



Environment Testing  
America



## ANALYTICAL REPORT

Eurofins Environment Testing Philadelphia, LLC  
213 Witmer Road  
Horsham, PA 19044-0962  
Tel: (215)355-3900

Laboratory Job ID: 630-32239-1

Client Project/Site: South Jersey Port Corp, Camden NJ

For:

ST Hudson Engineers, Inc.  
900 Dudley Avenue  
Cherry Hill, New Jersey 08002

Attn: Paul Ferry

Authorized for release by:

6/22/2022 2:58:26 PM

Erin Dougherty, Project Administrator  
(215)355-3900  
[Erin.Dougherty@et.eurofinsus.com](mailto:Erin.Dougherty@et.eurofinsus.com)

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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: ST Hudson Engineers, Inc.  
Project/Site: South Jersey Port Corp, Camden NJ

Job ID: 630-32239-1

## Qualifiers

### GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

### GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
P	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

### Metals

Qualifier	Qualifier Description
^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits.
U	Indicates the analyte was analyzed for but not detected.

### General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

## Glossary

### Abbreviation

These commonly used abbreviations may or may not be present in this report.

¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
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)

## Definitions/Glossary

Client: ST Hudson Engineers, Inc.  
Project/Site: South Jersey Port Corp, Camden NJ

Job ID: 630-32239-1

### Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

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## Case Narrative

Client: ST Hudson Engineers, Inc.  
Project/Site: South Jersey Port Corp, Camden NJ

Job ID: 630-32239-1

### Job ID: 630-32239-1

Laboratory: Eurofins Environment Testing Philadelphia, LLC

#### Narrative

##### Job Narrative 630-32239-1

#### Receipt

The samples were received on 4/28/2022 6:50 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 time was 2.0°C

#### GC/MS Semi VOA

Method 8270E\_LL: The following sample was diluted due to the nature of the sample matrix: SC-3 COMPOSITE (C5 + C6) (630-32239-3). 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.

#### PCBs

Method 8082A\_LL: Surrogate recovery for the following sample was outside control limits: SC-3 COMPOSITE (C5 + C6) (630-32239-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

#### Pesticides

Method 8081B\_LL: The following sample was diluted due to the nature of the sample matrix: SC-3 COMPOSITE (C5 + C6) (630-32239-3) at 5x. Elevated reporting limits (RLs) are provided.

Method 8081B\_LL: The DCB Decachlorobiphenyl (Surr) surrogate recovery for the following samples was outside acceptance limits (high biased) on the confirmation column due to matrix interference: SC-3 COMPOSITE (C5 + C6) (630-32239-3). The recovery is within acceptance limits on the other column, indicating that the extraction process was in control.

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

#### Metals

Method 6020B: The continuing calibration blank (CCB) associated with batch 180-399861 recovered above the upper control limit for aluminum. The samples associated with this CCB were 10X the CCB concentration for the affected analytes; therefore, the data have been reported. The associated samples are impacted: (CCB 180-399861/196) and (LCS 180-399173/2-A).

Method 6020B: The continuing calibration blank (CCB) associated with batch 180-399861 recovered above the upper control limit for aluminum, iron and manganese. The samples associated with this CCB were 10X the CCB concentration for the affected analytes; therefore, the data have been reported. The associated samples are impacted: SC-3 COMPOSITE (C5 + C6) (630-32239-3), (CCB 180-399861/207), (630-32238-B-9-J), (630-32238-B-9-K MS), (630-32238-B-9-L MSD), (630-32238-B-9-J PDS) and (630-32238-B-9-J SD ^5).

Method 6020B: The continuing calibration blank (CCB) associated with batch 180-399861 recovered above the upper control limit for aluminum. The samples associated with this CCB were batch QC for the affected analytes; therefore, the data have been reported. The associated samples are impacted: (CCB 180-399861/223) and (MB 180-399173/1-A).

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

#### General Chemistry

Method 7196A: The following sample was diluted due to the nature of the sample matrix: SC-3 COMPOSITE (C5 + C6) (630-32239-3). Elevated reporting limits (RLs) are provided.

Method 9014: The following sample was assumed to contain Sulfide due to sample matrix: SC-3 COMPOSITE (C5 + C6) (630-32239-3). The sulfide was treated and removed prior to distillation with 200 uL of bismuth nitrate solution.

