

June 29, 2022

Jeff Head
Vice President of Community Development
The Habitat Company
350 W. Hubbard Street, Suite 500
Chicago, IL 60654

**Re: Pre-BCP Sampling Report
Marine Drive Apartments – Marine Drive, Buffalo, New York**

Dear Mr. Head:

At the request of The Habitat Company, C&S Engineers, Inc. (C&S) has prepared this Pre-BCP Sampling Report (Report or Investigation) for the properties located at the Marine Drive Apartment complex in the City of Buffalo, New York (Site). The scope of services for the subsurface soil sampling was based on our proposal date May 11, 2022. The location of the Site is shown on **Figure 1**.

This Investigation is intended to provide further information on a site's environmental condition to render a professional opinion on the possibility to enter the Site into the New York State Department of Environmental Conservation's (NYSDEC) Brownfield Cleanup Program (BCP). The Investigation is not meant to be exhaustive in research; furthermore, no environmental site investigation can wholly eliminate uncertainty regarding the potential nature and extent of environmental concern(s) in connection with a property.

Site Description

The Site is located at Marine Drive in the City of Buffalo, Erie County, New York. The Site consists of tax parcels listed at SBL 111.17-17-1 and 111.17-15-1. The entire Site is approximately 9.7-acres, and is currently owned by the Buffalo Municipal Housing Authority.

Prior to the current use of the Site as an apartment complex, in the early to mid-1900s the Site was the location of multiple commercial and industrial uses such as machine shops, foundry, and grain elevators. In addition, most of the Site was occupied by tenement housing. The Site was demolished in the 1950s to construct the current apartment complex.

Limited Site Characterization Scope and Objectives

This Investigation was intended to document near surface soil conditions across the Site. The sampling program consisted of approximately 12 hand auger locations advanced from ground surface to approximately one to two feet below ground surface (bgs) or refusal.

A total of 12 soil samples was collected from each hand auger boring for laboratory analysis based on visual and screening evidence of contamination. The soil samples were analyzed for USEPA Target Compound List (TCL) semi-volatile organic compounds (SVOCs) and Total Analyte List (TAL) metals.

Results

Site Geology

The hand auger borings were advanced to two feet below grade in most locations. Obstructions were encountered in EB-04, EB-06, EB-08, and EB-10 that limited the depth to one-foot below grade. Near surface geology across the Site was generally consistent with approximately three-inches to one-foot of topsoil followed by urban fill. Topsoil consists of moist, brown silty sand. Urban fill is defined as material coming from anthropogenic sources re-worked to build a site to a defined grade. The urban fill material at the Site contains:

- Crushed Rock
- Sand
- Silt
- Clay
- Plastics
- Construction Debris
- Lumber
- Ash/Cinders
- Ceramics
- Bricks
- Metals

The urban fill in the borings consisted of a mixture of sand, silt, clay and gravel with varying amounts of anthropogenic materials. Color of the fill material varied between light grey, brown, dark grey and black.

Location	Borehole Depth (feet)	Material Description	PID Reading (PPM)
EB-01	2	1' – Silty SAND, moist, brown 1' – Urban FILL, moist, dark grey to black, concrete and brick pieces	0
EB-02	1.5	1' – Silty SAND, moist, brown 0.5' – Urban FILL, moist, dark grey to black, concrete and brick pieces	0
EB-03	1.5	0.5' – Silty SAND, moist, brown 1' – Urban FILL, moist, dark grey to black, coal, concrete and brick pieces	0
EB-04	1	1' – Silty SAND, moist, brown Obstruction at 1'	0
EB-05	2	0.5' – Silty SAND, moist, brown 1.5' – Urban FILL, crushed stone	0
EB-06	1	0.5' – Silty SAND, moist, brown 0.5' – Urban FILL, moist, dark grey to black, concrete and brick pieces	0
EB-07	2	1' – Silty SAND, moist, brown 1' – Urban FILL, moist, dark grey to black, concrete and brick pieces	0

EB-08	1	0.25' – Silty SAND, moist, brown 0.6' – Urban FILL, moist, dark grey to black, concrete and brick pieces Obstruction at 1'	0
EB-09	2	0.5' – Silty SAND, moist, brown 1.5' – Urban FILL, moist, dark grey to black, coal, concrete and brick pieces	0
EB-10	1	1' – Silty SAND, moist, brown Obstruction at 1'	0
EB-11	2	2' – Silty SAND, moist, brown	0
EB-12	1	0.5' – Silty SAND, moist, brown 0.5' – Urban FILL, moist, dark grey to black, concrete and brick pieces	0

Locations of the boreholes are presented in **Figures 1**. Photo log provided in **Attachment A**.

Field Screening Results

During the field investigation, C&S used a Mini-Rae 3000 photo-ionization detector (PID) with a 10.6-volt lamp to identify potential volatile organic odors. No physical evidence of contamination (stains, sheens, and odor) or detectable volatile organic vapors were detected in relation to the soil samples.

Laboratory Analytical Data

Sample results were also compared to 6 NYCRR Part 375-6, Remediation Program Soil Cleanup Objectives (SCO), effective December 14, 2006, includes SCOs that are based on protection of human health, groundwater, and ecological resources. The SCOs are based on the actual or intended site use.

The Unrestricted Use SCOs are considered to be representative of pre-release conditions unless an impact to ecological resources has been identified.

The Residential Use SCOs are intended for single family housing and requires the fewest restrictions on the use of the site. It allows only two restrictions: a groundwater use restriction and / or a prohibition against producing animal products for human consumption.

The Restricted Residential Use SCOs apply to land uses such as apartments, condominium, co-operative or other multi-family / common property control residential development. In addition to the restrictions for residential use, this use prohibits vegetable gardens, unless planted in gardens where the soil achieves the residential use soil cleanup objectives; and a prohibition of single-family housing. Restricted Residential use is the appropriate use category for day care or other child care facilities, elementary or secondary schools, or college or boarding school residential buildings. This use allows for active recreational uses, which includes recreational activities with a reasonable potential for soil contact.

The Commercial Use SCOs apply to businesses with the primary purpose of buying, selling or trading of merchandise or services.

The Industrial Use SCOs apply to businesses with the primary purpose of manufacturing goods for retail sale.

Summaries of the lab data as well as complete laboratory analytical reports are provided in **Attachment B**.

PART 375 SOIL ANALYTICAL DATA

Comparison of the soil analytical data indicates:

- SVOCs, mainly polycyclic aromatic hydrocarbons (PAHs), were detected in six of the 12 samples at concentrations exceeding the following SCOs:
 - Benzo(a)anthracene concentrations exceeded the Restricted Residential Use SCO (1,000 ppb¹) at four locations and Industrial Use SCO (11,000 ppb) at two locations. Concentrations ranged from 1,800 ppb to 26,000 ppb.
 - Benzo(a)pyrene concentrations exceeded the Industrial Use SCO (1,100 ppb) at six locations. Concentrations ranged from 1,500 ppb to 24,000 ppb.
 - Benzo(b)fluoranthene concentrations exceeded the Restricted Residential Use SCO (1,000 ppb) at four locations and Industrial Use SCO (11,000 ppb) at two locations. Concentrations ranged 1.0 ppm to 5.8 ppm.
 - Benzo(k)fluoranthene concentrations exceeded the Residential Use SCO (1,000 ppb) at three locations and Restricted Residential SCO (3,900 ppb) at two locations. Concentrations ranged from 1,400 ppb to 2,600 ppb.
 - Chrysene concentrations exceeded the Residential Use SCO (1,000 ppb) at four locations and Residential Restricted Use SCO (3,900 ppb) at two locations. Concentrations ranged from 1,700 ppb to 25,000 ppb.
 - Dibenzo(a,h)anthracene exceeded the Restricted Residential SCO (330 ppb) at two locations, Commercial Use SCO (560 ppb) SCO at one location and Industrial Use SCO (1,100 ppb) at two locations. Concentrations ranged from 420 ppb to 4,500 ppb.
 - Indeno(1,2,3-cd)pyrene exceeded the Restricted Residential Use SCO (500 ppb) in four locations and Commercial Use SCO (5,600 ppb) at two locations. Concentrations ranged from 820 ppb to 11,000 ppb.
- The following metals concentrations were detected in nine of the 12 samples exceeded the following SCOs:
 - Concentrations of mercury exceeded Unrestricted Use (50 ppm²) at four locations and Restricted Residential Use (0.81 ppm) in one location. Concentrations ranged from 0.25 ppm to 0.97 ppm.
 - Arsenic was detected at one location above Unrestricted Use SCO (13 ppm).
 - Barium was detected at one location above Commercial Use SCO (400 ppm).

¹ Parts per billion (ppb) = microgram per kilogram (ug/kg)

² Parts per million (ppm) = milligram per kilogram (mg/kg)

- Cadmium was detected at one location above Residential Use SCO (2.5 ppm).
- Copper was detected at one location above Unrestricted Use SCO (50 ppm).
- Concentrations of lead exceeded Unrestricted Use (63 ppm) at five locations; Restricted Residential Use (400 ppm) at two locations, Commercial Use (1,000 ppm) at one location. Concentrations ranged from 67.9 ppm to 1,660 ppm.
- Manganese was detected at one location above Restricted Residential Use SCO (2,000 ppm).
- Nickel was detected at one location above Unrestricted Use SCO (30 ppm).

Figure 2 shows sample results on a site map. **Table 1** presents laboratory data compared to SCOs.

Findings

C&S' Investigation of the Site was conducted on May 25, 2022. The following summarizes and discusses the results of this Investigation:

- A total of 12 near surface samples were collected from approximately one to two feet below ground surface. The samples were collected from pre-established locations based on current and historical uses of the Site.
- Urban fill materials containing ash, coal, and/or brick were observed in nine of the 12 borings and extend throughout both parcels that comprise the Site. This Investigation observed urban fill material starting underneath the topsoil (three-inches to one-foot thick) to the end of the boring at two feet bgs. Considering past buildings on the Site were demolished and backfilled to construct the current apartment complex in the 1950s, it is highly likely that urban fill material extends deeper than two feet bgs. No detectable evidence of petroleum odors was observed from the urban fill. From the samples collected in the urban fill material several significant detections were noted:
 - Numerous SVOCs were detected at concentrations greater than Restricted Residential Use SCOs (Note: this SCO typically applies to land uses such as apartments, condominium, co-operative or other multi-family / common property control residential development) at shallow depths of one to two feet below ground surface throughout the Site. Multiple locations had SVOC concentrations above Industrial Use SCOs for benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and dibenzo(a,h)anthracene. These PAHs are associated with the incomplete combustion of organic matter or fuels (e.g. wood or coal) and are found in urban areas mixed with soil from historic uses.
 - Heavy metals were detected in all samples collected from the Site; however, only four locations contained metal concentrations above Restricted Residential Use SCOs. EB-01, EB-08, EB-09 and EB-12 contained lead, mercury and manganese concentrations above Restricted Residential Use SCOs. EB-09 contained concentrations above Commercial Use SCOs for barium and lead.
- Samples collected from the topsoil layer included the following borings: EB-04; EB-05; EB-06; and EB-10, although they did not contain ash, coal, or brick from previous uses, the samples did contain marginal concentrations of lead above Unrestricted Use SCOs.

Recommendations

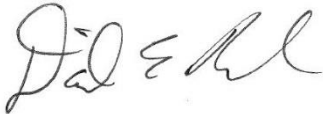
Based on C&S' onsite observations and experience, the Site's contamination is likely connected to the past Site uses and/or backfilling of the properties with unregulated fill material after buildings were demolished. Contaminants of concern in the near surface soil/urban fill are SVOCs and heavy metals; including PAHs, barium, cadmium, lead, manganese and mercury.

Given the history of the Site, and the probable extent of urban fill across the Site to potentially several feet below ground surface, C&S believes this Site would be appropriate to enter into the Brownfield Cleanup Program.

Should you have any questions regarding this letter or require additional information, please feel free to contact the undersigned.

Sincerely,

C&S ENGINEERS, INC.



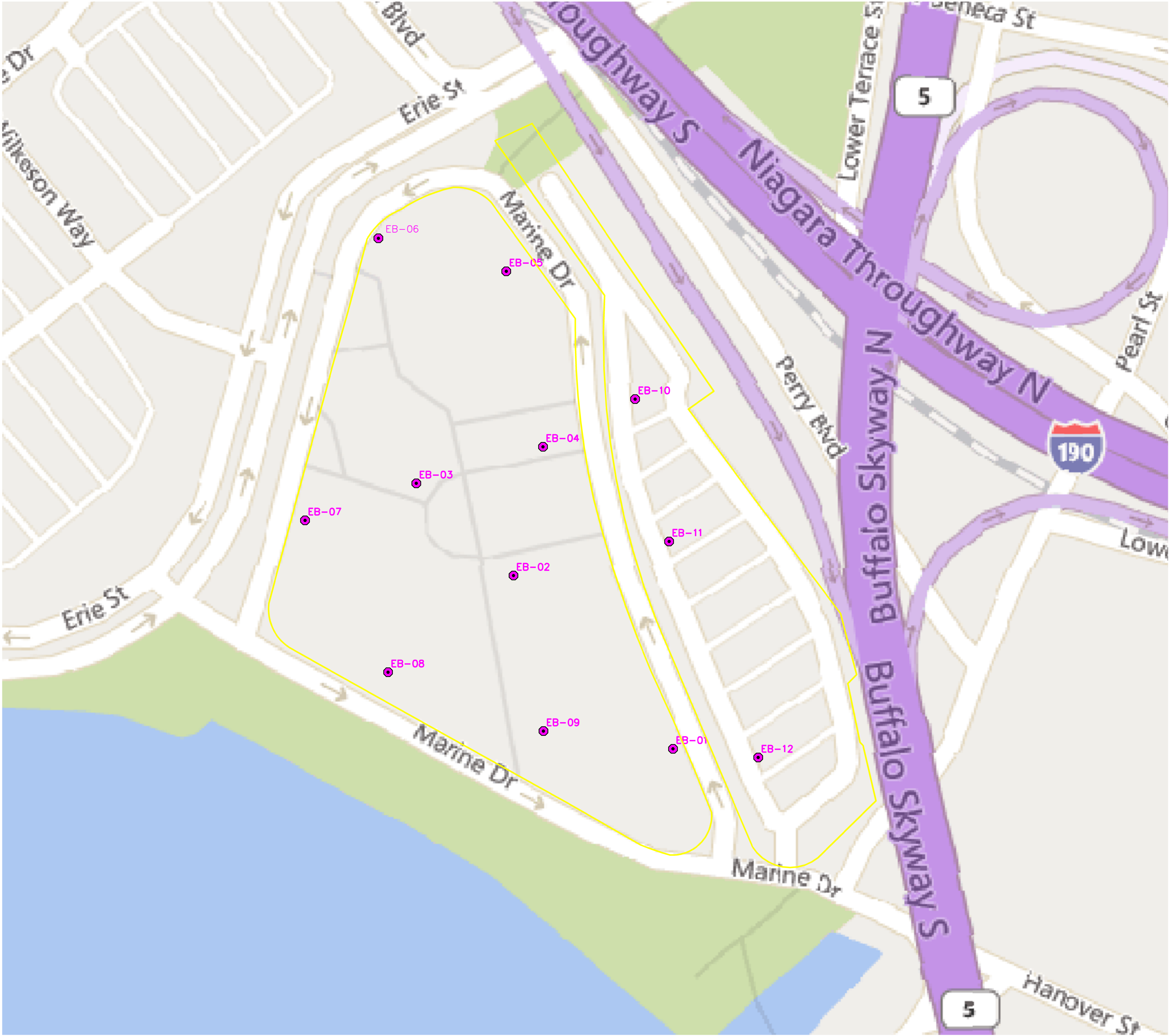
Daniel E. Riker, P.G.
Department Manager



Cody A. Martin
Project Environmental Scientist

FIGURES

Jun 27, 2022 - 12:02pm
F:\Project\Z31 - The Habitat Company\Z31001001 - Marine Drive BCP Assistance\Planning-Study\CADD\pre-bcp-sample-locations.dwg



LEGEND

PROPERTY BOUNDARY



C&S Engineers, Inc.
141 Elm Street, Suite 100
Buffalo, New York 14203
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Fax: 716-847-1454
www.cscos.com

PRELIMINARY
NOT FOR
CONSTRUCTION



**MARINE DRIVE
BROWNFIELD CLEANUP PROGRAM
BUFFALO, NEW YORK**

MARK	DATE	DESCRIPTION
REVISIONS		
PROJECT NO: Z31.001.001		
DATE: MAY 2022		
DRAWN BY: C. MARTIN		
DESIGNED BY: C. MARTIN		
CHECKED BY: D. RIKER		
NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209, SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW		

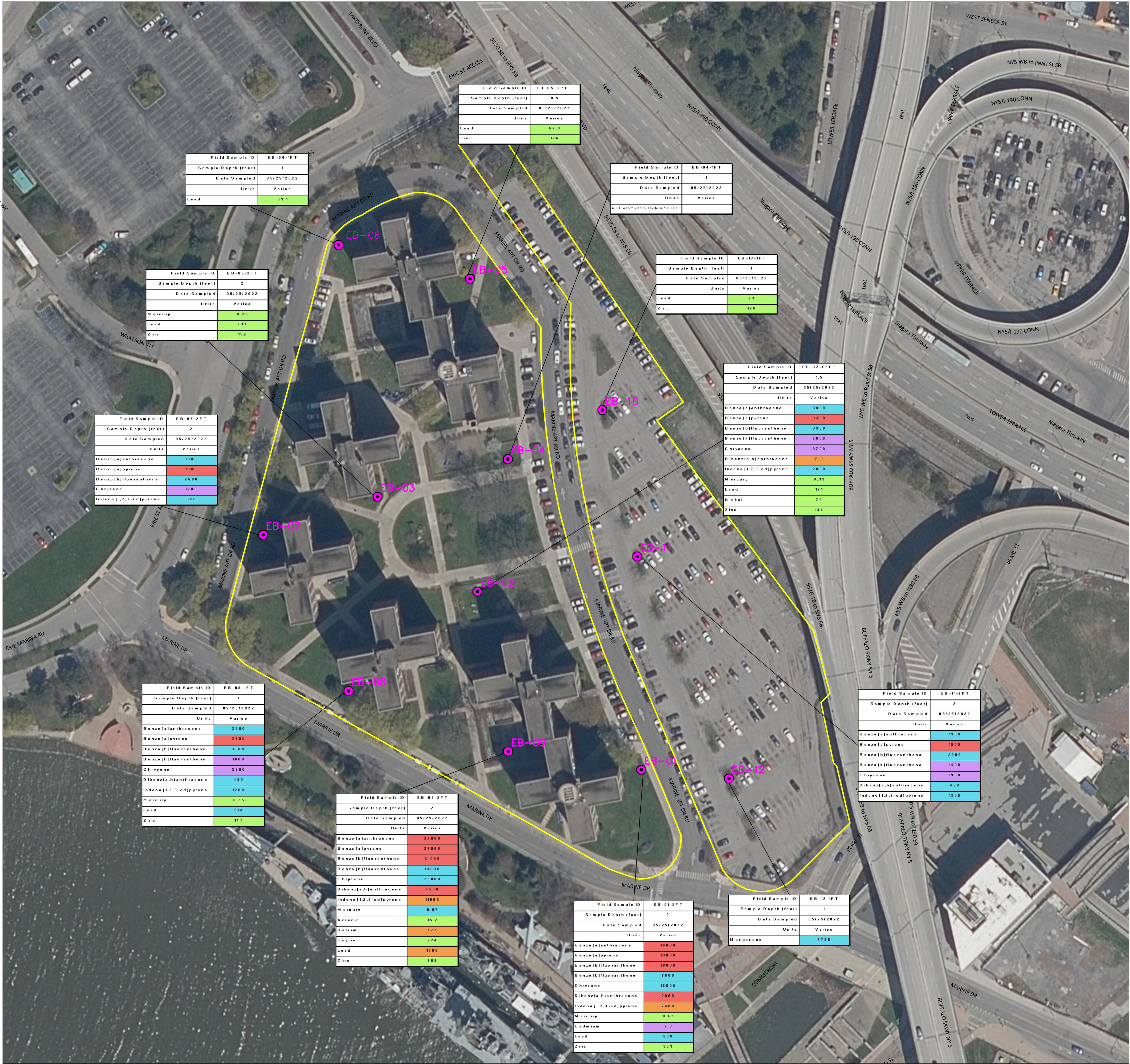
**PRE-BCP
SAMPLE
LOCATIONS**

FIGURE 1

C

B

A



LEGEND

- SOIL SAMPLE LOCATION
- PROPERTY BOUNDARY

LABEL LEGEND

Field Sample ID	
Sample Depth (feet)	
Date Sampled	
Units	
ANALYTE	Unrestricted Use
CONCENTRATION EXCEEDS	Residential Use
PART 375 SOIL CLEANUP	Restricted
OBJECTIVES	Commercial Use
	Industrial Use

C

B

A



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PRELIMINARY
NOT FOR
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MARINE DRIVE
BROWNFIELD CLEANUP PROGRAM

BUFFALO, NEW YORK

MARK	DATE	DESCRIPTION
REVISIONS		
PROJECT NO: Z31.001.001		
DATE: JUNE 2022		
DRAWN BY: C. MARTIN		
DESIGNED BY: C. MARTIN		
CHECKED BY: D. RIKER		
NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW		

SOIL SAMPLE
RESULTS

FIGURE 2

TABLES

TABLE 1

MARINE DRIVE APARTMENTS
PRE-BCP SAMPLING
SOIL RESULTS



Location ID						EB-01-2FT	EB-02-1.5FT	EB-03-2FT	EB-04-1FT	EB-05-0.5FT	EB-06-1FT	EB-07-2FT	EB-08-1FT	EB-09-2FT	EB-10-1FT	EB-11-2FT	EB-12FT-1FT
Sample Depth (feet)						2	1.5	2	1	0.5	1	2	1	2	1	2	1
Date Sampled						05/25/2022	05/25/2022	05/25/2022	05/25/2022	05/25/2022	05/25/2022	05/25/2022	05/25/2022	05/25/2022	05/25/2022	05/25/2022	05/25/2022
Sample Matrix						SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
Units						ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
SVOCs - ug/kg																	
Biphenyl	NA	NA	NA	NA	NA	550 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis (2-chloroisopropyl) ether	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NA	NA	NA	NA	NA	2100 J	ND	ND	ND	65 J	ND	ND	ND	1100 J	ND	ND	ND
2-Methylphenol	330	100000	100000	500000	1000000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl phenyl ether	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	330	34000	100000	500000	1000000	280 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	20000	100000	100000	500000	1000000	4900	410 J	ND	ND	130 J	61 J	210 J	260 J	2700	ND	ND	ND
Acenaphthylene	100000	100000	100000	500000	1000000	ND	440 J	ND	ND	ND	47 J	ND	140 J	2700	ND	ND	ND
Acetophenone	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	100000	100000	100000	500000	1000000	9700	1500	83 J	ND	470	190	680 J	760 J	9400	ND	610 J	ND
Atrazine	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzaldehyde	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[a]anthracene	1000	1000	1000	5600	11000	16000	3800	230	520 J	820	620	1800	2900	26000	600 J	1900 J	ND
Benzo[a]pyrene	1000	1000	1000	1000	1100	13000	3300	210	530 J	750	650	1500	2700	24000	640 J	1900 J	ND
Benzo[b]fluoranthene	1000	1000	1000	5600	11000	18000	3900	240	690 J	930	830	2600 K	4100	31000	800 J	2300	ND
Benzo[g,h,i]perylene	100000	100000	100000	500000	1000000	7300	1900	110 J	360 J	440	360	800 J	1700	10000	360 J	1100 J	ND
Benzo[k]fluoranthene	800	1000	3900	56000	110000	7600	2600	130 J	460 J	430	340	ND	1600	13000	500 J	1400 J	ND
Bis(2-chloroethoxy)methane	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethyl)ether	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butyl benzyl phthalate	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Caprolactam	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	NA	NA	NA	NA	NA	5000	430 J	ND	ND	180 J	69 J	280 J	270 J	4400	ND	ND	ND
Chrysene	1000	1000	3900	56000	110000	16000	3700	230	590 J	840	640	1700	2900	25000	670 J	1900 J	ND

TABLE 1

MARINE DRIVE APARTMENTS
PRE-BCP SAMPLING
SOIL RESULTS



Location ID	Unrestricted Use	Residential Use	Restricted Residential Use	Commercial Use	Industrial Use	EB-01-2FT	EB-02-1.5FT	EB-03-2FT	EB-04-1FT	EB-05-0.5FT	EB-06-1FT	EB-07-2FT	EB-08-1FT	EB-09-2FT	EB-10-1FT	EB-11-2FT	EB-12FT-1FT
Sample Depth (feet)						2	1.5	2	1	0.5	1	2	1	2	1	2	1
Date Sampled						05/25/2022	05/25/2022	05/25/2022	05/25/2022	05/25/2022	05/25/2022	05/25/2022	05/25/2022	05/25/2022	05/25/2022	05/25/2022	05/25/2022
Sample Matrix						SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
Units						ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Di-n-butyl phthalate	NA	NA	NA	NA	NA	ND	ND	39 JB	ND	ND	59 JB	ND	ND	ND	ND	ND	ND
Di-n-octyl phthalate	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	330	330	330	560	1100	2800	710 J	52 J	ND	150 J	100 J	270 J	430 J	4500	190 J	420 J	ND
Dibenzofuran	7000	14000	59000	350000	1000000	3800	240 J	ND	ND	140 J	28 J	130 J	130 J	1800 J	ND	ND	ND
Diethyl phthalate	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	100000	100000	100000	500000	1000000	38000	7500	380	1200	1500	1000	3800	7200	61000	1400	3800	130 J
Fluorene	30000	100000	100000	500000	1000000	5700	580 J	37 J	ND	200	63 J	220 J	270 J	3500	ND	ND	ND
Hexachlorobenzene	330	330	1200	6000	12000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno[1,2,3-cd]pyrene	500	500	500	5600	11000	7400	2000	110 J	370 J	420	370	820 J	1700	11000	370 J	1200 J	ND
Isophorone	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodi-n-propylamine	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	12000	100000	100000	500000	1000000	5000	130 J	ND	ND	74 J	ND	ND	ND	1400 J	ND	ND	ND
Nitrobenzene	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	800	2400	6700	6700	55000	ND *+	ND *+	ND *+	ND *+	ND *+	ND *+	ND *+	ND *+	ND *+	ND *+	ND *+	ND *+
Phenanthrene	100000	100000	100000	500000	1000000	39000	5300	320	510 J	1600	660	2400	3800	42000	630 J	2200	ND
Phenol	330	100000	100000	500000	1000000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	100000	100000	100000	500000	1000000	33000	6800	450	950 J	1500	1100	3300	5800	48000	1100	3400	110 J
Metals - mg/kg																	
Aluminum	NA	NA	NA	NA	NA	15500	16000	7750	15200	13400	10300	7090	9400	6090	14900	14900	24700
Mercury	0.18	0.81	0.81	2.8	5.7	0.42 F1F2	0.39	0.26	0.055	0.12	0.12	0.12	0.25	0.97	0.11	0.057	0.014 J
Antimony	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	4.0 J	0.96 J	0.69 J	ND F2 F1
Arsenic	13	16	16	16	16	9.0	6.3	5.6	3.3	5.2	4.6	2.7	4.8	15.2	5.7	6.2	2.9 F1
Barium	350	350	400	400	10000	242	136	302	78.6	70.0	64.3	46.9	70.4	777	82.4	80.5	273
Beryllium	7.2	14	72	590	2700	1.6	0.76	0.47	0.54	0.47	0.39	0.44	0.41	0.52	0.61	0.69	3.1 F1
Cadmium	2.5	2.5	4.3	9.3	60	2.8	0.67	0.38	0.26	0.53	0.47	0.28	0.52	1.5	0.79	0.67	0.26 F1
Calcium	NA	NA	NA	NA	NA	62600 B	22600 B	82100 B	7290 B	8470 B	16700 B	47300 B	40300 B	23500 B	13000 B	20800 B	136000 B
Chromium	NA	NA	NA	NA	NA	16.8	21.4	12.0	17.5	21.0	14.6	9.9	16.3	23.5	21.9	20.0	13.7 F1
Cobalt	NA	NA	NA	NA	NA	4.4	9.3	5.0	5.3	4.8	4.1	3.1	4.9	5.3	8.1	7.8	3.8
Copper	50	270	270	270	10000	33.6	47.0	27.7	13.1	18.4	15.7	11.0	20.6	224	23.9	19.2	9.8 F1F2
Iron	NA	NA	NA	NA	NA	10000	18800	11500	12400	13500	10200	8090	11800 B	18800 B	18900 B	19200 B	9480 F2B
Lead	63	400	400	1000	3900	898	171	233	23.8	67.9	69.1	33.9	514	1660	73.0	62.7	13.5
Magnesium	NA	NA	NA	NA	NA	11800	8110	11100	4120	3700	8120	23400	8420	2870	5030	6980	10200
Manganese	1600	2000	2000	10000	10000	426 B	396 B	211 B	169 B	223 B	228 B	348 B	291 B	424 B	419 B	449 B	3730 F2B
Nickel	30	140	310	310	10000	14.9	72.0	9.9	14.5	14.0	12.2	8.3	14.2	18.7	20.4	18.4	8.8
Potassium	NA	NA	NA	NA	NA	1590	3680	1680	2190	1820	1490	2100	1300	795	1680	2080	2290
Selenium	3.9	36	180	1500	6800	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3 JF1
Silver	2	36	180	1500	6800	0.56 J	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	0.41 JF1
Sodium	NA	NA	NA	NA	NA	548	380	1860	148 J	330	286	228	317 B	1540 B	352 B	273 B	794 B
Thallium	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.41 J

TABLE 1

MARINE DRIVE APARTMENTS
PRE-BCP SAMPLING
SOIL RESULTS



Location ID						EB-01-2FT	EB-02-1.5FT	EB-03-2FT	EB-04-1FT	EB-05-0.5FT	EB-06-1FT	EB-07-2FT	EB-08-1FT	EB-09-2FT	EB-10-1FT	EB-11-2FT	EB-12FT-1FT
Sample Depth (feet)						2	1.5	2	1	0.5	1	2	1	2	1	2	1
Date Sampled						05/25/2022	05/25/2022	05/25/2022	05/25/2022	05/25/2022	05/25/2022	05/25/2022	05/25/2022	05/25/2022	05/25/2022	05/25/2022	05/25/2022
Sample Matrix						SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
Units						ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Vanadium	NA	NA	NA	NA	NA	20.6	34.4	20.3	30.2	29.1	24.6	14.6	20.0	15.3	28.3	29.9	15.7 F1
Zinc	109	2200	10000	10000	10000	333	134	152	68.9	126	96.6	90.2	147 B	809 B	126 B	109 B	28.9 F1B

Analytical Data compared to Part 375 Standards and DER-10
ND indicates analyte was not detected.
Blank space indicates analyte was not analyzed for in that sample.
*+ - LCS and/or LCSD is outside acceptance limits, high biased.
B - Compound was found in the blank and sample.
F1 - MS and/or MSD recovery exceeds control limits.
F2 - MS/MSD RPD exceeds control limits
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
K - Benzo (b&k) fluoranthene are unresolved due to matrix, result is reported as Benzo(b)fluoranthene.

