kg	4.01	0.235	2	10/17/20 12:00	10/19/20 21:13	EPA 3050B	1,6010D	BV



Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-09

Date Collected: 10/13/20 12:35

Client ID: SB-08 (0'-2')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4090		mg/kg	8.40	2.27	2	10/17/20 12:00	10/19/20 21:53	EPA 3050B	1,6010D	BV
Antimony, Total	0.672	J	mg/kg	4.20	0.319	2	10/17/20 12:00	10/19/20 21:53	EPA 3050B	1,6010D	BV
Arsenic, Total	1.93		mg/kg	0.840	0.175	2	10/17/20 12:00	10/19/20 21:53	EPA 3050B	1,6010D	BV
Barium, Total	43.2		mg/kg	0.840	0.146	2	10/17/20 12:00	10/19/20 21:53	EPA 3050B	1,6010D	BV
Beryllium, Total	0.269	J	mg/kg	0.420	0.028	2	10/17/20 12:00	10/19/20 21:53	EPA 3050B	1,6010D	BV
Cadmium, Total	ND		mg/kg	0.840	0.082	2	10/17/20 12:00	10/19/20 21:53	EPA 3050B	1,6010D	BV
Calcium, Total	4240		mg/kg	8.40	2.94	2	10/17/20 12:00	10/19/20 21:53	EPA 3050B	1,6010D	BV
Chromium, Total	9.56		mg/kg	0.840	0.081	2	10/17/20 12:00	10/19/20 21:53	EPA 3050B	1,6010D	BV
Cobalt, Total	4.43		mg/kg	1.68	0.139	2	10/17/20 12:00	10/19/20 21:53	EPA 3050B	1,6010D	BV
Copper, Total	14.3		mg/kg	0.840	0.217	2	10/17/20 12:00	10/19/20 21:53	EPA 3050B	1,6010D	BV
Iron, Total	16000		mg/kg	4.20	0.759	2	10/17/20 12:00	10/19/20 21:53	EPA 3050B	1,6010D	BV
Lead, Total	30.8		mg/kg	4.20	0.225	2	10/17/20 12:00	10/19/20 21:53	EPA 3050B	1,6010D	BV
Magnesium, Total	1710		mg/kg	8.40	1.29	2	10/17/20 12:00	10/19/20 21:53	EPA 3050B	1,6010D	BV
Manganese, Total	333		mg/kg	0.840	0.134	2	10/17/20 12:00	10/19/20 21:53	EPA 3050B	1,6010D	BV
Mercury, Total	0.113		mg/kg	0.069	0.045	1	10/15/20 09:50	10/15/20 15:53	EPA 7471B	1,7471B	EW
Nickel, Total	8.73		mg/kg	2.10	0.203	2	10/17/20 12:00	10/19/20 21:53	EPA 3050B	1,6010D	BV
Potassium, Total	407		mg/kg	210	12.1	2	10/17/20 12:00	10/19/20 21:53	EPA 3050B	1,6010D	BV
Selenium, Total	ND		mg/kg	1.68	0.217	2	10/17/20 12:00	10/19/20 21:53	EPA 3050B	1,6010D	BV
Silver, Total	ND		mg/kg	0.840	0.238	2	10/17/20 12:00	10/19/20 21:53	EPA 3050B	1,6010D	BV
Sodium, Total	43.7	J	mg/kg	168	2.65	2	10/17/20 12:00	10/19/20 21:53	EPA 3050B	1,6010D	BV
Thallium, Total	ND		mg/kg	1.68	0.265	2	10/17/20 12:00	10/19/20 21:53	EPA 3050B	1,6010D	BV
Vanadium, Total	20.7		mg/kg	0.840	0.170	2	10/17/20 12:00	10/19/20 21:53	EPA 3050B	1,6010D	BV
Zinc, Total	42.2		mg/kg	4.20	0.246	2	10/17/20 12:00	10/19/20 21:53	EPA 3050B	1,6010D	BV



Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-10

Date Collected: 10/13/20 12:55

Client ID: SB-08 (13'-15')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	8070		mg/kg	8.60	2.32	2	10/17/20 12:00	10/19/20 21:57	EPA 3050B	1,6010D	BV
Antimony, Total	1.07	J	mg/kg	4.30	0.327	2	10/17/20 12:00	10/19/20 21:57	EPA 3050B	1,6010D	BV
Arsenic, Total	2.31		mg/kg	0.860	0.179	2	10/17/20 12:00	10/19/20 21:57	EPA 3050B	1,6010D	BV
Barium, Total	15.6		mg/kg	0.860	0.150	2	10/17/20 12:00	10/19/20 21:57	EPA 3050B	1,6010D	BV
Beryllium, Total	0.482		mg/kg	0.430	0.028	2	10/17/20 12:00	10/19/20 21:57	EPA 3050B	1,6010D	BV
Cadmium, Total	ND		mg/kg	0.860	0.084	2	10/17/20 12:00	10/19/20 21:57	EPA 3050B	1,6010D	BV
Calcium, Total	781		mg/kg	8.60	3.01	2	10/17/20 12:00	10/19/20 21:57	EPA 3050B	1,6010D	BV
Chromium, Total	27.2		mg/kg	0.860	0.083	2	10/17/20 12:00	10/19/20 21:57	EPA 3050B	1,6010D	BV
Cobalt, Total	6.19		mg/kg	1.72	0.143	2	10/17/20 12:00	10/19/20 21:57	EPA 3050B	1,6010D	BV
Copper, Total	26.9		mg/kg	0.860	0.222	2	10/17/20 12:00	10/19/20 21:57	EPA 3050B	1,6010D	BV
Iron, Total	33400		mg/kg	4.30	0.776	2	10/17/20 12:00	10/19/20 21:57	EPA 3050B	1,6010D	BV
Lead, Total	6.37		mg/kg	4.30	0.230	2	10/17/20 12:00	10/19/20 21:57	EPA 3050B	1,6010D	BV
Magnesium, Total	1520		mg/kg	8.60	1.32	2	10/17/20 12:00	10/19/20 21:57	EPA 3050B	1,6010D	BV
Manganese, Total	186		mg/kg	0.860	0.137	2	10/17/20 12:00	10/19/20 21:57	EPA 3050B	1,6010D	BV
Mercury, Total	ND		mg/kg	0.072	0.047	1	10/15/20 09:50	10/15/20 15:57	EPA 7471B	1,7471B	EW
Nickel, Total	12.9		mg/kg	2.15	0.208	2	10/17/20 12:00	10/19/20 21:57	EPA 3050B	1,6010D	BV
Potassium, Total	516		mg/kg	215	12.4	2	10/17/20 12:00	10/19/20 21:57	EPA 3050B	1,6010D	BV
Selenium, Total	ND		mg/kg	1.72	0.222	2	10/17/20 12:00	10/19/20 21:57	EPA 3050B	1,6010D	BV
Silver, Total	ND		mg/kg	0.860	0.243	2	10/17/20 12:00	10/19/20 21:57	EPA 3050B	1,6010D	BV
Sodium, Total	27.3	J	mg/kg	172	2.71	2	10/17/20 12:00	10/19/20 21:57	EPA 3050B	1,6010D	BV
Thallium, Total	ND		mg/kg	1.72	0.271	2	10/17/20 12:00	10/19/20 21:57	EPA 3050B	1,6010D	BV
Vanadium, Total	35.1		mg/kg	0.860	0.174	2	10/17/20 12:00	10/19/20 21:57	EPA 3050B	1,6010D	BV
Zinc, Total	48.8		mg/kg	4.30	0.252	2	10/17/20 12:00	10/19/20 21:57	EPA 3050B	1,6010D	BV



Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-11

Date Collected: 10/13/20 13:05

Client ID: SB-09 (0'-2')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4900		mg/kg	8.70	2.35	2	10/17/20 12:00	10/19/20 22:02	EPA 3050B	1,6010D	BV
Antimony, Total	1.10	J	mg/kg	4.35	0.331	2	10/17/20 12:00	10/19/20 22:02	EPA 3050B	1,6010D	BV
Arsenic, Total	2.97		mg/kg	0.870	0.181	2	10/17/20 12:00	10/19/20 22:02	EPA 3050B	1,6010D	BV
Barium, Total	384		mg/kg	0.870	0.151	2	10/17/20 12:00	10/19/20 22:02	EPA 3050B	1,6010D	BV
Beryllium, Total	0.270	J	mg/kg	0.435	0.029	2	10/17/20 12:00	10/19/20 22:02	EPA 3050B	1,6010D	BV
Cadmium, Total	0.087	J	mg/kg	0.870	0.085	2	10/17/20 12:00	10/19/20 22:02	EPA 3050B	1,6010D	BV
Calcium, Total	9870		mg/kg	8.70	3.04	2	10/17/20 12:00	10/19/20 22:02	EPA 3050B	1,6010D	BV
Chromium, Total	10.9		mg/kg	0.870	0.084	2	10/17/20 12:00	10/19/20 22:02	EPA 3050B	1,6010D	BV
Cobalt, Total	3.94		mg/kg	1.74	0.144	2	10/17/20 12:00	10/19/20 22:02	EPA 3050B	1,6010D	BV
Copper, Total	32.1		mg/kg	0.870	0.224	2	10/17/20 12:00	10/19/20 22:02	EPA 3050B	1,6010D	BV
Iron, Total	13500		mg/kg	4.35	0.786	2	10/17/20 12:00	10/19/20 22:02	EPA 3050B	1,6010D	BV
Lead, Total	393		mg/kg	4.35	0.233	2	10/17/20 12:00	10/19/20 22:02	EPA 3050B	1,6010D	BV
Magnesium, Total	4680		mg/kg	8.70	1.34	2	10/17/20 12:00	10/19/20 22:02	EPA 3050B	1,6010D	BV
Manganese, Total	251		mg/kg	0.870	0.138	2	10/17/20 12:00	10/19/20 22:02	EPA 3050B	1,6010D	BV
Mercury, Total	0.255		mg/kg	0.071	0.046	1	10/15/20 09:50	10/15/20 16:00	EPA 7471B	1,7471B	EW
Nickel, Total	9.01		mg/kg	2.18	0.211	2	10/17/20 12:00	10/19/20 22:02	EPA 3050B	1,6010D	BV
Potassium, Total	378		mg/kg	218	12.5	2	10/17/20 12:00	10/19/20 22:02	EPA 3050B	1,6010D	BV
Selenium, Total	0.357	J	mg/kg	1.74	0.224	2	10/17/20 12:00	10/19/20 22:02	EPA 3050B	1,6010D	BV
Silver, Total	ND		mg/kg	0.870	0.246	2	10/17/20 12:00	10/19/20 22:02	EPA 3050B	1,6010D	BV
Sodium, Total	90.0	J	mg/kg	174	2.74	2	10/17/20 12:00	10/19/20 22:02	EPA 3050B	1,6010D	BV
Thallium, Total	ND		mg/kg	1.74	0.274	2	10/17/20 12:00	10/19/20 22:02	EPA 3050B	1,6010D	BV
Vanadium, Total	17.8		mg/kg	0.870	0.177	2	10/17/20 12:00	10/19/20 22:02	EPA 3050B	1,6010D	BV
Zinc, Total	337		mg/kg	4.35	0.255	2	10/17/20 12:00	10/19/20 22:02	EPA 3050B	1,6010D	BV



Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-12

Date Collected: 10/13/20 13:20

Client ID: SB-09 (13'-15')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 97%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4140		mg/kg	7.90	2.13	2	10/17/20 12:00	10/19/20 22:55	EPA 3050B	1,6010D	BV
Antimony, Total	0.798	J	mg/kg	3.95	0.300	2	10/17/20 12:00	10/19/20 22:55	EPA 3050B	1,6010D	BV
Arsenic, Total	0.869		mg/kg	0.790	0.164	2	10/17/20 12:00	10/19/20 22:55	EPA 3050B	1,6010D	BV
Barium, Total	44.3		mg/kg	0.790	0.137	2	10/17/20 12:00	10/19/20 22:55	EPA 3050B	1,6010D	BV
Beryllium, Total	0.300	J	mg/kg	0.395	0.026	2	10/17/20 12:00	10/19/20 22:55	EPA 3050B	1,6010D	BV
Cadmium, Total	ND		mg/kg	0.790	0.077	2	10/17/20 12:00	10/19/20 22:55	EPA 3050B	1,6010D	BV
Calcium, Total	746		mg/kg	7.90	2.76	2	10/17/20 12:00	10/19/20 22:55	EPA 3050B	1,6010D	BV
Chromium, Total	9.81		mg/kg	0.790	0.076	2	10/17/20 12:00	10/19/20 22:55	EPA 3050B	1,6010D	BV
Cobalt, Total	4.34		mg/kg	1.58	0.131	2	10/17/20 12:00	10/19/20 22:55	EPA 3050B	1,6010D	BV
Copper, Total	12.6		mg/kg	0.790	0.204	2	10/17/20 12:00	10/19/20 22:55	EPA 3050B	1,6010D	BV
Iron, Total	12400		mg/kg	3.95	0.713	2	10/17/20 12:00	10/19/20 22:55	EPA 3050B	1,6010D	BV
Lead, Total	5.12		mg/kg	3.95	0.212	2	10/17/20 12:00	10/19/20 22:55	EPA 3050B	1,6010D	BV
Magnesium, Total	1720		mg/kg	7.90	1.22	2	10/17/20 12:00	10/19/20 22:55	EPA 3050B	1,6010D	BV
Manganese, Total	535		mg/kg	0.790	0.126	2	10/17/20 12:00	10/19/20 22:55	EPA 3050B	1,6010D	BV
Mercury, Total	ND		mg/kg	0.065	0.042	1	10/15/20 09:50	10/15/20 16:03	EPA 7471B	1,7471B	EW
Nickel, Total	8.73		mg/kg	1.97	0.191	2	10/17/20 12:00	10/19/20 22:55	EPA 3050B	1,6010D	BV
Potassium, Total	580		mg/kg	197	11.4	2	10/17/20 12:00	10/19/20 22:55	EPA 3050B	1,6010D	BV
Selenium, Total	ND		mg/kg	1.58	0.204	2	10/17/20 12:00	10/19/20 22:55	EPA 3050B	1,6010D	BV
Silver, Total	ND		mg/kg	0.790	0.224	2	10/17/20 12:00	10/19/20 22:55	EPA 3050B	1,6010D	BV
Sodium, Total	42.7	J	mg/kg	158	2.49	2	10/17/20 12:00	10/19/20 22:55	EPA 3050B	1,6010D	BV
Thallium, Total	ND		mg/kg	1.58	0.249	2	10/17/20 12:00	10/19/20 22:55	EPA 3050B	1,6010D	BV
Vanadium, Total	16.2		mg/kg	0.790	0.160	2	10/17/20 12:00	10/19/20 22:55	EPA 3050B	1,6010D	BV
Zinc, Total	20.7		mg/kg	3.95	0.231	2	10/17/20 12:00	10/19/20 22:55	EPA 3050B	1,6010D	BV



Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-14

Date Collected: 10/13/20 00:00

Client ID: DUP 101320

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	9340		mg/kg	8.73	2.36	2	10/17/20 12:00	10/19/20 22:59	EPA 3050B	1,6010D	BV
Antimony, Total	0.690	J	mg/kg	4.37	0.332	2	10/17/20 12:00	10/19/20 22:59	EPA 3050B	1,6010D	BV
Arsenic, Total	1.37		mg/kg	0.873	0.182	2	10/17/20 12:00	10/19/20 22:59	EPA 3050B	1,6010D	BV
Barium, Total	27.7		mg/kg	0.873	0.152	2	10/17/20 12:00	10/19/20 22:59	EPA 3050B	1,6010D	BV
Beryllium, Total	0.550		mg/kg	0.437	0.029	2	10/17/20 12:00	10/19/20 22:59	EPA 3050B	1,6010D	BV
Cadmium, Total	ND		mg/kg	0.873	0.086	2	10/17/20 12:00	10/19/20 22:59	EPA 3050B	1,6010D	BV
Calcium, Total	662		mg/kg	8.73	3.06	2	10/17/20 12:00	10/19/20 22:59	EPA 3050B	1,6010D	BV
Chromium, Total	24.7		mg/kg	0.873	0.084	2	10/17/20 12:00	10/19/20 22:59	EPA 3050B	1,6010D	BV
Cobalt, Total	8.25		mg/kg	1.75	0.145	2	10/17/20 12:00	10/19/20 22:59	EPA 3050B	1,6010D	BV
Copper, Total	18.1		mg/kg	0.873	0.225	2	10/17/20 12:00	10/19/20 22:59	EPA 3050B	1,6010D	BV
Iron, Total	25700		mg/kg	4.37	0.788	2	10/17/20 12:00	10/19/20 22:59	EPA 3050B	1,6010D	BV
Lead, Total	5.77		mg/kg	4.37	0.234	2	10/17/20 12:00	10/19/20 22:59	EPA 3050B	1,6010D	BV
Magnesium, Total	3250		mg/kg	8.73	1.34	2	10/17/20 12:00	10/19/20 22:59	EPA 3050B	1,6010D	BV
Manganese, Total	291		mg/kg	0.873	0.139	2	10/17/20 12:00	10/19/20 22:59	EPA 3050B	1,6010D	BV
Mercury, Total	ND		mg/kg	0.071	0.046	1	10/15/20 09:50	10/15/20 16:07	EPA 7471B	1,7471B	EW
Nickel, Total	13.5		mg/kg	2.18	0.211	2	10/17/20 12:00	10/19/20 22:59	EPA 3050B	1,6010D	BV
Potassium, Total	1100		mg/kg	218	12.6	2	10/17/20 12:00	10/19/20 22:59	EPA 3050B	1,6010D	BV
Selenium, Total	ND		mg/kg	1.75	0.225	2	10/17/20 12:00	10/19/20 22:59	EPA 3050B	1,6010D	BV
Silver, Total	ND		mg/kg	0.873	0.247	2	10/17/20 12:00	10/19/20 22:59	EPA 3050B	1,6010D	BV
Sodium, Total	32.0	J	mg/kg	175	2.75	2	10/17/20 12:00	10/19/20 22:59	EPA 3050B	1,6010D	BV
Thallium, Total	ND		mg/kg	1.75	0.275	2	10/17/20 12:00	10/19/20 22:59	EPA 3050B	1,6010D	BV
Vanadium, Total	33.9		mg/kg	0.873	0.177	2	10/17/20 12:00	10/19/20 22:59	EPA 3050B	1,6010D	BV
Zinc, Total	28.5		mg/kg	4.37	0.256	2	10/17/20 12:00	10/19/20 22:59	EPA 3050B	1,6010D	BV



Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-12,14 Batch: WG1422075-1									
Mercury, Total	ND	mg/kg	0.083	0.054	1	10/15/20 09:50	10/15/20 14:51	1,7471B	EW

Prep Information

Digestion Method: EPA 7471B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-12,14 Batch: WG1423025-1									
Aluminum, Total	ND	mg/kg	4.00	1.08	1	10/17/20 12:00	10/19/20 20:34	1,6010D	BV
Antimony, Total	ND	mg/kg	2.00	0.152	1	10/17/20 12:00	10/19/20 20:34	1,6010D	BV
Arsenic, Total	ND	mg/kg	0.400	0.083	1	10/17/20 12:00	10/19/20 20:34	1,6010D	BV
Barium, Total	ND	mg/kg	0.400	0.070	1	10/17/20 12:00	10/19/20 20:34	1,6010D	BV
Beryllium, Total	ND	mg/kg	0.200	0.013	1	10/17/20 12:00	10/19/20 20:34	1,6010D	BV
Cadmium, Total	ND	mg/kg	0.400	0.039	1	10/17/20 12:00	10/19/20 20:34	1,6010D	BV
Calcium, Total	ND	mg/kg	4.00	1.40	1	10/17/20 12:00	10/19/20 20:34	1,6010D	BV
Chromium, Total	ND	mg/kg	0.400	0.038	1	10/17/20 12:00	10/19/20 20:34	1,6010D	BV
Cobalt, Total	ND	mg/kg	0.800	0.066	1	10/17/20 12:00	10/19/20 20:34	1,6010D	BV
Copper, Total	ND	mg/kg	0.400	0.103	1	10/17/20 12:00	10/19/20 20:34	1,6010D	BV
Iron, Total	0.392 J	mg/kg	2.00	0.361	1	10/17/20 12:00	10/19/20 20:34	1,6010D	BV
Lead, Total	ND	mg/kg	2.00	0.107	1	10/17/20 12:00	10/19/20 20:34	1,6010D	BV
Magnesium, Total	ND	mg/kg	4.00	0.616	1	10/17/20 12:00	10/19/20 20:34	1,6010D	BV
Manganese, Total	0.092 J	mg/kg	0.400	0.064	1	10/17/20 12:00	10/19/20 20:34	1,6010D	BV
Nickel, Total	ND	mg/kg	1.00	0.097	1	10/17/20 12:00	10/19/20 20:34	1,6010D	BV
Potassium, Total	ND	mg/kg	100	5.76	1	10/17/20 12:00	10/19/20 20:34	1,6010D	BV
Selenium, Total	ND	mg/kg	0.800	0.103	1	10/17/20 12:00	10/19/20 20:34	1,6010D	BV
Silver, Total	ND	mg/kg	0.400	0.113	1	10/17/20 12:00	10/19/20 20:34	1,6010D	BV
Sodium, Total	ND	mg/kg	80.0	1.26	1	10/17/20 12:00	10/19/20 20:34	1,6010D	BV
Thallium, Total	ND	mg/kg	0.800	0.126	1	10/17/20 12:00	10/19/20 20:34	1,6010D	BV
Vanadium, Total	ND	mg/kg	0.400	0.081	1	10/17/20 12:00	10/19/20 20:34	1,6010D	BV
Zinc, Total	ND	mg/kg	2.00	0.117	1	10/17/20 12:00	10/19/20 20:34	1,6010D	BV

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 3050B

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE 11 ESH

Lab Number: L2043863

Project Number: 26979.01

Report Date: 10/20/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-12,14 Batch: WG1422075-2 SRM Lot Number: D109-540								
Mercury, Total	105		-		60-140	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE 11 ESH

Project Number: 26979.01

Lab Number: L2043863

Report Date: 10/20/20

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-12,14 Batch: WG1423025-2 SRM Lot Number: D109-540					
Aluminum, Total	69	-	50-150	-	
Antimony, Total	130	-	19-250	-	
Arsenic, Total	102	-	70-130	-	
Barium, Total	96	-	75-125	-	
Beryllium, Total	97	-	75-125	-	
Cadmium, Total	95	-	75-125	-	
Calcium, Total	97	-	73-128	-	
Chromium, Total	98	-	70-130	-	
Cobalt, Total	98	-	75-125	-	
Copper, Total	99	-	75-125	-	
Iron, Total	105	-	35-165	-	
Lead, Total	100	-	72-128	-	
Magnesium, Total	90	-	62-138	-	
Manganese, Total	99	-	74-126	-	
Nickel, Total	99	-	70-130	-	
Potassium, Total	87	-	59-141	-	
Selenium, Total	101	-	68-132	-	
Silver, Total	101	-	68-131	-	
Sodium, Total	101	-	35-165	-	
Thallium, Total	99	-	68-131	-	
Vanadium, Total	102	-	59-141	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE 11 ESH

Project Number: 26979.01

Lab Number: L2043863

Report Date: 10/20/20

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-12,14 Batch: WG1423025-2 SRM Lot Number: D109-540					
Zinc, Total	100	-	70-130	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-12,14 QC Batch ID: WG1422075-3 QC Sample: L2043885-01 Client ID: MS Sample											
Mercury, Total	0.643	0.135	0.889	182	Q	-	-		80-120	-	20

Matrix Spike Analysis Batch Quality Control

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-12,14 QC Batch ID: WG1423025-3 QC Sample: L2043924-03 Client ID: MS Sample									
Aluminum, Total	3740	165	4840	667	Q	-	75-125	-	20
Antimony, Total	0.959J	41.2	24.4	59	Q	-	75-125	-	20
Arsenic, Total	0.538	9.9	7.78	73	Q	-	75-125	-	20
Barium, Total	37.4	165	160	74	Q	-	75-125	-	20
Beryllium, Total	0.416	4.12	3.52	75		-	75-125	-	20
Cadmium, Total	ND	4.21	2.84	67	Q	-	75-125	-	20
Calcium, Total	692	825	1400	86		-	75-125	-	20
Chromium, Total	12.3	16.5	24.8	76		-	75-125	-	20
Cobalt, Total	6.84	41.2	35.6	70	Q	-	75-125	-	20
Copper, Total	11.7	20.6	27.4	76		-	75-125	-	20
Iron, Total	23600	82.5	20200	0	Q	-	75-125	-	20
Lead, Total	14.2	42.1	45.3	74	Q	-	75-125	-	20
Magnesium, Total	1060	825	1820	92		-	75-125	-	20
Manganese, Total	536	41.2	408	0	Q	-	75-125	-	20
Nickel, Total	12.9	41.2	40.6	67	Q	-	75-125	-	20
Potassium, Total	772	825	1510	89		-	75-125	-	20
Selenium, Total	ND	9.9	7.14	72	Q	-	75-125	-	20
Silver, Total	ND	24.7	18.5	75		-	75-125	-	20
Sodium, Total	31.3J	825	690	84		-	75-125	-	20
Thallium, Total	ND	9.9	7.18	72	Q	-	75-125	-	20
Vanadium, Total	22.4	41.2	51.4	70	Q	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits	
Total Metals - Mansfield Lab Associated sample(s): 01-12,14 QC Batch ID: WG1423025-3 QC Sample: L2043924-03 Client ID: MS Sample										
Zinc, Total	40.5	41.2	66.8	64	Q	-	-	75-125	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE 11 ESH

Project Number: 26979.01

Lab Number: L2043863

Report Date: 10/20/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-12,14 QC Batch ID: WG1422075-4 QC Sample: L2043885-01 Client ID: DUP Sample						
Mercury, Total	0.643	0.544	mg/kg	17		20
Total Metals - Mansfield Lab Associated sample(s): 01-12,14 QC Batch ID: WG1423025-4 QC Sample: L2043924-03 Client ID: DUP Sample						
Lead, Total	14.2	21.4	mg/kg	40	Q	20

INORGANICS & MISCELLANEOUS

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-01

Date Collected: 10/13/20 09:25

Client ID: SB-04 (0'-2')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	93.2		%	0.100	NA	1	-	10/14/20 12:04	121,2540G	RI



Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-02

Date Collected: 10/13/20 10:15

Client ID: SB-04 (13'-15')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	95.6		%	0.100	NA	1	-	10/14/20 12:04	121,2540G	RI



Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-03

Date Collected: 10/13/20 10:35

Client ID: SB-05 (0'-2')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.6		%	0.100	NA	1	-	10/14/20 12:04	121,2540G	RI



Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-04
Client ID: SB-05 (13'-15')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 10:58
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	95.7		%	0.100	NA	1	-	10/14/20 12:04	121,2540G	RI



Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-05
Client ID: SB-06 (0'-2')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 11:15
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.8		%	0.100	NA	1	-	10/14/20 12:04	121,2540G	RI



Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-06
Client ID: SB-06 (13'-15')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 11:35
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90.8		%	0.100	NA	1	-	10/14/20 12:04	121,2540G	RI



Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-07

Date Collected: 10/13/20 11:55

Client ID: SB-07 (0'-2')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.1		%	0.100	NA	1	-	10/14/20 12:04	121,2540G	RI



Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-08
Client ID: SB-07 (13'-15')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 12:18
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	96.6		%	0.100	NA	1	-	10/14/20 12:04	121,2540G	RI



Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-09

Date Collected: 10/13/20 12:35

Client ID: SB-08 (0'-2')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	91.4		%	0.100	NA	1	-	10/14/20 12:04	121,2540G	RI



Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-10
Client ID: SB-08 (13'-15')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 12:55
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.5		%	0.100	NA	1	-	10/14/20 12:04	121,2540G	RI



Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

SAMPLE RESULTS

Lab ID: L2043863-11
Client ID: SB-09 (0'-2')
Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Date Collected: 10/13/20 13:05
Date Received: 10/13/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	88.8		%	0.100	NA	1	-	10/14/20 12:04	121,2540G	RI



Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-12

Date Collected: 10/13/20 13:20

Client ID: SB-09 (13'-15')

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	96.5		%	0.100	NA	1	-	10/14/20 12:04	121,2540G	RI



Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**SAMPLE RESULTS**

Lab ID: L2043863-14

Date Collected: 10/13/20 00:00

Client ID: DUP 101320

Date Received: 10/13/20

Sample Location: BETWEEN ROCKAWAY AVE + CHESTER ST

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	88.5		%	0.100	NA	1	-	10/14/20 12:04	121,2540G	RI



Lab Duplicate Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE 11 ESH

Project Number: 26979.01

Lab Number: L2043863

Report Date: 10/20/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-12,14 QC Batch ID: WG1422002-1 QC Sample: L2041734-06 Client ID: DUP Sample						
Solids, Total	91.0	90.7	%	0		20

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2043863-01A	Vial MeOH preserved	A	NA		3.6	Y	Absent		NYTCL-8260HLW(14)
L2043863-01B	Vial water preserved	A	NA		3.6	Y	Absent	14-OCT-20 12:16	NYTCL-8260HLW(14)
L2043863-01C	Vial water preserved	A	NA		3.6	Y	Absent	14-OCT-20 12:16	NYTCL-8260HLW(14)
L2043863-01D	Plastic 2oz unpreserved for TS	A	NA		3.6	Y	Absent		TS(7)
L2043863-01E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.6	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),NI-TI(180),TL-TI(180),AL-TI(180),CR-TI(180),CU-TI(180),ZN-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),CO-TI(180),V-TI(180),MG-TI(180),HG-T(28),MN-TI(180),FE-TI(180),CA-TI(180),K-TI(180),CD-TI(180),NA-TI(180)
L2043863-01F	Glass 250ml/8oz unpreserved	A	NA		3.6	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2043863-02A	Vial MeOH preserved	A	NA		3.6	Y	Absent		NYTCL-8260HLW(14)
L2043863-02B	Vial water preserved	A	NA		3.6	Y	Absent	14-OCT-20 12:16	NYTCL-8260HLW(14)
L2043863-02C	Vial water preserved	A	NA		3.6	Y	Absent	14-OCT-20 12:16	NYTCL-8260HLW(14)
L2043863-02D	Plastic 2oz unpreserved for TS	A	NA		3.6	Y	Absent		TS(7)
L2043863-02E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.6	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),AL-TI(180),TL-TI(180),CR-TI(180),NI-TI(180),SE-TI(180),PB-TI(180),SB-TI(180),ZN-TI(180),CU-TI(180),CO-TI(180),V-TI(180),HG-T(28),FE-TI(180),MG-TI(180),MN-TI(180),CD-TI(180),CA-TI(180),NA-TI(180),K-TI(180)
L2043863-02F	Glass 250ml/8oz unpreserved	A	NA		3.6	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2043863-03A	Vial MeOH preserved	A	NA		3.6	Y	Absent		NYTCL-8260HLW(14)
L2043863-03B	Vial water preserved	A	NA		3.6	Y	Absent	14-OCT-20 12:16	NYTCL-8260HLW(14)
L2043863-03C	Vial water preserved	A	NA		3.6	Y	Absent	14-OCT-20 12:16	NYTCL-8260HLW(14)
L2043863-03D	Plastic 2oz unpreserved for TS	A	NA		3.6	Y	Absent		TS(7)

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Serial_No: 10202013:07
Lab Number: L2043863
Report Date: 10/20/20