## Case Narrative

Client: ST Hudson Engineers, Inc.  
Project/Site: South Jersey Port Corp, Camden NJ

Job ID: 630-32239-1

### Job ID: 630-32239-1 (Continued)

#### Laboratory: Eurofins Environment Testing Philadelphia, LLC (Continued)

Method Lloyd\_Kahn\_Mod: Please note that the reporting limit for Lloyd Kahn TOC analysis is a nominal value and does not reflect adjustments in sample mass processed on an individual basis. C-5 GRAB (630-32239-1), C-6 GRAB (630-32239-2), (180-137449-A-6), (180-137449-A-6 MS) and (180-137449-A-6 MSD)

Method Lloyd\_Kahn\_Mod: Please note that the reporting limit for Lloyd Kahn TOC analysis is a nominal value and does not reflect adjustments in sample mass processed on an individual basis. SC-3 COMPOSITE (C5 + C6) (630-32239-3), (180-137539-A-18), (180-137539-A-18 MS) and (180-137539-A-18 MSD)

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

#### Geotechnical

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

# Detection Summary

Client: ST Hudson Engineers, Inc.

Job ID: 630-32239-1

Project/Site: South Jersey Port Corp, Camden NJ

## Client Sample ID: C-5 GRAB

## Lab Sample ID: 630-32239-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Duplicates	49000		2300	2300	mg/Kg	1	⊗	EPA-Lloyd Kahn	Total/NA
Moisture Content	141.8				%	1		D2216-90	Total/NA
Gravel	0.3				%	1		D422	Total/NA
Sieve Size 3 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Sand	10.0				%	1		D422	Total/NA
Sieve Size 2 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Coarse Sand	1.1				%	1		D422	Total/NA
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Medium Sand	0.5				%	1		D422	Total/NA
Sieve Size 1 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Fine Sand	8.4				%	1		D422	Total/NA
Sieve Size 0.75 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Sieve Size 0.375 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Silt	62.5				%	1		D422	Total/NA
Clay	27.2				%	1		D422	Total/NA
Sieve Size #4 - Percent Finer	99.7				% Passing	1		D422	Total/NA
Sieve Size #10 - Percent Finer	98.6				% Passing	1		D422	Total/NA
Sieve Size #20 - Percent Finer	98.4				% Passing	1		D422	Total/NA
Sieve Size #40 - Percent Finer	98.1				% Passing	1		D422	Total/NA
Sieve Size #60 - Percent Finer	97.5				% Passing	1		D422	Total/NA
Sieve Size #80 - Percent Finer	96.9				% Passing	1		D422	Total/NA
Sieve Size #100 - Percent Finer	96.0				% Passing	1		D422	Total/NA
Sieve Size #200 - Percent Finer	89.7				% Passing	1		D422	Total/NA
Hydrometer Reading 1 - Percent Finer	63.5				% Passing	1		D422	Total/NA
Hydrometer Reading 2 - Percent Finer	52.9				% Passing	1		D422	Total/NA
Hydrometer Reading 3 - Percent Finer	40.8				% Passing	1		D422	Total/NA
Hydrometer Reading 4 - Percent Finer	33.3				% Passing	1		D422	Total/NA
Hydrometer Reading 5 - Percent Finer	27.2				% Passing	1		D422	Total/NA
Hydrometer Reading 6 - Percent Finer	17.9				% Passing	1		D422	Total/NA
Hydrometer Reading 7 - Percent Finer	13.4				% Passing	1		D422	Total/NA

## Client Sample ID: C-6 GRAB

## Lab Sample ID: 630-32239-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Duplicates	47000		2100	2100	mg/Kg	1	⊗	EPA-Lloyd Kahn	Total/NA
Moisture Content	132.7				%	1		D2216-90	Total/NA
Gravel	0.2				%	1		D422	Total/NA
Sieve Size 3 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Sand	20.5				%	1		D422	Total/NA
Sieve Size 2 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Coarse Sand	1.7				%	1		D422	Total/NA
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Medium Sand	1.9				%	1		D422	Total/NA
Sieve Size 1 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Fine Sand	16.9				%	1		D422	Total/NA
Sieve Size 0.75 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Sieve Size 0.375 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Silt	56.9				%	1		D422	Total/NA
Clay	22.4				%	1		D422	Total/NA
Sieve Size #4 - Percent Finer	99.8				% Passing	1		D422	Total/NA
Sieve Size #10 - Percent Finer	98.1				% Passing	1		D422	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Environment Testing Philadelphia, LLC

# Detection Summary

Client: ST Hudson Engineers, Inc.