ATTACHMET A PHOTO LOG

Photo Documentation

Project: Marine Drive Pre-BCP Sampling
Buffalo, New York



Photo 1 – Hand auger boring at EB-01.



Photo 2 – Hand auger boring at EB-03.

Photo Documentation

Project: Marine Drive Pre-BCP Sampling
Buffalo, New York



Photo 3 – Hand auger boring at EB-09.



Photo 4 – View of typical urban fill material observed throughout the Site.

ATTACHMET B LABORTORY ANALYTICAL REPORT

ANALYTICAL REPORT

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

Laboratory Job ID: 480-198378-1
Client Project/Site: Marine Drive BCP

For:
C&S Engineers, Inc.
141 Elm Street
Suite 100
Buffalo, New York 14203

Attn: Cody Martin



Authorized for release by:
6/10/2022 11:15:07 AM

Steve Hartmann, Project Manager
(413)572-4000
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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
K	Benzo (b&k) fluoranthene are unresolved due to matrix, result is reported as Benzo(b)fluoranthene.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Job ID: 480-198378-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative 480-198378-1

Comments

No additional comments.

Receipt

The samples were received on 5/26/2022 10:20 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.0° C.

GC/MS Semi VOA

Method 8270D: The continuing calibration verification (CCV) associated with batch 480-628199 recovered above the upper control limit for Pentachlorophenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: EB-01-2FT (480-198378-1), EB-02-1.5FT (480-198378-2), EB-03-2FT (480-198378-3), EB-04-1FT (480-198378-4), EB-05-0.5FT (480-198378-5), EB-06-1FT (480-198378-6), EB-07-2FT (480-198378-7), EB-08-1FT (480-198378-8), EB-09-2FT (480-198378-9) and EB-10-1FT (480-198378-10).

Method 8270D: The continuing calibration verification (CCV) associated with batch 480-628199 recovered outside acceptance criteria, low biased, for 2-Nitroaniline. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270D: The laboratory control sample (LCS) for preparation batch 480-628004 and analytical batch 480-628199 recovered outside control limits for the following analytes: Pentachlorophenol. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8270D: The following samples were diluted due to color and appearance: EB-01-2FT (480-198378-1), EB-02-1.5FT (480-198378-2), EB-04-1FT (480-198378-4), EB-07-2FT (480-198378-7), EB-08-1FT (480-198378-8), EB-09-2FT (480-198378-9) and EB-10-1FT (480-198378-10), EB-11-2FT (480-198378-11) and EB-12FT-1FT (480-198378-12). Elevated reporting limits (RL) are provided.

Method 8270D: The continuing calibration verification (CCV) associated with batch 480-628364 recovered above the upper control limit for Pentachlorophenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: EB-11-2FT (480-198378-11) and EB-12FT-1FT (480-198378-12).

Method 8270D: The continuing calibration verification (CCV) associated with batch 480-628364 recovered outside acceptance criteria, low biased, for 2-Nitroaniline. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270D: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 480-628004 and analytical batch 480-628364 recovered outside control limits for the following analytes: Pentachlorophenol. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method 6010C: The following samples were diluted due to the presence of Total Calcium which interferes with Copper: EB-12FT-1FT (480-198378-12), (480-198378-A-12-B MS ^2), (480-198378-A-12-C MSD ^2), (480-198378-A-12-A PDS ^2) and (480-198378-A-12-A SD ^10). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

Method 3550C: The following sample: EB-01-2FT (480-198378-1) was decanted prior to preparation

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Client Sample ID: EB-01-2FT

Lab Sample ID: 480-198378-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Biphenyl	550	J	2300	340	ug/Kg	10	✱	8270D	Total/NA
2-Methylnaphthalene	2100	J	2300	460	ug/Kg	10	✱	8270D	Total/NA
4-Methylphenol	280	J	4400	270	ug/Kg	10	✱	8270D	Total/NA
Acenaphthene	4900		2300	340	ug/Kg	10	✱	8270D	Total/NA
Anthracene	9700		2300	560	ug/Kg	10	✱	8270D	Total/NA
Benzo[a]anthracene	16000		2300	230	ug/Kg	10	✱	8270D	Total/NA
Benzo[a]pyrene	13000		2300	340	ug/Kg	10	✱	8270D	Total/NA
Benzo[b]fluoranthene	18000		2300	360	ug/Kg	10	✱	8270D	Total/NA
Benzo[g,h,i]perylene	7300		2300	240	ug/Kg	10	✱	8270D	Total/NA
Benzo[k]fluoranthene	7600		2300	300	ug/Kg	10	✱	8270D	Total/NA
Carbazole	5000		2300	270	ug/Kg	10	✱	8270D	Total/NA
Chrysene	16000		2300	510	ug/Kg	10	✱	8270D	Total/NA
Dibenz(a,h)anthracene	2800		2300	400	ug/Kg	10	✱	8270D	Total/NA
Dibenzofuran	3800		2300	270	ug/Kg	10	✱	8270D	Total/NA
Fluoranthene	38000		2300	240	ug/Kg	10	✱	8270D	Total/NA
Fluorene	5700		2300	270	ug/Kg	10	✱	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	7400		2300	280	ug/Kg	10	✱	8270D	Total/NA
Naphthalene	5000		2300	300	ug/Kg	10	✱	8270D	Total/NA
Phenanthrene	39000		2300	340	ug/Kg	10	✱	8270D	Total/NA
Pyrene	33000		2300	270	ug/Kg	10	✱	8270D	Total/NA
Aluminum	15500		14.4	6.3	mg/Kg	1	✱	6010C	Total/NA
Arsenic	9.0		2.9	0.58	mg/Kg	1	✱	6010C	Total/NA
Barium	242		0.72	0.16	mg/Kg	1	✱	6010C	Total/NA
Beryllium	1.6		0.29	0.040	mg/Kg	1	✱	6010C	Total/NA
Cadmium	2.8		0.29	0.043	mg/Kg	1	✱	6010C	Total/NA
Calcium	62600	B	72.0	4.8	mg/Kg	1	✱	6010C	Total/NA
Chromium	16.8		0.72	0.29	mg/Kg	1	✱	6010C	Total/NA
Cobalt	4.4		0.72	0.072	mg/Kg	1	✱	6010C	Total/NA
Copper	33.6		1.4	0.30	mg/Kg	1	✱	6010C	Total/NA
Iron	10000		14.4	5.0	mg/Kg	1	✱	6010C	Total/NA
Lead	898		1.4	0.35	mg/Kg	1	✱	6010C	Total/NA
Magnesium	11800		28.8	1.3	mg/Kg	1	✱	6010C	Total/NA
Manganese	426	B	0.29	0.046	mg/Kg	1	✱	6010C	Total/NA
Nickel	14.9		7.2	0.33	mg/Kg	1	✱	6010C	Total/NA
Potassium	1590		43.2	28.8	mg/Kg	1	✱	6010C	Total/NA
Silver	0.56	J	0.86	0.29	mg/Kg	1	✱	6010C	Total/NA
Sodium	548		202	18.7	mg/Kg	1	✱	6010C	Total/NA
Vanadium	20.6		0.72	0.16	mg/Kg	1	✱	6010C	Total/NA
Zinc	333		2.9	0.92	mg/Kg	1	✱	6010C	Total/NA
Mercury	0.42	F1 F2	0.028	0.0064	mg/Kg	1	✱	7471B	Total/NA

Client Sample ID: EB-02-1.5FT

Lab Sample ID: 480-198378-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	410	J	1000	150	ug/Kg	5	✱	8270D	Total/NA
Acenaphthylene	440	J	1000	130	ug/Kg	5	✱	8270D	Total/NA
Anthracene	1500		1000	250	ug/Kg	5	✱	8270D	Total/NA
Benzo[a]anthracene	3800		1000	100	ug/Kg	5	✱	8270D	Total/NA
Benzo[a]pyrene	3300		1000	150	ug/Kg	5	✱	8270D	Total/NA
Benzo[b]fluoranthene	3900		1000	160	ug/Kg	5	✱	8270D	Total/NA
Benzo[g,h,i]perylene	1900		1000	110	ug/Kg	5	✱	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Detection Summary

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Client Sample ID: EB-02-1.5FT (Continued)

Lab Sample ID: 480-198378-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[k]fluoranthene	2600		1000	130	ug/Kg	5	✱	8270D	Total/NA
Carbazole	430	J	1000	120	ug/Kg	5	✱	8270D	Total/NA
Chrysene	3700		1000	220	ug/Kg	5	✱	8270D	Total/NA
Dibenz(a,h)anthracene	710	J	1000	180	ug/Kg	5	✱	8270D	Total/NA
Dibenzofuran	240	J	1000	120	ug/Kg	5	✱	8270D	Total/NA
Fluoranthene	7500		1000	110	ug/Kg	5	✱	8270D	Total/NA
Fluorene	580	J	1000	120	ug/Kg	5	✱	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	2000		1000	120	ug/Kg	5	✱	8270D	Total/NA
Naphthalene	130	J	1000	130	ug/Kg	5	✱	8270D	Total/NA
Phenanthrene	5300		1000	150	ug/Kg	5	✱	8270D	Total/NA
Pyrene	6800		1000	120	ug/Kg	5	✱	8270D	Total/NA
Aluminum	16000		11.7	5.1	mg/Kg	1	✱	6010C	Total/NA
Arsenic	6.3		2.3	0.47	mg/Kg	1	✱	6010C	Total/NA
Barium	136		0.58	0.13	mg/Kg	1	✱	6010C	Total/NA
Beryllium	0.76		0.23	0.033	mg/Kg	1	✱	6010C	Total/NA
Cadmium	0.67		0.23	0.035	mg/Kg	1	✱	6010C	Total/NA
Calcium	22600	B	58.4	3.9	mg/Kg	1	✱	6010C	Total/NA
Chromium	21.4		0.58	0.23	mg/Kg	1	✱	6010C	Total/NA
Cobalt	9.3		0.58	0.058	mg/Kg	1	✱	6010C	Total/NA
Copper	47.0		1.2	0.25	mg/Kg	1	✱	6010C	Total/NA
Iron	18800		11.7	4.1	mg/Kg	1	✱	6010C	Total/NA
Lead	171		1.2	0.28	mg/Kg	1	✱	6010C	Total/NA
Magnesium	8110		23.3	1.1	mg/Kg	1	✱	6010C	Total/NA
Manganese	396	B	0.23	0.037	mg/Kg	1	✱	6010C	Total/NA
Nickel	72.0		5.8	0.27	mg/Kg	1	✱	6010C	Total/NA
Potassium	3680		35.0	23.3	mg/Kg	1	✱	6010C	Total/NA
Sodium	380		163	15.2	mg/Kg	1	✱	6010C	Total/NA
Vanadium	34.4		0.58	0.13	mg/Kg	1	✱	6010C	Total/NA
Zinc	134		2.3	0.75	mg/Kg	1	✱	6010C	Total/NA
Mercury	0.39		0.024	0.0056	mg/Kg	1	✱	7471B	Total/NA

Client Sample ID: EB-03-2FT

Lab Sample ID: 480-198378-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	83	J	200	49	ug/Kg	1	✱	8270D	Total/NA
Benzo[a]anthracene	230		200	20	ug/Kg	1	✱	8270D	Total/NA
Benzo[a]pyrene	210		200	29	ug/Kg	1	✱	8270D	Total/NA
Benzo[b]fluoranthene	240		200	32	ug/Kg	1	✱	8270D	Total/NA
Benzo[g,h,i]perylene	110	J	200	21	ug/Kg	1	✱	8270D	Total/NA
Benzo[k]fluoranthene	130	J	200	26	ug/Kg	1	✱	8270D	Total/NA
Chrysene	230		200	44	ug/Kg	1	✱	8270D	Total/NA
Di-n-butyl phthalate	39	J B	200	34	ug/Kg	1	✱	8270D	Total/NA
Dibenz(a,h)anthracene	52	J	200	35	ug/Kg	1	✱	8270D	Total/NA
Fluoranthene	380		200	21	ug/Kg	1	✱	8270D	Total/NA
Fluorene	37	J	200	23	ug/Kg	1	✱	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	110	J	200	25	ug/Kg	1	✱	8270D	Total/NA
Phenanthrene	320		200	29	ug/Kg	1	✱	8270D	Total/NA
Pyrene	450		200	23	ug/Kg	1	✱	8270D	Total/NA
Aluminum	7750		12.4	5.5	mg/Kg	1	✱	6010C	Total/NA
Arsenic	5.6		2.5	0.50	mg/Kg	1	✱	6010C	Total/NA
Barium	302		0.62	0.14	mg/Kg	1	✱	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Detection Summary

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Client Sample ID: EB-03-2FT (Continued)

Lab Sample ID: 480-198378-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Beryllium	0.47		0.25	0.035	mg/Kg	1		✱	6010C	Total/NA
Cadmium	0.38		0.25	0.037	mg/Kg	1		✱	6010C	Total/NA
Calcium	82100	B	62.2	4.1	mg/Kg	1		✱	6010C	Total/NA
Chromium	12.0		0.62	0.25	mg/Kg	1		✱	6010C	Total/NA
Cobalt	5.0		0.62	0.062	mg/Kg	1		✱	6010C	Total/NA
Copper	27.7		1.2	0.26	mg/Kg	1		✱	6010C	Total/NA
Iron	11500		12.4	4.4	mg/Kg	1		✱	6010C	Total/NA
Lead	233		1.2	0.30	mg/Kg	1		✱	6010C	Total/NA
Magnesium	11100		24.9	1.2	mg/Kg	1		✱	6010C	Total/NA
Manganese	211	B	0.25	0.040	mg/Kg	1		✱	6010C	Total/NA
Nickel	9.9		6.2	0.29	mg/Kg	1		✱	6010C	Total/NA
Potassium	1680		37.3	24.9	mg/Kg	1		✱	6010C	Total/NA
Sodium	1860		174	16.2	mg/Kg	1		✱	6010C	Total/NA
Vanadium	20.3		0.62	0.14	mg/Kg	1		✱	6010C	Total/NA
Zinc	152		2.5	0.80	mg/Kg	1		✱	6010C	Total/NA
Mercury	0.26		0.023	0.0053	mg/Kg	1		✱	7471B	Total/NA

Client Sample ID: EB-04-1FT

Lab Sample ID: 480-198378-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Benzo[a]anthracene	520	J	1100	110	ug/Kg	5		✱	8270D	Total/NA
Benzo[a]pyrene	530	J	1100	150	ug/Kg	5		✱	8270D	Total/NA
Benzo[b]fluoranthene	690	J	1100	170	ug/Kg	5		✱	8270D	Total/NA
Benzo[g,h,i]perylene	360	J	1100	110	ug/Kg	5		✱	8270D	Total/NA
Benzo[k]fluoranthene	460	J	1100	140	ug/Kg	5		✱	8270D	Total/NA
Chrysene	590	J	1100	240	ug/Kg	5		✱	8270D	Total/NA
Fluoranthene	1200		1100	110	ug/Kg	5		✱	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	370	J	1100	130	ug/Kg	5		✱	8270D	Total/NA
Phenanthrene	510	J	1100	150	ug/Kg	5		✱	8270D	Total/NA
Pyrene	950	J	1100	120	ug/Kg	5		✱	8270D	Total/NA
Aluminum	15200		12.8	5.6	mg/Kg	1		✱	6010C	Total/NA
Arsenic	3.3		2.6	0.51	mg/Kg	1		✱	6010C	Total/NA
Barium	78.6		0.64	0.14	mg/Kg	1		✱	6010C	Total/NA
Beryllium	0.54		0.26	0.036	mg/Kg	1		✱	6010C	Total/NA
Cadmium	0.26		0.26	0.038	mg/Kg	1		✱	6010C	Total/NA
Calcium	7290	B	63.9	4.2	mg/Kg	1		✱	6010C	Total/NA
Chromium	17.5		0.64	0.26	mg/Kg	1		✱	6010C	Total/NA
Cobalt	5.3		0.64	0.064	mg/Kg	1		✱	6010C	Total/NA
Copper	13.1		1.3	0.27	mg/Kg	1		✱	6010C	Total/NA
Iron	12400		12.8	4.5	mg/Kg	1		✱	6010C	Total/NA
Lead	23.8		1.3	0.31	mg/Kg	1		✱	6010C	Total/NA
Magnesium	4120		25.6	1.2	mg/Kg	1		✱	6010C	Total/NA
Manganese	169	B	0.26	0.041	mg/Kg	1		✱	6010C	Total/NA
Nickel	14.5		6.4	0.29	mg/Kg	1		✱	6010C	Total/NA
Potassium	2190		38.3	25.6	mg/Kg	1		✱	6010C	Total/NA
Sodium	148	J	179	16.6	mg/Kg	1		✱	6010C	Total/NA
Vanadium	30.2		0.64	0.14	mg/Kg	1		✱	6010C	Total/NA
Zinc	68.9		2.6	0.82	mg/Kg	1		✱	6010C	Total/NA
Mercury	0.055		0.023	0.0054	mg/Kg	1		✱	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Detection Summary

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Client Sample ID: EB-05-0.5FT

Lab Sample ID: 480-198378-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	65	J	200	39	ug/Kg	1	✱	8270D	Total/NA
Acenaphthene	130	J	200	29	ug/Kg	1	✱	8270D	Total/NA
Anthracene	470		200	49	ug/Kg	1	✱	8270D	Total/NA
Benzo[a]anthracene	820		200	20	ug/Kg	1	✱	8270D	Total/NA
Benzo[a]pyrene	750		200	29	ug/Kg	1	✱	8270D	Total/NA
Benzo[b]fluoranthene	930		200	31	ug/Kg	1	✱	8270D	Total/NA
Benzo[g,h,i]perylene	440		200	21	ug/Kg	1	✱	8270D	Total/NA
Benzo[k]fluoranthene	430		200	25	ug/Kg	1	✱	8270D	Total/NA
Carbazole	180	J	200	23	ug/Kg	1	✱	8270D	Total/NA
Chrysene	840		200	44	ug/Kg	1	✱	8270D	Total/NA
Dibenz(a,h)anthracene	150	J	200	35	ug/Kg	1	✱	8270D	Total/NA
Dibenzofuran	140	J	200	23	ug/Kg	1	✱	8270D	Total/NA
Fluoranthene	1500		200	21	ug/Kg	1	✱	8270D	Total/NA
Fluorene	200		200	23	ug/Kg	1	✱	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	420		200	24	ug/Kg	1	✱	8270D	Total/NA
Naphthalene	74	J	200	25	ug/Kg	1	✱	8270D	Total/NA
Phenanthrene	1600		200	29	ug/Kg	1	✱	8270D	Total/NA
Pyrene	1500		200	23	ug/Kg	1	✱	8270D	Total/NA
Aluminum	13400		12.0	5.3	mg/Kg	1	✱	6010C	Total/NA
Arsenic	5.2		2.4	0.48	mg/Kg	1	✱	6010C	Total/NA
Barium	70.0		0.60	0.13	mg/Kg	1	✱	6010C	Total/NA
Beryllium	0.47		0.24	0.033	mg/Kg	1	✱	6010C	Total/NA
Cadmium	0.53		0.24	0.036	mg/Kg	1	✱	6010C	Total/NA
Calcium	8470	B	59.8	3.9	mg/Kg	1	✱	6010C	Total/NA
Chromium	21.0		0.60	0.24	mg/Kg	1	✱	6010C	Total/NA
Cobalt	4.8		0.60	0.060	mg/Kg	1	✱	6010C	Total/NA
Copper	18.4		1.2	0.25	mg/Kg	1	✱	6010C	Total/NA
Iron	13500		12.0	4.2	mg/Kg	1	✱	6010C	Total/NA
Lead	67.9		1.2	0.29	mg/Kg	1	✱	6010C	Total/NA
Magnesium	3700		23.9	1.1	mg/Kg	1	✱	6010C	Total/NA
Manganese	223	B	0.24	0.038	mg/Kg	1	✱	6010C	Total/NA
Nickel	14.0		6.0	0.28	mg/Kg	1	✱	6010C	Total/NA
Potassium	1820		35.9	23.9	mg/Kg	1	✱	6010C	Total/NA
Sodium	330		167	15.5	mg/Kg	1	✱	6010C	Total/NA
Vanadium	29.1		0.60	0.13	mg/Kg	1	✱	6010C	Total/NA
Zinc	126		2.4	0.77	mg/Kg	1	✱	6010C	Total/NA
Mercury	0.12		0.022	0.0050	mg/Kg	1	✱	7471B	Total/NA

Client Sample ID: EB-06-1FT

Lab Sample ID: 480-198378-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	61	J	190	28	ug/Kg	1	✱	8270D	Total/NA
Acenaphthylene	47	J	190	25	ug/Kg	1	✱	8270D	Total/NA
Anthracene	190		190	48	ug/Kg	1	✱	8270D	Total/NA
Benzo[a]anthracene	620		190	19	ug/Kg	1	✱	8270D	Total/NA
Benzo[a]pyrene	650		190	28	ug/Kg	1	✱	8270D	Total/NA
Benzo[b]fluoranthene	830		190	31	ug/Kg	1	✱	8270D	Total/NA
Benzo[g,h,i]perylene	360		190	20	ug/Kg	1	✱	8270D	Total/NA
Benzo[k]fluoranthene	340		190	25	ug/Kg	1	✱	8270D	Total/NA
Carbazole	69	J	190	23	ug/Kg	1	✱	8270D	Total/NA
Chrysene	640		190	43	ug/Kg	1	✱	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Detection Summary

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Client Sample ID: EB-06-1FT (Continued)

Lab Sample ID: 480-198378-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Di-n-butyl phthalate	59	J B	190	33	ug/Kg	1	✱		8270D	Total/NA
Dibenz(a,h)anthracene	100	J	190	34	ug/Kg	1	✱		8270D	Total/NA
Dibenzofuran	28	J	190	23	ug/Kg	1	✱		8270D	Total/NA
Fluoranthene	1000		190	20	ug/Kg	1	✱		8270D	Total/NA
Fluorene	63	J	190	23	ug/Kg	1	✱		8270D	Total/NA
Indeno[1,2,3-cd]pyrene	370		190	24	ug/Kg	1	✱		8270D	Total/NA
Phenanthrene	660		190	28	ug/Kg	1	✱		8270D	Total/NA
Pyrene	1100		190	23	ug/Kg	1	✱		8270D	Total/NA
Aluminum	10300		12.2	5.4	mg/Kg	1	✱		6010C	Total/NA
Arsenic	4.6		2.4	0.49	mg/Kg	1	✱		6010C	Total/NA
Barium	64.3		0.61	0.13	mg/Kg	1	✱		6010C	Total/NA
Beryllium	0.39		0.24	0.034	mg/Kg	1	✱		6010C	Total/NA
Cadmium	0.47		0.24	0.036	mg/Kg	1	✱		6010C	Total/NA
Calcium	16700	B	60.8	4.0	mg/Kg	1	✱		6010C	Total/NA
Chromium	14.6		0.61	0.24	mg/Kg	1	✱		6010C	Total/NA
Cobalt	4.1		0.61	0.061	mg/Kg	1	✱		6010C	Total/NA
Copper	15.7		1.2	0.26	mg/Kg	1	✱		6010C	Total/NA
Iron	10200		12.2	4.3	mg/Kg	1	✱		6010C	Total/NA
Lead	69.1		1.2	0.29	mg/Kg	1	✱		6010C	Total/NA
Magnesium	8120		24.3	1.1	mg/Kg	1	✱		6010C	Total/NA
Manganese	228	B	0.24	0.039	mg/Kg	1	✱		6010C	Total/NA
Nickel	12.2		6.1	0.28	mg/Kg	1	✱		6010C	Total/NA
Potassium	1490		36.5	24.3	mg/Kg	1	✱		6010C	Total/NA
Sodium	286		170	15.8	mg/Kg	1	✱		6010C	Total/NA
Vanadium	24.6		0.61	0.13	mg/Kg	1	✱		6010C	Total/NA
Zinc	96.6		2.4	0.78	mg/Kg	1	✱		6010C	Total/NA
Mercury	0.12		0.023	0.0053	mg/Kg	1	✱		7471B	Total/NA