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2043863-03E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.6	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),NI-TI(180),AL-TI(180),CR-TI(180),TL-TI(180),CU-TI(180),SB-TI(180),PB-TI(180),SE-TI(180),ZN-TI(180),V-TI(180),CO-TI(180),HG-T(28),MN-TI(180),MG-TI(180),FE-TI(180),CA-TI(180),NA-TI(180),K-TI(180),CD-TI(180)
L2043863-03F	Glass 250ml/8oz unpreserved	A	NA		3.6	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2043863-04A	Vial MeOH preserved	A	NA		3.6	Y	Absent		NYTCL-8260HLW(14)
L2043863-04B	Vial water preserved	A	NA		3.6	Y	Absent	14-OCT-20 12:16	NYTCL-8260HLW(14)
L2043863-04C	Vial water preserved	A	NA		3.6	Y	Absent	14-OCT-20 12:16	NYTCL-8260HLW(14)
L2043863-04D	Plastic 2oz unpreserved for TS	A	NA		3.6	Y	Absent		TS(7)
L2043863-04E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.6	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),CR-TI(180),AL-TI(180),TL-TI(180),NI-TI(180),SB-TI(180),SE-TI(180),CU-TI(180),PB-TI(180),ZN-TI(180),V-TI(180),CO-TI(180),MN-TI(180),MG-TI(180),FE-TI(180),HG-T(28),NA-TI(180),K-TI(180),CA-TI(180),CD-TI(180)
L2043863-04F	Glass 250ml/8oz unpreserved	A	NA		3.6	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2043863-05A	Vial MeOH preserved	A	NA		3.6	Y	Absent		NYTCL-8260HLW(14)
L2043863-05B	Vial water preserved	A	NA		3.6	Y	Absent	14-OCT-20 12:16	NYTCL-8260HLW(14)
L2043863-05C	Vial water preserved	A	NA		3.6	Y	Absent	14-OCT-20 12:16	NYTCL-8260HLW(14)
L2043863-05D	Plastic 2oz unpreserved for TS	A	NA		3.6	Y	Absent		TS(7)
L2043863-05E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.6	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),AL-TI(180),TL-TI(180),SE-TI(180),ZN-TI(180),CU-TI(180),SB-TI(180),PB-TI(180),CO-TI(180),V-TI(180),MN-TI(180),FE-TI(180),HG-T(28),MG-TI(180),CA-TI(180),K-TI(180),NA-TI(180),CD-TI(180)
L2043863-05F	Glass 250ml/8oz unpreserved	A	NA		3.6	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2043863-06A	Vial MeOH preserved	B	NA		2.6	Y	Absent		NYTCL-8260HLW(14)
L2043863-06B	Vial water preserved	B	NA		2.6	Y	Absent	14-OCT-20 12:16	NYTCL-8260HLW(14)
L2043863-06C	Vial water preserved	B	NA		2.6	Y	Absent	14-OCT-20 12:16	NYTCL-8260HLW(14)
L2043863-06D	Plastic 2oz unpreserved for TS	B	NA		2.6	Y	Absent		TS(7)

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Serial_No:10202013:07
Lab Number: L2043863
Report Date: 10/20/20

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2043863-06E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		2.6	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),AL-TI(180),PB-TI(180),SB-TI(180),CU-TI(180),ZN-TI(180),SE-TI(180),CO-TI(180),V-TI(180),HG-T(28),MN-TI(180),MG-TI(180),FE-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L2043863-06F	Glass 250ml/8oz unpreserved	B	NA		2.6	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2043863-07A	Vial MeOH preserved	B	NA		2.6	Y	Absent		NYTCL-8260HLW(14)
L2043863-07B	Vial water preserved	B	NA		2.6	Y	Absent	14-OCT-20 12:16	NYTCL-8260HLW(14)
L2043863-07C	Vial water preserved	B	NA		2.6	Y	Absent	14-OCT-20 12:16	NYTCL-8260HLW(14)
L2043863-07D	Plastic 2oz unpreserved for TS	B	NA		2.6	Y	Absent		TS(7)
L2043863-07E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		2.6	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),AL-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),V-TI(180),CO-TI(180),FE-TI(180),MG-TI(180),HG-T(28),MN-TI(180),NA-TI(180),CA-TI(180),CD-TI(180),K-TI(180)
L2043863-07F	Glass 250ml/8oz unpreserved	B	NA		2.6	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2043863-08A	Vial MeOH preserved	B	NA		2.6	Y	Absent		NYTCL-8260HLW(14)
L2043863-08B	Vial water preserved	B	NA		2.6	Y	Absent	14-OCT-20 12:16	NYTCL-8260HLW(14)
L2043863-08C	Vial water preserved	B	NA		2.6	Y	Absent	14-OCT-20 12:16	NYTCL-8260HLW(14)
L2043863-08D	Plastic 2oz unpreserved for TS	B	NA		2.6	Y	Absent		TS(7)
L2043863-08E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		2.6	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),AL-TI(180),NI-TI(180),TL-TI(180),CR-TI(180),CU-TI(180),SE-TI(180),SB-TI(180),ZN-TI(180),PB-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),K-TI(180),CD-TI(180),NA-TI(180)
L2043863-08F	Glass 250ml/8oz unpreserved	B	NA		2.6	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2043863-09A	Vial MeOH preserved	B	NA		2.6	Y	Absent		NYTCL-8260HLW(14)
L2043863-09B	Vial water preserved	B	NA		2.6	Y	Absent	14-OCT-20 12:16	NYTCL-8260HLW(14)
L2043863-09C	Vial water preserved	B	NA		2.6	Y	Absent	14-OCT-20 12:16	NYTCL-8260HLW(14)
L2043863-09D	Plastic 2oz unpreserved for TS	B	NA		2.6	Y	Absent		TS(7)

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Serial_No: 10202013:07
Lab Number: L2043863
Report Date: 10/20/20

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2043863-09E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		2.6	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),NI-TI(180),TL-TI(180),AL-TI(180),CR-TI(180),ZN-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),CO-TI(180),V-TI(180),MG-TI(180),FE-TI(180),HG-T(28),MN-TI(180),CA-TI(180),K-TI(180),NA-TI(180),CD-TI(180)
L2043863-09F	Glass 250ml/8oz unpreserved	B	NA		2.6	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2043863-10A	Vial MeOH preserved	B	NA		2.6	Y	Absent		NYTCL-8260HLW(14)
L2043863-10B	Vial water preserved	B	NA		2.6	Y	Absent	14-OCT-20 12:16	NYTCL-8260HLW(14)
L2043863-10C	Vial water preserved	B	NA		2.6	Y	Absent	14-OCT-20 12:16	NYTCL-8260HLW(14)
L2043863-10D	Plastic 2oz unpreserved for TS	B	NA		2.6	Y	Absent		TS(7)
L2043863-10E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		2.6	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),CR-TI(180),TL-TI(180),AL-TI(180),NI-TI(180),SB-TI(180),PB-TI(180),ZN-TI(180),CU-TI(180),SE-TI(180),CO-TI(180),V-TI(180),FE-TI(180),MN-TI(180),HG-T(28),MG-TI(180),CA-TI(180),NA-TI(180),K-TI(180),CD-TI(180)
L2043863-10F	Glass 250ml/8oz unpreserved	B	NA		2.6	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2043863-11A	Vial MeOH preserved	B	NA		2.6	Y	Absent		NYTCL-8260HLW(14)
L2043863-11B	Vial water preserved	B	NA		2.6	Y	Absent	14-OCT-20 12:16	NYTCL-8260HLW(14)
L2043863-11C	Vial water preserved	B	NA		2.6	Y	Absent	14-OCT-20 12:16	NYTCL-8260HLW(14)
L2043863-11D	Plastic 2oz unpreserved for TS	B	NA		2.6	Y	Absent		TS(7)
L2043863-11E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		2.6	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),TL-TI(180),NI-TI(180),CR-TI(180),CU-TI(180),SB-TI(180),PB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),MG-TI(180),HG-T(28),FE-TI(180),MN-TI(180),NA-TI(180),CD-TI(180),CA-TI(180),K-TI(180)
L2043863-11F	Glass 250ml/8oz unpreserved	B	NA		2.6	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2043863-12A	Vial MeOH preserved	B	NA		2.6	Y	Absent		NYTCL-8260HLW(14)
L2043863-12B	Vial water preserved	B	NA		2.6	Y	Absent	14-OCT-20 12:16	NYTCL-8260HLW(14)
L2043863-12C	Vial water preserved	B	NA		2.6	Y	Absent	14-OCT-20 12:16	NYTCL-8260HLW(14)
L2043863-12D	Plastic 2oz unpreserved for TS	B	NA		2.6	Y	Absent		TS(7)

Project Name: BLUE SEA BACA PHASE 11 ESH**Lab Number:** L2043863**Project Number:** 26979.01**Report Date:** 10/20/20**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2043863-12E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		2.6	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),AL-TI(180),TL-TI(180),PB-TI(180),ZN-TI(180),SE-TI(180),SB-TI(180),CU-TI(180),V-TI(180),CO-TI(180),MG-TI(180),FE-TI(180),MN-TI(180),HG-T(28),CA-TI(180),CD-TI(180),NA-TI(180),K-TI(180)
L2043863-12F	Glass 250ml/8oz unpreserved	B	NA		2.6	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2043863-14A	Vial MeOH preserved	B	NA		2.6	Y	Absent		NYTCL-8260HLW(14)
L2043863-14B	Vial water preserved	B	NA		2.6	Y	Absent	14-OCT-20 12:16	NYTCL-8260HLW(14)
L2043863-14C	Vial water preserved	B	NA		2.6	Y	Absent	14-OCT-20 12:16	NYTCL-8260HLW(14)
L2043863-14D	Plastic 2oz unpreserved for TS	B	NA		2.6	Y	Absent		TS(7)
L2043863-14E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		2.6	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),NI-TI(180),CR-TI(180),TL-TI(180),ZN-TI(180),SB-TI(180),PB-TI(180),CU-TI(180),SE-TI(180),V-TI(180),CO-TI(180),FE-TI(180),MG-TI(180),HG-T(28),MN-TI(180),NA-TI(180),K-TI(180),CA-TI(180),CD-TI(180)
L2043863-14F	Glass 250ml/8oz unpreserved	B	NA		2.6	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benzo(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where

Report Format: DU Report with 'J' Qualifiers



Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

Data Qualifiers

the identification is based on a mass spectral library search.

- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.

Project Name: BLUE SEA BACA PHASE 11 ESH
Project Number: 26979.01

Lab Number: L2043863
Report Date: 10/20/20

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

EPA TO-12 Non-methane organics

EPA 3C Fixed gases

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.

EPA 522.

Non-Potable Water


EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.


EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 NEW YORK CHAIN OF CUSTODY Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 4 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page	Date Rec'd in Lab	ALPHA Job #																																																																																																																											
		1 of 1	10/13/20	12043863																																																																																																																											
Project Information Project Name: <u>Blue Sea BACT Phase II GSA</u> Project Location: <u>Between Ruckaway Ave + Chester St</u> Project # <u>26979.01</u>		Deliverables <input type="checkbox"/> ASP-A <input type="checkbox"/> ASP-B <input type="checkbox"/> EQUIS (1 File) <input type="checkbox"/> EQUIS (4 File) <input type="checkbox"/> Other		Billing Information <input type="checkbox"/> Same as Client Info PO #																																																																																																																											
Client Information Client: <u>VHB</u> Address: <u>100 Motor Parkway</u> <u>Hempstead NY</u> Phone: <u>631 787 3400</u> Fax: <u>B. Murty @ VHB.com</u> Email: <u>amurty@vhb.com</u>		(Use Project name as Project #) <input type="checkbox"/> Project Manager: <u>Bryan Murty</u> ALPHAQuote #:		Regulatory Requirement <input type="checkbox"/> NY TOGS <input checked="" type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input checked="" type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input checked="" type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge																																																																																																																											
Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:																																																																																																																													
These samples have been previously analyzed by Alpha <input type="checkbox"/> Other project specific requirements/comments:		ANALYSIS (Handwritten: TLL Vol's (9260), TLL SMO's (9270), TALL Metals (Gold), Restrooms (8081), PCBs (8082))		Sample Filtration <input type="checkbox"/> Done <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do (Please Specify below)																																																																																																																											
Please specify Metals or TAL.		<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">ALPHA Lab ID (Lab Use Only)</th> <th rowspan="2">Sample ID</th> <th colspan="2">Collection</th> <th rowspan="2">Sample Matrix</th> <th rowspan="2">Sampler's Initials</th> <th rowspan="2">TLL Vol's (9260)</th> <th rowspan="2">TLL SMO's (9270)</th> <th rowspan="2">TALL Metals (Gold)</th> <th rowspan="2">Restrooms (8081)</th> <th rowspan="2">PCBs (8082)</th> </tr> <tr> <th>Date</th> <th>Time</th> </tr> </thead> <tbody> <tr><td>43863 01</td><td>SB-04 (0'-2')</td><td>10/13/20</td><td>09:25</td><td>S</td><td>MP</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td></tr> <tr><td>02</td><td>SB-04 (13'-15')</td><td></td><td>10:15</td><td>S</td><td>MP</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td></tr> <tr><td>03</td><td>SB-05 (0'-2')</td><td></td><td>10:35</td><td>S</td><td>MP</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td></tr> <tr><td>04</td><td>SB-05 (13'-15')</td><td></td><td>10:58</td><td>S</td><td>MP</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td></tr> <tr><td>05</td><td>SB-06 (0'-2')</td><td></td><td>11:15</td><td>S</td><td>MP</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td></tr> <tr><td>06</td><td>SB-06 (13'-15')</td><td></td><td>11:35</td><td>S</td><td>MP</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td></tr> <tr><td>07</td><td>SB-07 (0'-2')</td><td></td><td>11:55</td><td>S</td><td>MP</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td></tr> <tr><td>08</td><td>SB-07 (13'-15')</td><td></td><td>12:12</td><td>S</td><td>MP</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td></tr> <tr><td>09</td><td>SB-08 (0'-2')</td><td></td><td>12:35</td><td>S</td><td>MP</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td></tr> <tr><td>10</td><td>SB-08 (13'-15')</td><td></td><td>12:55</td><td>S</td><td>MP</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td></tr> </tbody> </table>		ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	TLL Vol's (9260)	TLL SMO's (9270)	TALL Metals (Gold)	Restrooms (8081)	PCBs (8082)	Date	Time	43863 01	SB-04 (0'-2')	10/13/20	09:25	S	MP	X	X	X	X	X	02	SB-04 (13'-15')		10:15	S	MP	X	X	X	X	X	03	SB-05 (0'-2')		10:35	S	MP	X	X	X	X	X	04	SB-05 (13'-15')		10:58	S	MP	X	X	X	X	X	05	SB-06 (0'-2')		11:15	S	MP	X	X	X	X	X	06	SB-06 (13'-15')		11:35	S	MP	X	X	X	X	X	07	SB-07 (0'-2')		11:55	S	MP	X	X	X	X	X	08	SB-07 (13'-15')		12:12	S	MP	X	X	X	X	X	09	SB-08 (0'-2')		12:35	S	MP	X	X	X	X	X	10	SB-08 (13'-15')		12:55	S	MP	X	X	X	X	X	Sample Specific Comments Total Bottles: 6
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection				Sample Matrix	Sampler's Initials								TLL Vol's (9260)	TLL SMO's (9270)	TALL Metals (Gold)	Restrooms (8081)	PCBs (8082)																																																																																																												
		Date	Time																																																																																																																												
43863 01	SB-04 (0'-2')	10/13/20	09:25	S	MP	X	X	X	X	X																																																																																																																					
02	SB-04 (13'-15')		10:15	S	MP	X	X	X	X	X																																																																																																																					
03	SB-05 (0'-2')		10:35	S	MP	X	X	X	X	X																																																																																																																					
04	SB-05 (13'-15')		10:58	S	MP	X	X	X	X	X																																																																																																																					
05	SB-06 (0'-2')		11:15	S	MP	X	X	X	X	X																																																																																																																					
06	SB-06 (13'-15')		11:35	S	MP	X	X	X	X	X																																																																																																																					
07	SB-07 (0'-2')		11:55	S	MP	X	X	X	X	X																																																																																																																					
08	SB-07 (13'-15')		12:12	S	MP	X	X	X	X	X																																																																																																																					
09	SB-08 (0'-2')		12:35	S	MP	X	X	X	X	X																																																																																																																					
10	SB-08 (13'-15')		12:55	S	MP	X	X	X	X	X																																																																																																																					
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code: P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015																																																																																																																											
Container Type Preservative		Received By: <u>R. B. R. AAC</u> Date/Time: <u>10/13/20 16:15</u> <u>John AAC</u> <u>10/13/20 18:00</u> <u>John AAC</u> <u>10/13/20 23:00</u>		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)																																																																																																																											