Project/Site: South Jersey Port Corp, Camden NJ

Job ID: 630-32239-1

## Client Sample ID: C-6 GRAB (Continued)

## Lab Sample ID: 630-32239-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sieve Size #20 - Percent Finer	97.5				% Passing	1		D422	Total/NA
Sieve Size #40 - Percent Finer	96.2				% Passing	1		D422	Total/NA
Sieve Size #60 - Percent Finer	91.9				% Passing	1		D422	Total/NA
Sieve Size #80 - Percent Finer	88.4				% Passing	1		D422	Total/NA
Sieve Size #100 - Percent Finer	87.0				% Passing	1		D422	Total/NA
Sieve Size #200 - Percent Finer	79.3				% Passing	1		D422	Total/NA
Hydrometer Reading 1 - Percent Finer	60.7				% Passing	1		D422	Total/NA
Hydrometer Reading 2 - Percent Finer	48.8				% Passing	1		D422	Total/NA
Hydrometer Reading 3 - Percent Finer	43.5				% Passing	1		D422	Total/NA
Hydrometer Reading 4 - Percent Finer	27.7				% Passing	1		D422	Total/NA
Hydrometer Reading 5 - Percent Finer	22.4				% Passing	1		D422	Total/NA
Hydrometer Reading 6 - Percent Finer	14.3				% Passing	1		D422	Total/NA
Hydrometer Reading 7 - Percent Finer	10.3				% Passing	1		D422	Total/NA

## Client Sample ID: SC-3 COMPOSITE (C5 + C6)

## Lab Sample ID: 630-32239-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.025	J		0.041	mg/Kg	5	⊗	EPA 8270E LL	Total/NA
Acenaphthene	0.026	J		0.041	mg/Kg	5	⊗	EPA 8270E LL	Total/NA
Acenaphthylene	0.044			0.041	mg/Kg	5	⊗	EPA 8270E LL	Total/NA
Anthracene	0.064			0.041	mg/Kg	5	⊗	EPA 8270E LL	Total/NA
Benzo[a]anthracene	0.19			0.041	mg/Kg	5	⊗	EPA 8270E LL	Total/NA
Benzo[b]fluoranthene	0.26			0.041	mg/Kg	5	⊗	EPA 8270E LL	Total/NA
Benzo[k]fluoranthene	0.082			0.041	mg/Kg	5	⊗	EPA 8270E LL	Total/NA
Benzo[g,h,i]perylene	0.17			0.041	mg/Kg	5	⊗	EPA 8270E LL	Total/NA
Benzo[a]pyrene	0.20			0.041	mg/Kg	5	⊗	EPA 8270E LL	Total/NA
Bis(2-ethylhexyl) phthalate	0.25	J		2.0	mg/Kg	5	⊗	EPA 8270E LL	Total/NA
Carbazole	0.018	J		0.041	mg/Kg	5	⊗	EPA 8270E LL	Total/NA
Chrysene	0.22			0.041	mg/Kg	5	⊗	EPA 8270E LL	Total/NA
Dibenz(a,h)anthracene	0.042			0.041	mg/Kg	5	⊗	EPA 8270E LL	Total/NA
Fluoranthene	0.38			0.041	mg/Kg	5	⊗	EPA 8270E LL	Total/NA
Fluorene	0.030	J		0.041	mg/Kg	5	⊗	EPA 8270E LL	Total/NA
Indeno[1,2,3-cd]pyrene	0.15			0.041	mg/Kg	5	⊗	EPA 8270E LL	Total/NA
Naphthalene	0.048			0.041	mg/Kg	5	⊗	EPA 8270E LL	Total/NA
Phenanthrene	0.15			0.041	mg/Kg	5	⊗	EPA 8270E LL	Total/NA
Pyrene	0.33			0.041	mg/Kg	5	⊗	EPA 8270E LL	Total/NA
Aldrin (1C)	0.00019	J p		0.00050	mg/Kg	5	⊗	EPA 8081B LL	Total/NA
cis-Chlordane (2C)	0.00091	p		0.00050	mg/Kg	5	⊗	EPA 8081B LL	Total/NA
4,4'-DDD (1C)	0.0054			0.00050	mg/Kg	5	⊗	EPA 8081B LL	Total/NA
4,4'-DDE (1C)	0.011			0.00050	mg/Kg	5	⊗	EPA 8081B LL	Total/NA
Heptachlor epoxide (2C)	0.00025	J p		0.00050	mg/Kg	5	⊗	EPA 8081B LL	Total/NA
PCB-1248 (1C)	0.030			0.0010	mg/Kg	1	⊗	EPA 8082A	Total/NA
PCB-1260 (2C)	0.044			0.0010	mg/Kg	1	⊗	EPA 8082A	Total/NA
Aluminum	11000	^2		7.2	mg/Kg	1	⊗	EPA 6020B	Total/NA
Arsenic	8.1			0.12	mg/Kg	1	⊗	EPA 6020B	Total/NA
Barium	150			1.2	mg/Kg	1	⊗	EPA 6020B	Total/NA
Antimony	0.56			0.24	mg/Kg	1	⊗	EPA 6020B	Total/NA
Beryllium	1.2			0.12	mg/Kg	1	⊗	EPA 6020B	Total/NA
Cadmium	1.6			0.12	mg/Kg	1	⊗	EPA 6020B	Total/NA
Calcium	3700			60	mg/Kg	1	⊗	EPA 6020B	Total/NA
Chromium	31			0.24	mg/Kg	1	⊗	EPA 6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Environment Testing Philadelphia, LLC