Client Sample ID: EB-07-2FT

Lab Sample ID: 480-198378-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acenaphthene	210	J	980	140	ug/Kg	5	✱		8270D	Total/NA
Anthracene	680	J	980	240	ug/Kg	5	✱		8270D	Total/NA
Benzo[a]anthracene	1800		980	98	ug/Kg	5	✱		8270D	Total/NA
Benzo[a]pyrene	1500		980	140	ug/Kg	5	✱		8270D	Total/NA
Benzo[b]fluoranthene	2600	K	980	150	ug/Kg	5	✱		8270D	Total/NA
Benzo[g,h,i]perylene	800	J	980	100	ug/Kg	5	✱		8270D	Total/NA
Carbazole	280	J	980	110	ug/Kg	5	✱		8270D	Total/NA
Chrysene	1700		980	220	ug/Kg	5	✱		8270D	Total/NA
Dibenz(a,h)anthracene	270	J	980	170	ug/Kg	5	✱		8270D	Total/NA
Dibenzofuran	130	J	980	110	ug/Kg	5	✱		8270D	Total/NA
Fluoranthene	3800		980	100	ug/Kg	5	✱		8270D	Total/NA
Fluorene	220	J	980	110	ug/Kg	5	✱		8270D	Total/NA
Indeno[1,2,3-cd]pyrene	820	J	980	120	ug/Kg	5	✱		8270D	Total/NA
Phenanthrene	2400		980	140	ug/Kg	5	✱		8270D	Total/NA
Pyrene	3300		980	110	ug/Kg	5	✱		8270D	Total/NA
Aluminum	7090		11.5	5.1	mg/Kg	1	✱		6010C	Total/NA
Arsenic	2.7		2.3	0.46	mg/Kg	1	✱		6010C	Total/NA
Barium	46.9		0.58	0.13	mg/Kg	1	✱		6010C	Total/NA
Beryllium	0.44		0.23	0.032	mg/Kg	1	✱		6010C	Total/NA
Cadmium	0.28		0.23	0.035	mg/Kg	1	✱		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Detection Summary

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Client Sample ID: EB-07-2FT (Continued)

Lab Sample ID: 480-198378-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Calcium	47300	B	57.7	3.8	mg/Kg	1	✱		6010C	Total/NA
Chromium	9.9		0.58	0.23	mg/Kg	1	✱		6010C	Total/NA
Cobalt	3.1		0.58	0.058	mg/Kg	1	✱		6010C	Total/NA
Copper	11.0		1.2	0.24	mg/Kg	1	✱		6010C	Total/NA
Iron	8090		11.5	4.0	mg/Kg	1	✱		6010C	Total/NA
Lead	33.9		1.2	0.28	mg/Kg	1	✱		6010C	Total/NA
Magnesium	23400		23.1	1.1	mg/Kg	1	✱		6010C	Total/NA
Manganese	348	B	0.23	0.037	mg/Kg	1	✱		6010C	Total/NA
Nickel	8.3		5.8	0.27	mg/Kg	1	✱		6010C	Total/NA
Potassium	2100		34.6	23.1	mg/Kg	1	✱		6010C	Total/NA
Sodium	228		162	15.0	mg/Kg	1	✱		6010C	Total/NA
Vanadium	14.6		0.58	0.13	mg/Kg	1	✱		6010C	Total/NA
Zinc	90.2		2.3	0.74	mg/Kg	1	✱		6010C	Total/NA
Mercury	0.12		0.023	0.0052	mg/Kg	1	✱		7471B	Total/NA

Client Sample ID: EB-08-1FT

Lab Sample ID: 480-198378-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acenaphthene	260	J	930	140	ug/Kg	5	✱		8270D	Total/NA
Acenaphthylene	140	J	930	120	ug/Kg	5	✱		8270D	Total/NA
Anthracene	760	J	930	230	ug/Kg	5	✱		8270D	Total/NA
Benzo[a]anthracene	2900		930	93	ug/Kg	5	✱		8270D	Total/NA
Benzo[a]pyrene	2700		930	140	ug/Kg	5	✱		8270D	Total/NA
Benzo[b]fluoranthene	4100		930	150	ug/Kg	5	✱		8270D	Total/NA
Benzo[g,h,i]perylene	1700		930	99	ug/Kg	5	✱		8270D	Total/NA
Benzo[k]fluoranthene	1600		930	120	ug/Kg	5	✱		8270D	Total/NA
Carbazole	270	J	930	110	ug/Kg	5	✱		8270D	Total/NA
Chrysene	2900		930	210	ug/Kg	5	✱		8270D	Total/NA
Dibenz(a,h)anthracene	430	J	930	160	ug/Kg	5	✱		8270D	Total/NA
Dibenzofuran	130	J	930	110	ug/Kg	5	✱		8270D	Total/NA
Fluoranthene	7200		930	99	ug/Kg	5	✱		8270D	Total/NA
Fluorene	270	J	930	110	ug/Kg	5	✱		8270D	Total/NA
Indeno[1,2,3-cd]pyrene	1700		930	120	ug/Kg	5	✱		8270D	Total/NA
Phenanthrene	3800		930	140	ug/Kg	5	✱		8270D	Total/NA
Pyrene	5800		930	110	ug/Kg	5	✱		8270D	Total/NA
Aluminum	9400		11.6	5.1	mg/Kg	1	✱		6010C	Total/NA
Arsenic	4.8		2.3	0.46	mg/Kg	1	✱		6010C	Total/NA
Barium	70.4		0.58	0.13	mg/Kg	1	✱		6010C	Total/NA
Beryllium	0.41		0.23	0.032	mg/Kg	1	✱		6010C	Total/NA
Cadmium	0.52		0.23	0.035	mg/Kg	1	✱		6010C	Total/NA
Calcium	40300	B	57.8	3.8	mg/Kg	1	✱		6010C	Total/NA
Chromium	16.3		0.58	0.23	mg/Kg	1	✱		6010C	Total/NA
Cobalt	4.9		0.58	0.058	mg/Kg	1	✱		6010C	Total/NA
Copper	20.6		1.2	0.24	mg/Kg	1	✱		6010C	Total/NA
Iron	11800	B	11.6	4.0	mg/Kg	1	✱		6010C	Total/NA
Lead	514		1.2	0.28	mg/Kg	1	✱		6010C	Total/NA
Magnesium	8420		23.1	1.1	mg/Kg	1	✱		6010C	Total/NA
Manganese	291	B	0.23	0.037	mg/Kg	1	✱		6010C	Total/NA
Nickel	14.2		5.8	0.27	mg/Kg	1	✱		6010C	Total/NA
Potassium	1300		34.7	23.1	mg/Kg	1	✱		6010C	Total/NA
Sodium	317	B	162	15.0	mg/Kg	1	✱		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Detection Summary

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Client Sample ID: EB-08-1FT (Continued)

Lab Sample ID: 480-198378-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Vanadium	20.0		0.58	0.13	mg/Kg	1		✱	6010C	Total/NA
Zinc	147	B	2.3	0.74	mg/Kg	1		✱	6010C	Total/NA
Mercury	0.25		0.022	0.0050	mg/Kg	1		✱	7471B	Total/NA

Client Sample ID: EB-09-2FT

Lab Sample ID: 480-198378-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
2-Methylnaphthalene	1100	J	2100	420	ug/Kg	10		✱	8270D	Total/NA
Acenaphthene	2700		2100	310	ug/Kg	10		✱	8270D	Total/NA
Acenaphthylene	2700		2100	270	ug/Kg	10		✱	8270D	Total/NA
Anthracene	9400		2100	520	ug/Kg	10		✱	8270D	Total/NA
Benzo[a]anthracene	26000		2100	210	ug/Kg	10		✱	8270D	Total/NA
Benzo[a]pyrene	24000		2100	310	ug/Kg	10		✱	8270D	Total/NA
Benzo[b]fluoranthene	31000		2100	330	ug/Kg	10		✱	8270D	Total/NA
Benzo[g,h,i]perylene	10000		2100	220	ug/Kg	10		✱	8270D	Total/NA
Benzo[k]fluoranthene	13000		2100	270	ug/Kg	10		✱	8270D	Total/NA
Carbazole	4400		2100	250	ug/Kg	10		✱	8270D	Total/NA
Chrysene	25000		2100	470	ug/Kg	10		✱	8270D	Total/NA
Dibenz(a,h)anthracene	4500		2100	370	ug/Kg	10		✱	8270D	Total/NA
Dibenzofuran	1800	J	2100	250	ug/Kg	10		✱	8270D	Total/NA
Fluoranthene	61000		2100	220	ug/Kg	10		✱	8270D	Total/NA
Fluorene	3500		2100	250	ug/Kg	10		✱	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	11000		2100	260	ug/Kg	10		✱	8270D	Total/NA
Naphthalene	1400	J	2100	270	ug/Kg	10		✱	8270D	Total/NA
Phenanthrene	42000		2100	310	ug/Kg	10		✱	8270D	Total/NA
Pyrene	48000		2100	250	ug/Kg	10		✱	8270D	Total/NA
Aluminum	6090		13.0	5.7	mg/Kg	1		✱	6010C	Total/NA
Antimony	4.0	J	19.5	0.52	mg/Kg	1		✱	6010C	Total/NA
Arsenic	15.2		2.6	0.52	mg/Kg	1		✱	6010C	Total/NA
Barium	777		0.65	0.14	mg/Kg	1		✱	6010C	Total/NA
Beryllium	0.52		0.26	0.036	mg/Kg	1		✱	6010C	Total/NA
Cadmium	1.5		0.26	0.039	mg/Kg	1		✱	6010C	Total/NA
Calcium	23500	B	65.0	4.3	mg/Kg	1		✱	6010C	Total/NA
Chromium	23.5		0.65	0.26	mg/Kg	1		✱	6010C	Total/NA
Cobalt	5.3		0.65	0.065	mg/Kg	1		✱	6010C	Total/NA
Copper	224		1.3	0.27	mg/Kg	1		✱	6010C	Total/NA
Iron	18800	B	13.0	4.6	mg/Kg	1		✱	6010C	Total/NA
Lead	1660		1.3	0.31	mg/Kg	1		✱	6010C	Total/NA
Magnesium	2870		26.0	1.2	mg/Kg	1		✱	6010C	Total/NA
Manganese	424	B	0.26	0.042	mg/Kg	1		✱	6010C	Total/NA
Nickel	18.7		6.5	0.30	mg/Kg	1		✱	6010C	Total/NA
Potassium	795		39.0	26.0	mg/Kg	1		✱	6010C	Total/NA
Silver	1.1		0.78	0.26	mg/Kg	1		✱	6010C	Total/NA
Sodium	1540	B	182	16.9	mg/Kg	1		✱	6010C	Total/NA
Vanadium	15.3		0.65	0.14	mg/Kg	1		✱	6010C	Total/NA
Zinc	809	B	2.6	0.83	mg/Kg	1		✱	6010C	Total/NA
Mercury	0.97		0.025	0.0058	mg/Kg	1		✱	7471B	Total/NA

Client Sample ID: EB-10-1FT

Lab Sample ID: 480-198378-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Benzo[a]anthracene	600	J	1000	100	ug/Kg	5		✱	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Detection Summary

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Client Sample ID: EB-10-1FT (Continued)

Lab Sample ID: 480-198378-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]pyrene	640	J	1000	150	ug/Kg	5	✱	8270D	Total/NA
Benzo[b]fluoranthene	800	J	1000	160	ug/Kg	5	✱	8270D	Total/NA
Benzo[g,h,i]perylene	360	J	1000	110	ug/Kg	5	✱	8270D	Total/NA
Benzo[k]fluoranthene	500	J	1000	130	ug/Kg	5	✱	8270D	Total/NA
Chrysene	670	J	1000	230	ug/Kg	5	✱	8270D	Total/NA
Dibenz(a,h)anthracene	190	J	1000	180	ug/Kg	5	✱	8270D	Total/NA
Fluoranthene	1400		1000	110	ug/Kg	5	✱	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	370	J	1000	130	ug/Kg	5	✱	8270D	Total/NA
Phenanthrene	630	J	1000	150	ug/Kg	5	✱	8270D	Total/NA
Pyrene	1100		1000	120	ug/Kg	5	✱	8270D	Total/NA
Aluminum	14900		12.1	5.3	mg/Kg	1	✱	6010C	Total/NA
Antimony	0.96	J	18.2	0.49	mg/Kg	1	✱	6010C	Total/NA
Arsenic	5.7		2.4	0.49	mg/Kg	1	✱	6010C	Total/NA
Barium	82.4		0.61	0.13	mg/Kg	1	✱	6010C	Total/NA
Beryllium	0.61		0.24	0.034	mg/Kg	1	✱	6010C	Total/NA
Cadmium	0.79		0.24	0.036	mg/Kg	1	✱	6010C	Total/NA
Calcium	13000	B	60.6	4.0	mg/Kg	1	✱	6010C	Total/NA
Chromium	21.9		0.61	0.24	mg/Kg	1	✱	6010C	Total/NA
Cobalt	8.1		0.61	0.061	mg/Kg	1	✱	6010C	Total/NA
Copper	23.9		1.2	0.25	mg/Kg	1	✱	6010C	Total/NA
Iron	18900	B	12.1	4.2	mg/Kg	1	✱	6010C	Total/NA
Lead	73.0		1.2	0.29	mg/Kg	1	✱	6010C	Total/NA
Magnesium	5030		24.3	1.1	mg/Kg	1	✱	6010C	Total/NA
Manganese	419	B	0.24	0.039	mg/Kg	1	✱	6010C	Total/NA
Nickel	20.4		6.1	0.28	mg/Kg	1	✱	6010C	Total/NA
Potassium	1680		36.4	24.3	mg/Kg	1	✱	6010C	Total/NA
Sodium	352	B	170	15.8	mg/Kg	1	✱	6010C	Total/NA
Vanadium	28.3		0.61	0.13	mg/Kg	1	✱	6010C	Total/NA
Zinc	126	B	2.4	0.78	mg/Kg	1	✱	6010C	Total/NA
Mercury	0.11		0.024	0.0055	mg/Kg	1	✱	7471B	Total/NA

Client Sample ID: EB-11-2FT

Lab Sample ID: 480-198378-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	610	J	2200	530	ug/Kg	10	✱	8270D	Total/NA
Benzo[a]anthracene	1900	J	2200	220	ug/Kg	10	✱	8270D	Total/NA
Benzo[a]pyrene	1900	J	2200	320	ug/Kg	10	✱	8270D	Total/NA
Benzo[b]fluoranthene	2300		2200	340	ug/Kg	10	✱	8270D	Total/NA
Benzo[g,h,i]perylene	1100	J	2200	230	ug/Kg	10	✱	8270D	Total/NA
Benzo[k]fluoranthene	1400	J	2200	280	ug/Kg	10	✱	8270D	Total/NA
Chrysene	1900	J	2200	480	ug/Kg	10	✱	8270D	Total/NA
Dibenz(a,h)anthracene	420	J	2200	380	ug/Kg	10	✱	8270D	Total/NA
Fluoranthene	3800		2200	230	ug/Kg	10	✱	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	1200	J	2200	270	ug/Kg	10	✱	8270D	Total/NA
Phenanthrene	2200		2200	320	ug/Kg	10	✱	8270D	Total/NA
Pyrene	3400		2200	250	ug/Kg	10	✱	8270D	Total/NA
Aluminum	14900		13.4	5.9	mg/Kg	1	✱	6010C	Total/NA
Antimony	0.69	J	20.2	0.54	mg/Kg	1	✱	6010C	Total/NA
Arsenic	6.2		2.7	0.54	mg/Kg	1	✱	6010C	Total/NA
Barium	80.5		0.67	0.15	mg/Kg	1	✱	6010C	Total/NA
Beryllium	0.69		0.27	0.038	mg/Kg	1	✱	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Detection Summary

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Client Sample ID: EB-11-2FT (Continued)

Lab Sample ID: 480-198378-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.67		0.27	0.040	mg/Kg	1	✱	6010C	Total/NA
Calcium	20800	B	67.2	4.4	mg/Kg	1	✱	6010C	Total/NA
Chromium	20.0		0.67	0.27	mg/Kg	1	✱	6010C	Total/NA
Cobalt	7.8		0.67	0.067	mg/Kg	1	✱	6010C	Total/NA
Copper	19.2		1.3	0.28	mg/Kg	1	✱	6010C	Total/NA
Iron	19200	B	13.4	4.7	mg/Kg	1	✱	6010C	Total/NA
Lead	62.7		1.3	0.32	mg/Kg	1	✱	6010C	Total/NA
Magnesium	6980		26.9	1.2	mg/Kg	1	✱	6010C	Total/NA
Manganese	449	B	0.27	0.043	mg/Kg	1	✱	6010C	Total/NA
Nickel	18.4		6.7	0.31	mg/Kg	1	✱	6010C	Total/NA
Potassium	2080		40.3	26.9	mg/Kg	1	✱	6010C	Total/NA
Sodium	273	B	188	17.5	mg/Kg	1	✱	6010C	Total/NA
Vanadium	29.9		0.67	0.15	mg/Kg	1	✱	6010C	Total/NA
Zinc	109	B	2.7	0.86	mg/Kg	1	✱	6010C	Total/NA
Mercury	0.057		0.026	0.0060	mg/Kg	1	✱	7471B	Total/NA

Client Sample ID: EB-12FT-1FT

Lab Sample ID: 480-198378-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	130	J	900	95	ug/Kg	5	✱	8270D	Total/NA
Pyrene	110	J	900	110	ug/Kg	5	✱	8270D	Total/NA
Aluminum	24700		10.6	4.7	mg/Kg	1	✱	6010C	Total/NA
Arsenic	2.9	F1	2.1	0.42	mg/Kg	1	✱	6010C	Total/NA
Barium	273		0.53	0.12	mg/Kg	1	✱	6010C	Total/NA
Beryllium	3.1	F1	0.21	0.030	mg/Kg	1	✱	6010C	Total/NA
Cadmium	0.26	F1	0.21	0.032	mg/Kg	1	✱	6010C	Total/NA
Calcium	136000	B	106	7.0	mg/Kg	2	✱	6010C	Total/NA
Chromium	13.7	F1	0.53	0.21	mg/Kg	1	✱	6010C	Total/NA
Cobalt	3.8		0.53	0.053	mg/Kg	1	✱	6010C	Total/NA
Copper	9.8	F1 F2	2.1	0.44	mg/Kg	2	✱	6010C	Total/NA
Iron	9480	F2 B	10.6	3.7	mg/Kg	1	✱	6010C	Total/NA
Lead	13.5		1.1	0.25	mg/Kg	1	✱	6010C	Total/NA
Magnesium	10200		21.2	0.98	mg/Kg	1	✱	6010C	Total/NA
Manganese	3730	F2 B	0.21	0.034	mg/Kg	1	✱	6010C	Total/NA
Nickel	8.8		5.3	0.24	mg/Kg	1	✱	6010C	Total/NA
Potassium	2290		31.7	21.2	mg/Kg	1	✱	6010C	Total/NA
Selenium	1.3	J F1	4.2	0.42	mg/Kg	1	✱	6010C	Total/NA
Silver	0.41	J F1	0.63	0.21	mg/Kg	1	✱	6010C	Total/NA
Sodium	794	B	148	13.8	mg/Kg	1	✱	6010C	Total/NA
Thallium	0.41	J	6.3	0.32	mg/Kg	1	✱	6010C	Total/NA
Vanadium	15.7	F1	0.53	0.12	mg/Kg	1	✱	6010C	Total/NA
Zinc	28.9	F1 B	2.1	0.68	mg/Kg	1	✱	6010C	Total/NA
Mercury	0.014	J	0.020	0.0046	mg/Kg	1	✱	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Client Sample ID: EB-01-2FT

Lab Sample ID: 480-198378-1

Date Collected: 05/25/22 09:45

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 73.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	550	J	2300	340	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
bis (2-chloroisopropyl) ether	ND		2300	460	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
2,4,5-Trichlorophenol	ND		2300	620	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
2,4,6-Trichlorophenol	ND		2300	460	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
2,4-Dichlorophenol	ND		2300	240	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
2,4-Dimethylphenol	ND		2300	550	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
2,4-Dinitrophenol	ND		22000	11000	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
2,4-Dinitrotoluene	ND		2300	470	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
2,6-Dinitrotoluene	ND		2300	270	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
2-Chloronaphthalene	ND		2300	380	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
2-Chlorophenol	ND		4400	420	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
2-Methylnaphthalene	2100	J	2300	460	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
2-Methylphenol	ND		2300	270	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
2-Nitroaniline	ND		4400	340	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
2-Nitrophenol	ND		2300	640	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
3,3'-Dichlorobenzidine	ND		4400	2700	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
3-Nitroaniline	ND		4400	630	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
4,6-Dinitro-2-methylphenol	ND		4400	2300	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
4-Bromophenyl phenyl ether	ND		2300	320	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
4-Chloro-3-methylphenol	ND		2300	560	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
4-Chloroaniline	ND		2300	560	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
4-Chlorophenyl phenyl ether	ND		2300	280	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
4-Methylphenol	280	J	4400	270	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
4-Nitroaniline	ND		4400	1200	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
4-Nitrophenol	ND		4400	1600	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
Acenaphthene	4900		2300	340	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
Acenaphthylene	ND		2300	300	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
Acetophenone	ND		2300	310	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
Anthracene	9700		2300	560	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
Atrazine	ND		2300	790	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
Benzaldehyde	ND		2300	1800	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
Benzo[a]anthracene	16000		2300	230	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
Benzo[a]pyrene	13000		2300	340	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
Benzo[b]fluoranthene	18000		2300	360	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
Benzo[g,h,i]perylene	7300		2300	240	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
Benzo[k]fluoranthene	7600		2300	300	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
Bis(2-chloroethoxy)methane	ND		2300	480	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
Bis(2-chloroethyl)ether	ND		2300	300	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
Bis(2-ethylhexyl) phthalate	ND		2300	780	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
Butyl benzyl phthalate	ND		2300	380	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
Caprolactam	ND		2300	680	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
Carbazole	5000		2300	270	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
Chrysene	16000		2300	510	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
Di-n-butyl phthalate	ND		2300	390	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
Di-n-octyl phthalate	ND		2300	270	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
Dibenz(a,h)anthracene	2800		2300	400	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
Dibenzofuran	3800		2300	270	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
Diethyl phthalate	ND		2300	300	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10
Dimethyl phthalate	ND		2300	270	ug/Kg	✱	05/27/22 15:27	05/31/22 22:28	10

Eurofins Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Client Sample ID: EB-01-2FT

Lab Sample ID: 480-198378-1

Date Collected: 05/25/22 09:45

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 73.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	38000		2300	240	ug/Kg	☆	05/27/22 15:27	05/31/22 22:28	10
Fluorene	5700		2300	270	ug/Kg	☆	05/27/22 15:27	05/31/22 22:28	10
Hexachlorobenzene	ND		2300	310	ug/Kg	☆	05/27/22 15:27	05/31/22 22:28	10
Hexachlorobutadiene	ND		2300	340	ug/Kg	☆	05/27/22 15:27	05/31/22 22:28	10
Hexachlorocyclopentadiene	ND		2300	310	ug/Kg	☆	05/27/22 15:27	05/31/22 22:28	10
Hexachloroethane	ND		2300	300	ug/Kg	☆	05/27/22 15:27	05/31/22 22:28	10
Indeno[1,2,3-cd]pyrene	7400		2300	280	ug/Kg	☆	05/27/22 15:27	05/31/22 22:28	10
Isophorone	ND		2300	480	ug/Kg	☆	05/27/22 15:27	05/31/22 22:28	10
N-Nitrosodi-n-propylamine	ND		2300	390	ug/Kg	☆	05/27/22 15:27	05/31/22 22:28	10
N-Nitrosodiphenylamine	ND		2300	1900	ug/Kg	☆	05/27/22 15:27	05/31/22 22:28	10
Naphthalene	5000		2300	300	ug/Kg	☆	05/27/22 15:27	05/31/22 22:28	10
Nitrobenzene	ND		2300	250	ug/Kg	☆	05/27/22 15:27	05/31/22 22:28	10
Pentachlorophenol	ND	+	4400	2300	ug/Kg	☆	05/27/22 15:27	05/31/22 22:28	10
Phenanthrene	39000		2300	340	ug/Kg	☆	05/27/22 15:27	05/31/22 22:28	10
Phenol	ND		2300	350	ug/Kg	☆	05/27/22 15:27	05/31/22 22:28	10
Pyrene	33000		2300	270	ug/Kg	☆	05/27/22 15:27	05/31/22 22:28	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	83		54 - 120	05/27/22 15:27	05/31/22 22:28	10
2-Fluorobiphenyl	86		60 - 120	05/27/22 15:27	05/31/22 22:28	10
2-Fluorophenol	75		52 - 120	05/27/22 15:27	05/31/22 22:28	10
Nitrobenzene-d5	61		53 - 120	05/27/22 15:27	05/31/22 22:28	10
p-Terphenyl-d14	97		79 - 130	05/27/22 15:27	05/31/22 22:28	10
Phenol-d5	65		54 - 120	05/27/22 15:27	05/31/22 22:28	10

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	15500		14.4	6.3	mg/Kg	☆	05/31/22 17:05	06/01/22 22:28	1
Antimony	ND		21.6	0.58	mg/Kg	☆	05/31/22 17:05	06/01/22 22:28	1
Arsenic	9.0		2.9	0.58	mg/Kg	☆	05/31/22 17:05	06/01/22 22:28	1
Barium	242		0.72	0.16	mg/Kg	☆	05/31/22 17:05	06/01/22 22:28	1
Beryllium	1.6		0.29	0.040	mg/Kg	☆	05/31/22 17:05	06/01/22 22:28	1
Cadmium	2.8		0.29	0.043	mg/Kg	☆	05/31/22 17:05	06/01/22 22:28	1
Calcium	62600	B	72.0	4.8	mg/Kg	☆	05/31/22 17:05	06/01/22 22:28	1
Chromium	16.8		0.72	0.29	mg/Kg	☆	05/31/22 17:05	06/01/22 22:28	1
Cobalt	4.4		0.72	0.072	mg/Kg	☆	05/31/22 17:05	06/01/22 22:28	1
Copper	33.6		1.4	0.30	mg/Kg	☆	05/31/22 17:05	06/01/22 22:28	1
Iron	10000		14.4	5.0	mg/Kg	☆	05/31/22 17:05	06/01/22 22:28	1
Lead	898		1.4	0.35	mg/Kg	☆	05/31/22 17:05	06/01/22 22:28	1
Magnesium	11800		28.8	1.3	mg/Kg	☆	05/31/22 17:05	06/01/22 22:28	1
Manganese	426	B	0.29	0.046	mg/Kg	☆	05/31/22 17:05	06/01/22 22:28	1
Nickel	14.9		7.2	0.33	mg/Kg	☆	05/31/22 17:05	06/01/22 22:28	1
Potassium	1590		43.2	28.8	mg/Kg	☆	05/31/22 17:05	06/01/22 22:28	1
Selenium	ND		5.8	0.58	mg/Kg	☆	05/31/22 17:05	06/01/22 22:28	1
Silver	0.56	J	0.86	0.29	mg/Kg	☆	05/31/22 17:05	06/01/22 22:28	1
Sodium	548		202	18.7	mg/Kg	☆	05/31/22 17:05	06/01/22 22:28	1
Thallium	ND		8.6	0.43	mg/Kg	☆	05/31/22 17:05	06/01/22 22:28	1
Vanadium	20.6		0.72	0.16	mg/Kg	☆	05/31/22 17:05	06/01/22 22:28	1
Zinc	333		2.9	0.92	mg/Kg	☆	05/31/22 17:05	06/01/22 22:28	1

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Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Client Sample ID: EB-01-2FT

Lab Sample ID: 480-198378-1

Date Collected: 05/25/22 09:45

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 73.8

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.42	F1 F2	0.028	0.0064	mg/Kg	☆	06/02/22 10:39	06/02/22 14:33	1