 NEW YORK CHAIN OF CUSTODY Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	NEW YORK CHAIN OF CUSTODY Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page 2 of 2	Date Rec'd in Lab 10/13/20	ALPHA Job # 12043863		
		Project Information Project Name: Blue Sea BACT Phase II ESW Project Location: Between Rockaway Ave + Chester St Project # 26479-01		Deliverables <input type="checkbox"/> ASP-A <input type="checkbox"/> ASP-B <input type="checkbox"/> EQUIS (1 File) <input type="checkbox"/> EQUIS (4 File) <input type="checkbox"/> Other		Billing Information <input type="checkbox"/> Same as Client Info PO #	
Client Information Client: VHB Address: 100 Motor Parkway Hempstead NY 11798 Ste 355 Phone: 631-787-3400 Fax: Email: bnmw@vhb.com		(Use Project name as Project #) <input type="checkbox"/> Project Manager: Bryan Murty ALPHAQuote #: Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		Regulatory Requirement <input type="checkbox"/> NY TOGS <input checked="" type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input checked="" type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input checked="" type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:	
These samples have been previously analyzed by Alpha <input type="checkbox"/> Other project specific requirements/comments: Please specify Metals or TAL.		ANALYSIS (Handwritten: TCL VOCs (8260), TCL SVOCs (8270), TML Metals (6010), Pesticides (8081), PCBs (8082))		Sample Filtration <input type="checkbox"/> Done <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do (Please Specify below)			
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	Total Bottles 6 6 2 6	
		Date	Time				
43863-11	SB-04 (0'-2')	10/14/20	13:05	S	MI		
-12	SB-09 (12'-15')	10/13/20	13:20	S	MI		
-13	TB-1	10/13/20	-	DE	ME		
-14	Dwp 101320	10/13/20	-	S	MI		
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type Preservative	
Relinquished By: [Signature] RBER AAL [Signature] AAL		Date/Time 10/13/20 16:15 10/13/20 18:00 10/13/20 23:00		Received By: RBIR AAL [Signature] AAL [Signature] AAL		Date/Time 10/13/20 16:15 10/13/20 19:30 10/13/20 23:00	
Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)							



ANALYTICAL REPORT

Lab Number:	L2044045
Client:	VHB Engineering, Surveying and Landscape One Penn Plaza Suite 715 New York, NY 10119
ATTN:	Bryan Murty
Phone:	(212) 857-7394
Project Name:	BLUE SEA BACA PHASE 11 ESA
Project Number:	26979.01
Report Date:	10/21/20

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com



Project Name: BLUE SEA BACA PHASE 11 ESA
Project Number: 26979.01

Lab Number: L2044045
Report Date: 10/21/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2044045-01	SV-1	SOIL_VAPOR	BETWEEN CHESTER ST AND ROCKAWAY AVE	10/14/20 11:05	10/14/20
L2044045-02	SV-2	SOIL_VAPOR	BETWEEN CHESTER ST AND ROCKAWAY AVE	10/14/20 11:11	10/14/20
L2044045-03	SV-4	SOIL_VAPOR	BETWEEN CHESTER ST AND ROCKAWAY AVE	10/14/20 11:30	10/14/20
L2044045-04	SV-3	SOIL_VAPOR	BETWEEN CHESTER ST AND ROCKAWAY AVE	10/14/20 12:14	10/14/20

Project Name: BLUE SEA BACA PHASE 11 ESA
Project Number: 26979.01

Lab Number: L2044045
Report Date: 10/21/20

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: BLUE SEA BACA PHASE 11 ESA
Project Number: 26979.01

Lab Number: L2044045
Report Date: 10/21/20

Case Narrative (continued)

Report Revision

This report replaces the one previously issued on October 20, 2020. The report has been amended to report helium at the request of the client.

Volatile Organics in Air

Canisters were released from the laboratory on October 13, 2020. The canister certification results are provided as an addendum.

L2044045-01, -03 and -04: The samples have elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the samples.

Fixed Gases

L2044045-01 through -04: Prior to sample analysis, the canisters were pressurized with UHP Hydrogen in order to facilitate the transfer of sample to the Gas Chromatograph. The addition of Hydrogen resulted in a dilution of the sample. The reporting limits have been elevated accordingly.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Christopher J. Anderson

Title: Technical Director/Representative

Date: 10/21/20

AIR

Project Name: BLUE SEA BACA PHASE 11 ESA**Lab Number:** L2044045**Project Number:** 26979.01**Report Date:** 10/21/20**SAMPLE RESULTS**

Lab ID: L2044045-01 D
 Client ID: SV-1
 Sample Location: BETWEEN CHESTER ST AND ROCKAWAY AVE

Date Collected: 10/14/20 11:05
 Date Received: 10/14/20
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 48,TO-15
 Analytical Date: 10/19/20 18:06
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	1.00	--	ND	4.94	--		5
Chloromethane	ND	1.00	--	ND	2.07	--		5
Freon-114	ND	1.00	--	ND	6.99	--		5
Vinyl chloride	ND	1.00	--	ND	2.56	--		5
1,3-Butadiene	25.6	1.00	--	56.6	2.21	--		5
Bromomethane	ND	1.00	--	ND	3.88	--		5
Chloroethane	ND	1.00	--	ND	2.64	--		5
Ethanol	ND	25.0	--	ND	47.1	--		5
Vinyl bromide	ND	1.00	--	ND	4.37	--		5
Acetone	33.0	5.00	--	78.4	11.9	--		5
Trichlorofluoromethane	ND	1.00	--	ND	5.62	--		5
Isopropanol	ND	2.50	--	ND	6.15	--		5
1,1-Dichloroethene	ND	1.00	--	ND	3.96	--		5
Tertiary butyl Alcohol	10.4	2.50	--	31.5	7.58	--		5
Methylene chloride	ND	2.50	--	ND	8.69	--		5
3-Chloropropene	ND	1.00	--	ND	3.13	--		5
Carbon disulfide	2.96	1.00	--	9.22	3.11	--		5
Freon-113	ND	1.00	--	ND	7.66	--		5
trans-1,2-Dichloroethene	ND	1.00	--	ND	3.96	--		5
1,1-Dichloroethane	ND	1.00	--	ND	4.05	--		5
Methyl tert butyl ether	ND	1.00	--	ND	3.61	--		5
2-Butanone	11.9	2.50	--	35.1	7.37	--		5
cis-1,2-Dichloroethene	ND	1.00	--	ND	3.96	--		5



Project Name: BLUE SEA BACA PHASE 11 ESA**Lab Number:** L2044045**Project Number:** 26979.01**Report Date:** 10/21/20**SAMPLE RESULTS**

Lab ID: L2044045-01 D
 Client ID: SV-1
 Sample Location: BETWEEN CHESTER ST AND ROCKAWAY AVE

Date Collected: 10/14/20 11:05
 Date Received: 10/14/20
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	2.50	--	ND	9.01	--		5
Chloroform	ND	1.00	--	ND	4.88	--		5
Tetrahydrofuran	ND	2.50	--	ND	7.37	--		5
1,2-Dichloroethane	ND	1.00	--	ND	4.05	--		5
n-Hexane	12.3	1.00	--	43.3	3.52	--		5
1,1,1-Trichloroethane	ND	1.00	--	ND	5.46	--		5
Benzene	5.84	1.00	--	18.7	3.19	--		5
Carbon tetrachloride	ND	1.00	--	ND	6.29	--		5
Cyclohexane	1.38	1.00	--	4.75	3.44	--		5
1,2-Dichloropropane	ND	1.00	--	ND	4.62	--		5
Bromodichloromethane	ND	1.00	--	ND	6.70	--		5
1,4-Dioxane	ND	1.00	--	ND	3.60	--		5
Trichloroethene	ND	1.00	--	ND	5.37	--		5
2,2,4-Trimethylpentane	ND	1.00	--	ND	4.67	--		5
Heptane	5.60	1.00	--	22.9	4.10	--		5
cis-1,3-Dichloropropene	ND	1.00	--	ND	4.54	--		5
4-Methyl-2-pentanone	6.30	2.50	--	25.8	10.2	--		5
trans-1,3-Dichloropropene	ND	1.00	--	ND	4.54	--		5
1,1,2-Trichloroethane	ND	1.00	--	ND	5.46	--		5
Toluene	6.03	1.00	--	22.7	3.77	--		5
2-Hexanone	1.22	1.00	--	5.00	4.10	--		5
Dibromochloromethane	ND	1.00	--	ND	8.52	--		5
1,2-Dibromoethane	ND	1.00	--	ND	7.69	--		5
Tetrachloroethene	ND	1.00	--	ND	6.78	--		5
Chlorobenzene	ND	1.00	--	ND	4.61	--		5
Ethylbenzene	ND	1.00	--	ND	4.34	--		5



Project Name: BLUE SEA BACA PHASE 11 ESA**Lab Number:** L2044045**Project Number:** 26979.01**Report Date:** 10/21/20**SAMPLE RESULTS**

Lab ID: L2044045-01 D
 Client ID: SV-1
 Sample Location: BETWEEN CHESTER ST AND ROCKAWAY AVE

Date Collected: 10/14/20 11:05
 Date Received: 10/14/20
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	3.03	2.00	--	13.2	8.69	--		5
Bromoform	ND	1.00	--	ND	10.3	--		5
Styrene	ND	1.00	--	ND	4.26	--		5
1,1,2,2-Tetrachloroethane	ND	1.00	--	ND	6.87	--		5
o-Xylene	1.01	1.00	--	4.39	4.34	--		5
4-Ethyltoluene	ND	1.00	--	ND	4.92	--		5
1,3,5-Trimethylbenzene	ND	1.00	--	ND	4.92	--		5
1,2,4-Trimethylbenzene	ND	1.00	--	ND	4.92	--		5
Benzyl chloride	ND	1.00	--	ND	5.18	--		5
1,3-Dichlorobenzene	ND	1.00	--	ND	6.01	--		5
1,4-Dichlorobenzene	ND	1.00	--	ND	6.01	--		5
1,2-Dichlorobenzene	ND	1.00	--	ND	6.01	--		5
1,2,4-Trichlorobenzene	ND	1.00	--	ND	7.42	--		5
Hexachlorobutadiene	ND	1.00	--	ND	10.7	--		5

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	98		60-140
Bromochloromethane	99		60-140
chlorobenzene-d5	96		60-140



Project Name: BLUE SEA BACA PHASE 11 ESA**Lab Number:** L2044045**Project Number:** 26979.01**Report Date:** 10/21/20**SAMPLE RESULTS**

Lab ID: L2044045-02
 Client ID: SV-2
 Sample Location: BETWEEN CHESTER ST AND ROCKAWAY AVE

Date Collected: 10/14/20 11:11
 Date Received: 10/14/20
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 48,TO-15
 Analytical Date: 10/19/20 18:45
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	1.40	0.200	--	6.92	0.989	--		1
Chloromethane	0.250	0.200	--	0.516	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	8.84	0.200	--	19.6	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	6.73	5.00	--	12.7	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	12.0	1.00	--	28.5	2.38	--		1
Trichlorofluoromethane	0.470	0.200	--	2.64	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	1.86	0.500	--	5.64	1.52	--		1
Methylene chloride	2.13	0.500	--	7.40	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	1.84	0.200	--	5.73	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	7.16	0.500	--	21.1	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BLUE SEA BACA PHASE 11 ESA**Lab Number:** L2044045**Project Number:** 26979.01**Report Date:** 10/21/20**SAMPLE RESULTS**

Lab ID: L2044045-02

Date Collected: 10/14/20 11:11

Client ID: SV-2

Date Received: 10/14/20

Sample Location: BETWEEN CHESTER ST AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	1.19	0.500	--	3.51	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	5.95	0.200	--	21.0	0.705	--		1
1,1,1-Trichloroethane	0.369	0.200	--	2.01	1.09	--		1
Benzene	3.16	0.200	--	10.1	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	1.22	0.200	--	4.20	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	0.506	0.200	--	2.36	0.934	--		1
Heptane	3.74	0.200	--	15.3	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	0.581	0.500	--	2.38	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	5.27	0.200	--	19.9	0.754	--		1
2-Hexanone	0.611	0.200	--	2.50	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	0.264	0.200	--	1.79	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.988	0.200	--	4.29	0.869	--		1



Project Name: BLUE SEA BACA PHASE 11 ESA**Lab Number:** L2044045**Project Number:** 26979.01**Report Date:** 10/21/20**SAMPLE RESULTS**

Lab ID: L2044045-02

Date Collected: 10/14/20 11:11

Client ID: SV-2

Date Received: 10/14/20

Sample Location: BETWEEN CHESTER ST AND ROCKAWAY
AVE

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	3.06	0.400	--	13.3	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	1.03	0.200	--	4.47	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	0.272	0.200	--	1.34	0.983	--		1
1,2,4-Trimethylbenzene	1.03	0.200	--	5.06	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	99		60-140
Bromochloromethane	99		60-140
chlorobenzene-d5	98		60-140



Project Name: BLUE SEA BACA PHASE 11 ESA**Lab Number:** L2044045**Project Number:** 26979.01**Report Date:** 10/21/20**SAMPLE RESULTS**

Lab ID: L2044045-03 D
 Client ID: SV-4
 Sample Location: BETWEEN CHESTER ST AND ROCKAWAY AVE

Date Collected: 10/14/20 11:30
 Date Received: 10/14/20
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 48,TO-15
 Analytical Date: 10/19/20 20:03
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.676	0.667	--	3.34	3.30	--		3.333
Chloromethane	ND	0.667	--	ND	1.38	--		3.333
Freon-114	ND	0.667	--	ND	4.66	--		3.333
Vinyl chloride	ND	0.667	--	ND	1.71	--		3.333
1,3-Butadiene	21.3	0.667	--	47.1	1.48	--		3.333
Bromomethane	ND	0.667	--	ND	2.59	--		3.333
Chloroethane	ND	0.667	--	ND	1.76	--		3.333
Ethanol	ND	16.7	--	ND	31.5	--		3.333
Vinyl bromide	ND	0.667	--	ND	2.92	--		3.333
Acetone	56.4	3.33	--	134	7.91	--		3.333
Trichlorofluoromethane	ND	0.667	--	ND	3.75	--		3.333
Isopropanol	ND	1.67	--	ND	4.10	--		3.333
1,1-Dichloroethene	ND	0.667	--	ND	2.64	--		3.333
Tertiary butyl Alcohol	2.73	1.67	--	8.28	5.06	--		3.333
Methylene chloride	2.19	1.67	--	7.61	5.80	--		3.333
3-Chloropropene	ND	0.667	--	ND	2.09	--		3.333
Carbon disulfide	4.52	0.667	--	14.1	2.08	--		3.333
Freon-113	ND	0.667	--	ND	5.11	--		3.333
trans-1,2-Dichloroethene	ND	0.667	--	ND	2.64	--		3.333
1,1-Dichloroethane	ND	0.667	--	ND	2.70	--		3.333
Methyl tert butyl ether	ND	0.667	--	ND	2.40	--		3.333
2-Butanone	16.0	1.67	--	47.2	4.93	--		3.333
cis-1,2-Dichloroethene	ND	0.667	--	ND	2.64	--		3.333