# Detection Summary

Client: ST Hudson Engineers, Inc.

Job ID: 630-32239-1

Project/Site: South Jersey Port Corp, Camden NJ

## Client Sample ID: SC-3 COMPOSITE (C5 + C6) (Continued)

## Lab Sample ID: 630-32239-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	15		0.060	0.043	mg/Kg	1	⊗	EPA 6020B	Total/NA
Copper	40		0.36	0.25	mg/Kg	1	⊗	EPA 6020B	Total/NA
Magnesium	3700		60	5.4	mg/Kg	1	⊗	EPA 6020B	Total/NA
Manganese	1700 ^2		0.60	0.51	mg/Kg	1	⊗	EPA 6020B	Total/NA
Iron	26000 ^2		6.0	5.7	mg/Kg	1	⊗	EPA 6020B	Total/NA
Lead	55		0.12	0.079	mg/Kg	1	⊗	EPA 6020B	Total/NA
Potassium	1300		60	17	mg/Kg	1	⊗	EPA 6020B	Total/NA
Nickel	24		0.12	0.11	mg/Kg	1	⊗	EPA 6020B	Total/NA
Selenium	1.1		0.60	0.15	mg/Kg	1	⊗	EPA 6020B	Total/NA
Sodium	130		60	31	mg/Kg	1	⊗	EPA 6020B	Total/NA
Silver	0.31		0.12	0.033	mg/Kg	1	⊗	EPA 6020B	Total/NA
Thallium	0.15		0.12	0.083	mg/Kg	1	⊗	EPA 6020B	Total/NA
Vanadium	26		0.12	0.11	mg/Kg	1	⊗	EPA 6020B	Total/NA
Zinc	270		0.60	0.57	mg/Kg	1	⊗	EPA 6020B	Total/NA
Mercury	0.20		0.034	0.022	mg/Kg	1	⊗	EPA 7471B	Total/NA
Cr (III)	31		0.50	0.21	mg/Kg	1		7196A	Total/NA
Cyanide, Total	5.2		0.44	0.34	mg/Kg	1	⊗	EPA 9014	Total/NA
Total Organic Carbon - Duplicates	54000		2400	2400	mg/Kg	1	⊗	EPA-Lloyd Kahn	Total/NA
Moisture Content	137.2				%	1		D2216-90	Total/NA
Gravel	0.2				%	1		D422	Total/NA
Sieve Size 3 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Sand	16.0				%	1		D422	Total/NA
Sieve Size 2 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Coarse Sand	1.2				%	1		D422	Total/NA
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Medium Sand	1.0				%	1		D422	Total/NA
Sieve Size 1 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Fine Sand	13.8				%	1		D422	Total/NA
Sieve Size 0.75 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Sieve Size 0.375 inch - Percent Finer	100.0				% Passing	1		D422	Total/NA
Silt	60.8				%	1		D422	Total/NA
Clay	23.0				%	1		D422	Total/NA
Sieve Size #4 - Percent Finer	99.8				% Passing	1		D422	Total/NA
Sieve Size #10 - Percent Finer	98.6				% Passing	1		D422	Total/NA
Sieve Size #20 - Percent Finer	98.4				% Passing	1		D422	Total/NA
Sieve Size #40 - Percent Finer	97.6				% Passing	1		D422	Total/NA
Sieve Size #60 - Percent Finer	94.9				% Passing	1		D422	Total/NA
Sieve Size #80 - Percent Finer	93.0				% Passing	1		D422	Total/NA
Sieve Size #100 - Percent Finer	91.0				% Passing	1		D422	Total/NA
Sieve Size #200 - Percent Finer	83.8				% Passing	1		D422	Total/NA
Hydrometer Reading 1 - Percent Finer	58.8				% Passing	1		D422	Total/NA
Hydrometer Reading 2 - Percent Finer	48.4				% Passing	1		D422	Total/NA
Hydrometer Reading 3 - Percent Finer	38.0				% Passing	1		D422	Total/NA
Hydrometer Reading 4 - Percent Finer	31.4				% Passing	1		D422	Total/NA
Hydrometer Reading 5 - Percent Finer	23.0				% Passing	1		D422	Total/NA
Hydrometer Reading 6 - Percent Finer	14.4				% Passing	1		D422	Total/NA
Hydrometer Reading 7 - Percent Finer	10.1				% Passing	1		D422	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Environment Testing Philadelphia, LLC