Client Sample ID: EB-02-1.5FT

Lab Sample ID: 480-198378-2

Date Collected: 05/25/22 10:00

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 83.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		1000	150	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
bis (2-chloroisopropyl) ether	ND		1000	200	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
2,4,5-Trichlorophenol	ND		1000	270	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
2,4,6-Trichlorophenol	ND		1000	200	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
2,4-Dichlorophenol	ND		1000	110	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
2,4-Dimethylphenol	ND		1000	240	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
2,4-Dinitrophenol	ND		9800	4600	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
2,4-Dinitrotoluene	ND		1000	210	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
2,6-Dinitrotoluene	ND		1000	120	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
2-Chloronaphthalene	ND		1000	170	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
2-Chlorophenol	ND		2000	180	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
2-Methylnaphthalene	ND		1000	200	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
2-Methylphenol	ND		1000	120	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
2-Nitroaniline	ND		2000	150	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
2-Nitrophenol	ND		1000	280	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
3,3'-Dichlorobenzidine	ND		2000	1200	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
3-Nitroaniline	ND		2000	280	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
4,6-Dinitro-2-methylphenol	ND		2000	1000	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
4-Bromophenyl phenyl ether	ND		1000	140	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
4-Chloro-3-methylphenol	ND		1000	250	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
4-Chloroaniline	ND		1000	250	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
4-Chlorophenyl phenyl ether	ND		1000	120	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
4-Methylphenol	ND		2000	120	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
4-Nitroaniline	ND		2000	530	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
4-Nitrophenol	ND		2000	700	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
Acenaphthene	410	J	1000	150	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
Acenaphthylene	440	J	1000	130	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
Acetophenone	ND		1000	140	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
Anthracene	1500		1000	250	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
Atrazine	ND		1000	350	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
Benzaldehyde	ND		1000	800	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
Benzo[a]anthracene	3800		1000	100	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
Benzo[a]pyrene	3300		1000	150	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
Benzo[b]fluoranthene	3900		1000	160	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
Benzo[g,h,i]perylene	1900		1000	110	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
Benzo[k]fluoranthene	2600		1000	130	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
Bis(2-chloroethoxy)methane	ND		1000	210	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
Bis(2-chloroethyl)ether	ND		1000	130	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
Bis(2-ethylhexyl) phthalate	ND		1000	340	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
Butyl benzyl phthalate	ND		1000	170	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
Caprolactam	ND		1000	300	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
Carbazole	430	J	1000	120	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5

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Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Client Sample ID: EB-02-1.5FT

Lab Sample ID: 480-198378-2

Date Collected: 05/25/22 10:00

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 83.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	3700		1000	220	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
Di-n-butyl phthalate	ND		1000	170	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
Di-n-octyl phthalate	ND		1000	120	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
Dibenz(a,h)anthracene	710	J	1000	180	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
Dibenzofuran	240	J	1000	120	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
Diethyl phthalate	ND		1000	130	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
Dimethyl phthalate	ND		1000	120	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
Fluoranthene	7500		1000	110	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
Fluorene	580	J	1000	120	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
Hexachlorobenzene	ND		1000	140	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
Hexachlorobutadiene	ND		1000	150	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
Hexachlorocyclopentadiene	ND		1000	140	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
Hexachloroethane	ND		1000	130	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
Indeno[1,2,3-cd]pyrene	2000		1000	120	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
Isophorone	ND		1000	210	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
N-Nitrosodi-n-propylamine	ND		1000	170	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
N-Nitrosodiphenylamine	ND		1000	820	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
Naphthalene	130	J	1000	130	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
Nitrobenzene	ND		1000	110	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
Pentachlorophenol	ND	*+	2000	1000	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
Phenanthrene	5300		1000	150	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
Phenol	ND		1000	150	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5
Pyrene	6800		1000	120	ug/Kg	☆	05/27/22 15:27	05/31/22 22:52	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	63		54 - 120	05/27/22 15:27	05/31/22 22:52	5
2-Fluorobiphenyl	92		60 - 120	05/27/22 15:27	05/31/22 22:52	5
2-Fluorophenol	70		52 - 120	05/27/22 15:27	05/31/22 22:52	5
Nitrobenzene-d5	70		53 - 120	05/27/22 15:27	05/31/22 22:52	5
p-Terphenyl-d14	108		79 - 130	05/27/22 15:27	05/31/22 22:52	5
Phenol-d5	79		54 - 120	05/27/22 15:27	05/31/22 22:52	5

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	16000		11.7	5.1	mg/Kg	☆	05/31/22 17:05	06/01/22 22:32	1
Antimony	ND		17.5	0.47	mg/Kg	☆	05/31/22 17:05	06/01/22 22:32	1
Arsenic	6.3		2.3	0.47	mg/Kg	☆	05/31/22 17:05	06/01/22 22:32	1
Barium	136		0.58	0.13	mg/Kg	☆	05/31/22 17:05	06/01/22 22:32	1
Beryllium	0.76		0.23	0.033	mg/Kg	☆	05/31/22 17:05	06/01/22 22:32	1
Cadmium	0.67		0.23	0.035	mg/Kg	☆	05/31/22 17:05	06/01/22 22:32	1
Calcium	22600	B	58.4	3.9	mg/Kg	☆	05/31/22 17:05	06/01/22 22:32	1
Chromium	21.4		0.58	0.23	mg/Kg	☆	05/31/22 17:05	06/01/22 22:32	1
Cobalt	9.3		0.58	0.058	mg/Kg	☆	05/31/22 17:05	06/01/22 22:32	1
Copper	47.0		1.2	0.25	mg/Kg	☆	05/31/22 17:05	06/01/22 22:32	1
Iron	18800		11.7	4.1	mg/Kg	☆	05/31/22 17:05	06/01/22 22:32	1
Lead	171		1.2	0.28	mg/Kg	☆	05/31/22 17:05	06/01/22 22:32	1
Magnesium	8110		23.3	1.1	mg/Kg	☆	05/31/22 17:05	06/01/22 22:32	1
Manganese	396	B	0.23	0.037	mg/Kg	☆	05/31/22 17:05	06/01/22 22:32	1
Nickel	72.0		5.8	0.27	mg/Kg	☆	05/31/22 17:05	06/01/22 22:32	1
Potassium	3680		35.0	23.3	mg/Kg	☆	05/31/22 17:05	06/01/22 22:32	1

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Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Client Sample ID: EB-02-1.5FT

Lab Sample ID: 480-198378-2

Date Collected: 05/25/22 10:00

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 83.8

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		4.7	0.47	mg/Kg	✱	05/31/22 17:05	06/01/22 22:32	1
Silver	ND		0.70	0.23	mg/Kg	✱	05/31/22 17:05	06/01/22 22:32	1
Sodium	380		163	15.2	mg/Kg	✱	05/31/22 17:05	06/01/22 22:32	1
Thallium	ND		7.0	0.35	mg/Kg	✱	05/31/22 17:05	06/01/22 22:32	1
Vanadium	34.4		0.58	0.13	mg/Kg	✱	05/31/22 17:05	06/01/22 22:32	1
Zinc	134		2.3	0.75	mg/Kg	✱	05/31/22 17:05	06/01/22 22:32	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.39		0.024	0.0056	mg/Kg	✱	06/02/22 10:39	06/02/22 14:39	1

Client Sample ID: EB-03-2FT

Lab Sample ID: 480-198378-3

Date Collected: 05/25/22 10:30

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 84.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		200	29	ug/Kg	✱	05/27/22 15:27	05/31/22 23:17	1
bis (2-chloroisopropyl) ether	ND		200	40	ug/Kg	✱	05/27/22 15:27	05/31/22 23:17	1
2,4,5-Trichlorophenol	ND		200	54	ug/Kg	✱	05/27/22 15:27	05/31/22 23:17	1
2,4,6-Trichlorophenol	ND		200	40	ug/Kg	✱	05/27/22 15:27	05/31/22 23:17	1
2,4-Dichlorophenol	ND		200	21	ug/Kg	✱	05/27/22 15:27	05/31/22 23:17	1
2,4-Dimethylphenol	ND		200	48	ug/Kg	✱	05/27/22 15:27	05/31/22 23:17	1
2,4-Dinitrophenol	ND		1900	910	ug/Kg	✱	05/27/22 15:27	05/31/22 23:17	1
2,4-Dinitrotoluene	ND		200	41	ug/Kg	✱	05/27/22 15:27	05/31/22 23:17	1
2,6-Dinitrotoluene	ND		200	23	ug/Kg	✱	05/27/22 15:27	05/31/22 23:17	1
2-Chloronaphthalene	ND		200	33	ug/Kg	✱	05/27/22 15:27	05/31/22 23:17	1
2-Chlorophenol	ND		390	36	ug/Kg	✱	05/27/22 15:27	05/31/22 23:17	1
2-Methylnaphthalene	ND		200	40	ug/Kg	✱	05/27/22 15:27	05/31/22 23:17	1
2-Methylphenol	ND		200	23	ug/Kg	✱	05/27/22 15:27	05/31/22 23:17	1
2-Nitroaniline	ND		390	29	ug/Kg	✱	05/27/22 15:27	05/31/22 23:17	1
2-Nitrophenol	ND		200	56	ug/Kg	✱	05/27/22 15:27	05/31/22 23:17	1
3,3'-Dichlorobenzidine	ND		390	230	ug/Kg	✱	05/27/22 15:27	05/31/22 23:17	1
3-Nitroaniline	ND		390	55	ug/Kg	✱	05/27/22 15:27	05/31/22 23:17	1
4,6-Dinitro-2-methylphenol	ND		390	200	ug/Kg	✱	05/27/22 15:27	05/31/22 23:17	1
4-Bromophenyl phenyl ether	ND		200	28	ug/Kg	✱	05/27/22 15:27	05/31/22 23:17	1
4-Chloro-3-methylphenol	ND		200	49	ug/Kg	✱	05/27/22 15:27	05/31/22 23:17	1
4-Chloroaniline	ND		200	49	ug/Kg	✱	05/27/22 15:27	05/31/22 23:17	1
4-Chlorophenyl phenyl ether	ND		200	25	ug/Kg	✱	05/27/22 15:27	05/31/22 23:17	1
4-Methylphenol	ND		390	23	ug/Kg	✱	05/27/22 15:27	05/31/22 23:17	1
4-Nitroaniline	ND		390	100	ug/Kg	✱	05/27/22 15:27	05/31/22 23:17	1
4-Nitrophenol	ND		390	140	ug/Kg	✱	05/27/22 15:27	05/31/22 23:17	1
Acenaphthene	ND		200	29	ug/Kg	✱	05/27/22 15:27	05/31/22 23:17	1
Acenaphthylene	ND		200	26	ug/Kg	✱	05/27/22 15:27	05/31/22 23:17	1
Acetophenone	ND		200	27	ug/Kg	✱	05/27/22 15:27	05/31/22 23:17	1
Anthracene	83 J		200	49	ug/Kg	✱	05/27/22 15:27	05/31/22 23:17	1
Atrazine	ND		200	69	ug/Kg	✱	05/27/22 15:27	05/31/22 23:17	1
Benzaldehyde	ND		200	160	ug/Kg	✱	05/27/22 15:27	05/31/22 23:17	1
Benzo[a]anthracene	230		200	20	ug/Kg	✱	05/27/22 15:27	05/31/22 23:17	1
Benzo[a]pyrene	210		200	29	ug/Kg	✱	05/27/22 15:27	05/31/22 23:17	1

Eurofins Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Client Sample ID: EB-03-2FT

Lab Sample ID: 480-198378-3

Date Collected: 05/25/22 10:30

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 84.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	240		200	32	ug/Kg	☆	05/27/22 15:27	05/31/22 23:17	1
Benzo[g,h,i]perylene	110	J	200	21	ug/Kg	☆	05/27/22 15:27	05/31/22 23:17	1
Benzo[k]fluoranthene	130	J	200	26	ug/Kg	☆	05/27/22 15:27	05/31/22 23:17	1
Bis(2-chloroethoxy)methane	ND		200	42	ug/Kg	☆	05/27/22 15:27	05/31/22 23:17	1
Bis(2-chloroethyl)ether	ND		200	26	ug/Kg	☆	05/27/22 15:27	05/31/22 23:17	1
Bis(2-ethylhexyl) phthalate	ND		200	68	ug/Kg	☆	05/27/22 15:27	05/31/22 23:17	1
Butyl benzyl phthalate	ND		200	33	ug/Kg	☆	05/27/22 15:27	05/31/22 23:17	1
Caprolactam	ND		200	60	ug/Kg	☆	05/27/22 15:27	05/31/22 23:17	1
Carbazole	ND		200	23	ug/Kg	☆	05/27/22 15:27	05/31/22 23:17	1
Chrysene	230		200	44	ug/Kg	☆	05/27/22 15:27	05/31/22 23:17	1
Di-n-butyl phthalate	39	J B	200	34	ug/Kg	☆	05/27/22 15:27	05/31/22 23:17	1
Di-n-octyl phthalate	ND		200	23	ug/Kg	☆	05/27/22 15:27	05/31/22 23:17	1
Dibenz(a,h)anthracene	52	J	200	35	ug/Kg	☆	05/27/22 15:27	05/31/22 23:17	1
Dibenzofuran	ND		200	23	ug/Kg	☆	05/27/22 15:27	05/31/22 23:17	1
Diethyl phthalate	ND		200	26	ug/Kg	☆	05/27/22 15:27	05/31/22 23:17	1
Dimethyl phthalate	ND		200	23	ug/Kg	☆	05/27/22 15:27	05/31/22 23:17	1
Fluoranthene	380		200	21	ug/Kg	☆	05/27/22 15:27	05/31/22 23:17	1
Fluorene	37	J	200	23	ug/Kg	☆	05/27/22 15:27	05/31/22 23:17	1
Hexachlorobenzene	ND		200	27	ug/Kg	☆	05/27/22 15:27	05/31/22 23:17	1
Hexachlorobutadiene	ND		200	29	ug/Kg	☆	05/27/22 15:27	05/31/22 23:17	1
Hexachlorocyclopentadiene	ND		200	27	ug/Kg	☆	05/27/22 15:27	05/31/22 23:17	1
Hexachloroethane	ND		200	26	ug/Kg	☆	05/27/22 15:27	05/31/22 23:17	1
Indeno[1,2,3-cd]pyrene	110	J	200	25	ug/Kg	☆	05/27/22 15:27	05/31/22 23:17	1
Isophorone	ND		200	42	ug/Kg	☆	05/27/22 15:27	05/31/22 23:17	1
N-Nitrosodi-n-propylamine	ND		200	34	ug/Kg	☆	05/27/22 15:27	05/31/22 23:17	1
N-Nitrosodiphenylamine	ND		200	160	ug/Kg	☆	05/27/22 15:27	05/31/22 23:17	1
Naphthalene	ND		200	26	ug/Kg	☆	05/27/22 15:27	05/31/22 23:17	1
Nitrobenzene	ND		200	22	ug/Kg	☆	05/27/22 15:27	05/31/22 23:17	1
Pentachlorophenol	ND	+	390	200	ug/Kg	☆	05/27/22 15:27	05/31/22 23:17	1
Phenanthrene	320		200	29	ug/Kg	☆	05/27/22 15:27	05/31/22 23:17	1
Phenol	ND		200	30	ug/Kg	☆	05/27/22 15:27	05/31/22 23:17	1
Pyrene	450		200	23	ug/Kg	☆	05/27/22 15:27	05/31/22 23:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	83		54 - 120	05/27/22 15:27	05/31/22 23:17	1
2-Fluorobiphenyl	86		60 - 120	05/27/22 15:27	05/31/22 23:17	1
2-Fluorophenol	67		52 - 120	05/27/22 15:27	05/31/22 23:17	1
Nitrobenzene-d5	70		53 - 120	05/27/22 15:27	05/31/22 23:17	1
p-Terphenyl-d14	98		79 - 130	05/27/22 15:27	05/31/22 23:17	1
Phenol-d5	71		54 - 120	05/27/22 15:27	05/31/22 23:17	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	7750		12.4	5.5	mg/Kg	☆	05/31/22 17:05	06/01/22 22:36	1
Antimony	ND		18.7	0.50	mg/Kg	☆	05/31/22 17:05	06/01/22 22:36	1
Arsenic	5.6		2.5	0.50	mg/Kg	☆	05/31/22 17:05	06/01/22 22:36	1
Barium	302		0.62	0.14	mg/Kg	☆	05/31/22 17:05	06/01/22 22:36	1
Beryllium	0.47		0.25	0.035	mg/Kg	☆	05/31/22 17:05	06/01/22 22:36	1
Cadmium	0.38		0.25	0.037	mg/Kg	☆	05/31/22 17:05	06/01/22 22:36	1
Calcium	82100	B	62.2	4.1	mg/Kg	☆	05/31/22 17:05	06/01/22 22:36	1

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Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Client Sample ID: EB-03-2FT

Lab Sample ID: 480-198378-3

Date Collected: 05/25/22 10:30

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 84.5

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	12.0		0.62	0.25	mg/Kg	☆	05/31/22 17:05	06/01/22 22:36	1
Cobalt	5.0		0.62	0.062	mg/Kg	☆	05/31/22 17:05	06/01/22 22:36	1
Copper	27.7		1.2	0.26	mg/Kg	☆	05/31/22 17:05	06/01/22 22:36	1
Iron	11500		12.4	4.4	mg/Kg	☆	05/31/22 17:05	06/01/22 22:36	1
Lead	233		1.2	0.30	mg/Kg	☆	05/31/22 17:05	06/01/22 22:36	1
Magnesium	11100		24.9	1.2	mg/Kg	☆	05/31/22 17:05	06/01/22 22:36	1
Manganese	211	B	0.25	0.040	mg/Kg	☆	05/31/22 17:05	06/01/22 22:36	1
Nickel	9.9		6.2	0.29	mg/Kg	☆	05/31/22 17:05	06/01/22 22:36	1
Potassium	1680		37.3	24.9	mg/Kg	☆	05/31/22 17:05	06/01/22 22:36	1
Selenium	ND		5.0	0.50	mg/Kg	☆	05/31/22 17:05	06/01/22 22:36	1
Silver	ND		0.75	0.25	mg/Kg	☆	05/31/22 17:05	06/01/22 22:36	1
Sodium	1860		174	16.2	mg/Kg	☆	05/31/22 17:05	06/01/22 22:36	1
Thallium	ND		7.5	0.37	mg/Kg	☆	05/31/22 17:05	06/01/22 22:36	1
Vanadium	20.3		0.62	0.14	mg/Kg	☆	05/31/22 17:05	06/01/22 22:36	1
Zinc	152		2.5	0.80	mg/Kg	☆	05/31/22 17:05	06/01/22 22:36	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.26		0.023	0.0053	mg/Kg	☆	06/02/22 10:39	06/02/22 14:40	1

Client Sample ID: EB-04-1FT

Lab Sample ID: 480-198378-4

Date Collected: 05/25/22 10:40

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 80.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		1100	150	ug/Kg	☆	05/27/22 15:27	05/31/22 23:41	5
bis (2-chloroisopropyl) ether	ND		1100	210	ug/Kg	☆	05/27/22 15:27	05/31/22 23:41	5
2,4,5-Trichlorophenol	ND		1100	280	ug/Kg	☆	05/27/22 15:27	05/31/22 23:41	5
2,4,6-Trichlorophenol	ND		1100	210	ug/Kg	☆	05/27/22 15:27	05/31/22 23:41	5
2,4-Dichlorophenol	ND		1100	110	ug/Kg	☆	05/27/22 15:27	05/31/22 23:41	5
2,4-Dimethylphenol	ND		1100	250	ug/Kg	☆	05/27/22 15:27	05/31/22 23:41	5
2,4-Dinitrophenol	ND		10000	4900	ug/Kg	☆	05/27/22 15:27	05/31/22 23:41	5
2,4-Dinitrotoluene	ND		1100	220	ug/Kg	☆	05/27/22 15:27	05/31/22 23:41	5
2,6-Dinitrotoluene	ND		1100	120	ug/Kg	☆	05/27/22 15:27	05/31/22 23:41	5
2-Chloronaphthalene	ND		1100	170	ug/Kg	☆	05/27/22 15:27	05/31/22 23:41	5
2-Chlorophenol	ND		2000	190	ug/Kg	☆	05/27/22 15:27	05/31/22 23:41	5
2-Methylnaphthalene	ND		1100	210	ug/Kg	☆	05/27/22 15:27	05/31/22 23:41	5
2-Methylphenol	ND		1100	120	ug/Kg	☆	05/27/22 15:27	05/31/22 23:41	5
2-Nitroaniline	ND		2000	150	ug/Kg	☆	05/27/22 15:27	05/31/22 23:41	5
2-Nitrophenol	ND		1100	300	ug/Kg	☆	05/27/22 15:27	05/31/22 23:41	5
3,3'-Dichlorobenzidine	ND		2000	1200	ug/Kg	☆	05/27/22 15:27	05/31/22 23:41	5
3-Nitroaniline	ND		2000	290	ug/Kg	☆	05/27/22 15:27	05/31/22 23:41	5
4,6-Dinitro-2-methylphenol	ND		2000	1100	ug/Kg	☆	05/27/22 15:27	05/31/22 23:41	5
4-Bromophenyl phenyl ether	ND		1100	150	ug/Kg	☆	05/27/22 15:27	05/31/22 23:41	5
4-Chloro-3-methylphenol	ND		1100	260	ug/Kg	☆	05/27/22 15:27	05/31/22 23:41	5
4-Chloroaniline	ND		1100	260	ug/Kg	☆	05/27/22 15:27	05/31/22 23:41	5
4-Chlorophenyl phenyl ether	ND		1100	130	ug/Kg	☆	05/27/22 15:27	05/31/22 23:41	5
4-Methylphenol	ND		2000	120	ug/Kg	☆	05/27/22 15:27	05/31/22 23:41	5
4-Nitroaniline	ND		2000	550	ug/Kg	☆	05/27/22 15:27	05/31/22 23:41	5

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Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Client Sample ID: EB-04-1FT

Lab Sample ID: 480-198378-4

Date Collected: 05/25/22 10:40

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 80.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	ND		2000	740	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5
Acenaphthene	ND		1100	150	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5
Acenaphthylene	ND		1100	140	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5
Acetophenone	ND		1100	140	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5
Anthracene	ND		1100	260	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5
Atrazine	ND		1100	370	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5
Benzaldehyde	ND		1100	840	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5
Benzo[a]anthracene	520	J	1100	110	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5
Benzo[a]pyrene	530	J	1100	150	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5
Benzo[b]fluoranthene	690	J	1100	170	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5
Benzo[g,h,i]perylene	360	J	1100	110	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5
Benzo[k]fluoranthene	460	J	1100	140	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5
Bis(2-chloroethoxy)methane	ND		1100	220	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5
Bis(2-chloroethyl)ether	ND		1100	140	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5
Bis(2-ethylhexyl) phthalate	ND		1100	360	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5
Butyl benzyl phthalate	ND		1100	170	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5
Caprolactam	ND		1100	320	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5
Carbazole	ND		1100	120	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5
Chrysene	590	J	1100	240	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5
Di-n-butyl phthalate	ND		1100	180	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5
Di-n-octyl phthalate	ND		1100	120	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5
Dibenz(a,h)anthracene	ND		1100	190	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5
Dibenzofuran	ND		1100	120	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5
Diethyl phthalate	ND		1100	140	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5
Dimethyl phthalate	ND		1100	120	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5
Fluoranthene	1200		1100	110	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5
Fluorene	ND		1100	120	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5
Hexachlorobenzene	ND		1100	140	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5
Hexachlorobutadiene	ND		1100	150	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5
Hexachlorocyclopentadiene	ND		1100	140	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5
Hexachloroethane	ND		1100	140	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5
Indeno[1,2,3-cd]pyrene	370	J	1100	130	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5
Isophorone	ND		1100	220	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5
N-Nitrosodi-n-propylamine	ND		1100	180	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5
N-Nitrosodiphenylamine	ND		1100	850	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5
Naphthalene	ND		1100	140	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5
Nitrobenzene	ND		1100	120	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5
Pentachlorophenol	ND	+	2000	1100	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5
Phenanthrene	510	J	1100	150	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5
Phenol	ND		1100	160	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5
Pyrene	950	J	1100	120	ug/Kg	✱	05/27/22 15:27	05/31/22 23:41	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	62		54 - 120	05/27/22 15:27	05/31/22 23:41	5
2-Fluorobiphenyl	86		60 - 120	05/27/22 15:27	05/31/22 23:41	5
2-Fluorophenol	68		52 - 120	05/27/22 15:27	05/31/22 23:41	5
Nitrobenzene-d5	70		53 - 120	05/27/22 15:27	05/31/22 23:41	5
p-Terphenyl-d14	97		79 - 130	05/27/22 15:27	05/31/22 23:41	5
Phenol-d5	66		54 - 120	05/27/22 15:27	05/31/22 23:41	5

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Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Client Sample ID: EB-04-1FT

Lab Sample ID: 480-198378-4

Date Collected: 05/25/22 10:40

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 80.1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	15200		12.8	5.6	mg/Kg	☆	05/31/22 17:05	06/01/22 22:40	1
Antimony	ND		19.2	0.51	mg/Kg	☆	05/31/22 17:05	06/01/22 22:40	1
Arsenic	3.3		2.6	0.51	mg/Kg	☆	05/31/22 17:05	06/01/22 22:40	1
Barium	78.6		0.64	0.14	mg/Kg	☆	05/31/22 17:05	06/01/22 22:40	1
Beryllium	0.54		0.26	0.036	mg/Kg	☆	05/31/22 17:05	06/01/22 22:40	1
Cadmium	0.26		0.26	0.038	mg/Kg	☆	05/31/22 17:05	06/01/22 22:40	1
Calcium	7290	B	63.9	4.2	mg/Kg	☆	05/31/22 17:05	06/01/22 22:40	1
Chromium	17.5		0.64	0.26	mg/Kg	☆	05/31/22 17:05	06/01/22 22:40	1
Cobalt	5.3		0.64	0.064	mg/Kg	☆	05/31/22 17:05	06/01/22 22:40	1
Copper	13.1		1.3	0.27	mg/Kg	☆	05/31/22 17:05	06/01/22 22:40	1
Iron	12400		12.8	4.5	mg/Kg	☆	05/31/22 17:05	06/01/22 22:40	1
Lead	23.8		1.3	0.31	mg/Kg	☆	05/31/22 17:05	06/01/22 22:40	1
Magnesium	4120		25.6	1.2	mg/Kg	☆	05/31/22 17:05	06/01/22 22:40	1
Manganese	169	B	0.26	0.041	mg/Kg	☆	05/31/22 17:05	06/01/22 22:40	1
Nickel	14.5		6.4	0.29	mg/Kg	☆	05/31/22 17:05	06/01/22 22:40	1
Potassium	2190		38.3	25.6	mg/Kg	☆	05/31/22 17:05	06/01/22 22:40	1
Selenium	ND		5.1	0.51	mg/Kg	☆	05/31/22 17:05	06/01/22 22:40	1
Silver	ND		0.77	0.26	mg/Kg	☆	05/31/22 17:05	06/01/22 22:40	1
Sodium	148	J	179	16.6	mg/Kg	☆	05/31/22 17:05	06/01/22 22:40	1
Thallium	ND		7.7	0.38	mg/Kg	☆	05/31/22 17:05	06/01/22 22:40	1
Vanadium	30.2		0.64	0.14	mg/Kg	☆	05/31/22 17:05	06/01/22 22:40	1
Zinc	68.9		2.6	0.82	mg/Kg	☆	05/31/22 17:05	06/01/22 22:40	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.055		0.023	0.0054	mg/Kg	☆	06/02/22 10:39	06/02/22 14:41	1

Client Sample ID: EB-05-0.5FT

Lab Sample ID: 480-198378-5

Date Collected: 05/25/22 11:10

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 85.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		200	29	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
bis (2-chloroisopropyl) ether	ND		200	39	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
2,4,5-Trichlorophenol	ND		200	53	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
2,4,6-Trichlorophenol	ND		200	39	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
2,4-Dichlorophenol	ND		200	21	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
2,4-Dimethylphenol	ND		200	47	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
2,4-Dinitrophenol	ND		1900	910	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
2,4-Dinitrotoluene	ND		200	40	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
2,6-Dinitrotoluene	ND		200	23	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
2-Chloronaphthalene	ND		200	32	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
2-Chlorophenol	ND		380	36	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
2-Methylnaphthalene	65	J	200	39	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
2-Methylphenol	ND		200	23	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
2-Nitroaniline	ND		380	29	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
2-Nitrophenol	ND		200	55	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
3,3'-Dichlorobenzidine	ND		380	230	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
3-Nitroaniline	ND		380	54	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1

Eurofins Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Client Sample ID: EB-05-0.5FT