Project Name: BLUE SEA BACA PHASE 11 ESA
Project Number: 26979.01

Lab Number: L2044045
Report Date: 10/21/20

SAMPLE RESULTS

Lab ID: L2044045-03 D
 Client ID: SV-4
 Sample Location: BETWEEN CHESTER ST AND ROCKAWAY AVE

Date Collected: 10/14/20 11:30
 Date Received: 10/14/20
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	1.67	--	ND	6.02	--		3.333
Chloroform	ND	0.667	--	ND	3.26	--		3.333
Tetrahydrofuran	ND	1.67	--	ND	4.93	--		3.333
1,2-Dichloroethane	ND	0.667	--	ND	2.70	--		3.333
n-Hexane	13.0	0.667	--	45.8	2.35	--		3.333
1,1,1-Trichloroethane	1.81	0.667	--	9.88	3.64	--		3.333
Benzene	5.82	0.667	--	18.6	2.13	--		3.333
Carbon tetrachloride	ND	0.667	--	ND	4.20	--		3.333
Cyclohexane	1.90	0.667	--	6.54	2.30	--		3.333
1,2-Dichloropropane	ND	0.667	--	ND	3.08	--		3.333
Bromodichloromethane	ND	0.667	--	ND	4.47	--		3.333
1,4-Dioxane	ND	0.667	--	ND	2.40	--		3.333
Trichloroethene	ND	0.667	--	ND	3.58	--		3.333
2,2,4-Trimethylpentane	ND	0.667	--	ND	3.12	--		3.333
Heptane	8.64	0.667	--	35.4	2.73	--		3.333
cis-1,3-Dichloropropene	ND	0.667	--	ND	3.03	--		3.333
4-Methyl-2-pentanone	ND	1.67	--	ND	6.84	--		3.333
trans-1,3-Dichloropropene	ND	0.667	--	ND	3.03	--		3.333
1,1,2-Trichloroethane	ND	0.667	--	ND	3.64	--		3.333
Toluene	5.79	0.667	--	21.8	2.51	--		3.333
2-Hexanone	0.903	0.667	--	3.70	2.73	--		3.333
Dibromochloromethane	ND	0.667	--	ND	5.68	--		3.333
1,2-Dibromoethane	ND	0.667	--	ND	5.13	--		3.333
Tetrachloroethene	ND	0.667	--	ND	4.52	--		3.333
Chlorobenzene	ND	0.667	--	ND	3.07	--		3.333
Ethylbenzene	0.950	0.667	--	4.13	2.90	--		3.333



Project Name: BLUE SEA BACA PHASE 11 ESA**Lab Number:** L2044045**Project Number:** 26979.01**Report Date:** 10/21/20**SAMPLE RESULTS**

Lab ID: L2044045-03 D

Date Collected: 10/14/20 11:30

Client ID: SV-4

Date Received: 10/14/20

Sample Location: BETWEEN CHESTER ST AND ROCKAWAY
AVE

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	3.09	1.33	--	13.4	5.78	--		3.333
Bromoform	ND	0.667	--	ND	6.90	--		3.333
Styrene	ND	0.667	--	ND	2.84	--		3.333
1,1,2,2-Tetrachloroethane	ND	0.667	--	ND	4.58	--		3.333
o-Xylene	1.04	0.667	--	4.52	2.90	--		3.333
4-Ethyltoluene	ND	0.667	--	ND	3.28	--		3.333
1,3,5-Trimethylbenzene	ND	0.667	--	ND	3.28	--		3.333
1,2,4-Trimethylbenzene	0.930	0.667	--	4.57	3.28	--		3.333
Benzyl chloride	ND	0.667	--	ND	3.45	--		3.333
1,3-Dichlorobenzene	ND	0.667	--	ND	4.01	--		3.333
1,4-Dichlorobenzene	ND	0.667	--	ND	4.01	--		3.333
1,2-Dichlorobenzene	ND	0.667	--	ND	4.01	--		3.333
1,2,4-Trichlorobenzene	ND	0.667	--	ND	4.95	--		3.333
Hexachlorobutadiene	ND	0.667	--	ND	7.11	--		3.333

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	97		60-140
Bromochloromethane	98		60-140
chlorobenzene-d5	98		60-140



Project Name: BLUE SEA BACA PHASE 11 ESA**Lab Number:** L2044045**Project Number:** 26979.01**Report Date:** 10/21/20**SAMPLE RESULTS**

Lab ID: L2044045-04 D
 Client ID: SV-3
 Sample Location: BETWEEN CHESTER ST AND ROCKAWAY AVE

Date Collected: 10/14/20 12:14
 Date Received: 10/14/20
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 48,TO-15
 Analytical Date: 10/19/20 20:41
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	5.62	0.625	--	27.8	3.09	--		3.125
Chloromethane	ND	0.625	--	ND	1.29	--		3.125
Freon-114	ND	0.625	--	ND	4.37	--		3.125
Vinyl chloride	ND	0.625	--	ND	1.60	--		3.125
1,3-Butadiene	19.7	0.625	--	43.6	1.38	--		3.125
Bromomethane	ND	0.625	--	ND	2.43	--		3.125
Chloroethane	ND	0.625	--	ND	1.65	--		3.125
Ethanol	ND	15.6	--	ND	29.4	--		3.125
Vinyl bromide	ND	0.625	--	ND	2.73	--		3.125
Acetone	90.4	3.12	--	215	7.41	--		3.125
Trichlorofluoromethane	23.6	0.625	--	133	3.51	--		3.125
Isopropanol	2.71	1.56	--	6.66	3.83	--		3.125
1,1-Dichloroethene	ND	0.625	--	ND	2.48	--		3.125
Tertiary butyl Alcohol	6.04	1.56	--	18.3	4.73	--		3.125
Methylene chloride	2.24	1.56	--	7.78	5.42	--		3.125
3-Chloropropene	ND	0.625	--	ND	1.96	--		3.125
Carbon disulfide	5.45	0.625	--	17.0	1.95	--		3.125
Freon-113	ND	0.625	--	ND	4.79	--		3.125
trans-1,2-Dichloroethene	ND	0.625	--	ND	2.48	--		3.125
1,1-Dichloroethane	ND	0.625	--	ND	2.53	--		3.125
Methyl tert butyl ether	ND	0.625	--	ND	2.25	--		3.125
2-Butanone	19.4	1.56	--	57.2	4.60	--		3.125
cis-1,2-Dichloroethene	ND	0.625	--	ND	2.48	--		3.125



Project Name: BLUE SEA BACA PHASE 11 ESA**Lab Number:** L2044045**Project Number:** 26979.01**Report Date:** 10/21/20**SAMPLE RESULTS**

Lab ID: L2044045-04 D
 Client ID: SV-3
 Sample Location: BETWEEN CHESTER ST AND ROCKAWAY AVE

Date Collected: 10/14/20 12:14
 Date Received: 10/14/20
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	1.56	--	ND	5.62	--		3.125
Chloroform	ND	0.625	--	ND	3.05	--		3.125
Tetrahydrofuran	ND	1.56	--	ND	4.60	--		3.125
1,2-Dichloroethane	ND	0.625	--	ND	2.53	--		3.125
n-Hexane	8.16	0.625	--	28.8	2.20	--		3.125
1,1,1-Trichloroethane	ND	0.625	--	ND	3.41	--		3.125
Benzene	6.66	0.625	--	21.3	2.00	--		3.125
Carbon tetrachloride	ND	0.625	--	ND	3.93	--		3.125
Cyclohexane	3.18	0.625	--	10.9	2.15	--		3.125
1,2-Dichloropropane	ND	0.625	--	ND	2.89	--		3.125
Bromodichloromethane	ND	0.625	--	ND	4.19	--		3.125
1,4-Dioxane	ND	0.625	--	ND	2.25	--		3.125
Trichloroethene	ND	0.625	--	ND	3.36	--		3.125
2,2,4-Trimethylpentane	ND	0.625	--	ND	2.92	--		3.125
Heptane	24.5	0.625	--	100	2.56	--		3.125
cis-1,3-Dichloropropene	ND	0.625	--	ND	2.84	--		3.125
4-Methyl-2-pentanone	ND	1.56	--	ND	6.39	--		3.125
trans-1,3-Dichloropropene	ND	0.625	--	ND	2.84	--		3.125
1,1,2-Trichloroethane	ND	0.625	--	ND	3.41	--		3.125
Toluene	8.71	0.625	--	32.8	2.36	--		3.125
2-Hexanone	ND	0.625	--	ND	2.56	--		3.125
Dibromochloromethane	ND	0.625	--	ND	5.32	--		3.125
1,2-Dibromoethane	ND	0.625	--	ND	4.80	--		3.125
Tetrachloroethene	ND	0.625	--	ND	4.24	--		3.125
Chlorobenzene	ND	0.625	--	ND	2.88	--		3.125
Ethylbenzene	4.80	0.625	--	20.8	2.71	--		3.125



Project Name: BLUE SEA BACA PHASE 11 ESA**Lab Number:** L2044045**Project Number:** 26979.01**Report Date:** 10/21/20**SAMPLE RESULTS**

Lab ID: L2044045-04 D
 Client ID: SV-3
 Sample Location: BETWEEN CHESTER ST AND ROCKAWAY AVE

Date Collected: 10/14/20 12:14
 Date Received: 10/14/20
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	10.0	1.25	--	43.4	5.43	--		3.125
Bromoform	ND	0.625	--	ND	6.46	--		3.125
Styrene	ND	0.625	--	ND	2.66	--		3.125
1,1,2,2-Tetrachloroethane	ND	0.625	--	ND	4.29	--		3.125
o-Xylene	2.88	0.625	--	12.5	2.71	--		3.125
4-Ethyltoluene	ND	0.625	--	ND	3.07	--		3.125
1,3,5-Trimethylbenzene	ND	0.625	--	ND	3.07	--		3.125
1,2,4-Trimethylbenzene	0.881	0.625	--	4.33	3.07	--		3.125
Benzyl chloride	ND	0.625	--	ND	3.24	--		3.125
1,3-Dichlorobenzene	ND	0.625	--	ND	3.76	--		3.125
1,4-Dichlorobenzene	ND	0.625	--	ND	3.76	--		3.125
1,2-Dichlorobenzene	ND	0.625	--	ND	3.76	--		3.125
1,2,4-Trichlorobenzene	ND	0.625	--	ND	4.64	--		3.125
Hexachlorobutadiene	ND	0.625	--	ND	6.67	--		3.125

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	99		60-140
Bromochloromethane	99		60-140
chlorobenzene-d5	115		60-140



Project Name: BLUE SEA BACA PHASE 11 ESA

Lab Number: L2044045

Project Number: 26979.01

Report Date: 10/21/20

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 10/19/20 14:18

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-04 Batch: WG1423784-4								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1



Project Name: BLUE SEA BACA PHASE 11 ESA

Lab Number: L2044045

Project Number: 26979.01

Report Date: 10/21/20

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 10/19/20 14:18

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-04 Batch: WG1423784-4								
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1



Project Name: BLUE SEA BACA PHASE 11 ESA

Lab Number: L2044045

Project Number: 26979.01

Report Date: 10/21/20

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 10/19/20 14:18

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-04 Batch: WG1423784-4								
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE 11 ESA

Lab Number: L2044045

Project Number: 26979.01

Report Date: 10/21/20

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 Batch: WG1423784-3								
Dichlorodifluoromethane	86		-		70-130	-		
Chloromethane	83		-		70-130	-		
Freon-114	88		-		70-130	-		
Vinyl chloride	88		-		70-130	-		
1,3-Butadiene	89		-		70-130	-		
Bromomethane	88		-		70-130	-		
Chloroethane	88		-		70-130	-		
Ethanol	77		-		40-160	-		
Vinyl bromide	88		-		70-130	-		
Acetone	76		-		40-160	-		
Trichlorofluoromethane	87		-		70-130	-		
Isopropanol	78		-		40-160	-		
1,1-Dichloroethene	88		-		70-130	-		
Tertiary butyl Alcohol	77		-		70-130	-		
Methylene chloride	90		-		70-130	-		
3-Chloropropene	89		-		70-130	-		
Carbon disulfide	84		-		70-130	-		
Freon-113	90		-		70-130	-		
trans-1,2-Dichloroethene	86		-		70-130	-		
1,1-Dichloroethane	90		-		70-130	-		
Methyl tert butyl ether	89		-		70-130	-		
2-Butanone	88		-		70-130	-		
cis-1,2-Dichloroethene	92		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE 11 ESA

Lab Number: L2044045

Project Number: 26979.01

Report Date: 10/21/20

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 Batch: WG1423784-3								
Ethyl Acetate	88		-		70-130	-		
Chloroform	94		-		70-130	-		
Tetrahydrofuran	90		-		70-130	-		
1,2-Dichloroethane	88		-		70-130	-		
n-Hexane	99		-		70-130	-		
1,1,1-Trichloroethane	101		-		70-130	-		
Benzene	98		-		70-130	-		
Carbon tetrachloride	100		-		70-130	-		
Cyclohexane	101		-		70-130	-		
1,2-Dichloropropane	100		-		70-130	-		
Bromodichloromethane	104		-		70-130	-		
1,4-Dioxane	101		-		70-130	-		
Trichloroethene	102		-		70-130	-		
2,2,4-Trimethylpentane	105		-		70-130	-		
Heptane	100		-		70-130	-		
cis-1,3-Dichloropropene	108		-		70-130	-		
4-Methyl-2-pentanone	104		-		70-130	-		
trans-1,3-Dichloropropene	92		-		70-130	-		
1,1,2-Trichloroethane	102		-		70-130	-		
Toluene	100		-		70-130	-		
2-Hexanone	102		-		70-130	-		
Dibromochloromethane	109		-		70-130	-		
1,2-Dibromoethane	104		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE 11 ESA

Project Number: 26979.01

Lab Number: L2044045

Report Date: 10/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-04 Batch: WG1423784-3								
Tetrachloroethene	104		-		70-130	-		
Chlorobenzene	104		-		70-130	-		
Ethylbenzene	103		-		70-130	-		
p/m-Xylene	104		-		70-130	-		
Bromoform	108		-		70-130	-		
Styrene	105		-		70-130	-		
1,1,2,2-Tetrachloroethane	108		-		70-130	-		
o-Xylene	105		-		70-130	-		
4-Ethyltoluene	103		-		70-130	-		
1,3,5-Trimethylbenzene	102		-		70-130	-		
1,2,4-Trimethylbenzene	107		-		70-130	-		
Benzyl chloride	110		-		70-130	-		
1,3-Dichlorobenzene	107		-		70-130	-		
1,4-Dichlorobenzene	105		-		70-130	-		
1,2-Dichlorobenzene	107		-		70-130	-		
1,2,4-Trichlorobenzene	116		-		70-130	-		
Hexachlorobutadiene	117		-		70-130	-		

Project Name: BLUE SEA BACA PHASE 11 ESA**Lab Number:** L2044045**Project Number:** 26979.01**Report Date:** 10/21/20**SAMPLE RESULTS**

Lab ID: L2044045-01 D
 Client ID: SV-1
 Sample Location: BETWEEN CHESTER ST AND ROCKAWAY AVE

Date Collected: 10/14/20 11:05
 Date Received: 10/14/20
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil_Vapor

Extraction Method:

Analytical Method: 51,3C

Analytical Date: 10/21/20 07:33

Analyst: AW

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Fixed Gases by GC - Mansfield Lab						
Helium	ND		%	0.161	--	1.613

Project Name: BLUE SEA BACA PHASE 11 ESA**Lab Number:** L2044045**Project Number:** 26979.01**Report Date:** 10/21/20**SAMPLE RESULTS**

Lab ID: L2044045-02 D

Date Collected: 10/14/20 11:11

Client ID: SV-2

Date Received: 10/14/20

Sample Location: BETWEEN CHESTER ST AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil_Vapor

Extraction Method:

Analytical Method: 51,3C

Analytical Date: 10/21/20 08:06

Analyst: AW

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Fixed Gases by GC - Mansfield Lab						
Helium	ND		%	0.217	--	2.174

Project Name: BLUE SEA BACA PHASE 11 ESA**Lab Number:** L2044045**Project Number:** 26979.01**Report Date:** 10/21/20**SAMPLE RESULTS**

Lab ID: L2044045-03 D
 Client ID: SV-4
 Sample Location: BETWEEN CHESTER ST AND ROCKAWAY AVE

Date Collected: 10/14/20 11:30
 Date Received: 10/14/20
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil_Vapor

Extraction Method:

Analytical Method: 51,3C

Analytical Date: 10/21/20 08:39

Analyst: AW

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Fixed Gases by GC - Mansfield Lab						
Helium	ND		%	0.175	--	1.754

Project Name: BLUE SEA BACA PHASE 11 ESA**Lab Number:** L2044045**Project Number:** 26979.01**Report Date:** 10/21/20**SAMPLE RESULTS**

Lab ID: L2044045-04 D

Date Collected: 10/14/20 12:14

Client ID: SV-3

Date Received: 10/14/20

Sample Location: BETWEEN CHESTER ST AND ROCKAWAY AVE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil_Vapor

Extraction Method:

Analytical Method: 51,3C

Analytical Date: 10/21/20 09:12

Analyst: AW

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Fixed Gases by GC - Mansfield Lab						
Helium	ND		%	0.178	--	1.786

Project Name: BLUE SEA BACA PHASE 11 ESA
Project Number: 26979.01

Lab Number: L2044045
Report Date: 10/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 51,3C
Analytical Date: 10/21/20 06:57
Analyst: AW

Parameter	Result	Qualifier	Units	RL	MDL
Fixed Gases by GC - Mansfield Lab for sample(s): 01-04 Batch: WG1424499-3					
Nitrogen	ND		%	1.00	--
Oxygen	ND		%	1.00	--
Carbon Dioxide	ND		%	0.100	--
Methane	ND		%	0.100	--
Carbon Monoxide	ND		%	0.100	--
Helium	ND		%	0.100	--

Lab Control Sample Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE 11 ESA

Project Number: 26979.01

Lab Number: L2044045

Report Date: 10/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Fixed Gases by GC - Mansfield Lab Associated sample(s): 01-04 Batch: WG1424499-2								
Nitrogen	107		-		80-120	-		
Oxygen	107		-		80-120	-		
Carbon Dioxide	109		-		80-120	-		
Methane	116		-		80-120	-		
Carbon Monoxide	112		-		80-120	-		
Helium	105		-		80-120	-		

Lab Duplicate Analysis

Batch Quality Control

Project Name: BLUE SEA BACA PHASE 11 ESA

Project Number: 26979.01

Lab Number: L2044045

Report Date: 10/21/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Fixed Gases by GC - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1424499-4 QC Sample: L2044230-01 Client ID: DUP Sample						
Methane	ND	ND	%	NC		5
Fixed Gases by GC - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1424499-5 QC Sample: L2044045-01 Client ID: SV-1						
Helium	ND	ND	%	NC		5
Fixed Gases by GC - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1424499-6 QC Sample: L2044045-02 Client ID: SV-2						
Helium	ND	ND	%	NC		5
Fixed Gases by GC - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1424499-7 QC Sample: L2044045-03 Client ID: SV-4						
Helium	ND	ND	%	NC		5
Fixed Gases by GC - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1424499-8 QC Sample: L2044045-04 Client ID: SV-3						
Helium	ND	ND	%	NC		5

Project Name: BLUE SEA BACA PHASE 11 ESA

Serial_No:10212017:03
Lab Number: L2044045

Project Number: 26979.01

Report Date: 10/21/20

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2044045-01	SV-1	0047	Flow 4	10/13/20	332701		-	-	-	Pass	17.5	17.8	2
L2044045-01	SV-1	403	2.7L Can	10/13/20	332701	L2040997-01	Pass	-29.2	-1.0	-	-	-	-
L2044045-02	SV-2	01143	SV20	10/13/20	332701		-	-	-	Pass	17.6	17.9	2
L2044045-02	SV-2	387	2.7L Can	10/13/20	332701	L2040997-01	Pass	-29.3	-4.4	-	-	-	-
L2044045-03	SV-4	01526	Flow 3	10/13/20	332701		-	-	-	Pass	17.6	17.7	1
L2044045-03	SV-4	2862	2.7L Can	10/13/20	332701	L2040997-01	Pass	-29.3	-4.2	-	-	-	-
L2044045-04	SV-3	0856	SV20	10/13/20	332701		-	-	-	Pass	18.0	18.2	1
L2044045-04	SV-3	122	2.7L Can	10/13/20	332701	L2040997-01	Pass	-29.3	-4.3	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2040997
Report Date: 10/21/20

Air Canister Certification Results

Lab ID: L2040997-01
 Client ID: CAN 2239 SHELF 21
 Sample Location:

Date Collected: 09/28/20 16:00
 Date Received: 09/29/20
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 09/29/20 16:51
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2040997
Report Date: 10/21/20

Air Canister Certification Results

Lab ID: L2040997-01
 Client ID: CAN 2239 SHELF 21
 Sample Location:

Date Collected: 09/28/20 16:00
 Date Received: 09/29/20
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2040997
Report Date: 10/21/20

Air Canister Certification Results

Lab ID: L2040997-01
 Client ID: CAN 2239 SHELF 21
 Sample Location:

Date Collected: 09/28/20 16:00
 Date Received: 09/29/20
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2040997
Report Date: 10/21/20

Air Canister Certification Results

Lab ID: L2040997-01
 Client ID: CAN 2239 SHELF 21
 Sample Location:

Date Collected: 09/28/20 16:00
 Date Received: 09/29/20
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2040997
Report Date: 10/21/20

Air Canister Certification Results

Lab ID: L2040997-01
 Client ID: CAN 2239 SHELF 21
 Sample Location:

Date Collected: 09/28/20 16:00
 Date Received: 09/29/20
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	93		60-140
Bromochloromethane	101		60-140
chlorobenzene-d5	93		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2040997
Report Date: 10/21/20

Air Canister Certification Results

Lab ID: L2040997-01
 Client ID: CAN 2239 SHELF 21
 Sample Location:

Date Collected: 09/28/20 16:00
 Date Received: 09/29/20
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 09/29/20 16:51
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2040997
Report Date: 10/21/20

Air Canister Certification Results

Lab ID: L2040997-01
 Client ID: CAN 2239 SHELF 21
 Sample Location:

Date Collected: 09/28/20 16:00
 Date Received: 09/29/20
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2040997
Report Date: 10/21/20

Air Canister Certification Results

Lab ID: L2040997-01
 Client ID: CAN 2239 SHELF 21
 Sample Location:

Date Collected: 09/28/20 16:00
 Date Received: 09/29/20
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	93		60-140
bromochloromethane	99		60-140
chlorobenzene-d5	95		60-140

Project Name: BLUE SEA BACA PHASE 11 ESA

Project Number: 26979.01

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information**Cooler** **Custody Seal**

NA Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2044045-01A	Canister - 2.7 Liter	NA	NA			Y	Absent		FIXGAS(30),TO15-LL(30)
L2044045-02A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30),FIXGAS(30)
L2044045-03A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30),FIXGAS(30)
L2044045-04A	Canister - 2.7 Liter	NA	NA			Y	Absent		FIXGAS(30),TO15-LL(30)

Project Name: BLUE SEA BACA PHASE 11 ESA
Project Number: 26979.01

Lab Number: L2044045
Report Date: 10/21/20

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report



Project Name: BLUE SEA BACA PHASE 11 ESA
Project Number: 26979.01

Lab Number: L2044045
Report Date: 10/21/20

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benzo(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.

Report Format: Data Usability Report



Project Name: BLUE SEA BACA PHASE 11 ESA
Project Number: 26979.01

Lab Number: L2044045
Report Date: 10/21/20

Data Qualifiers

- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.

Project Name: BLUE SEA BACA PHASE 11 ESA
Project Number: 26979.01

Lab Number: L2044045
Report Date: 10/21/20

REFERENCES

- 48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.
- 51 Determination of Carbon Dioxide, Methane, Nitrogen and Oxygen from Stationary Sources. Method 3C. Appendix A, Part 60, 40 CFR (Code of Federal Regulations). June 20, 1996.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

EPA TO-12 Non-methane organics

EPA 3C Fixed gases

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.

EPA 522.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.



CHAIN OF CUSTODY

AIR ANALYSIS

320 Forbes Blvd, Mansfield, MA 02048
 TEL: 508-822-9300 FAX: 508-822-3288

PAGE _____ OF _____

Date Rec'd in Lab: 10/15/20

ALPHA Job #: 22044045

Client Information

Client: VHS
 Address: 100 Motor Parkway
 Haverange NY 11788 610 350
 Phone: 631 835 1184
 Fax:
 Email: Bmurry@VHS.com

Project Information

Project Name: Blue Sea PAGA Phase II GSA
 Project Location: Between Chester St and Rockaway Ave
 Project #: 26979.01
 Project Manager: Bryan Murty
 ALPHA Quote #:

Report Information - Data Deliverables

FAX
 ADEx
 Criteria Checker:
 (Default based on Regulatory Criteria Indicated)
 Other Formats:
 EMAIL (standard pdf report)
 Additional Deliverables:
 Report to: (if different than Project Manager)

Billing Information

Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed Program Res / Comm

Turn-Around Time

Standard RUSH (only confirmed if pre-approved)

Date Due: Time:

These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List:

ANALYSIS

TO-15
 TO-15 SIM
 APH Reduced Non-halogenated HCs
 Fixed Gases
 Sulfides & Mercaptans by TO-15

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION					Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	TO-15	TO-15 SIM	APH Reduced Non-halogenated HCs	Fixed Gases	Sulfides & Mercaptans by TO-15	Sample Comments (i.e. PID)
		End Date	Start Time	End Time	Initial Vacuum	Final Vacuum											
44045-01	SV-1	10/14/20	08:40	11:05	-30.1	-1.06	SV	ME	2.7	403	0047	X					
02	SV-2	10/14/20	08:57	11:11	-30.31	-4.89	SV	ME	2.7	387	01143	X					
03	SV-4	10/14/20	09:22	11:30	-30.26	-4.28	SV	ME	2.7	280	06226	X					
04	SV-3	10/14/20	09:58	12:14	-30.14	-4.06	SV	ME	2.7	122	0386	X					

***SAMPLE MATRIX CODES**


AA = Ambient Air (Indoor/Outdoor)
 SV = Soil Vapor/Landfill Gas/SVE
 Other = Please Specify


Container Type


Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.


Relinquished By: [Signature] Date/Time: 10/14/20 13:30
 Received By: [Signature] Date/Time: 10/15/20 0300
 [Signature] (AA) 10/14/20 1330
 [Signature] (AA) 10/15/20 0300


ATTACHMENT F – SOIL BORING LOGS


		Boring Log		Project No.: 26979.01		Page:	
		Drill Rig: Truck Mounted 7800 Geoprobe			Date Drilled: 10/14/2020		Logged By: MI
		Boring Diameter: 2 inch			Boring Number: SB-01/ GW-01		
Sample	% Recovery	PID Reading (ppm)	Depth (Feet)	USCS Soil Type	Lithology/Description		
X	40	0.4	0-2	PT/SP	Medium to coarse grained medium gray sand; loam at top layer.		
	40	0.3	2-5	SP	Brick fragments; wood fragments; loam and medium grained dark gray sand.		
	40	0.2	5-7	SP	Brick fragments; wood fragments; loam and medium grained dark gray sand.		
	40	1.0	7-10	SM	Medium to fine grained light brown sand; some gravel.		
X	75	2.2 ft bgs (at 13')	10-15	SW	Medium grained light brown sand; well graded.		
<p>Completion Notes: Sample SB-01 (0'-2') collected at 10:14. Sample SB-01 (13'-15') collected at 10:24. Temporary Monitoring Well installed to 42ft bgs. DTW 39.1 ft bgs. Well was developed with check valve and GW sample GW-01 was collected at 11:25.</p> <p>BGS - Below Ground Surface USCS - Unified Soil Classification System</p>					<p>Boring Location: SB-01/ GW-01</p>		


		Boring Log		Project No.: 26979.01		Page:	
		Drill Rig: Truck Mounted 7800 Geoprobe			Date Drilled: 10/14/2020		Logged By: MI
		Boring Diameter: 2 inch			Boring Number: SB-02/ GW-02		
Sample	% Recovery	PID Reading (ppm)	Depth (Feet)	USCS Soil Type	Lithology/Description		
X	60	78.6 (at 1.5ft bgs)	0-3	SP	Medium to coarse grained medium brown sand; trace gravel.		
	60	4.0	3-5	SP	Brick fragments and C&D material.		
	30	0.3	5-10	SP	Brick fragments and C&D material; some coarse grained light brown sand.		
X	60	0.0	10-12	SP	Coarse grained light brown sand; brick fragments; asphalt.		
	60	0.0	12-15	SW	Coarse grained light brown sand; trace gravel.		
	60	0.5	15-20	SW	Coarse grained light brown sand; trace gravel.		
<p>Completion Notes: Sample SB-02 (0'-2') collected at 11:50. Sample SB-02 (15'-17') collected at 12:10. Temporary Monitoring Well installed to 43ft bgs. DTW 39.50 ft bgs. Well was developed with check valve and GW sample GW-02 was collected at 13:00.</p> <p>BGS - Below Ground Surface USCS - Unified Soil Classification System</p>					<p>Boring Location: SB-02/ GW-02</p>		


		Boring Log		Project No.: 26979.01		Page:	
		Drill Rig: Truck Mounted 7800 Geoprobe			Date Drilled: 10/15/2020		Logged By: MI
		Boring Diameter: 2 inch			Boring Number: SB-03		
Sample	% Recovery	PID Reading (ppm)	Depth (Feet)	USCS Soil Type	Lithology/Description		
X	40	12.6 (at 0-1ft bgs)	0-5	SP	Medium to coarse grained gray sand; fill material; trace brick & C&D materials.		
	60	6.2	5-7	SP	Medium to coarse grained gray sand; fill material; trace brick & C&D materials.		
	60	8.1	7-10	SC	Medium to fine grained light brown sand, high plasticity.		
X	60	4.1	10-15	SM	Medium to coarse grained light brown sand; some cobble.		
<p>Completion Notes: Sample SB-03 (0'-2') collected at 09:10. Sample SB-03 (5'-7') collected at 09:20. SB-03(13'-15') collected at 09:25.</p> <p>BGS - Below Ground Surface</p> <p>USCS - Unified Soil Classification System</p>					<p>Boring Location: SB-03</p>		


		Boring Log		Project No.: 26979.01		Page:	
		Drill Rig: Truck Mounted 7800 Geoprobe		Date Drilled: 10/13/2020		Logged By: MI	
		Boring Diameter: 2 inch		Boring Number: SB-04			
Sample	% Recovery	PID Reading (ppm)	Depth (Feet)	USCS Soil Type	Lithology/Description		
X	75	0.0	0-2	PT/SW	Medium to coarse grained brown/dark gray sand; loam top layer with organics.		
	75	0.0	2-5	SW	Medium to coarse grained light brown sand; brick and glass fragments.		
	75	0.0	5-10	SM/SC	Medium to fine grained light brown silty sand; well graded; silty clay with medium plasticity at 8'-10'.		
X	75	0.2 (at 8')	10-15	SW	Medium to coarse grained medium brown sand; cobble throughout; appears to be native.		
	80	0.4 (at 18')	15-20	SW	Medium to coarse grained medium brown sand; cobble throughout.		
Completion Notes: Sample SB-04 (0'-2') collected at 09:25. Sample SB-04(13'-15') collected at 10:15 BGS - Below Ground Surface USCS - Unified Soil Classification System					Boring Location: SB-04		