Lab Sample ID: 480-198378-5

Date Collected: 05/25/22 11:10

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 85.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,6-Dinitro-2-methylphenol	ND		380	200	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
4-Bromophenyl phenyl ether	ND		200	28	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
4-Chloro-3-methylphenol	ND		200	49	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
4-Chloroaniline	ND		200	49	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
4-Chlorophenyl phenyl ether	ND		200	24	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
4-Methylphenol	ND		380	23	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
4-Nitroaniline	ND		380	100	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
4-Nitrophenol	ND		380	140	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
Acenaphthene	130	J	200	29	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
Acenaphthylene	ND		200	25	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
Acetophenone	ND		200	27	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
Anthracene	470		200	49	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
Atrazine	ND		200	68	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
Benzaldehyde	ND		200	160	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
Benzo[a]anthracene	820		200	20	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
Benzo[a]pyrene	750		200	29	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
Benzo[b]fluoranthene	930		200	31	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
Benzo[g,h,i]perylene	440		200	21	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
Benzo[k]fluoranthene	430		200	25	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
Bis(2-chloroethoxy)methane	ND		200	42	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
Bis(2-chloroethyl)ether	ND		200	25	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
Bis(2-ethylhexyl) phthalate	ND		200	67	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
Butyl benzyl phthalate	ND		200	32	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
Caprolactam	ND		200	59	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
Carbazole	180	J	200	23	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
Chrysene	840		200	44	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
Di-n-butyl phthalate	ND		200	33	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
Di-n-octyl phthalate	ND		200	23	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
Dibenz(a,h)anthracene	150	J	200	35	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
Dibenzofuran	140	J	200	23	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
Diethyl phthalate	ND		200	25	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
Dimethyl phthalate	ND		200	23	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
Fluoranthene	1500		200	21	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
Fluorene	200		200	23	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
Hexachlorobenzene	ND		200	27	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
Hexachlorobutadiene	ND		200	29	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
Hexachlorocyclopentadiene	ND		200	27	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
Hexachloroethane	ND		200	25	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
Indeno[1,2,3-cd]pyrene	420		200	24	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
Isophorone	ND		200	42	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
N-Nitrosodi-n-propylamine	ND		200	33	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
N-Nitrosodiphenylamine	ND		200	160	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
Naphthalene	74	J	200	25	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
Nitrobenzene	ND		200	22	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
Pentachlorophenol	ND	+	380	200	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
Phenanthrene	1600		200	29	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
Phenol	ND		200	30	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1
Pyrene	1500		200	23	ug/Kg	☆	05/27/22 15:27	06/01/22 00:06	1

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Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Client Sample ID: EB-05-0.5FT

Lab Sample ID: 480-198378-5

Date Collected: 05/25/22 11:10

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 85.3

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	104		54 - 120	05/27/22 15:27	06/01/22 00:06	1
2-Fluorobiphenyl	101		60 - 120	05/27/22 15:27	06/01/22 00:06	1
2-Fluorophenol	73		52 - 120	05/27/22 15:27	06/01/22 00:06	1
Nitrobenzene-d5	78		53 - 120	05/27/22 15:27	06/01/22 00:06	1
p-Terphenyl-d14	117		79 - 130	05/27/22 15:27	06/01/22 00:06	1
Phenol-d5	76		54 - 120	05/27/22 15:27	06/01/22 00:06	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	13400		12.0	5.3	mg/Kg	☆	05/31/22 17:05	06/01/22 22:44	1
Antimony	ND		17.9	0.48	mg/Kg	☆	05/31/22 17:05	06/01/22 22:44	1
Arsenic	5.2		2.4	0.48	mg/Kg	☆	05/31/22 17:05	06/01/22 22:44	1
Barium	70.0		0.60	0.13	mg/Kg	☆	05/31/22 17:05	06/01/22 22:44	1
Beryllium	0.47		0.24	0.033	mg/Kg	☆	05/31/22 17:05	06/01/22 22:44	1
Cadmium	0.53		0.24	0.036	mg/Kg	☆	05/31/22 17:05	06/01/22 22:44	1
Calcium	8470	B	59.8	3.9	mg/Kg	☆	05/31/22 17:05	06/01/22 22:44	1
Chromium	21.0		0.60	0.24	mg/Kg	☆	05/31/22 17:05	06/01/22 22:44	1
Cobalt	4.8		0.60	0.060	mg/Kg	☆	05/31/22 17:05	06/01/22 22:44	1
Copper	18.4		1.2	0.25	mg/Kg	☆	05/31/22 17:05	06/01/22 22:44	1
Iron	13500		12.0	4.2	mg/Kg	☆	05/31/22 17:05	06/01/22 22:44	1
Lead	67.9		1.2	0.29	mg/Kg	☆	05/31/22 17:05	06/01/22 22:44	1
Magnesium	3700		23.9	1.1	mg/Kg	☆	05/31/22 17:05	06/01/22 22:44	1
Manganese	223	B	0.24	0.038	mg/Kg	☆	05/31/22 17:05	06/01/22 22:44	1
Nickel	14.0		6.0	0.28	mg/Kg	☆	05/31/22 17:05	06/01/22 22:44	1
Potassium	1820		35.9	23.9	mg/Kg	☆	05/31/22 17:05	06/01/22 22:44	1
Selenium	ND		4.8	0.48	mg/Kg	☆	05/31/22 17:05	06/01/22 22:44	1
Silver	ND		0.72	0.24	mg/Kg	☆	05/31/22 17:05	06/01/22 22:44	1
Sodium	330		167	15.5	mg/Kg	☆	05/31/22 17:05	06/01/22 22:44	1
Thallium	ND		7.2	0.36	mg/Kg	☆	05/31/22 17:05	06/01/22 22:44	1
Vanadium	29.1		0.60	0.13	mg/Kg	☆	05/31/22 17:05	06/01/22 22:44	1
Zinc	126		2.4	0.77	mg/Kg	☆	05/31/22 17:05	06/01/22 22:44	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12		0.022	0.0050	mg/Kg	☆	06/02/22 10:39	06/02/22 14:45	1

Client Sample ID: EB-06-1FT

Lab Sample ID: 480-198378-6

Date Collected: 05/25/22 11:30

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 86.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		190	28	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
bis (2-chloroisopropyl) ether	ND		190	39	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
2,4,5-Trichlorophenol	ND		190	52	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
2,4,6-Trichlorophenol	ND		190	39	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
2,4-Dichlorophenol	ND		190	20	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
2,4-Dimethylphenol	ND		190	46	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
2,4-Dinitrophenol	ND		1900	890	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
2,4-Dinitrotoluene	ND		190	40	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
2,6-Dinitrotoluene	ND		190	23	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1

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Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Client Sample ID: EB-06-1FT

Lab Sample ID: 480-198378-6

Date Collected: 05/25/22 11:30

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 86.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloronaphthalene	ND		190	32	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
2-Chlorophenol	ND		370	35	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
2-Methylnaphthalene	ND		190	39	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
2-Methylphenol	ND		190	23	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
2-Nitroaniline	ND		370	28	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
2-Nitrophenol	ND		190	54	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
3,3'-Dichlorobenzidine	ND		370	230	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
3-Nitroaniline	ND		370	53	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
4,6-Dinitro-2-methylphenol	ND		370	190	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
4-Bromophenyl phenyl ether	ND		190	27	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
4-Chloro-3-methylphenol	ND		190	48	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
4-Chloroaniline	ND		190	48	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
4-Chlorophenyl phenyl ether	ND		190	24	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
4-Methylphenol	ND		370	23	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
4-Nitroaniline	ND		370	100	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
4-Nitrophenol	ND		370	130	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
Acenaphthene	61	J	190	28	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
Acenaphthylene	47	J	190	25	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
Acetophenone	ND		190	26	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
Anthracene	190		190	48	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
Atrazine	ND		190	67	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
Benzaldehyde	ND		190	150	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
Benzo[a]anthracene	620		190	19	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
Benzo[a]pyrene	650		190	28	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
Benzo[b]fluoranthene	830		190	31	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
Benzo[g,h,i]perylene	360		190	20	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
Benzo[k]fluoranthene	340		190	25	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
Bis(2-chloroethoxy)methane	ND		190	41	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
Bis(2-chloroethyl)ether	ND		190	25	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
Bis(2-ethylhexyl) phthalate	ND		190	66	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
Butyl benzyl phthalate	ND		190	32	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
Caprolactam	ND		190	58	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
Carbazole	69	J	190	23	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
Chrysene	640		190	43	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
Di-n-butyl phthalate	59	J B	190	33	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
Di-n-octyl phthalate	ND		190	23	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
Dibenz(a,h)anthracene	100	J	190	34	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
Dibenzofuran	28	J	190	23	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
Diethyl phthalate	ND		190	25	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
Dimethyl phthalate	ND		190	23	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
Fluoranthene	1000		190	20	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
Fluorene	63	J	190	23	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
Hexachlorobenzene	ND		190	26	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
Hexachlorobutadiene	ND		190	28	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
Hexachlorocyclopentadiene	ND		190	26	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
Hexachloroethane	ND		190	25	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
Indeno[1,2,3-cd]pyrene	370		190	24	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
Isophorone	ND		190	41	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1
N-Nitrosodi-n-propylamine	ND		190	33	ug/Kg	☆	05/27/22 15:27	06/01/22 00:30	1

Eurofins Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Client Sample ID: EB-06-1FT

Lab Sample ID: 480-198378-6

Date Collected: 05/25/22 11:30

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 86.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		190	160	ug/Kg	✱	05/27/22 15:27	06/01/22 00:30	1
Naphthalene	ND		190	25	ug/Kg	✱	05/27/22 15:27	06/01/22 00:30	1
Nitrobenzene	ND		190	22	ug/Kg	✱	05/27/22 15:27	06/01/22 00:30	1
Pentachlorophenol	ND	*+	370	190	ug/Kg	✱	05/27/22 15:27	06/01/22 00:30	1
Phenanthrene	660		190	28	ug/Kg	✱	05/27/22 15:27	06/01/22 00:30	1
Phenol	ND		190	29	ug/Kg	✱	05/27/22 15:27	06/01/22 00:30	1
Pyrene	1100		190	23	ug/Kg	✱	05/27/22 15:27	06/01/22 00:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	96		54 - 120	05/27/22 15:27	06/01/22 00:30	1
2-Fluorobiphenyl	102		60 - 120	05/27/22 15:27	06/01/22 00:30	1
2-Fluorophenol	78		52 - 120	05/27/22 15:27	06/01/22 00:30	1
Nitrobenzene-d5	79		53 - 120	05/27/22 15:27	06/01/22 00:30	1
p-Terphenyl-d14	109		79 - 130	05/27/22 15:27	06/01/22 00:30	1
Phenol-d5	78		54 - 120	05/27/22 15:27	06/01/22 00:30	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	10300		12.2	5.4	mg/Kg	✱	05/31/22 17:05	06/01/22 22:47	1
Antimony	ND		18.2	0.49	mg/Kg	✱	05/31/22 17:05	06/01/22 22:47	1
Arsenic	4.6		2.4	0.49	mg/Kg	✱	05/31/22 17:05	06/01/22 22:47	1
Barium	64.3		0.61	0.13	mg/Kg	✱	05/31/22 17:05	06/01/22 22:47	1
Beryllium	0.39		0.24	0.034	mg/Kg	✱	05/31/22 17:05	06/01/22 22:47	1
Cadmium	0.47		0.24	0.036	mg/Kg	✱	05/31/22 17:05	06/01/22 22:47	1
Calcium	16700	B	60.8	4.0	mg/Kg	✱	05/31/22 17:05	06/01/22 22:47	1
Chromium	14.6		0.61	0.24	mg/Kg	✱	05/31/22 17:05	06/01/22 22:47	1
Cobalt	4.1		0.61	0.061	mg/Kg	✱	05/31/22 17:05	06/01/22 22:47	1
Copper	15.7		1.2	0.26	mg/Kg	✱	05/31/22 17:05	06/01/22 22:47	1
Iron	10200		12.2	4.3	mg/Kg	✱	05/31/22 17:05	06/01/22 22:47	1
Lead	69.1		1.2	0.29	mg/Kg	✱	05/31/22 17:05	06/01/22 22:47	1
Magnesium	8120		24.3	1.1	mg/Kg	✱	05/31/22 17:05	06/01/22 22:47	1
Manganese	228	B	0.24	0.039	mg/Kg	✱	05/31/22 17:05	06/01/22 22:47	1
Nickel	12.2		6.1	0.28	mg/Kg	✱	05/31/22 17:05	06/01/22 22:47	1
Potassium	1490		36.5	24.3	mg/Kg	✱	05/31/22 17:05	06/01/22 22:47	1
Selenium	ND		4.9	0.49	mg/Kg	✱	05/31/22 17:05	06/01/22 22:47	1
Silver	ND		0.73	0.24	mg/Kg	✱	05/31/22 17:05	06/01/22 22:47	1
Sodium	286		170	15.8	mg/Kg	✱	05/31/22 17:05	06/01/22 22:47	1
Thallium	ND		7.3	0.36	mg/Kg	✱	05/31/22 17:05	06/01/22 22:47	1
Vanadium	24.6		0.61	0.13	mg/Kg	✱	05/31/22 17:05	06/01/22 22:47	1
Zinc	96.6		2.4	0.78	mg/Kg	✱	05/31/22 17:05	06/01/22 22:47	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12		0.023	0.0053	mg/Kg	✱	06/02/22 10:39	06/02/22 14:46	1

Eurofins Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Client Sample ID: EB-07-2FT

Lab Sample ID: 480-198378-7

Date Collected: 05/25/22 11:40

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 86.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		980	140	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
bis (2-chloroisopropyl) ether	ND		980	200	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
2,4,5-Trichlorophenol	ND		980	260	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
2,4,6-Trichlorophenol	ND		980	200	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
2,4-Dichlorophenol	ND		980	100	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
2,4-Dimethylphenol	ND		980	240	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
2,4-Dinitrophenol	ND		9500	4500	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
2,4-Dinitrotoluene	ND		980	200	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
2,6-Dinitrotoluene	ND		980	110	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
2-Chloronaphthalene	ND		980	160	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
2-Chlorophenol	ND		1900	180	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
2-Methylnaphthalene	ND		980	200	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
2-Methylphenol	ND		980	110	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
2-Nitroaniline	ND		1900	140	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
2-Nitrophenol	ND		980	280	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
3,3'-Dichlorobenzidine	ND		1900	1100	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
3-Nitroaniline	ND		1900	270	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
4,6-Dinitro-2-methylphenol	ND		1900	980	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
4-Bromophenyl phenyl ether	ND		980	140	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
4-Chloro-3-methylphenol	ND		980	240	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
4-Chloroaniline	ND		980	240	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
4-Chlorophenyl phenyl ether	ND		980	120	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
4-Methylphenol	ND		1900	110	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
4-Nitroaniline	ND		1900	510	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
4-Nitrophenol	ND		1900	680	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
Acenaphthene	210 J		980	140	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
Acenaphthylene	ND		980	130	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
Acetophenone	ND		980	130	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
Anthracene	680 J		980	240	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
Atrazine	ND		980	340	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
Benzaldehyde	ND		980	770	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
Benzo[a]anthracene	1800		980	98	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
Benzo[a]pyrene	1500		980	140	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
Benzo[b]fluoranthene	2600 K		980	150	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
Benzo[g,h,i]perylene	800 J		980	100	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
Benzo[k]fluoranthene	ND		980	130	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
Bis(2-chloroethoxy)methane	ND		980	210	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
Bis(2-chloroethyl)ether	ND		980	130	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
Bis(2-ethylhexyl) phthalate	ND		980	330	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
Butyl benzyl phthalate	ND		980	160	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
Caprolactam	ND		980	290	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
Carbazole	280 J		980	110	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
Chrysene	1700		980	220	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
Di-n-butyl phthalate	ND		980	170	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
Di-n-octyl phthalate	ND		980	110	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
Dibenz(a,h)anthracene	270 J		980	170	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
Dibenzofuran	130 J		980	110	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
Diethyl phthalate	ND		980	130	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
Dimethyl phthalate	ND		980	110	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5

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Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Client Sample ID: EB-07-2FT

Lab Sample ID: 480-198378-7

Date Collected: 05/25/22 11:40

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 86.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	3800		980	100	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
Fluorene	220	J	980	110	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
Hexachlorobenzene	ND		980	130	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
Hexachlorobutadiene	ND		980	140	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
Hexachlorocyclopentadiene	ND		980	130	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
Hexachloroethane	ND		980	130	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
Indeno[1,2,3-cd]pyrene	820	J	980	120	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
Isophorone	ND		980	210	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
N-Nitrosodi-n-propylamine	ND		980	170	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
N-Nitrosodiphenylamine	ND		980	790	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
Naphthalene	ND		980	130	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
Nitrobenzene	ND		980	110	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
Pentachlorophenol	ND	*+	1900	980	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
Phenanthrene	2400		980	140	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
Phenol	ND		980	150	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
Pyrene	3300		980	110	ug/Kg	✱	05/27/22 15:27	06/01/22 00:55	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	84		54 - 120				05/27/22 15:27	06/01/22 00:55	5
2-Fluorobiphenyl	85		60 - 120				05/27/22 15:27	06/01/22 00:55	5
2-Fluorophenol	75		52 - 120				05/27/22 15:27	06/01/22 00:55	5
Nitrobenzene-d5	74		53 - 120				05/27/22 15:27	06/01/22 00:55	5
p-Terphenyl-d14	108		79 - 130				05/27/22 15:27	06/01/22 00:55	5
Phenol-d5	74		54 - 120				05/27/22 15:27	06/01/22 00:55	5

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	7090		11.5	5.1	mg/Kg	✱	05/31/22 17:05	06/01/22 22:51	1
Antimony	ND		17.3	0.46	mg/Kg	✱	05/31/22 17:05	06/01/22 22:51	1
Arsenic	2.7		2.3	0.46	mg/Kg	✱	05/31/22 17:05	06/01/22 22:51	1
Barium	46.9		0.58	0.13	mg/Kg	✱	05/31/22 17:05	06/01/22 22:51	1
Beryllium	0.44		0.23	0.032	mg/Kg	✱	05/31/22 17:05	06/01/22 22:51	1
Cadmium	0.28		0.23	0.035	mg/Kg	✱	05/31/22 17:05	06/01/22 22:51	1
Calcium	47300	B	57.7	3.8	mg/Kg	✱	05/31/22 17:05	06/01/22 22:51	1
Chromium	9.9		0.58	0.23	mg/Kg	✱	05/31/22 17:05	06/01/22 22:51	1
Cobalt	3.1		0.58	0.058	mg/Kg	✱	05/31/22 17:05	06/01/22 22:51	1
Copper	11.0		1.2	0.24	mg/Kg	✱	05/31/22 17:05	06/01/22 22:51	1
Iron	8090		11.5	4.0	mg/Kg	✱	05/31/22 17:05	06/01/22 22:51	1
Lead	33.9		1.2	0.28	mg/Kg	✱	05/31/22 17:05	06/01/22 22:51	1
Magnesium	23400		23.1	1.1	mg/Kg	✱	05/31/22 17:05	06/01/22 22:51	1
Manganese	348	B	0.23	0.037	mg/Kg	✱	05/31/22 17:05	06/01/22 22:51	1
Nickel	8.3		5.8	0.27	mg/Kg	✱	05/31/22 17:05	06/01/22 22:51	1
Potassium	2100		34.6	23.1	mg/Kg	✱	05/31/22 17:05	06/01/22 22:51	1
Selenium	ND		4.6	0.46	mg/Kg	✱	05/31/22 17:05	06/01/22 22:51	1
Silver	ND		0.69	0.23	mg/Kg	✱	05/31/22 17:05	06/01/22 22:51	1
Sodium	228		162	15.0	mg/Kg	✱	05/31/22 17:05	06/01/22 22:51	1
Thallium	ND		6.9	0.35	mg/Kg	✱	05/31/22 17:05	06/01/22 22:51	1
Vanadium	14.6		0.58	0.13	mg/Kg	✱	05/31/22 17:05	06/01/22 22:51	1
Zinc	90.2		2.3	0.74	mg/Kg	✱	05/31/22 17:05	06/01/22 22:51	1

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Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Client Sample ID: EB-07-2FT

Lab Sample ID: 480-198378-7

Date Collected: 05/25/22 11:40

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 86.4

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12		0.023	0.0052	mg/Kg	☆	06/02/22 10:39	06/02/22 14:48	1

Client Sample ID: EB-08-1FT

Lab Sample ID: 480-198378-8

Date Collected: 05/25/22 12:00

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 89.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		930	140	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
bis (2-chloroisopropyl) ether	ND		930	190	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
2,4,5-Trichlorophenol	ND		930	250	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
2,4,6-Trichlorophenol	ND		930	190	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
2,4-Dichlorophenol	ND		930	99	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
2,4-Dimethylphenol	ND		930	220	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
2,4-Dinitrophenol	ND		9100	4300	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
2,4-Dinitrotoluene	ND		930	190	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
2,6-Dinitrotoluene	ND		930	110	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
2-Chloronaphthalene	ND		930	150	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
2-Chlorophenol	ND		1800	170	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
2-Methylnaphthalene	ND		930	190	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
2-Methylphenol	ND		930	110	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
2-Nitroaniline	ND		1800	140	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
2-Nitrophenol	ND		930	260	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
3,3'-Dichlorobenzidine	ND		1800	1100	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
3-Nitroaniline	ND		1800	260	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
4,6-Dinitro-2-methylphenol	ND		1800	930	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
4-Bromophenyl phenyl ether	ND		930	130	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
4-Chloro-3-methylphenol	ND		930	230	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
4-Chloroaniline	ND		930	230	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
4-Chlorophenyl phenyl ether	ND		930	120	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
4-Methylphenol	ND		1800	110	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
4-Nitroaniline	ND		1800	490	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
4-Nitrophenol	ND		1800	650	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
Acenaphthene	260	J	930	140	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
Acenaphthylene	140	J	930	120	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
Acetophenone	ND		930	130	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
Anthracene	760	J	930	230	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
Atrazine	ND		930	320	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
Benzaldehyde	ND		930	740	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
Benzo[a]anthracene	2900		930	93	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
Benzo[a]pyrene	2700		930	140	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
Benzo[b]fluoranthene	4100		930	150	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
Benzo[g,h,i]perylene	1700		930	99	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
Benzo[k]fluoranthene	1600		930	120	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
Bis(2-chloroethoxy)methane	ND		930	200	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
Bis(2-chloroethyl)ether	ND		930	120	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
Bis(2-ethylhexyl) phthalate	ND		930	320	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
Butyl benzyl phthalate	ND		930	150	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
Caprolactam	ND		930	280	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
Carbazole	270	J	930	110	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5

Eurofins Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Client Sample ID: EB-08-1FT

Lab Sample ID: 480-198378-8

Date Collected: 05/25/22 12:00

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 89.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	2900		930	210	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
Di-n-butyl phthalate	ND		930	160	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
Di-n-octyl phthalate	ND		930	110	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
Dibenz(a,h)anthracene	430	J	930	160	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
Dibenzofuran	130	J	930	110	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
Diethyl phthalate	ND		930	120	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
Dimethyl phthalate	ND		930	110	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
Fluoranthene	7200		930	99	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
Fluorene	270	J	930	110	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
Hexachlorobenzene	ND		930	130	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
Hexachlorobutadiene	ND		930	140	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
Hexachlorocyclopentadiene	ND		930	130	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
Hexachloroethane	ND		930	120	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
Indeno[1,2,3-cd]pyrene	1700		930	120	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
Isophorone	ND		930	200	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
N-Nitrosodi-n-propylamine	ND		930	160	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
N-Nitrosodiphenylamine	ND		930	760	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
Naphthalene	ND		930	120	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
Nitrobenzene	ND		930	100	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
Pentachlorophenol	ND	+	1800	930	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
Phenanthrene	3800		930	140	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
Phenol	ND		930	140	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5
Pyrene	5800		930	110	ug/Kg	☆	05/27/22 15:27	06/01/22 01:19	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	85		54 - 120	05/27/22 15:27	06/01/22 01:19	5
2-Fluorobiphenyl	89		60 - 120	05/27/22 15:27	06/01/22 01:19	5
2-Fluorophenol	71		52 - 120	05/27/22 15:27	06/01/22 01:19	5
Nitrobenzene-d5	71		53 - 120	05/27/22 15:27	06/01/22 01:19	5
p-Terphenyl-d14	100		79 - 130	05/27/22 15:27	06/01/22 01:19	5
Phenol-d5	82		54 - 120	05/27/22 15:27	06/01/22 01:19	5

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9400		11.6	5.1	mg/Kg	☆	06/01/22 10:25	06/02/22 15:29	1
Antimony	ND		17.3	0.46	mg/Kg	☆	06/01/22 10:25	06/02/22 15:29	1
Arsenic	4.8		2.3	0.46	mg/Kg	☆	06/01/22 10:25	06/02/22 15:29	1
Barium	70.4		0.58	0.13	mg/Kg	☆	06/01/22 10:25	06/02/22 15:29	1
Beryllium	0.41		0.23	0.032	mg/Kg	☆	06/01/22 10:25	06/02/22 15:29	1
Cadmium	0.52		0.23	0.035	mg/Kg	☆	06/01/22 10:25	06/02/22 15:29	1
Calcium	40300	B	57.8	3.8	mg/Kg	☆	06/01/22 10:25	06/02/22 15:29	1
Chromium	16.3		0.58	0.23	mg/Kg	☆	06/01/22 10:25	06/02/22 15:29	1
Cobalt	4.9		0.58	0.058	mg/Kg	☆	06/01/22 10:25	06/02/22 15:29	1
Copper	20.6		1.2	0.24	mg/Kg	☆	06/01/22 10:25	06/02/22 15:29	1
Iron	11800	B	11.6	4.0	mg/Kg	☆	06/01/22 10:25	06/02/22 15:29	1
Lead	514		1.2	0.28	mg/Kg	☆	06/01/22 10:25	06/02/22 15:29	1
Magnesium	8420		23.1	1.1	mg/Kg	☆	06/01/22 10:25	06/02/22 15:29	1
Manganese	291	B	0.23	0.037	mg/Kg	☆	06/01/22 10:25	06/02/22 15:29	1
Nickel	14.2		5.8	0.27	mg/Kg	☆	06/01/22 10:25	06/02/22 15:29	1
Potassium	1300		34.7	23.1	mg/Kg	☆	06/01/22 10:25	06/02/22 15:29	1

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Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Client Sample ID: EB-08-1FT

Lab Sample ID: 480-198378-8

Date Collected: 05/25/22 12:00

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 89.4

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		4.6	0.46	mg/Kg	✱	06/01/22 10:25	06/02/22 15:29	1
Silver	ND		0.69	0.23	mg/Kg	✱	06/01/22 10:25	06/02/22 15:29	1
Sodium	317	B	162	15.0	mg/Kg	✱	06/01/22 10:25	06/02/22 15:29	1
Thallium	ND		6.9	0.35	mg/Kg	✱	06/01/22 10:25	06/02/22 15:29	1
Vanadium	20.0		0.58	0.13	mg/Kg	✱	06/01/22 10:25	06/02/22 15:29	1
Zinc	147	B	2.3	0.74	mg/Kg	✱	06/01/22 10:25	06/02/22 15:29	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.25		0.022	0.0050	mg/Kg	✱	06/02/22 10:39	06/02/22 14:49	1