		Boring Log		Project No.: 26979.01		Page:		
		Drill Rig: Truck Mounted 7800 Geoprobe			Date Drilled: 10/13/2020			Logged By: MI
		Boring Diameter: 2 inch			Boring Number: SB-05			
Sample	% Recovery	PID Reading (ppm)	Depth (Feet)	USCS Soil Type	Lithology/Description			
X	50	0.2 (at 5')	0-5	SM	Medium to fine grained medium brown/gray silty sand; brick fragments from 4' - 5'.			
	75	0.0	5-10	SW	Medium to fine grained light brown sand; well graded.			
X	75	0.0	10-15	SW	Medium to coarse grained medium brown sand; well graded.			
Completion Notes: Sample SB-05 (0'-2') collected at 10:35. Sample SB-05(13'-15') collected at 10:55 BGS - Below Ground Surface USCS - Unified Soil Classification System						Boring Location: SB-05		

		Boring Log		Project No.: 26979.01		Page:	
		Drill Rig: Truck Mounted 7800 Geoprobe			Date Drilled: 10/13/2020		Logged By: MI
		Boring Diameter: 2 inch			Boring Number: SB-06		
Sample	% Recovery	PID Reading (ppm)	Depth (Feet)	USCS Soil Type	Lithology/Description		
X	60	0.0	0-2	PT/ SP	Medium to coarse grained dark gray fill/ C&D material; loam top layer; brick fragments and some medium brown sand.		
X	60	0.1 (at 3'-5')	2-5	SP	Medium to coarse grained brown sand; C&D material.		
	75	0.5 (at 7'-10')	5-10	SW/SC	Fine grained medium/light brown clayey sand; high plasticity at 7' - 10'.		
x	75	0.0	10-15	SW	Fine grained medium/light brown sand; well graded.		
<p>Completion Notes: Sample SB-06 (0'-2') collected at 11:15. Sample SB-06 (13'-15') collected at 11:35. Sample SB-06 (2'-4') re-collected on 10/15/20 at 10:46.</p> <p>BGS - Below Ground Surface USCS - Unified Soil Classification System</p>					<p>Boring Location: SB-06</p>		

		Boring Log		Project No.: 26979.01		Page:	
		Drill Rig: Truck Mounted 7800 Geoprobe			Date Drilled: 10/13/2020		Logged By: MI
		Boring Diameter: 2 inch			Boring Number: SB-07		
Sample	% Recovery	PID Reading (ppm)	Depth (Feet)	USCS Soil Type	Lithology/Description		
X	75	0.0	0-5	SP	Medium to coarse grained dark gray fill; some medium grained light brown sand.		
	75	0.0	5-10	SW	Medium to fine grained light brown sand; well graded.		
x	75	0.0	10-15	SW/SC	Medium to fine grained light brown sand; well graded; high plasticity from 11'-13'.		
Completion Notes: Sample SB-07 (0'-2') collected at 11:55. Sample SB-07 (13'-15') collected at 12:18.					Boring Location: SB-07		
BGS - Below Ground Surface USCS - Unified Soil Classification System							

		Boring Log		Project No.: 26979.01		Page:	
		Drill Rig: Truck Mounted 7800 Geoprobe			Date Drilled: 10/13/2020		Logged By: MI
		Boring Diameter: 2 inch			Boring Number: SB-08		
Sample	% Recovery	PID Reading (ppm)	Depth (Feet)	USCS Soil Type	Lithology/Description		
X	50	0.0	0-2	SW	Medium grained medium brown sand.		
	50	0.0	2-5	SP	Fill with brick/concrete fragments; medium grained medium brown sand.		
	80	0.0	5-8	SP	Medium to coarse grained dark gray/brown sand; brick fragments.		
	80	0.0	8-10	SW	Medium to coarse grained light brown well graded sand.		
X	80	0.0	10-15	SM	Medium to coarse grained medium brown sand; some cobble.		
Completion Notes: Sample SB-08 (0'-2') collected at 12:35. Sample SB-08 (13'-15') collected at 12:55.					Boring Location: SB-08		
BGS - Below Ground Surface USCS - Unified Soil Classification System							

		Boring Log		Project No.: 26979.01		Page:	
		Drill Rig: Truck Mounted 7800 Geoprobe			Date Drilled: 10/13/2020		Logged By: MI
		Boring Diameter: 2 inch			Boring Number: SB-09		
Sample	% Recovery	PID Reading (ppm)	Depth (Feet)	USCS Soil Type	Lithology/Description		
X	40	0.0	0-5	SP	Medium to coarse grained medium brown sand; fill with brick and concrete.		
	50	0.0	5-7	SP	Medium to coarse grained medium brown sand; fill with brick and concrete.		
	50	0.0	7-10	SC	Medium to fine grained dark light brown sand; high plasticity.		
X	60	0.0	10-15	SM	Medium to fine grained dark light brown sand; high plasticity; medium cobble.		
Completion Notes: Sample SB-09 (0'-2') collected at 13:05. Sample SB-09 (13'-15') collected at 13:20.					Boring Location: SB-09		
BGS - Below Ground Surface USCS - Unified Soil Classification System							

		Boring Log		Project No.: 26979.01		Page:	
		Drill Rig: Truck Mounted 7800 Geoprobe			Date Drilled: 10/15/2020		Logged By: MI
		Boring Diameter: 2 inch			Boring Number: SB-10		
Sample	% Recovery	PID Reading (ppm)	Depth (Feet)	USCS Soil Type	Lithology/Description		
X	30	0.0	0-3	SM	Medium to fine grained dark brown sandy loam.		
X	30	0.0	3-5	SP	Brick fragments and fill material.		
X	50	0.0	5-7	SP	Wood fragments and C&D material		
X	50	0.0	7-10	SM	Medium to coarse grained light brown sand; some cobble.		
X	75	0.0	10-15	SM	Medium to coarse grained light brown sand; some cobble.		
	75	0.0	15-20	SM	Medium to coarse grained light brown sand; some cobble.		
Completion Notes: Sample SB-10 (0'-2') collected at 09:55. Sample SB-10 (4'-6') collected at 10:00. Sample SB-10 (13'-15') collected at 10:05.					Boring Location: SB-10		
BGS - Below Ground Surface USCS - Unified Soil Classification System							

ATTACHMENT G – NYSDOH SOIL VAPOR/INDOOR AIR MATRICES

Soil Vapor/Indoor Air Matrix A

May 2017

Analytes Assigned:

Trichloroethene (TCE), *cis*-1,2-Dichloroethene (c12-DCE), 1,1-Dichloroethene (11-DCE), Carbon Tetrachloride

SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m ³)	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m ³)		
	< 0.2	0.2 to < 1	1 and above
< 6	1. No further action	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
6 to < 60	4. No further action	5. MONITOR	6. MITIGATE
60 and above	7. MITIGATE	8. MITIGATE	9. MITIGATE

No further action: No additional actions are recommended to address human exposures.

Identify Source(s) and Resample or Mitigate: We recommend that reasonable and practical actions be taken to identify the source(s) affecting the indoor air quality and that actions be implemented to reduce indoor air concentrations to within background ranges. For example, if an indoor or outdoor air source is identified, we recommend the appropriate party implement actions to reduce the levels. In the event that indoor or outdoor sources are not readily identified or confirmed, resampling (which might include additional sub-slab vapor and indoor air sampling locations) is recommended to demonstrate that SVI mitigation actions are not needed. Based on the information available, mitigation might also be recommended when soil vapor intrusion cannot be ruled out.

Monitor: We recommend monitoring (sampling on a recurring basis), including but not necessarily limited to sub-slab vapor, basement air and outdoor air sampling, to determine whether concentrations in the indoor air or sub-slab vapor have changed and/or to evaluate temporal influences. Monitoring might also be recommended to determine whether existing building conditions (e.g., positive pressure heating, ventilation and air-conditioning systems) are maintaining the desired mitigation endpoint and to determine whether changes are needed. The type and frequency of monitoring is determined based on site-, building- and analyte-specific information, taking into account applicable environmental data and building operating conditions. Monitoring is an interim measure required to evaluate exposures related to soil vapor intrusion until contaminated environmental media are remediated.

Mitigate: We recommend mitigation to minimize current or potential exposures associated with soil vapor intrusion. The most common mitigation methods are sealing preferential pathways in conjunction with installing a sub-slab depressurization system and changing the pressurization of the building in conjunction with monitoring. The type, or combination of types, of mitigation is determined on a building-specific basis, taking into account building construction and operating conditions. Mitigation is considered a temporary measure implemented to address exposures related to soil vapor intrusion until contaminated environmental media are remediated.

These general recommendations are made with consideration being given to the additional notes on page 2.

ADDITIONAL NOTES FOR MATRIX A

This matrix summarizes actions recommended to address current and potential exposures related to soil vapor intrusion. To use the matrix appropriately as a tool in the decision-making process, the following should be noted:

- [1] The matrix is generic. As such, it may be appropriate to modify a recommended action to accommodate analyte-specific, building-specific conditions (e.g., dirt floor in basement, crawl spaces, thick slabs, current occupancy, etc.), and/or factors provided in Section 3.2 of the guidance (e.g., current land use, environmental conditions, etc.). For example, collection of additional samples may be recommended when the matrix indicates "no further action" for a particular building, but the results of adjacent buildings (especially sub-slab vapor results) indicate a need to take actions to address exposures related to soil vapor intrusion. Mitigation might be recommended when the results of multiple contaminants indicate monitoring is recommended. Proactive actions may be proposed at any time. For example, the party implementing the actions may decide to install sub-slab depressurization systems on buildings where the matrix indicates "no further action" or "monitoring." Such an action might be undertaken for reasons other than public health (e.g., seeking community acceptance, reducing costs, etc.). However, actions implemented *in lieu* of sampling will typically be expected to be captured in the final engineering report and site management plan, and might not rule out the need for post-implementation sampling (e.g., to document effectiveness or to support terminating the action).
- [2] Actions provided in the matrix are specific to addressing human exposures. Implementation of these actions does not preclude investigating possible sources of soil vapor contamination, nor does it preclude remediating contaminated soil vapor or the source of soil vapor contamination.
- [3] Appropriate care should be taken during all aspects of sample collection to ensure that high quality data are obtained. Since the data are being used in the decision-making process, the laboratory analyzing the environmental samples must have current Environmental Laboratory Approval Program (ELAP) certification for the appropriate analyte and environmental matrix combinations. Furthermore, samples should be analyzed by methods that can achieve a minimum reporting limit of 0.20 microgram per cubic meter for indoor and outdoor air samples. For sub-slab vapor samples and dirt floor soil vapor samples, a minimum reporting limit of 1 microgram per cubic meter is recommended.
- [4] Sub-slab vapor and indoor air samples are typically collected when the likelihood of soil vapor intrusion is considered to be the greatest (i.e., worst-case conditions). If samples are collected at other times (typically, samples collected outside of the heating season), then resampling during worst-case conditions might be appropriate to verify that actions taken to address exposures related to soil vapor intrusion are protective of human health.
- [5] When current exposures are attributed to sources other than soil vapor intrusion, the agencies should be given documentation (e.g., applicable environmental data, completed indoor air sampling questionnaire, digital photographs, etc.) to support a proposed action other than that provided in the matrix box and to support agency assessment and follow-up.
- [6] The party responsible for implementing the recommended actions will differ depending upon several factors, including but not limited to the following: the identified source of the volatile chemicals, the environmental remediation program, and analyte-specific, site-specific and building-specific factors.

Soil Vapor/Indoor Air Matrix B

May 2017

Analytes Assigned:

Tetrachloroethene (PCE), 1,1,1-Trichloroethane (111-TCA), Methylene Chloride

SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m ³)	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m ³)		
	< 3	3 to < 10	10 and above
< 100	1. No further action	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
100 to < 1,000	4. No further action	5. MONITOR	6. MITIGATE
1,000 and above	7. MITIGATE	8. MITIGATE	9. MITIGATE

No further action: No additional actions are recommended to address human exposures.

Identify Source(s) and Resample or Mitigate: We recommend that reasonable and practical actions be taken to identify the source(s) affecting the indoor air quality and that actions be implemented to reduce indoor air concentrations to within background ranges. For example, if an indoor or outdoor air source is identified, we recommend the appropriate party implement actions to reduce the levels. In the event that indoor or outdoor sources are not readily identified or confirmed, resampling (which might include additional sub-slab vapor and indoor air sampling locations) is recommended to demonstrate that SVI mitigation actions are not needed. Based on the information available, mitigation might also be recommended when soil vapor intrusion cannot be ruled out.

Monitor: We recommend monitoring (sampling on a recurring basis), including but not necessarily limited to sub-slab vapor, basement air and outdoor air sampling, to determine whether concentrations in the indoor air or sub-slab vapor have changed and/or to evaluate temporal influences. Monitoring might also be recommended to determine whether existing building conditions (e.g., positive pressure heating, ventilation and air-conditioning systems) are maintaining the desired mitigation endpoint and to determine whether changes are needed. The type and frequency of monitoring is determined based on site-, building- and analyte-specific information, taking into account applicable environmental data and building operating conditions. Monitoring is an interim measure required to evaluate exposures related to soil vapor intrusion until contaminated environmental media are remediated.

Mitigate: We recommend mitigation to minimize current or potential exposures associated with soil vapor intrusion. The most common mitigation methods are sealing preferential pathways in conjunction with installing a sub-slab depressurization system and changing the pressurization of the building in conjunction with monitoring. The type, or combination of types, of mitigation is determined on a building-specific basis, taking into account building construction and operating conditions. Mitigation is considered a temporary measure implemented to address exposures related to soil vapor intrusion until contaminated environmental media are remediated.

These general recommendations are made with consideration being given to the additional notes on page 2.

ADDITIONAL NOTES FOR MATRIX B

This matrix summarizes actions recommended to address current and potential exposures related to soil vapor intrusion. To use the matrix appropriately as a tool in the decision-making process, the following should be noted:

- [1] The matrix is generic. As such, it may be appropriate to modify a recommended action to accommodate analyte-specific, building-specific conditions (e.g., dirt floor in basement, crawl spaces, thick slabs, current occupancy, etc.), and/or factors provided in Section 3.2 of the guidance (e.g., current land use, environmental conditions, etc.). For example, collection of additional samples may be recommended when the matrix indicates "no further action" for a particular building, but the results of adjacent buildings (especially sub-slab vapor results) indicate a need to take actions to address exposures related to soil vapor intrusion. Mitigation might be recommended when the results of multiple contaminants indicate monitoring is recommended. Proactive actions may be proposed at any time. For example, the party implementing the actions may decide to install sub-slab depressurization systems on buildings where the matrix indicates "no further action" or "monitoring." Such an action might be undertaken for reasons other than public health (e.g., seeking community acceptance, reducing costs, etc.). However, actions implemented *in lieu* of sampling will typically be expected to be captured in the final engineering report and site management plan, and might not rule out the need for post-implementation sampling (e.g., to document effectiveness or to support terminating the action).
- [2] Actions provided in the matrix are specific to addressing human exposures. Implementation of these actions does not preclude investigating possible sources of soil vapor contamination, nor does it preclude remediating contaminated soil vapor or the source of soil vapor contamination.
- [3] Appropriate care should be taken during all aspects of sample collection to ensure that high quality data are obtained. Since the data are being used in the decision-making process, the laboratory analyzing the environmental samples must have current Environmental Laboratory Approval Program (ELAP) certification for the appropriate analyte and environmental matrix combinations. Furthermore, samples should be analyzed by methods that can achieve a minimum reporting limit of 1 microgram per cubic meter for indoor and outdoor air samples. For sub-slab vapor samples and dirt floor soil vapor samples, a minimum reporting limit of 1 microgram per cubic meter is recommended.
- [4] Sub-slab vapor and indoor air samples are typically collected when the likelihood of soil vapor intrusion is considered to be the greatest (i.e., worst-case conditions). If samples are collected at other times (typically, samples collected outside of the heating season), then resampling during worst-case conditions might be appropriate to verify that actions taken to address exposures related to soil vapor intrusion are protective of human health.
- [5] When current exposures are attributed to sources other than soil vapor intrusion, the agencies should be given documentation (e.g., applicable environmental data, completed indoor air sampling questionnaire, digital photographs, etc.) to support a proposed action other than that provided in the matrix box and to support agency assessment and follow-up.
- [6] The party responsible for implementing the recommended actions will differ depending upon several factors, including but not limited to the following: the identified source of the volatile chemicals, the environmental remediation program, and analyte-specific, site-specific and building-specific factors.