Client Sample ID: EB-09-2FT

Lab Sample ID: 480-198378-9

Date Collected: 05/25/22 00:00

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 80.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		2100	310	ug/Kg	✱	05/27/22 15:27	06/01/22 01:43	10
bis (2-chloroisopropyl) ether	ND		2100	420	ug/Kg	✱	05/27/22 15:27	06/01/22 01:43	10
2,4,5-Trichlorophenol	ND		2100	560	ug/Kg	✱	05/27/22 15:27	06/01/22 01:43	10
2,4,6-Trichlorophenol	ND		2100	420	ug/Kg	✱	05/27/22 15:27	06/01/22 01:43	10
2,4-Dichlorophenol	ND		2100	220	ug/Kg	✱	05/27/22 15:27	06/01/22 01:43	10
2,4-Dimethylphenol	ND		2100	500	ug/Kg	✱	05/27/22 15:27	06/01/22 01:43	10
2,4-Dinitrophenol	ND		20000	9600	ug/Kg	✱	05/27/22 15:27	06/01/22 01:43	10
2,4-Dinitrotoluene	ND		2100	430	ug/Kg	✱	05/27/22 15:27	06/01/22 01:43	10
2,6-Dinitrotoluene	ND		2100	250	ug/Kg	✱	05/27/22 15:27	06/01/22 01:43	10
2-Chloronaphthalene	ND		2100	340	ug/Kg	✱	05/27/22 15:27	06/01/22 01:43	10
2-Chlorophenol	ND		4100	380	ug/Kg	✱	05/27/22 15:27	06/01/22 01:43	10
2-Methylnaphthalene	1100	J	2100	420	ug/Kg	✱	05/27/22 15:27	06/01/22 01:43	10
2-Methylphenol	ND		2100	250	ug/Kg	✱	05/27/22 15:27	06/01/22 01:43	10
2-Nitroaniline	ND		4100	310	ug/Kg	✱	05/27/22 15:27	06/01/22 01:43	10
2-Nitrophenol	ND		2100	590	ug/Kg	✱	05/27/22 15:27	06/01/22 01:43	10
3,3'-Dichlorobenzidine	ND		4100	2500	ug/Kg	✱	05/27/22 15:27	06/01/22 01:43	10
3-Nitroaniline	ND		4100	580	ug/Kg	✱	05/27/22 15:27	06/01/22 01:43	10
4,6-Dinitro-2-methylphenol	ND		4100	2100	ug/Kg	✱	05/27/22 15:27	06/01/22 01:43	10
4-Bromophenyl phenyl ether	ND		2100	290	ug/Kg	✱	05/27/22 15:27	06/01/22 01:43	10
4-Chloro-3-methylphenol	ND		2100	520	ug/Kg	✱	05/27/22 15:27	06/01/22 01:43	10
4-Chloroaniline	ND		2100	520	ug/Kg	✱	05/27/22 15:27	06/01/22 01:43	10
4-Chlorophenyl phenyl ether	ND		2100	260	ug/Kg	✱	05/27/22 15:27	06/01/22 01:43	10
4-Methylphenol	ND		4100	250	ug/Kg	✱	05/27/22 15:27	06/01/22 01:43	10
4-Nitroaniline	ND		4100	1100	ug/Kg	✱	05/27/22 15:27	06/01/22 01:43	10
4-Nitrophenol	ND		4100	1500	ug/Kg	✱	05/27/22 15:27	06/01/22 01:43	10
Acenaphthene	2700		2100	310	ug/Kg	✱	05/27/22 15:27	06/01/22 01:43	10
Acenaphthylene	2700		2100	270	ug/Kg	✱	05/27/22 15:27	06/01/22 01:43	10
Acetophenone	ND		2100	280	ug/Kg	✱	05/27/22 15:27	06/01/22 01:43	10
Anthracene	9400		2100	520	ug/Kg	✱	05/27/22 15:27	06/01/22 01:43	10
Atrazine	ND		2100	720	ug/Kg	✱	05/27/22 15:27	06/01/22 01:43	10
Benzaldehyde	ND		2100	1700	ug/Kg	✱	05/27/22 15:27	06/01/22 01:43	10
Benzo[a]anthracene	26000		2100	210	ug/Kg	✱	05/27/22 15:27	06/01/22 01:43	10
Benzo[a]pyrene	24000		2100	310	ug/Kg	✱	05/27/22 15:27	06/01/22 01:43	10

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Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Client Sample ID: EB-09-2FT

Lab Sample ID: 480-198378-9

Date Collected: 05/25/22 00:00

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 80.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	31000		2100	330	ug/Kg	☆	05/27/22 15:27	06/01/22 01:43	10
Benzo[g,h,i]perylene	10000		2100	220	ug/Kg	☆	05/27/22 15:27	06/01/22 01:43	10
Benzo[k]fluoranthene	13000		2100	270	ug/Kg	☆	05/27/22 15:27	06/01/22 01:43	10
Bis(2-chloroethoxy)methane	ND		2100	440	ug/Kg	☆	05/27/22 15:27	06/01/22 01:43	10
Bis(2-chloroethyl)ether	ND		2100	270	ug/Kg	☆	05/27/22 15:27	06/01/22 01:43	10
Bis(2-ethylhexyl) phthalate	ND		2100	710	ug/Kg	☆	05/27/22 15:27	06/01/22 01:43	10
Butyl benzyl phthalate	ND		2100	340	ug/Kg	☆	05/27/22 15:27	06/01/22 01:43	10
Caprolactam	ND		2100	630	ug/Kg	☆	05/27/22 15:27	06/01/22 01:43	10
Carbazole	4400		2100	250	ug/Kg	☆	05/27/22 15:27	06/01/22 01:43	10
Chrysene	25000		2100	470	ug/Kg	☆	05/27/22 15:27	06/01/22 01:43	10
Di-n-butyl phthalate	ND		2100	360	ug/Kg	☆	05/27/22 15:27	06/01/22 01:43	10
Di-n-octyl phthalate	ND		2100	250	ug/Kg	☆	05/27/22 15:27	06/01/22 01:43	10
Dibenz(a,h)anthracene	4500		2100	370	ug/Kg	☆	05/27/22 15:27	06/01/22 01:43	10
Dibenzofuran	1800 J		2100	250	ug/Kg	☆	05/27/22 15:27	06/01/22 01:43	10
Diethyl phthalate	ND		2100	270	ug/Kg	☆	05/27/22 15:27	06/01/22 01:43	10
Dimethyl phthalate	ND		2100	250	ug/Kg	☆	05/27/22 15:27	06/01/22 01:43	10
Fluoranthene	61000		2100	220	ug/Kg	☆	05/27/22 15:27	06/01/22 01:43	10
Fluorene	3500		2100	250	ug/Kg	☆	05/27/22 15:27	06/01/22 01:43	10
Hexachlorobenzene	ND		2100	280	ug/Kg	☆	05/27/22 15:27	06/01/22 01:43	10
Hexachlorobutadiene	ND		2100	310	ug/Kg	☆	05/27/22 15:27	06/01/22 01:43	10
Hexachlorocyclopentadiene	ND		2100	280	ug/Kg	☆	05/27/22 15:27	06/01/22 01:43	10
Hexachloroethane	ND		2100	270	ug/Kg	☆	05/27/22 15:27	06/01/22 01:43	10
Indeno[1,2,3-cd]pyrene	11000		2100	260	ug/Kg	☆	05/27/22 15:27	06/01/22 01:43	10
Isophorone	ND		2100	440	ug/Kg	☆	05/27/22 15:27	06/01/22 01:43	10
N-Nitrosodi-n-propylamine	ND		2100	360	ug/Kg	☆	05/27/22 15:27	06/01/22 01:43	10
N-Nitrosodiphenylamine	ND		2100	1700	ug/Kg	☆	05/27/22 15:27	06/01/22 01:43	10
Naphthalene	1400 J		2100	270	ug/Kg	☆	05/27/22 15:27	06/01/22 01:43	10
Nitrobenzene	ND		2100	230	ug/Kg	☆	05/27/22 15:27	06/01/22 01:43	10
Pentachlorophenol	ND	+	4100	2100	ug/Kg	☆	05/27/22 15:27	06/01/22 01:43	10
Phenanthrene	42000		2100	310	ug/Kg	☆	05/27/22 15:27	06/01/22 01:43	10
Phenol	ND		2100	320	ug/Kg	☆	05/27/22 15:27	06/01/22 01:43	10
Pyrene	48000		2100	250	ug/Kg	☆	05/27/22 15:27	06/01/22 01:43	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	82		54 - 120	05/27/22 15:27	06/01/22 01:43	10
2-Fluorobiphenyl	85		60 - 120	05/27/22 15:27	06/01/22 01:43	10
2-Fluorophenol	72		52 - 120	05/27/22 15:27	06/01/22 01:43	10
Nitrobenzene-d5	74		53 - 120	05/27/22 15:27	06/01/22 01:43	10
p-Terphenyl-d14	104		79 - 130	05/27/22 15:27	06/01/22 01:43	10
Phenol-d5	76		54 - 120	05/27/22 15:27	06/01/22 01:43	10

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6090		13.0	5.7	mg/Kg	☆	06/01/22 10:25	06/02/22 15:33	1
Antimony	4.0 J		19.5	0.52	mg/Kg	☆	06/01/22 10:25	06/02/22 15:33	1
Arsenic	15.2		2.6	0.52	mg/Kg	☆	06/01/22 10:25	06/02/22 15:33	1
Barium	777		0.65	0.14	mg/Kg	☆	06/01/22 10:25	06/02/22 15:33	1
Beryllium	0.52		0.26	0.036	mg/Kg	☆	06/01/22 10:25	06/02/22 15:33	1
Cadmium	1.5		0.26	0.039	mg/Kg	☆	06/01/22 10:25	06/02/22 15:33	1
Calcium	23500 B		65.0	4.3	mg/Kg	☆	06/01/22 10:25	06/02/22 15:33	1

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Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Client Sample ID: EB-09-2FT

Lab Sample ID: 480-198378-9

Date Collected: 05/25/22 00:00

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 80.8

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	23.5		0.65	0.26	mg/Kg	☆	06/01/22 10:25	06/02/22 15:33	1
Cobalt	5.3		0.65	0.065	mg/Kg	☆	06/01/22 10:25	06/02/22 15:33	1
Copper	224		1.3	0.27	mg/Kg	☆	06/01/22 10:25	06/02/22 15:33	1
Iron	18800	B	13.0	4.6	mg/Kg	☆	06/01/22 10:25	06/02/22 15:33	1
Lead	1660		1.3	0.31	mg/Kg	☆	06/01/22 10:25	06/02/22 15:33	1
Magnesium	2870		26.0	1.2	mg/Kg	☆	06/01/22 10:25	06/02/22 15:33	1
Manganese	424	B	0.26	0.042	mg/Kg	☆	06/01/22 10:25	06/02/22 15:33	1
Nickel	18.7		6.5	0.30	mg/Kg	☆	06/01/22 10:25	06/02/22 15:33	1
Potassium	795		39.0	26.0	mg/Kg	☆	06/01/22 10:25	06/02/22 15:33	1
Selenium	ND		5.2	0.52	mg/Kg	☆	06/01/22 10:25	06/02/22 15:33	1
Silver	1.1		0.78	0.26	mg/Kg	☆	06/01/22 10:25	06/02/22 15:33	1
Sodium	1540	B	182	16.9	mg/Kg	☆	06/01/22 10:25	06/02/22 15:33	1
Thallium	ND		7.8	0.39	mg/Kg	☆	06/01/22 10:25	06/02/22 15:33	1
Vanadium	15.3		0.65	0.14	mg/Kg	☆	06/01/22 10:25	06/02/22 15:33	1
Zinc	809	B	2.6	0.83	mg/Kg	☆	06/01/22 10:25	06/02/22 15:33	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.97		0.025	0.0058	mg/Kg	☆	06/02/22 10:39	06/02/22 14:50	1

Client Sample ID: EB-10-1FT

Lab Sample ID: 480-198378-10

Date Collected: 05/25/22 12:40

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 81.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		1000	150	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
bis (2-chloroisopropyl) ether	ND		1000	200	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
2,4,5-Trichlorophenol	ND		1000	280	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
2,4,6-Trichlorophenol	ND		1000	200	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
2,4-Dichlorophenol	ND		1000	110	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
2,4-Dimethylphenol	ND		1000	250	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
2,4-Dinitrophenol	ND		10000	4700	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
2,4-Dinitrotoluene	ND		1000	210	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
2,6-Dinitrotoluene	ND		1000	120	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
2-Chloronaphthalene	ND		1000	170	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
2-Chlorophenol	ND		2000	190	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
2-Methylnaphthalene	ND		1000	200	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
2-Methylphenol	ND		1000	120	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
2-Nitroaniline	ND		2000	150	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
2-Nitrophenol	ND		1000	290	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
3,3'-Dichlorobenzidine	ND		2000	1200	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
3-Nitroaniline	ND		2000	280	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
4,6-Dinitro-2-methylphenol	ND		2000	1000	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
4-Bromophenyl phenyl ether	ND		1000	140	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
4-Chloro-3-methylphenol	ND		1000	250	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
4-Chloroaniline	ND		1000	250	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
4-Chlorophenyl phenyl ether	ND		1000	130	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
4-Methylphenol	ND		2000	120	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
4-Nitroaniline	ND		2000	530	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5

Eurofins Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Client Sample ID: EB-10-1FT

Lab Sample ID: 480-198378-10

Date Collected: 05/25/22 12:40

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 81.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	ND		2000	720	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
Acenaphthene	ND		1000	150	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
Acenaphthylene	ND		1000	130	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
Acetophenone	ND		1000	140	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
Anthracene	ND		1000	250	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
Atrazine	ND		1000	350	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
Benzaldehyde	ND		1000	810	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
Benzo[a]anthracene	600	J	1000	100	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
Benzo[a]pyrene	640	J	1000	150	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
Benzo[b]fluoranthene	800	J	1000	160	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
Benzo[g,h,i]perylene	360	J	1000	110	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
Benzo[k]fluoranthene	500	J	1000	130	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
Bis(2-chloroethoxy)methane	ND		1000	220	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
Bis(2-chloroethyl)ether	ND		1000	130	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
Bis(2-ethylhexyl) phthalate	ND		1000	350	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
Butyl benzyl phthalate	ND		1000	170	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
Caprolactam	ND		1000	310	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
Carbazole	ND		1000	120	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
Chrysene	670	J	1000	230	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
Di-n-butyl phthalate	ND		1000	170	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
Di-n-octyl phthalate	ND		1000	120	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
Dibenz(a,h)anthracene	190	J	1000	180	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
Dibenzofuran	ND		1000	120	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
Diethyl phthalate	ND		1000	130	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
Dimethyl phthalate	ND		1000	120	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
Fluoranthene	1400		1000	110	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
Fluorene	ND		1000	120	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
Hexachlorobenzene	ND		1000	140	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
Hexachlorobutadiene	ND		1000	150	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
Hexachlorocyclopentadiene	ND		1000	140	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
Hexachloroethane	ND		1000	130	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
Indeno[1,2,3-cd]pyrene	370	J	1000	130	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
Isophorone	ND		1000	220	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
N-Nitrosodi-n-propylamine	ND		1000	170	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
N-Nitrosodiphenylamine	ND		1000	830	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
Naphthalene	ND		1000	130	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
Nitrobenzene	ND		1000	110	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
Pentachlorophenol	ND	+	2000	1000	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
Phenanthrene	630	J	1000	150	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
Phenol	ND		1000	160	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
Pyrene	1100		1000	120	ug/Kg	☆	05/27/22 15:27	06/01/22 02:08	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	71		54 - 120				05/27/22 15:27	06/01/22 02:08	5
2-Fluorobiphenyl	72		60 - 120				05/27/22 15:27	06/01/22 02:08	5
2-Fluorophenol	60		52 - 120				05/27/22 15:27	06/01/22 02:08	5
Nitrobenzene-d5	58		53 - 120				05/27/22 15:27	06/01/22 02:08	5
p-Terphenyl-d14	88		79 - 130				05/27/22 15:27	06/01/22 02:08	5
Phenol-d5	64		54 - 120				05/27/22 15:27	06/01/22 02:08	5

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Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Client Sample ID: EB-10-1FT

Lab Sample ID: 480-198378-10

Date Collected: 05/25/22 12:40

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 81.7

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	14900		12.1	5.3	mg/Kg	☆	06/01/22 10:25	06/02/22 15:37	1
Antimony	0.96	J	18.2	0.49	mg/Kg	☆	06/01/22 10:25	06/02/22 15:37	1
Arsenic	5.7		2.4	0.49	mg/Kg	☆	06/01/22 10:25	06/02/22 15:37	1
Barium	82.4		0.61	0.13	mg/Kg	☆	06/01/22 10:25	06/02/22 15:37	1
Beryllium	0.61		0.24	0.034	mg/Kg	☆	06/01/22 10:25	06/02/22 15:37	1
Cadmium	0.79		0.24	0.036	mg/Kg	☆	06/01/22 10:25	06/02/22 15:37	1
Calcium	13000	B	60.6	4.0	mg/Kg	☆	06/01/22 10:25	06/02/22 15:37	1
Chromium	21.9		0.61	0.24	mg/Kg	☆	06/01/22 10:25	06/02/22 15:37	1
Cobalt	8.1		0.61	0.061	mg/Kg	☆	06/01/22 10:25	06/02/22 15:37	1
Copper	23.9		1.2	0.25	mg/Kg	☆	06/01/22 10:25	06/02/22 15:37	1
Iron	18900	B	12.1	4.2	mg/Kg	☆	06/01/22 10:25	06/02/22 15:37	1
Lead	73.0		1.2	0.29	mg/Kg	☆	06/01/22 10:25	06/02/22 15:37	1
Magnesium	5030		24.3	1.1	mg/Kg	☆	06/01/22 10:25	06/02/22 15:37	1
Manganese	419	B	0.24	0.039	mg/Kg	☆	06/01/22 10:25	06/02/22 15:37	1
Nickel	20.4		6.1	0.28	mg/Kg	☆	06/01/22 10:25	06/02/22 15:37	1
Potassium	1680		36.4	24.3	mg/Kg	☆	06/01/22 10:25	06/02/22 15:37	1
Selenium	ND		4.9	0.49	mg/Kg	☆	06/01/22 10:25	06/02/22 15:37	1
Silver	ND		0.73	0.24	mg/Kg	☆	06/01/22 10:25	06/02/22 15:37	1
Sodium	352	B	170	15.8	mg/Kg	☆	06/01/22 10:25	06/02/22 15:37	1
Thallium	ND		7.3	0.36	mg/Kg	☆	06/01/22 10:25	06/02/22 15:37	1
Vanadium	28.3		0.61	0.13	mg/Kg	☆	06/01/22 10:25	06/02/22 15:37	1
Zinc	126	B	2.4	0.78	mg/Kg	☆	06/01/22 10:25	06/02/22 15:37	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.11		0.024	0.0055	mg/Kg	☆	06/02/22 10:39	06/02/22 14:52	1

Client Sample ID: EB-11-2FT

Lab Sample ID: 480-198378-11

Date Collected: 05/25/22 12:50

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 77.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		2200	320	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
bis (2-chloroisopropyl) ether	ND		2200	430	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
2,4,5-Trichlorophenol	ND		2200	590	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
2,4,6-Trichlorophenol	ND		2200	430	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
2,4-Dichlorophenol	ND		2200	230	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
2,4-Dimethylphenol	ND		2200	520	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
2,4-Dinitrophenol	ND		21000	10000	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
2,4-Dinitrotoluene	ND		2200	450	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
2,6-Dinitrotoluene	ND		2200	250	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
2-Chloronaphthalene	ND		2200	360	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
2-Chlorophenol	ND		4200	390	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
2-Methylnaphthalene	ND		2200	430	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
2-Methylphenol	ND		2200	250	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
2-Nitroaniline	ND		4200	320	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
2-Nitrophenol	ND		2200	610	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
3,3'-Dichlorobenzidine	ND		4200	2500	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
3-Nitroaniline	ND		4200	600	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10

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Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Client Sample ID: EB-11-2FT

Lab Sample ID: 480-198378-11

Date Collected: 05/25/22 12:50

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 77.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,6-Dinitro-2-methylphenol	ND		4200	2200	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
4-Bromophenyl phenyl ether	ND		2200	310	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
4-Chloro-3-methylphenol	ND		2200	530	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
4-Chloroaniline	ND		2200	530	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
4-Chlorophenyl phenyl ether	ND		2200	270	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
4-Methylphenol	ND		4200	250	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
4-Nitroaniline	ND		4200	1100	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
4-Nitrophenol	ND		4200	1500	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
Acenaphthene	ND		2200	320	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
Acenaphthylene	ND		2200	280	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
Acetophenone	ND		2200	290	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
Anthracene	610	J	2200	530	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
Atrazine	ND		2200	750	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
Benzaldehyde	ND		2200	1700	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
Benzo[a]anthracene	1900	J	2200	220	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
Benzo[a]pyrene	1900	J	2200	320	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
Benzo[b]fluoranthene	2300		2200	340	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
Benzo[g,h,i]perylene	1100	J	2200	230	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
Benzo[k]fluoranthene	1400	J	2200	280	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
Bis(2-chloroethoxy)methane	ND		2200	460	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
Bis(2-chloroethyl)ether	ND		2200	280	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
Bis(2-ethylhexyl) phthalate	ND		2200	740	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
Butyl benzyl phthalate	ND		2200	360	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
Caprolactam	ND		2200	650	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
Carbazole	ND		2200	250	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
Chrysene	1900	J	2200	480	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
Di-n-butyl phthalate	ND		2200	370	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
Di-n-octyl phthalate	ND		2200	250	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
Dibenz(a,h)anthracene	420	J	2200	380	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
Dibenzofuran	ND		2200	250	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
Diethyl phthalate	ND		2200	280	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
Dimethyl phthalate	ND		2200	250	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
Fluoranthene	3800		2200	230	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
Fluorene	ND		2200	250	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
Hexachlorobenzene	ND		2200	290	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
Hexachlorobutadiene	ND		2200	320	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
Hexachlorocyclopentadiene	ND		2200	290	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
Hexachloroethane	ND		2200	280	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
Indeno[1,2,3-cd]pyrene	1200	J	2200	270	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
Isophorone	ND		2200	460	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
N-Nitrosodi-n-propylamine	ND		2200	370	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
N-Nitrosodiphenylamine	ND		2200	1800	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
Naphthalene	ND		2200	280	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
Nitrobenzene	ND		2200	240	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
Pentachlorophenol	ND	+	4200	2200	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
Phenanthrene	2200		2200	320	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
Phenol	ND		2200	330	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10
Pyrene	3400		2200	250	ug/Kg	☆	05/27/22 15:27	06/01/22 16:08	10

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Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Client Sample ID: EB-11-2FT

Lab Sample ID: 480-198378-11

Date Collected: 05/25/22 12:50

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 77.8

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	65		54 - 120	05/27/22 15:27	06/01/22 16:08	10
2-Fluorobiphenyl	85		60 - 120	05/27/22 15:27	06/01/22 16:08	10
2-Fluorophenol	69		52 - 120	05/27/22 15:27	06/01/22 16:08	10
Nitrobenzene-d5	66		53 - 120	05/27/22 15:27	06/01/22 16:08	10
p-Terphenyl-d14	105		79 - 130	05/27/22 15:27	06/01/22 16:08	10
Phenol-d5	70		54 - 120	05/27/22 15:27	06/01/22 16:08	10

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	14900		13.4	5.9	mg/Kg	☆	06/01/22 10:25	06/02/22 15:40	1
Antimony	0.69	J	20.2	0.54	mg/Kg	☆	06/01/22 10:25	06/02/22 15:40	1
Arsenic	6.2		2.7	0.54	mg/Kg	☆	06/01/22 10:25	06/02/22 15:40	1
Barium	80.5		0.67	0.15	mg/Kg	☆	06/01/22 10:25	06/02/22 15:40	1
Beryllium	0.69		0.27	0.038	mg/Kg	☆	06/01/22 10:25	06/02/22 15:40	1
Cadmium	0.67		0.27	0.040	mg/Kg	☆	06/01/22 10:25	06/02/22 15:40	1
Calcium	20800	B	67.2	4.4	mg/Kg	☆	06/01/22 10:25	06/02/22 15:40	1
Chromium	20.0		0.67	0.27	mg/Kg	☆	06/01/22 10:25	06/02/22 15:40	1
Cobalt	7.8		0.67	0.067	mg/Kg	☆	06/01/22 10:25	06/02/22 15:40	1
Copper	19.2		1.3	0.28	mg/Kg	☆	06/01/22 10:25	06/02/22 15:40	1
Iron	19200	B	13.4	4.7	mg/Kg	☆	06/01/22 10:25	06/02/22 15:40	1
Lead	62.7		1.3	0.32	mg/Kg	☆	06/01/22 10:25	06/02/22 15:40	1
Magnesium	6980		26.9	1.2	mg/Kg	☆	06/01/22 10:25	06/02/22 15:40	1
Manganese	449	B	0.27	0.043	mg/Kg	☆	06/01/22 10:25	06/02/22 15:40	1
Nickel	18.4		6.7	0.31	mg/Kg	☆	06/01/22 10:25	06/02/22 15:40	1
Potassium	2080		40.3	26.9	mg/Kg	☆	06/01/22 10:25	06/02/22 15:40	1
Selenium	ND		5.4	0.54	mg/Kg	☆	06/01/22 10:25	06/02/22 15:40	1
Silver	ND		0.81	0.27	mg/Kg	☆	06/01/22 10:25	06/02/22 15:40	1
Sodium	273	B	188	17.5	mg/Kg	☆	06/01/22 10:25	06/02/22 15:40	1
Thallium	ND		8.1	0.40	mg/Kg	☆	06/01/22 10:25	06/02/22 15:40	1
Vanadium	29.9		0.67	0.15	mg/Kg	☆	06/01/22 10:25	06/02/22 15:40	1
Zinc	109	B	2.7	0.86	mg/Kg	☆	06/01/22 10:25	06/02/22 15:40	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.057		0.026	0.0060	mg/Kg	☆	06/02/22 10:39	06/02/22 14:53	1

Client Sample ID: EB-12FT-1FT

Lab Sample ID: 480-198378-12

Date Collected: 05/25/22 13:50

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 94.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		900	130	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
bis (2-chloroisopropyl) ether	ND		900	180	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
2,4,5-Trichlorophenol	ND		900	240	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
2,4,6-Trichlorophenol	ND		900	180	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
2,4-Dichlorophenol	ND		900	95	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
2,4-Dimethylphenol	ND		900	220	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
2,4-Dinitrophenol	ND		8800	4100	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
2,4-Dinitrotoluene	ND		900	180	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
2,6-Dinitrotoluene	ND		900	110	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5

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Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Client Sample ID: EB-12FT-1FT

Lab Sample ID: 480-198378-12

Date Collected: 05/25/22 13:50

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 94.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloronaphthalene	ND		900	150	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
2-Chlorophenol	ND		1700	160	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
2-Methylnaphthalene	ND		900	180	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
2-Methylphenol	ND		900	110	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
2-Nitroaniline	ND		1700	130	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
2-Nitrophenol	ND		900	250	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
3,3'-Dichlorobenzidine	ND		1700	1100	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
3-Nitroaniline	ND		1700	250	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
4,6-Dinitro-2-methylphenol	ND		1700	900	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
4-Bromophenyl phenyl ether	ND		900	130	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
4-Chloro-3-methylphenol	ND		900	220	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
4-Chloroaniline	ND		900	220	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
4-Chlorophenyl phenyl ether	ND		900	110	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
4-Methylphenol	ND		1700	110	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
4-Nitroaniline	ND		1700	470	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
4-Nitrophenol	ND		1700	630	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
Acenaphthene	ND		900	130	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
Acenaphthylene	ND		900	120	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
Acetophenone	ND		900	120	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
Anthracene	ND		900	220	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
Atrazine	ND		900	310	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
Benzaldehyde	ND		900	710	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
Benzo[a]anthracene	ND		900	90	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
Benzo[a]pyrene	ND		900	130	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
Benzo[b]fluoranthene	ND		900	140	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
Benzo[g,h,i]perylene	ND		900	95	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
Benzo[k]fluoranthene	ND		900	120	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
Bis(2-chloroethoxy)methane	ND		900	190	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
Bis(2-chloroethyl)ether	ND		900	120	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
Bis(2-ethylhexyl) phthalate	ND		900	310	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
Butyl benzyl phthalate	ND		900	150	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
Caprolactam	ND		900	270	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
Carbazole	ND		900	110	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
Chrysene	ND		900	200	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
Di-n-butyl phthalate	ND		900	150	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
Di-n-octyl phthalate	ND		900	110	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
Dibenz(a,h)anthracene	ND		900	160	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
Dibenzofuran	ND		900	110	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
Diethyl phthalate	ND		900	120	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
Dimethyl phthalate	ND		900	110	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
Fluoranthene	130	J	900	95	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
Fluorene	ND		900	110	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
Hexachlorobenzene	ND		900	120	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
Hexachlorobutadiene	ND		900	130	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
Hexachlorocyclopentadiene	ND		900	120	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
Hexachloroethane	ND		900	120	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
Indeno[1,2,3-cd]pyrene	ND		900	110	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
Isophorone	ND		900	190	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5
N-Nitrosodi-n-propylamine	ND		900	150	ug/Kg	☆	05/27/22 15:27	06/01/22 16:33	5

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Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Client Sample ID: EB-12FT-1FT

Lab Sample ID: 480-198378-12

Date Collected: 05/25/22 13:50

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 94.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		900	730	ug/Kg	✱	05/27/22 15:27	06/01/22 16:33	5
Naphthalene	ND		900	120	ug/Kg	✱	05/27/22 15:27	06/01/22 16:33	5
Nitrobenzene	ND		900	100	ug/Kg	✱	05/27/22 15:27	06/01/22 16:33	5
Pentachlorophenol	ND	*+	1700	900	ug/Kg	✱	05/27/22 15:27	06/01/22 16:33	5
Phenanthrene	ND		900	130	ug/Kg	✱	05/27/22 15:27	06/01/22 16:33	5
Phenol	ND		900	140	ug/Kg	✱	05/27/22 15:27	06/01/22 16:33	5
Pyrene	110	J	900	110	ug/Kg	✱	05/27/22 15:27	06/01/22 16:33	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	72		54 - 120	05/27/22 15:27	06/01/22 16:33	5
2-Fluorobiphenyl	72		60 - 120	05/27/22 15:27	06/01/22 16:33	5
2-Fluorophenol	65		52 - 120	05/27/22 15:27	06/01/22 16:33	5
Nitrobenzene-d5	62		53 - 120	05/27/22 15:27	06/01/22 16:33	5
p-Terphenyl-d14	85		79 - 130	05/27/22 15:27	06/01/22 16:33	5
Phenol-d5	68		54 - 120	05/27/22 15:27	06/01/22 16:33	5

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	24700		10.6	4.7	mg/Kg	✱	06/01/22 10:25	06/02/22 15:44	1
Antimony	ND	F2 F1	15.9	0.42	mg/Kg	✱	06/01/22 10:25	06/02/22 15:44	1
Arsenic	2.9	F1	2.1	0.42	mg/Kg	✱	06/01/22 10:25	06/02/22 15:44	1
Barium	273		0.53	0.12	mg/Kg	✱	06/01/22 10:25	06/02/22 15:44	1
Beryllium	3.1	F1	0.21	0.030	mg/Kg	✱	06/01/22 10:25	06/02/22 15:44	1
Cadmium	0.26	F1	0.21	0.032	mg/Kg	✱	06/01/22 10:25	06/02/22 15:44	1
Calcium	136000	B	106	7.0	mg/Kg	✱	06/01/22 10:25	06/03/22 18:18	2
Chromium	13.7	F1	0.53	0.21	mg/Kg	✱	06/01/22 10:25	06/02/22 15:44	1
Cobalt	3.8		0.53	0.053	mg/Kg	✱	06/01/22 10:25	06/02/22 15:44	1
Copper	9.8	F1 F2	2.1	0.44	mg/Kg	✱	06/01/22 10:25	06/03/22 18:18	2
Iron	9480	F2 B	10.6	3.7	mg/Kg	✱	06/01/22 10:25	06/02/22 15:44	1
Lead	13.5		1.1	0.25	mg/Kg	✱	06/01/22 10:25	06/02/22 15:44	1
Magnesium	10200		21.2	0.98	mg/Kg	✱	06/01/22 10:25	06/02/22 15:44	1
Manganese	3730	F2 B	0.21	0.034	mg/Kg	✱	06/01/22 10:25	06/02/22 15:44	1
Nickel	8.8		5.3	0.24	mg/Kg	✱	06/01/22 10:25	06/02/22 15:44	1
Potassium	2290		31.7	21.2	mg/Kg	✱	06/01/22 10:25	06/02/22 15:44	1
Selenium	1.3	J F1	4.2	0.42	mg/Kg	✱	06/01/22 10:25	06/02/22 15:44	1
Silver	0.41	J F1	0.63	0.21	mg/Kg	✱	06/01/22 10:25	06/02/22 15:44	1
Sodium	794	B	148	13.8	mg/Kg	✱	06/01/22 10:25	06/02/22 15:44	1
Thallium	0.41	J	6.3	0.32	mg/Kg	✱	06/01/22 10:25	06/02/22 15:44	1
Vanadium	15.7	F1	0.53	0.12	mg/Kg	✱	06/01/22 10:25	06/02/22 15:44	1
Zinc	28.9	F1 B	2.1	0.68	mg/Kg	✱	06/01/22 10:25	06/02/22 15:44	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.014	J	0.020	0.0046	mg/Kg	✱	06/02/22 10:39	06/02/22 14:54	1

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Surrogate Summary

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (54-120)	FBP (60-120)	2FP (52-120)	NBZ (53-120)	TPHd14 (79-130)	PHL (54-120)
480-198378-1	EB-01-2FT	83	86	75	61	97	65
480-198378-2	EB-02-1.5FT	63	92	70	70	108	79
480-198378-3	EB-03-2FT	83	86	67	70	98	71
480-198378-4	EB-04-1FT	62	86	68	70	97	66
480-198378-5	EB-05-0.5FT	104	101	73	78	117	76
480-198378-6	EB-06-1FT	96	102	78	79	109	78
480-198378-7	EB-07-2FT	84	85	75	74	108	74
480-198378-8	EB-08-1FT	85	89	71	71	100	82
480-198378-9	EB-09-2FT	82	85	72	74	104	76
480-198378-10	EB-10-1FT	71	72	60	58	88	64
480-198378-11	EB-11-2FT	65	85	69	66	105	70
480-198378-12	EB-12FT-1FT	72	72	65	62	85	68
LCS 480-628004/2-A	Lab Control Sample	95	86	70	75	111	74
MB 480-628004/1-A	Method Blank	79	83	74	76	110	77

Surrogate Legend

TBP = 2,4,6-Tribromophenol
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
TPHd14 = p-Terphenyl-d14
PHL = Phenol-d5

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-628004/1-A

Matrix: Solid

Analysis Batch: 628199

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 628004

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		170	25	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
bis (2-chloroisopropyl) ether	ND		170	34	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
2,4,5-Trichlorophenol	ND		170	46	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
2,4,6-Trichlorophenol	ND		170	34	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
2,4-Dichlorophenol	ND		170	18	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
2,4-Dimethylphenol	ND		170	41	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
2,4-Dinitrophenol	ND		1700	780	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
2,4-Dinitrotoluene	ND		170	35	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
2,6-Dinitrotoluene	ND		170	20	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
2-Chloronaphthalene	ND		170	28	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
2-Chlorophenol	ND		330	31	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
2-Methylnaphthalene	ND		170	34	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
2-Methylphenol	ND		170	20	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
2-Nitroaniline	ND		330	25	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
2-Nitrophenol	ND		170	48	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
3,3'-Dichlorobenzidine	ND		330	200	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
3-Nitroaniline	ND		330	47	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
4,6-Dinitro-2-methylphenol	ND		330	170	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
4-Bromophenyl phenyl ether	ND		170	24	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
4-Chloro-3-methylphenol	ND		170	42	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
4-Chloroaniline	ND		170	42	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
4-Chlorophenyl phenyl ether	ND		170	21	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
4-Methylphenol	ND		330	20	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
4-Nitroaniline	ND		330	88	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
4-Nitrophenol	ND		330	120	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
Acenaphthene	ND		170	25	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
Acenaphthylene	ND		170	22	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
Acetophenone	ND		170	23	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
Anthracene	ND		170	42	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
Atrazine	ND		170	59	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
Benzaldehyde	ND		170	130	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
Benzo[a]anthracene	ND		170	17	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
Benzo[a]pyrene	ND		170	25	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
Benzo[b]fluoranthene	ND		170	27	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
Benzo[g,h,i]perylene	ND		170	18	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
Benzo[k]fluoranthene	ND		170	22	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
Bis(2-chloroethoxy)methane	ND		170	36	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
Bis(2-chloroethyl)ether	ND		170	22	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
Bis(2-ethylhexyl) phthalate	ND		170	58	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
Butyl benzyl phthalate	ND		170	28	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
Caprolactam	ND		170	51	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
Carbazole	ND		170	20	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
Chrysene	ND		170	38	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
Di-n-butyl phthalate	37.3	J	170	29	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
Di-n-octyl phthalate	ND		170	20	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
Dibenz(a,h)anthracene	ND		170	30	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
Dibenzofuran	ND		170	20	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
Diethyl phthalate	ND		170	22	ug/Kg		05/27/22 15:27	05/31/22 18:24	1

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QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-628004/1-A

Matrix: Solid

Analysis Batch: 628199

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 628004

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		170	20	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
Fluoranthene	ND		170	18	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
Fluorene	ND		170	20	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
Hexachlorobenzene	ND		170	23	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
Hexachlorobutadiene	ND		170	25	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
Hexachlorocyclopentadiene	ND		170	23	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
Hexachloroethane	ND		170	22	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
Indeno[1,2,3-cd]pyrene	ND		170	21	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
Isophorone	ND		170	36	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
N-Nitrosodi-n-propylamine	ND		170	29	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
N-Nitrosodiphenylamine	ND		170	140	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
Naphthalene	ND		170	22	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
Nitrobenzene	ND		170	19	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
Pentachlorophenol	ND		330	170	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
Phenanthrene	ND		170	25	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
Phenol	ND		170	26	ug/Kg		05/27/22 15:27	05/31/22 18:24	1
Pyrene	ND		170	20	ug/Kg		05/27/22 15:27	05/31/22 18:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	79		54 - 120	05/27/22 15:27	05/31/22 18:24	1
2-Fluorobiphenyl	83		60 - 120	05/27/22 15:27	05/31/22 18:24	1
2-Fluorophenol	74		52 - 120	05/27/22 15:27	05/31/22 18:24	1
Nitrobenzene-d5	76		53 - 120	05/27/22 15:27	05/31/22 18:24	1
p-Terphenyl-d14	110		79 - 130	05/27/22 15:27	05/31/22 18:24	1
Phenol-d5	77		54 - 120	05/27/22 15:27	05/31/22 18:24	1

Lab Sample ID: LCS 480-628004/2-A

Matrix: Solid

Analysis Batch: 628199

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 628004

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Biphenyl	1630	1390		ug/Kg		86	59 - 120
bis (2-chloroisopropyl) ether	1630	1050		ug/Kg		65	44 - 120
2,4,5-Trichlorophenol	1630	1500		ug/Kg		92	59 - 126
2,4,6-Trichlorophenol	1630	1490		ug/Kg		92	59 - 123
2,4-Dichlorophenol	1630	1420		ug/Kg		87	61 - 120
2,4-Dimethylphenol	1630	1320		ug/Kg		81	59 - 120
2,4-Dinitrophenol	3250	2700		ug/Kg		83	41 - 146
2,4-Dinitrotoluene	1630	1540		ug/Kg		95	63 - 120
2,6-Dinitrotoluene	1630	1400		ug/Kg		86	66 - 120
2-Chloronaphthalene	1630	1370		ug/Kg		84	57 - 120
2-Chlorophenol	1630	1300		ug/Kg		80	53 - 120
2-Methylnaphthalene	1630	1270		ug/Kg		78	59 - 120
2-Methylphenol	1630	1290		ug/Kg		79	54 - 120
2-Nitroaniline	1630	1050		ug/Kg		64	61 - 120
2-Nitrophenol	1630	1310		ug/Kg		81	56 - 120
3,3'-Dichlorobenzidine	3250	3210		ug/Kg		99	54 - 120
3-Nitroaniline	1630	1210		ug/Kg		75	48 - 120

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QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-628004/2-A

Matrix: Solid

Analysis Batch: 628199

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 628004

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4,6-Dinitro-2-methylphenol	3250	2780		ug/Kg		85	49 - 122
4-Bromophenyl phenyl ether	1630	1500		ug/Kg		92	58 - 120
4-Chloro-3-methylphenol	1630	1360		ug/Kg		84	61 - 120
4-Chloroaniline	1630	1040		ug/Kg		64	38 - 120
4-Chlorophenyl phenyl ether	1630	1560		ug/Kg		96	63 - 124
4-Methylphenol	1630	1300		ug/Kg		80	55 - 120
4-Nitroaniline	1630	1390		ug/Kg		86	56 - 120
4-Nitrophenol	3250	2590		ug/Kg		80	43 - 147
Acenaphthene	1630	1470		ug/Kg		90	62 - 120
Acenaphthylene	1630	1360		ug/Kg		83	58 - 121
Acetophenone	1630	1260		ug/Kg		77	54 - 120
Anthracene	1630	1510		ug/Kg		93	62 - 120
Atrazine	3250	2880		ug/Kg		88	60 - 127
Benzaldehyde	3250	3040		ug/Kg		93	10 - 150
Benzo[a]anthracene	1630	1560		ug/Kg		96	65 - 120
Benzo[a]pyrene	1630	1440		ug/Kg		89	64 - 120
Benzo[b]fluoranthene	1630	1580		ug/Kg		97	64 - 120
Benzo[g,h,i]perylene	1630	1420		ug/Kg		87	45 - 145
Benzo[k]fluoranthene	1630	1620		ug/Kg		99	65 - 120
Bis(2-chloroethoxy)methane	1630	1300		ug/Kg		80	55 - 120
Bis(2-chloroethyl)ether	1630	1180		ug/Kg		72	45 - 120
Bis(2-ethylhexyl) phthalate	1630	1660		ug/Kg		102	61 - 133
Butyl benzyl phthalate	1630	1600		ug/Kg		98	61 - 129
Caprolactam	3250	2880		ug/Kg		88	47 - 120
Carbazole	1630	1460		ug/Kg		90	65 - 120
Chrysene	1630	1540		ug/Kg		95	64 - 120
Di-n-butyl phthalate	1630	1470		ug/Kg		91	58 - 130
Di-n-octyl phthalate	1630	1600		ug/Kg		98	57 - 133
Dibenz(a,h)anthracene	1630	1520		ug/Kg		93	54 - 132
Dibenzofuran	1630	1440		ug/Kg		89	63 - 120
Diethyl phthalate	1630	1420		ug/Kg		87	66 - 120
Dimethyl phthalate	1630	1510		ug/Kg		93	65 - 124
Fluoranthene	1630	1510		ug/Kg		93	62 - 120
Fluorene	1630	1520		ug/Kg		94	63 - 120
Hexachlorobenzene	1630	1470		ug/Kg		90	60 - 120
Hexachlorobutadiene	1630	1360		ug/Kg		84	45 - 120
Hexachlorocyclopentadiene	1630	1380		ug/Kg		85	47 - 120
Hexachloroethane	1630	1180		ug/Kg		73	41 - 120
Indeno[1,2,3-cd]pyrene	1630	1490		ug/Kg		91	56 - 134
Isophorone	1630	1290		ug/Kg		80	56 - 120
N-Nitrosodi-n-propylamine	1630	1170		ug/Kg		72	52 - 120
Naphthalene	1630	1270		ug/Kg		78	55 - 120
Nitrobenzene	1630	1150		ug/Kg		71	54 - 120
Pentachlorophenol	3250	4040	*+	ug/Kg		124	51 - 120
Phenanthrene	1630	1500		ug/Kg		92	60 - 120
Phenol	1630	1170		ug/Kg		72	53 - 120
Pyrene	1630	1800		ug/Kg		111	61 - 133

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QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-628004/2-A

Matrix: Solid

Analysis Batch: 628199

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 628004

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
2,4,6-Tribromophenol	95		54 - 120
2-Fluorobiphenyl	86		60 - 120
2-Fluorophenol	70		52 - 120
Nitrobenzene-d5	75		53 - 120
p-Terphenyl-d14	111		79 - 130
Phenol-d5	74		54 - 120

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-628203/1-A

Matrix: Solid

Analysis Batch: 628483

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 628203

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Aluminum	ND		9.6	4.2	mg/Kg		05/31/22 17:05	06/01/22 20:52	1
Antimony	ND		14.4	0.38	mg/Kg		05/31/22 17:05	06/01/22 20:52	1
Arsenic	ND		1.9	0.38	mg/Kg		05/31/22 17:05	06/01/22 20:52	1
Barium	ND		0.48	0.11	mg/Kg		05/31/22 17:05	06/01/22 20:52	1
Beryllium	ND		0.19	0.027	mg/Kg		05/31/22 17:05	06/01/22 20:52	1
Cadmium	ND		0.19	0.029	mg/Kg		05/31/22 17:05	06/01/22 20:52	1
Calcium	4.58	J	48.1	3.2	mg/Kg		05/31/22 17:05	06/01/22 20:52	1
Chromium	ND		0.48	0.19	mg/Kg		05/31/22 17:05	06/01/22 20:52	1
Cobalt	ND		0.48	0.048	mg/Kg		05/31/22 17:05	06/01/22 20:52	1
Copper	ND		0.96	0.20	mg/Kg		05/31/22 17:05	06/01/22 20:52	1
Iron	ND		9.6	3.4	mg/Kg		05/31/22 17:05	06/01/22 20:52	1
Lead	ND		0.96	0.23	mg/Kg		05/31/22 17:05	06/01/22 20:52	1
Magnesium	ND		19.2	0.89	mg/Kg		05/31/22 17:05	06/01/22 20:52	1
Manganese	0.0548	J	0.19	0.031	mg/Kg		05/31/22 17:05	06/01/22 20:52	1
Nickel	ND		4.8	0.22	mg/Kg		05/31/22 17:05	06/01/22 20:52	1
Potassium	ND		28.9	19.2	mg/Kg		05/31/22 17:05	06/01/22 20:52	1
Selenium	ND		3.8	0.38	mg/Kg		05/31/22 17:05	06/01/22 20:52	1
Silver	ND		0.58	0.19	mg/Kg		05/31/22 17:05	06/01/22 20:52	1
Sodium	ND		135	12.5	mg/Kg		05/31/22 17:05	06/01/22 20:52	1
Thallium	ND		5.8	0.29	mg/Kg		05/31/22 17:05	06/01/22 20:52	1
Vanadium	ND		0.48	0.11	mg/Kg		05/31/22 17:05	06/01/22 20:52	1
Zinc	ND		1.9	0.62	mg/Kg		05/31/22 17:05	06/01/22 20:52	1

Lab Sample ID: LCSSRM 480-628203/2-A

Matrix: Solid

Analysis Batch: 628483

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 628203

Analyte	Spike	LCSSRM	LCSSRM	Unit	D	%Rec	%Rec
	Added	Result	Qualifier			Limits	
Aluminum	8130	9326		mg/Kg		114.7	49.9 - 150.1
Antimony	134	105.7		mg/Kg		78.9	19.3 - 250.0
Arsenic	156	135.8		mg/Kg		87.0	69.9 - 130.1
Barium	239	203.0		mg/Kg		84.9	74.9 - 124.7

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QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 480-628203/2-A
Matrix: Solid
Analysis Batch: 628483

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 628203

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Beryllium	169	142.7		mg/Kg		84.5	75.1 - 125.4
Cadmium	137	120.1		mg/Kg		87.7	75.2 - 124.8
Calcium	4760	4012		mg/Kg		84.3	72.7 - 127.5
Chromium	154	133.1		mg/Kg		86.4	70.1 - 129.9
Cobalt	121	117.6		mg/Kg		97.2	75.0 - 124.8
Copper	54.9	48.89		mg/Kg		89.1	74.9 - 125.0
Iron	14100	13030		mg/Kg		92.4	34.9 - 164.5
Lead	130	125.5		mg/Kg		96.5	71.8 - 128.5
Magnesium	2320	2228		mg/Kg		96.0	62.1 - 137.9
Manganese	269	244.4		mg/Kg		90.8	74.0 - 126.4
Nickel	58.7	52.77		mg/Kg		89.9	64.2 - 119.3
Potassium	2020	2251		mg/Kg		111.4	58.9 - 141.1
Selenium	167	147.2		mg/Kg		88.2	67.7 - 132.3
Silver	33.6	28.31		mg/Kg		84.3	68.5 - 131.3
Sodium	133	185.0		mg/Kg		139.1	35.0 - 165.4
Thallium	112	113.4		mg/Kg		101.2	67.9 - 131.3
Vanadium	62.6	61.66		mg/Kg		98.5	59.1 - 141.1
Zinc	158	132.1		mg/Kg		83.6	70.3 - 129.7

Lab Sample ID: MB 480-628279/1-A
Matrix: Solid
Analysis Batch: 628572

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 628279

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		9.5	4.2	mg/Kg		06/01/22 10:25	06/02/22 14:03	1
Antimony	ND		14.2	0.38	mg/Kg		06/01/22 10:25	06/02/22 14:03	1
Arsenic	ND		1.9	0.38	mg/Kg		06/01/22 10:25	06/02/22 14:03	1
Barium	ND		0.47	0.10	mg/Kg		06/01/22 10:25	06/02/22 14:03	1
Beryllium	ND		0.19	0.027	mg/Kg		06/01/22 10:25	06/02/22 14:03	1
Cadmium	ND		0.19	0.028	mg/Kg		06/01/22 10:25	06/02/22 14:03	1
Calcium	4.36	J	47.4	3.1	mg/Kg		06/01/22 10:25	06/02/22 14:03	1
Chromium	ND		0.47	0.19	mg/Kg		06/01/22 10:25	06/02/22 14:03	1
Cobalt	ND		0.47	0.047	mg/Kg		06/01/22 10:25	06/02/22 14:03	1
Copper	ND		0.95	0.20	mg/Kg		06/01/22 10:25	06/02/22 14:03	1
Iron	5.33	J	9.5	3.3	mg/Kg		06/01/22 10:25	06/02/22 14:03	1

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QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 480-628279/1-A

Matrix: Solid

Analysis Batch: 628572

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 628279

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.95	0.23	mg/Kg		06/01/22 10:25	06/02/22 14:03	1
Magnesium	ND		18.9	0.88	mg/Kg		06/01/22 10:25	06/02/22 14:03	1
Manganese	0.105	J	0.19	0.030	mg/Kg		06/01/22 10:25	06/02/22 14:03	1
Nickel	ND		4.7	0.22	mg/Kg		06/01/22 10:25	06/02/22 14:03	1
Potassium	ND		28.4	18.9	mg/Kg		06/01/22 10:25	06/02/22 14:03	1
Selenium	ND		3.8	0.38	mg/Kg		06/01/22 10:25	06/02/22 14:03	1
Silver	ND		0.57	0.19	mg/Kg		06/01/22 10:25	06/02/22 14:03	1
Sodium	39.87	J	133	12.3	mg/Kg		06/01/22 10:25	06/02/22 14:03	1
Thallium	ND		5.7	0.28	mg/Kg		06/01/22 10:25	06/02/22 14:03	1
Vanadium	ND		0.47	0.10	mg/Kg		06/01/22 10:25	06/02/22 14:03	1
Zinc	1.00	J	1.9	0.61	mg/Kg		06/01/22 10:25	06/02/22 14:03	1

Lab Sample ID: LCSSRM 480-628279/2-A

Matrix: Solid

Analysis Batch: 628572

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 628279

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	8130	8307		mg/Kg		102.2	49.9 - 150.1
Antimony	134	101.1		mg/Kg		75.5	19.3 - 250.0
Arsenic	156	148.2		mg/Kg		95.0	69.9 - 130.1
Barium	239	226.2		mg/Kg		94.6	74.9 - 124.7
Beryllium	169	175.8		mg/Kg		104.0	75.1 - 125.4
Cadmium	137	145.7		mg/Kg		106.3	75.2 - 124.8
Calcium	4760	4472		mg/Kg		94.0	72.7 - 127.5
Chromium	154	154.7		mg/Kg		100.4	70.1 - 129.9
Cobalt	121	139.3		mg/Kg		115.1	75.0 - 124.8
Copper	54.9	52.36		mg/Kg		95.4	74.9 - 125.0
Iron	14100	12380		mg/Kg		87.8	34.9 - 164.5
Lead	130	130.7		mg/Kg		100.5	71.8 - 128.5
Magnesium	2320	2308		mg/Kg		99.5	62.1 - 137.9
Manganese	269	269.7		mg/Kg		100.3	74.0 - 126.4
Nickel	58.7	61.16		mg/Kg		104.2	64.2 - 119.3
Potassium	2020	1965		mg/Kg		97.3	58.9 - 141.1
Selenium	167	165.2		mg/Kg		98.9	67.7 - 132.3
Silver	33.6	30.44		mg/Kg		90.6	68.5 - 131.3

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QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 480-628279/2-A

Matrix: Solid

Analysis Batch: 628572

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 628279

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Sodium	133	157.8		mg/Kg		118.7	35.0 - 165.4
Thallium	112	129.4		mg/Kg		115.5	67.9 - 131.3
Vanadium	62.6	59.28		mg/Kg		94.7	59.1 - 141.1
Zinc	158	147.4		mg/Kg		93.3	70.3 - 129.7

Lab Sample ID: 480-198378-12 MS

Matrix: Solid

Analysis Batch: 628644

Client Sample ID: EB-12FT-1FT

Prep Type: Total/NA

Prep Batch: 628279

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	24700		2160	28160	4	mg/Kg	✱	161	75 - 125
Antimony	ND	F2 F1	43.1	9.75	J F1	mg/Kg	✱	23	75 - 125
Arsenic	2.9	F1	43.1	34.21	F1	mg/Kg	✱	73	75 - 125
Barium	273		43.1	340.2	4	mg/Kg	✱	157	75 - 125
Beryllium	3.1	F1	43.1	32.75	F1	mg/Kg	✱	69	75 - 125
Cadmium	0.26	F1	43.1	31.80	F1	mg/Kg	✱	73	75 - 125
Chromium	13.7	F1	43.1	41.88	F1	mg/Kg	✱	65	75 - 125
Cobalt	3.8		43.1	46.67		mg/Kg	✱	99	75 - 125
Iron	9480	F2 B	2150	8989	4	mg/Kg	✱	-23	75 - 125
Lead	13.5		43.1	57.51		mg/Kg	✱	102	75 - 125
Magnesium	10200		2150	11530	4	mg/Kg	✱	61	75 - 125
Manganese	3730	F2 B	43.1	3540	4	mg/Kg	✱	-429	75 - 125
Nickel	8.8		43.1	47.94		mg/Kg	✱	91	75 - 125
Potassium	2290		2160	3933		mg/Kg	✱	76	75 - 125
Selenium	1.3	J F1	43.1	18.37	F1	mg/Kg	✱	40	75 - 125
Silver	0.41	J F1	10.8	8.55		mg/Kg	✱	76	75 - 125
Sodium	794	B	2160	2510		mg/Kg	✱	80	75 - 125
Thallium	0.41	J	43.1	43.23		mg/Kg	✱	99	75 - 125
Vanadium	15.7	F1	43.1	44.32	F1	mg/Kg	✱	66	75 - 125
Zinc	28.9	F1 B	43.1	47.78	F1	mg/Kg	✱	44	75 - 125

Lab Sample ID: 480-198378-12 MS

Matrix: Solid

Analysis Batch: 628860

Client Sample ID: EB-12FT-1FT

Prep Type: Total/NA

Prep Batch: 628279

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	136000	B	2150	152500	4	mg/Kg	✱	780	75 - 125
Copper	9.8	F1 F2	43.1	55.49		mg/Kg	✱	106	75 - 125

Lab Sample ID: 480-198378-12 MSD

Matrix: Solid

Analysis Batch: 628644

Client Sample ID: EB-12FT-1FT

Prep Type: Total/NA

Prep Batch: 628279

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	24700		2040	30380	4	mg/Kg	✱	280	75 - 125	8	20
Antimony	ND	F2 F1	40.7	7.31	J F2 F1	mg/Kg	✱	18	75 - 125	29	20

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QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 480-198378-12 MSD