Soil Vapor/Indoor Air Matrix C

May 2017

Analytes Assigned:

Vinyl Chloride

SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m ³)	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m ³)	
	< 0.2	0.2 and above
< 6	1. No further action	2. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
6 to < 60	3. MONITOR	4. MITIGATE
60 and above	5. MITIGATE	6. MITIGATE

No further action: No additional actions are recommended to address human exposures.

Identify Source(s) and Resample or Mitigate: We recommend that reasonable and practical actions be taken to identify the source(s) affecting the indoor air quality and that actions be implemented to reduce indoor air concentrations to within background ranges. For example, if an indoor or outdoor air source is identified, we recommend the appropriate party implement actions to reduce the levels. In the event that indoor or outdoor sources are not readily identified or confirmed, resampling (which might include additional sub-slab vapor and indoor air sampling locations) is recommended to demonstrate that SVI mitigation actions are not needed. Based on the information available, mitigation might also be recommended when soil vapor intrusion cannot be ruled out.

Monitor: We recommend monitoring (sampling on a recurring basis), including but not necessarily limited to sub-slab vapor, basement air and outdoor air sampling, to determine whether concentrations in the indoor air or sub-slab vapor have changed and/or to evaluate temporal influences. Monitoring might also be recommended to determine whether existing building conditions (e.g., positive pressure heating, ventilation and air-conditioning systems) are maintaining the desired mitigation endpoint and to determine whether changes are needed. The type and frequency of monitoring is determined based on site-, building- and analyte-specific information, taking into account applicable environmental data and building operating conditions. Monitoring is an interim measure required to evaluate exposures related to soil vapor intrusion until contaminated environmental media are remediated.

Mitigate: We recommend mitigation to minimize current or potential exposures associated with soil vapor intrusion. The most common mitigation methods are sealing preferential pathways in conjunction with installing a sub-slab depressurization system and changing the pressurization of the building in conjunction with monitoring. The type, or combination of types, of mitigation is determined on a building-specific basis, taking into account building construction and operating conditions. Mitigation is considered a temporary measure implemented to address exposures related to soil vapor intrusion until contaminated environmental media are remediated.

These general recommendations are made with consideration being given to the additional notes on page 2.

ADDITIONAL NOTES FOR MATRIX C

This matrix summarizes actions recommended to address current and potential exposures related to soil vapor intrusion. To use the matrix appropriately as a tool in the decision-making process, the following should be noted:

- [1] The matrix is generic. As such, it may be appropriate to modify a recommended action to accommodate analyte-specific, building-specific conditions (e.g., dirt floor in basement, crawl spaces, thick slabs, current occupancy, etc.), and/or factors provided in Section 3.2 of the guidance (e.g., current land use, environmental conditions, etc.). For example, collection of additional samples may be recommended when the matrix indicates "no further action" for a particular building, but the results of adjacent buildings (especially sub-slab vapor results) indicate a need to take actions to address exposures related to soil vapor intrusion. Mitigation might be recommended when the results of multiple contaminants indicate monitoring is recommended. Proactive actions may be proposed at any time. For example, the party implementing the actions may decide to install sub-slab depressurization systems on buildings where the matrix indicates "no further action" or "monitoring." Such an action might be undertaken for reasons other than public health (e.g., seeking community acceptance, reducing costs, etc.). However, actions implemented *in lieu* of sampling will typically be expected to be captured in the final engineering report and site management plan, and might not rule out the need for post-implementation sampling (e.g., to document effectiveness or to support terminating the action).
- [2] Actions provided in the matrix are specific to addressing human exposures. Implementation of these actions does not preclude investigating possible sources of soil vapor contamination, nor does it preclude remediating contaminated soil vapor or the source of soil vapor contamination.
- [3] Appropriate care should be taken during all aspects of sample collection to ensure that high quality data are obtained. Since the data are being used in the decision-making process, the laboratory analyzing the environmental samples must have current Environmental Laboratory Approval Program (ELAP) certification for the appropriate analyte and environmental matrix combinations. Furthermore, samples should be analyzed by methods that can achieve a minimum reporting limit of 0.20 microgram per cubic meter for indoor and outdoor air samples. For sub-slab vapor samples and dirt floor soil vapor samples, a minimum reporting limit of 1 microgram per cubic meter is recommended.
- [4] Sub-slab vapor and indoor air samples are typically collected when the likelihood of soil vapor intrusion is considered to be the greatest (i.e., worst-case conditions). If samples are collected at other times (typically, samples collected outside of the heating season), then resampling during worst-case conditions might be appropriate to verify that actions taken to address exposures related to soil vapor intrusion are protective of human health.
- [5] When current exposures are attributed to sources other than soil vapor intrusion, the agencies should be given documentation (e.g., applicable environmental data, completed indoor air sampling questionnaire, digital photographs, etc.) to support a proposed action other than that provided in the matrix box and to support agency assessment and follow-up.
- [6] The party responsible for implementing the recommended actions will differ depending upon several factors, including but not limited to the following: the identified source of the volatile chemicals, the environmental remediation program, and analyte-specific, site-specific and building-specific factors.

ATTACHMENT H – PREPARER INFORMATION

George William Lester, PE

Senior Project Engineer



Education

MS, Civil and Environmental Engineering, University of Vermont, 2013

BS, Civil Engineering, University of Vermont, 2011

Registrations/Certifications

Professional Engineer PA, 2020

Professional Engineer NC, 2019

Professional Engineer NY, 2017

Professional Engineer VT, 2016

OSHA 10-Hour Construction Safety and Health Certificate

OSHA 40-Hour Hazwoper Certificate, 2015

OSHA 8- Hour Hazwoper Refresher Certificate, 2018

George has civil and environmental engineering experience focused primarily on groundwater remediation and stormwater management, with experience in geotechnical analysis and civil design. He has performed the design, implementation, operation, and monitoring of soil, soil gas, and groundwater remediation systems sites. Additionally, George has worked on stormwater treatment systems as well as residential and commercial development projects from the project planning phase through construction completion. George is a licensed Professional Engineer in New York, North Carolina, Pennsylvania, and Vermont.

Groundwater Extraction and Treatment System Construction, Operation, Maintenance, and Monitoring – New York

Performed construction oversight tasks for the construction of a Waterloo Barrier®, engineered soil cap and the and the groundwater extraction and treatment system at a chlorinated solvent site in New York state. The Waterloo Barrier® encompasses approximately 2.6 acres ranging in depth from 35 to 55 feet below grade. The engineered soil cap was constructed with over 6000 cubic yards of imported low permeability clay, fill, and topsoil. He continues to oversee the operation, maintenance, and monitoring of the groundwater extraction and treatment system including monitoring for compliance of air and water discharge regulations and verification of the system performance goals.

Sub-Slab Depressurization System Design Construction, Operation, Maintenance, and Monitoring – New York

Completed the design and construction of a sub-slab depressurization system for a former manufacturing facility in Rockland County, New York. Responsibilities included pre-design testing, design report, and installation of the system. After successful construction, the system was started and optimized to insure adequate capture of the sub-slab soil gas. Ongoing work includes confirmation sampling, preparation of a Final Engineering Report and Site Management Plan for New York State.

Groundwater Extraction and Treatment System Construction, Operation, Maintenance, and Monitoring – North Carolina

Oversees the operation, maintenance, and monitoring of a groundwater extraction and treatment system at a former industrial site in North Carolina. He conducts routine engineering inspections, ongoing preventative and unplanned equipment maintenance, continuous treatment system optimization, and reporting to NCDEQ.

Pine Street Canal Superfund Site, Compliance Monitoring Activities, Burlington, VT

Manages the ongoing long-term monitoring and operation and maintenance activities at the Pine Street Canal Superfund Site. Prepared and executed additional investigations including soil borings, profiling, monitoring well installation, and field sampling of sediment, surface water, and pore water in order to verify compliance with the project Remedial Action Objectives. Provides ongoing technical guidance do the performing defendant group.

Bryan Murty

Senior Project Manager



Bryan Murty manages and conducts Phase I and Phase II Environmental Site Assessments. In addition, Bryan performs various environmental services including soil vapor sampling/ambient air quality analysis, design, oversight and technical support of small and large-scale remediation projects, as well as noise studies. Bryan also participates in various environmental planning activities, including preparation of Draft and Final Environmental Impact Statements.

Education

BA, Environmental Sciences,
State University of New York
at Binghamton, 2005

Registrations/ Certifications

New York City Office of
Environmental Remediation
Gold Certified Professional
(Brownfield Industry), 2015

OSHA Certified Hazardous
Waste Health and Safety
Operator (OSHA 1910.120),
2006

OSHA Construction Safety
and Health Certificate (10-
Hour), 2012

11 years of professional experience

United States Armed Forces Reserve Center/Nike Missile Base, Amityville, NY

Bryan performed Phase I and Phase II Environmental Site Assessments for the closure and redevelopment of the former United States Armed Forces Reserve Center and Nike Missile Base located in Amityville, New York. He evaluated all environmental conditions at the property including sub-slab soil vapor and ambient air quality analyses, multi-depth soil sampling, underground injection control (UIC), as well as groundwater and wastewater sampling within abandoned missile silos. (\$50K)

Polytechnic Institute of New York University, Brooklyn, NY

Bryan assisted in the design and implementation of a large-scale groundwater remediation system associated with a former leaking underground storage tank located at the Polytechnic Institute in Brooklyn. The groundwater remediation system is designed to collect and capture contaminated groundwater and recover product floating on the groundwater table. In order to achieve this, Bryan coordinated with various additional team consultants in order to gather information needed to produce a New York State Department of Environmental Conservation-approved remedial action work plan. (\$50K)

Nassau Board of Cooperative Educational Services (BOCES) Career Preparatory High School, Westbury, NY

Bryan provided consulting services including a review of adjacent industrial and former Superfund sites within the surrounding properties. Bryan also conducts sub-slab soil vapor and indoor air monitoring in accordance with New York State Department of Health (NYSDOH) protocols in order to ensure surrounding industrial properties are not adversely affecting the school. (\$25K)

Taystee Bakery, West Harlem, NY

Bryan performed Phase I and Phase II ESAs for the redevelopment of a block of vacant buildings located in West Harlem that were formerly utilized as a commercial bakery. Bryan also corresponded with the NYSDEC for closure of an on-site spill, and created a New York City Office of Environmental Remediation (NYCOER)-approved Work Plan for the remediation of the property that is scheduled to be implemented in the coming year. (\$12K)

The Riverwalk Redevelopment, Patchogue, NY

Bryan assisted in the preparation of Phase I and Phase II Environmental Site Assessments, as well as the facility closure (including soil, groundwater, UIC analysis and

Bryan Murty

underground storage tank removal) of the former Clare Rose beverage distribution center in Patchogue, New York for redevelopment into market rate condominiums.

Costco Redevelopment, Hicksville, NY

Bryan prepared Phase I and Phase II Environmental Site Assessments and assisted in preparation of the revised FEIS for the redevelopment of the property at West John Street and Charlotte Avenue.

New York City Phase I ESA Experience, New York, NY

Bryan has prepared numerous Phase I Environmental Site Assessments throughout the five boroughs for such projects as the Tastyee Bakery Site near Columbia University; Jewish Home Lifecare on the Upper West Side; 7 World Trade Center in Manhattan; Bossert Hotel in Brooklyn; Attorney Street in Manhattan; Park Lane Hotel, the former Helmsley Hotel, in Manhattan; and many others. As a result of the research for these projects and the coordination with environmental agencies, Bryan understands New York City environmental issues, the regulations governing these issues, and the remediation protocols.

T.C. Dunham Paint Company, Yonkers, NY

Bryan provided consulting services including emergency response, and production and oversight of an approved remedial action work plan associated with a 4-alarm paint warehouse fire that impacted a large area in Yonkers. He teamed with various consultants and coordinated with various regulatory agencies, including the City of Yonkers, New York State Department of Environmental Conservation and the United States Environmental Protection Agency to generate various approved documents including a remedial action work plan, health and safety plan (HASP) and community air monitoring program (CAMP) plan.

Former Bay Shore Armory, Bay Shore, NY

Bryan performed a Phase II Environmental Site Assessment for the re-use and redevelopment of the former New York State Armory property. He coordinated with sub-contractors and provided field oversight for a geophysical survey, the sampling from several large leaching fields, abandoned underground structures including vehicle lifts, tanks and an oil/water separator.

Queen of Peace Cemetery and Residential Subdivision, Old Westbury, NY

Bryan prepared the FEIS for the development of a cemetery for the Diocese of Rockville Centre.

Nassau Coliseum Redevelopment, Lighthouse at Long Island, Uniondale, NY

Bryan assisted in preparation of the DGEIS for the redevelopment of the existing Nassau County Veterans Memorial Coliseum to a multi-use entertainment and residential complex in the Town of Hempstead.

EIS for Heartland Town Square Redevelopment, Brentwood, NY

Bryan assisted in preparation of the EIS for the rezoning and redevelopment of the 475± acre former Pilgrim Psychiatric Center as a Smart Growth Community.

Sheltair Aviation, Republic Airport, Farmingdale, NY

Bryan assisted in preparation of the Hazardous Materials section of DEIS for proposed redevelopment and improvement of a former residential subdivision as a private jet terminal.

Pulte Homes, Courthouse Commons, Central Islip, NY

Bryan prepared Phase I and Phase II Environmental Site Assessment and assisted in the monitoring of a large-scale remediation of a landfill at the former Central Islip Psychiatric Facility under the direction of the Suffolk County Department of Health Services and the New York State Department of Environmental Conservation for the ultimate redevelopment of the property as a residential condominium complex. (\$125K)

Lowe's Home Centers, Various Nassau County and Suffolk County Sites, NY

Bryan prepared Phase I and Phase II Environmental Site Assessments for several Lowe's stores throughout Long Island.

Verizon Wireless Phase I & Phase II Environmental Site Assessments, Various Locations, NY

Bryan has performed over 60 Phase I and/or Phase II Environmental Site Assessments (ESA) in the five boroughs and over 200 in various locations in New York for Verizon Wireless' service expansion. He supports Phase II ESAs by performing soil sampling, groundwater investigations/monitoring and soil vapor monitoring, and also provides remedial investigation support.

PANYNJ Passenger Facility Charge, Newark, NJ, New York, NY, New Windsor, NY

Bryan assisted in developing and administering the 2010 PFC application for the Port Authority of New York and New Jersey for Newark Liberty International Airport, John F. Kennedy International Airport, LaGuardia Airport and Stewart International Airport. This application includes \$570 million in capital development projects that incorporate terminal expansion, runway and taxiway pavement rehabilitation and security enhancements. Working with Port Authority staff, assisted in developing each project description justification through detailed meetings with a variety of Port Authority staff (technical services, accounting, planning) throughout the agency. The application received considerable support by the airlines and worked diligently with Port Authority staff and the FAA to the eventual approval of the application.

Country Point at Plainview, Plainview, NY

Bryan conducted a Phase I Environmental Site Assessment on the former Nassau County Sanatorium and associated recreational playing fields in Plainview, New York. He used this information to provide integrated services and incorporated some into a Draft Environmental Impact Statement to analyze existing conditions, potential impacts and mitigation measures associated with the redevelopment of the former Nassau County Sanatorium to a multi-family residential subdivision.