Matrix: Solid

Analysis Batch: 628644

Client Sample ID: EB-12FT-1FT

Prep Type: Total/NA

Prep Batch: 628279

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	2.9	F1	40.7	30.22	F1	mg/Kg	✱	67	75 - 125	12	20
Barium	273		40.7	349.9	4	mg/Kg	✱	190	75 - 125	3	20
Beryllium	3.1	F1	40.7	29.98	F1	mg/Kg	✱	66	75 - 125	9	20
Cadmium	0.26	F1	40.7	28.40	F1	mg/Kg	✱	69	75 - 125	11	20
Chromium	13.7	F1	40.7	37.54	F1	mg/Kg	✱	58	75 - 125	11	20
Cobalt	3.8		40.7	42.04		mg/Kg	✱	94	75 - 125	10	20
Iron	9480	F2 B	2040	6462	4 F2	mg/Kg	✱	-148	75 - 125	33	20
Lead	13.5		40.7	48.93		mg/Kg	✱	87	75 - 125	16	20
Magnesium	10200		2040	12630	4	mg/Kg	✱	119	75 - 125	9	20
Manganese	3730	F2 B	40.7	4616	E 4 F2	mg/Kg	✱	2188	75 - 125	26	20
Nickel	8.8		40.7	42.47		mg/Kg	✱	83	75 - 125	12	20
Potassium	2290		2040	4304		mg/Kg	✱	99	75 - 125	9	20
Selenium	1.3	J F1	40.7	16.93	F1	mg/Kg	✱	38	75 - 125	8	20
Silver	0.41	J F1	10.2	7.92	F1	mg/Kg	✱	74	75 - 125	8	20
Sodium	794	B	2040	2411		mg/Kg	✱	79	75 - 125	4	20
Thallium	0.41	J	40.7	40.16		mg/Kg	✱	98	75 - 125	7	20
Vanadium	15.7	F1	40.7	41.06	F1	mg/Kg	✱	62	75 - 125	8	20
Zinc	28.9	F1 B	40.7	38.96	F1	mg/Kg	✱	25	75 - 125	20	20

Lab Sample ID: 480-198378-12 MSD

Matrix: Solid

Analysis Batch: 628860

Client Sample ID: EB-12FT-1FT

Prep Type: Total/NA

Prep Batch: 628279

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	136000	B	2040	164800	4	mg/Kg	✱	1427	75 - 125	8	20
Copper	9.8	F1 F2	40.7	39.89	F1 F2	mg/Kg	✱	74	75 - 125	33	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 480-628407/1-A

Matrix: Solid

Analysis Batch: 628577

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 628407

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.0046	mg/Kg		06/02/22 10:39	06/02/22 14:30	1

Lab Sample ID: LCDSRM 480-628407/3-A ^10

Matrix: Solid

Analysis Batch: 628577

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 628407

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	20.5	20.52		mg/Kg		100.1	60.0 - 139.5	0	20

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: LCSSRM 480-628407/2-A ^10

Matrix: Solid

Analysis Batch: 628577

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 628407

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	20.5	20.58		mg/Kg		100.4	60.0 - 139.5

Lab Sample ID: 480-198378-1 MS

Matrix: Solid

Analysis Batch: 628577

Client Sample ID: EB-01-2FT

Prep Type: Total/NA

Prep Batch: 628407

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.42	F1 F2	0.445	0.796		mg/Kg	✱	85	80 - 120

Lab Sample ID: 480-198378-1 MSD

Matrix: Solid

Analysis Batch: 628577

Client Sample ID: EB-01-2FT

Prep Type: Total/NA

Prep Batch: 628407

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.42	F1 F2	0.454	1.16	F1 F2	mg/Kg	✱	163	80 - 120	37	20

QC Association Summary

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

GC/MS Semi VOA

Prep Batch: 628004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-198378-1	EB-01-2FT	Total/NA	Solid	3550C	
480-198378-2	EB-02-1.5FT	Total/NA	Solid	3550C	
480-198378-3	EB-03-2FT	Total/NA	Solid	3550C	
480-198378-4	EB-04-1FT	Total/NA	Solid	3550C	
480-198378-5	EB-05-0.5FT	Total/NA	Solid	3550C	
480-198378-6	EB-06-1FT	Total/NA	Solid	3550C	
480-198378-7	EB-07-2FT	Total/NA	Solid	3550C	
480-198378-8	EB-08-1FT	Total/NA	Solid	3550C	
480-198378-9	EB-09-2FT	Total/NA	Solid	3550C	
480-198378-10	EB-10-1FT	Total/NA	Solid	3550C	
480-198378-11	EB-11-2FT	Total/NA	Solid	3550C	
480-198378-12	EB-12FT-1FT	Total/NA	Solid	3550C	
MB 480-628004/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-628004/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Analysis Batch: 628199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-198378-1	EB-01-2FT	Total/NA	Solid	8270D	628004
480-198378-2	EB-02-1.5FT	Total/NA	Solid	8270D	628004
480-198378-3	EB-03-2FT	Total/NA	Solid	8270D	628004
480-198378-4	EB-04-1FT	Total/NA	Solid	8270D	628004
480-198378-5	EB-05-0.5FT	Total/NA	Solid	8270D	628004
480-198378-6	EB-06-1FT	Total/NA	Solid	8270D	628004
480-198378-7	EB-07-2FT	Total/NA	Solid	8270D	628004
480-198378-8	EB-08-1FT	Total/NA	Solid	8270D	628004
480-198378-9	EB-09-2FT	Total/NA	Solid	8270D	628004
480-198378-10	EB-10-1FT	Total/NA	Solid	8270D	628004
MB 480-628004/1-A	Method Blank	Total/NA	Solid	8270D	628004
LCS 480-628004/2-A	Lab Control Sample	Total/NA	Solid	8270D	628004

Analysis Batch: 628364

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-198378-11	EB-11-2FT	Total/NA	Solid	8270D	628004
480-198378-12	EB-12FT-1FT	Total/NA	Solid	8270D	628004

Metals

Prep Batch: 628203

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-198378-1	EB-01-2FT	Total/NA	Solid	3050B	
480-198378-2	EB-02-1.5FT	Total/NA	Solid	3050B	
480-198378-3	EB-03-2FT	Total/NA	Solid	3050B	
480-198378-4	EB-04-1FT	Total/NA	Solid	3050B	
480-198378-5	EB-05-0.5FT	Total/NA	Solid	3050B	
480-198378-6	EB-06-1FT	Total/NA	Solid	3050B	
480-198378-7	EB-07-2FT	Total/NA	Solid	3050B	
MB 480-628203/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 480-628203/2-A	Lab Control Sample	Total/NA	Solid	3050B	

QC Association Summary

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Metals

Prep Batch: 628279

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-198378-8	EB-08-1FT	Total/NA	Solid	3050B	
480-198378-9	EB-09-2FT	Total/NA	Solid	3050B	
480-198378-10	EB-10-1FT	Total/NA	Solid	3050B	
480-198378-11	EB-11-2FT	Total/NA	Solid	3050B	
480-198378-12	EB-12FT-1FT	Total/NA	Solid	3050B	
MB 480-628279/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 480-628279/2-A	Lab Control Sample	Total/NA	Solid	3050B	
480-198378-12 MS	EB-12FT-1FT	Total/NA	Solid	3050B	
480-198378-12 MSD	EB-12FT-1FT	Total/NA	Solid	3050B	

Prep Batch: 628407

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-198378-1	EB-01-2FT	Total/NA	Solid	7471B	
480-198378-2	EB-02-1.5FT	Total/NA	Solid	7471B	
480-198378-3	EB-03-2FT	Total/NA	Solid	7471B	
480-198378-4	EB-04-1FT	Total/NA	Solid	7471B	
480-198378-5	EB-05-0.5FT	Total/NA	Solid	7471B	
480-198378-6	EB-06-1FT	Total/NA	Solid	7471B	
480-198378-7	EB-07-2FT	Total/NA	Solid	7471B	
480-198378-8	EB-08-1FT	Total/NA	Solid	7471B	
480-198378-9	EB-09-2FT	Total/NA	Solid	7471B	
480-198378-10	EB-10-1FT	Total/NA	Solid	7471B	
480-198378-11	EB-11-2FT	Total/NA	Solid	7471B	
480-198378-12	EB-12FT-1FT	Total/NA	Solid	7471B	
MB 480-628407/1-A	Method Blank	Total/NA	Solid	7471B	
LCDSRM 480-628407/3-A ^10	Lab Control Sample Dup	Total/NA	Solid	7471B	
LCSSRM 480-628407/2-A ^10	Lab Control Sample	Total/NA	Solid	7471B	
480-198378-1 MS	EB-01-2FT	Total/NA	Solid	7471B	
480-198378-1 MSD	EB-01-2FT	Total/NA	Solid	7471B	

Analysis Batch: 628483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-198378-1	EB-01-2FT	Total/NA	Solid	6010C	628203
480-198378-2	EB-02-1.5FT	Total/NA	Solid	6010C	628203
480-198378-3	EB-03-2FT	Total/NA	Solid	6010C	628203
480-198378-4	EB-04-1FT	Total/NA	Solid	6010C	628203
480-198378-5	EB-05-0.5FT	Total/NA	Solid	6010C	628203
480-198378-6	EB-06-1FT	Total/NA	Solid	6010C	628203
480-198378-7	EB-07-2FT	Total/NA	Solid	6010C	628203
MB 480-628203/1-A	Method Blank	Total/NA	Solid	6010C	628203
LCSSRM 480-628203/2-A	Lab Control Sample	Total/NA	Solid	6010C	628203

Analysis Batch: 628572

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-628279/1-A	Method Blank	Total/NA	Solid	6010C	628279
LCSSRM 480-628279/2-A	Lab Control Sample	Total/NA	Solid	6010C	628279

Analysis Batch: 628577

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-198378-1	EB-01-2FT	Total/NA	Solid	7471B	628407
480-198378-2	EB-02-1.5FT	Total/NA	Solid	7471B	628407

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QC Association Summary

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Metals (Continued)

Analysis Batch: 628577 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-198378-3	EB-03-2FT	Total/NA	Solid	7471B	628407
480-198378-4	EB-04-1FT	Total/NA	Solid	7471B	628407
480-198378-5	EB-05-0.5FT	Total/NA	Solid	7471B	628407
480-198378-6	EB-06-1FT	Total/NA	Solid	7471B	628407
480-198378-7	EB-07-2FT	Total/NA	Solid	7471B	628407
480-198378-8	EB-08-1FT	Total/NA	Solid	7471B	628407
480-198378-9	EB-09-2FT	Total/NA	Solid	7471B	628407
480-198378-10	EB-10-1FT	Total/NA	Solid	7471B	628407
480-198378-11	EB-11-2FT	Total/NA	Solid	7471B	628407
480-198378-12	EB-12FT-1FT	Total/NA	Solid	7471B	628407
MB 480-628407/1-A	Method Blank	Total/NA	Solid	7471B	628407
LCDSRM 480-628407/3-A ^10	Lab Control Sample Dup	Total/NA	Solid	7471B	628407
LCSSRM 480-628407/2-A ^10	Lab Control Sample	Total/NA	Solid	7471B	628407
480-198378-1 MS	EB-01-2FT	Total/NA	Solid	7471B	628407
480-198378-1 MSD	EB-01-2FT	Total/NA	Solid	7471B	628407

Analysis Batch: 628644

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-198378-8	EB-08-1FT	Total/NA	Solid	6010C	628279
480-198378-9	EB-09-2FT	Total/NA	Solid	6010C	628279
480-198378-10	EB-10-1FT	Total/NA	Solid	6010C	628279
480-198378-11	EB-11-2FT	Total/NA	Solid	6010C	628279
480-198378-12	EB-12FT-1FT	Total/NA	Solid	6010C	628279
480-198378-12 MS	EB-12FT-1FT	Total/NA	Solid	6010C	628279
480-198378-12 MSD	EB-12FT-1FT	Total/NA	Solid	6010C	628279

Analysis Batch: 628860

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-198378-12	EB-12FT-1FT	Total/NA	Solid	6010C	628279
480-198378-12 MS	EB-12FT-1FT	Total/NA	Solid	6010C	628279
480-198378-12 MSD	EB-12FT-1FT	Total/NA	Solid	6010C	628279

General Chemistry

Analysis Batch: 628020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-198378-1	EB-01-2FT	Total/NA	Solid	Moisture	
480-198378-2	EB-02-1.5FT	Total/NA	Solid	Moisture	
480-198378-3	EB-03-2FT	Total/NA	Solid	Moisture	
480-198378-4	EB-04-1FT	Total/NA	Solid	Moisture	
480-198378-5	EB-05-0.5FT	Total/NA	Solid	Moisture	
480-198378-6	EB-06-1FT	Total/NA	Solid	Moisture	
480-198378-7	EB-07-2FT	Total/NA	Solid	Moisture	
480-198378-8	EB-08-1FT	Total/NA	Solid	Moisture	
480-198378-9	EB-09-2FT	Total/NA	Solid	Moisture	
480-198378-10	EB-10-1FT	Total/NA	Solid	Moisture	
480-198378-11	EB-11-2FT	Total/NA	Solid	Moisture	
480-198378-12	EB-12FT-1FT	Total/NA	Solid	Moisture	
480-198378-12 DU	EB-12FT-1FT	Total/NA	Solid	Moisture	

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Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Client Sample ID: EB-01-2FT

Lab Sample ID: 480-198378-1

Date Collected: 05/25/22 09:45

Matrix: Solid

Date Received: 05/26/22 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	628020	05/27/22 17:38	KER	TAL BUF

Client Sample ID: EB-01-2FT

Lab Sample ID: 480-198378-1

Date Collected: 05/25/22 09:45

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 73.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			628004	05/27/22 15:27	SJM	TAL BUF
Total/NA	Analysis	8270D		10	628199	05/31/22 22:28	PJQ	TAL BUF
Total/NA	Prep	3050B			628203	05/31/22 17:05	NBS	TAL BUF
Total/NA	Analysis	6010C		1	628483	06/01/22 22:28	LMH	TAL BUF
Total/NA	Prep	7471B			628407	06/02/22 10:39	NVK	TAL BUF
Total/NA	Analysis	7471B		1	628577	06/02/22 14:33	NVK	TAL BUF

Client Sample ID: EB-02-1.5FT

Lab Sample ID: 480-198378-2

Date Collected: 05/25/22 10:00

Matrix: Solid

Date Received: 05/26/22 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	628020	05/27/22 17:38	KER	TAL BUF

Client Sample ID: EB-02-1.5FT

Lab Sample ID: 480-198378-2

Date Collected: 05/25/22 10:00

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 83.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			628004	05/27/22 15:27	SJM	TAL BUF
Total/NA	Analysis	8270D		5	628199	05/31/22 22:52	PJQ	TAL BUF
Total/NA	Prep	3050B			628203	05/31/22 17:05	NBS	TAL BUF
Total/NA	Analysis	6010C		1	628483	06/01/22 22:32	LMH	TAL BUF
Total/NA	Prep	7471B			628407	06/02/22 10:39	NVK	TAL BUF
Total/NA	Analysis	7471B		1	628577	06/02/22 14:39	NVK	TAL BUF

Client Sample ID: EB-03-2FT

Lab Sample ID: 480-198378-3

Date Collected: 05/25/22 10:30

Matrix: Solid

Date Received: 05/26/22 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	628020	05/27/22 17:38	KER	TAL BUF

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Client Sample ID: EB-03-2FT

Lab Sample ID: 480-198378-3

Date Collected: 05/25/22 10:30

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 84.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			628004	05/27/22 15:27	SJM	TAL BUF
Total/NA	Analysis	8270D		1	628199	05/31/22 23:17	PJQ	TAL BUF
Total/NA	Prep	3050B			628203	05/31/22 17:05	NBS	TAL BUF
Total/NA	Analysis	6010C		1	628483	06/01/22 22:36	LMH	TAL BUF
Total/NA	Prep	7471B			628407	06/02/22 10:39	NVK	TAL BUF
Total/NA	Analysis	7471B		1	628577	06/02/22 14:40	NVK	TAL BUF

Client Sample ID: EB-04-1FT

Lab Sample ID: 480-198378-4

Date Collected: 05/25/22 10:40

Matrix: Solid

Date Received: 05/26/22 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	628020	05/27/22 17:38	KER	TAL BUF

Client Sample ID: EB-04-1FT

Lab Sample ID: 480-198378-4

Date Collected: 05/25/22 10:40

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 80.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			628004	05/27/22 15:27	SJM	TAL BUF
Total/NA	Analysis	8270D		5	628199	05/31/22 23:41	PJQ	TAL BUF
Total/NA	Prep	3050B			628203	05/31/22 17:05	NBS	TAL BUF
Total/NA	Analysis	6010C		1	628483	06/01/22 22:40	LMH	TAL BUF
Total/NA	Prep	7471B			628407	06/02/22 10:39	NVK	TAL BUF
Total/NA	Analysis	7471B		1	628577	06/02/22 14:41	NVK	TAL BUF

Client Sample ID: EB-05-0.5FT

Lab Sample ID: 480-198378-5

Date Collected: 05/25/22 11:10

Matrix: Solid

Date Received: 05/26/22 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	628020	05/27/22 17:38	KER	TAL BUF

Client Sample ID: EB-05-0.5FT

Lab Sample ID: 480-198378-5

Date Collected: 05/25/22 11:10

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 85.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			628004	05/27/22 15:27	SJM	TAL BUF
Total/NA	Analysis	8270D		1	628199	06/01/22 00:06	PJQ	TAL BUF
Total/NA	Prep	3050B			628203	05/31/22 17:05	NBS	TAL BUF
Total/NA	Analysis	6010C		1	628483	06/01/22 22:44	LMH	TAL BUF
Total/NA	Prep	7471B			628407	06/02/22 10:39	NVK	TAL BUF
Total/NA	Analysis	7471B		1	628577	06/02/22 14:45	NVK	TAL BUF

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Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Client Sample ID: EB-06-1FT

Lab Sample ID: 480-198378-6

Date Collected: 05/25/22 11:30

Matrix: Solid

Date Received: 05/26/22 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	628020	05/27/22 17:38	KER	TAL BUF

Client Sample ID: EB-06-1FT

Lab Sample ID: 480-198378-6

Date Collected: 05/25/22 11:30

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 86.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			628004	05/27/22 15:27	SJM	TAL BUF
Total/NA	Analysis	8270D		1	628199	06/01/22 00:30	PJQ	TAL BUF
Total/NA	Prep	3050B			628203	05/31/22 17:05	NBS	TAL BUF
Total/NA	Analysis	6010C		1	628483	06/01/22 22:47	LMH	TAL BUF
Total/NA	Prep	7471B			628407	06/02/22 10:39	NVK	TAL BUF
Total/NA	Analysis	7471B		1	628577	06/02/22 14:46	NVK	TAL BUF

Client Sample ID: EB-07-2FT

Lab Sample ID: 480-198378-7

Date Collected: 05/25/22 11:40

Matrix: Solid

Date Received: 05/26/22 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	628020	05/27/22 17:38	KER	TAL BUF

Client Sample ID: EB-07-2FT

Lab Sample ID: 480-198378-7

Date Collected: 05/25/22 11:40

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 86.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			628004	05/27/22 15:27	SJM	TAL BUF
Total/NA	Analysis	8270D		5	628199	06/01/22 00:55	PJQ	TAL BUF
Total/NA	Prep	3050B			628203	05/31/22 17:05	NBS	TAL BUF
Total/NA	Analysis	6010C		1	628483	06/01/22 22:51	LMH	TAL BUF
Total/NA	Prep	7471B			628407	06/02/22 10:39	NVK	TAL BUF
Total/NA	Analysis	7471B		1	628577	06/02/22 14:48	NVK	TAL BUF

Client Sample ID: EB-08-1FT

Lab Sample ID: 480-198378-8

Date Collected: 05/25/22 12:00

Matrix: Solid

Date Received: 05/26/22 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	628020	05/27/22 17:38	KER	TAL BUF

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Client Sample ID: EB-08-1FT

Lab Sample ID: 480-198378-8

Date Collected: 05/25/22 12:00

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 89.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			628004	05/27/22 15:27	SJM	TAL BUF
Total/NA	Analysis	8270D		5	628199	06/01/22 01:19	PJQ	TAL BUF
Total/NA	Prep	3050B			628279	06/01/22 10:25	NBS	TAL BUF
Total/NA	Analysis	6010C		1	628644	06/02/22 15:29	LMH	TAL BUF
Total/NA	Prep	7471B			628407	06/02/22 10:39	NVK	TAL BUF
Total/NA	Analysis	7471B		1	628577	06/02/22 14:49	NVK	TAL BUF

Client Sample ID: EB-09-2FT

Lab Sample ID: 480-198378-9

Date Collected: 05/25/22 00:00

Matrix: Solid

Date Received: 05/26/22 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	628020	05/27/22 17:38	KER	TAL BUF

Client Sample ID: EB-09-2FT

Lab Sample ID: 480-198378-9

Date Collected: 05/25/22 00:00

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 80.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			628004	05/27/22 15:27	SJM	TAL BUF
Total/NA	Analysis	8270D		10	628199	06/01/22 01:43	PJQ	TAL BUF
Total/NA	Prep	3050B			628279	06/01/22 10:25	NBS	TAL BUF
Total/NA	Analysis	6010C		1	628644	06/02/22 15:33	LMH	TAL BUF
Total/NA	Prep	7471B			628407	06/02/22 10:39	NVK	TAL BUF
Total/NA	Analysis	7471B		1	628577	06/02/22 14:50	NVK	TAL BUF

Client Sample ID: EB-10-1FT

Lab Sample ID: 480-198378-10

Date Collected: 05/25/22 12:40

Matrix: Solid

Date Received: 05/26/22 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	628020	05/27/22 17:38	KER	TAL BUF

Client Sample ID: EB-10-1FT

Lab Sample ID: 480-198378-10

Date Collected: 05/25/22 12:40

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 81.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			628004	05/27/22 15:27	SJM	TAL BUF
Total/NA	Analysis	8270D		5	628199	06/01/22 02:08	PJQ	TAL BUF
Total/NA	Prep	3050B			628279	06/01/22 10:25	NBS	TAL BUF
Total/NA	Analysis	6010C		1	628644	06/02/22 15:37	LMH	TAL BUF
Total/NA	Prep	7471B			628407	06/02/22 10:39	NVK	TAL BUF
Total/NA	Analysis	7471B		1	628577	06/02/22 14:52	NVK	TAL BUF

Eurofins Buffalo

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Client Sample ID: EB-11-2FT

Lab Sample ID: 480-198378-11

Date Collected: 05/25/22 12:50

Matrix: Solid

Date Received: 05/26/22 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	628020	05/27/22 17:38	KER	TAL BUF

Client Sample ID: EB-11-2FT

Lab Sample ID: 480-198378-11

Date Collected: 05/25/22 12:50

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 77.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			628004	05/27/22 15:27	SJM	TAL BUF
Total/NA	Analysis	8270D		10	628364	06/01/22 16:08	PJQ	TAL BUF
Total/NA	Prep	3050B			628279	06/01/22 10:25	NBS	TAL BUF
Total/NA	Analysis	6010C		1	628644	06/02/22 15:40	LMH	TAL BUF
Total/NA	Prep	7471B			628407	06/02/22 10:39	NVK	TAL BUF
Total/NA	Analysis	7471B		1	628577	06/02/22 14:53	NVK	TAL BUF

Client Sample ID: EB-12FT-1FT

Lab Sample ID: 480-198378-12

Date Collected: 05/25/22 13:50

Matrix: Solid

Date Received: 05/26/22 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	628020	05/27/22 17:38	KER	TAL BUF

Client Sample ID: EB-12FT-1FT

Lab Sample ID: 480-198378-12

Date Collected: 05/25/22 13:50

Matrix: Solid

Date Received: 05/26/22 10:20

Percent Solids: 94.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			628004	05/27/22 15:27	SJM	TAL BUF
Total/NA	Analysis	8270D		5	628364	06/01/22 16:33	PJQ	TAL BUF
Total/NA	Prep	3050B			628279	06/01/22 10:25	NBS	TAL BUF
Total/NA	Analysis	6010C		1	628644	06/02/22 15:44	LMH	TAL BUF
Total/NA	Prep	3050B			628279	06/01/22 10:25	NBS	TAL BUF
Total/NA	Analysis	6010C		2	628860	06/03/22 18:18	LMH	TAL BUF
Total/NA	Prep	7471B			628407	06/02/22 10:39	NVK	TAL BUF
Total/NA	Analysis	7471B		1	628577	06/02/22 14:54	NVK	TAL BUF

Laboratory References:

TAL BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Eurofins Buffalo

Accreditation/Certification Summary

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Method	Method Description	Protocol	Laboratory
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
7471B	Mercury (CVAA)	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF
3050B	Preparation, Metals	SW846	TAL BUF
3550C	Ultrasonic Extraction	SW846	TAL BUF
7471B	Preparation, Mercury	SW846	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: C&S Engineers, Inc.
Project/Site: Marine Drive BCP

Job ID: 480-198378-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-198378-1	EB-01-2FT	Solid	05/25/22 09:45	05/26/22 10:20
480-198378-2	EB-02-1.5FT	Solid	05/25/22 10:00	05/26/22 10:20
480-198378-3	EB-03-2FT	Solid	05/25/22 10:30	05/26/22 10:20
480-198378-4	EB-04-1FT	Solid	05/25/22 10:40	05/26/22 10:20
480-198378-5	EB-05-0.5FT	Solid	05/25/22 11:10	05/26/22 10:20
480-198378-6	EB-06-1FT	Solid	05/25/22 11:30	05/26/22 10:20
480-198378-7	EB-07-2FT	Solid	05/25/22 11:40	05/26/22 10:20
480-198378-8	EB-08-1FT	Solid	05/25/22 12:00	05/26/22 10:20
480-198378-9	EB-09-2FT	Solid	05/25/22 00:00	05/26/22 10:20
480-198378-10	EB-10-1FT	Solid	05/25/22 12:40	05/26/22 10:20
480-198378-11	EB-11-2FT	Solid	05/25/22 12:50	05/26/22 10:20
480-198378-12	EB-12FT-1FT	Solid	05/25/22 13:50	05/26/22 10:20

Chain of Custody Record



Client Information Company: C&S Engineers, Inc. Address: 141 Elm Street Suite 100 City: Buffalo State, Zip: NY, 14203 Phone: 716-847-1630(Tel) Email: cmartin@cscos.com Project Name: Marine Drive BCP Site:		Sampler: Lab PM Hartmann, Steve E-Mail: Steve.Hartmann@et.eurofins.com Phone:	Carrier Tracking No(s): 480-174227-37583.2 Page: Page 2 of 2 Job #:
Due Date Requested: TAT Requested (day): <u>Standard</u> Compliance Project: ☐ Yes ☒ No PO #: Z31001001 WO #: 48025204 Project #: 48025204 SSOW#:		Analysis Requested Preservation Codes: A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Y - Trizma Z - other (specify)	
Sample Identification Sample Date: <u>5/25/2021</u> 19 Sample Time: <u>21:50</u> Sample Type (C=Comp, G=grab): <u>G</u> Matrix (W=water, S=solid, O=oil, BT=tissue, A=air): <u>Solid</u> Preservation Code: <u>6</u>		Field Filtered Sample (Yes or No) ☒ Perform MS/MSD (Yes or No) ☒ 6010C, 7471B 8270D - TCL SVOCs	
Total Number of Containers: <u>2</u> Special Instructions/Note:		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months	
Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological Deliverable Requested: I, II, III, IV, Other (specify)			
Empty Kit Relinquished by: _____ Date: _____ Relinquished by: _____ Date/Time: <u>5/26/2021 9:02</u> Relinquished by: _____ Date/Time: _____ Relinquished by: _____ Date/Time: _____ Custody Seals Intact: ☒ Yes ☐ No Custody Seal No.:			
Received by: _____ Date/Time: _____ Received by: _____ Date/Time: _____ Received by: _____ Date/Time: _____ Cooler Temperature(s) °C and Other Remarks:			

Login Sample Receipt Checklist

Client: C&S Engineers, Inc.

Job Number: 480-198378-1

Login Number: 198378

List Source: Eurofins Buffalo

List Number: 1

Creator: Sabuda, Brendan D

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.0 #1 ICE
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	