# Client Sample Results

Client: ST Hudson Engineers, Inc.  
Project/Site: South Jersey Port Corp, Camden NJ

Job ID: 630-32239-1

## Client Sample ID: C-5 GRAB

Date Collected: 04/27/22 09:32

Date Received: 04/28/22 06:50

## Lab Sample ID: 630-32239-1

Matrix: Sediment

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	57.0		0.1	0.1	%			05/10/22 06:22	1
Percent Solids	43.0		0.1	0.1	%			05/10/22 06:22	1

### Method: D2216-90 - Water (Moisture) Content

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Moisture Content	141.8				%			06/14/22 21:52	1

### Method: D422 - Grain Size

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.3				%			06/14/22 12:00	1
Sieve Size 3 inch - Percent Finer	100.0				% Passing			06/14/22 12:00	1
Sand	10.0				%			06/14/22 12:00	1
Sieve Size 2 inch - Percent Finer	100.0				% Passing			06/14/22 12:00	1
Coarse Sand	1.1				%			06/14/22 12:00	1
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing			06/14/22 12:00	1
Medium Sand	0.5				%			06/14/22 12:00	1
Sieve Size 1 inch - Percent Finer	100.0				% Passing			06/14/22 12:00	1
Fine Sand	8.4				%			06/14/22 12:00	1
Sieve Size 0.75 inch - Percent Finer	100.0				% Passing			06/14/22 12:00	1
Sieve Size 0.375 inch - Percent Finer	100.0				% Passing			06/14/22 12:00	1
Silt	62.5				%			06/14/22 12:00	1
Clay	27.2				%			06/14/22 12:00	1
Sieve Size #4 - Percent Finer	99.7				% Passing			06/14/22 12:00	1
Sieve Size #10 - Percent Finer	98.6				% Passing			06/14/22 12:00	1
Sieve Size #20 - Percent Finer	98.4				% Passing			06/14/22 12:00	1
Sieve Size #40 - Percent Finer	98.1				% Passing			06/14/22 12:00	1
Sieve Size #60 - Percent Finer	97.5				% Passing			06/14/22 12:00	1
Sieve Size #80 - Percent Finer	96.9				% Passing			06/14/22 12:00	1
Sieve Size #100 - Percent Finer	96.0				% Passing			06/14/22 12:00	1
Sieve Size #200 - Percent Finer	89.7				% Passing			06/14/22 12:00	1
Hydrometer Reading 1 - Percent Finer	63.5				% Passing			06/14/22 12:00	1
Hydrometer Reading 2 - Percent Finer	52.9				% Passing			06/14/22 12:00	1
Hydrometer Reading 3 - Percent Finer	40.8				% Passing			06/14/22 12:00	1
Hydrometer Reading 4 - Percent Finer	33.3				% Passing			06/14/22 12:00	1
Hydrometer Reading 5 - Percent Finer	27.2				% Passing			06/14/22 12:00	1
Hydrometer Reading 6 - Percent Finer	17.9				% Passing			06/14/22 12:00	1
Hydrometer Reading 7 - Percent Finer	13.4				% Passing			06/14/22 12:00	1

# Client Sample Results

Client: ST Hudson Engineers, Inc.  
Project/Site: South Jersey Port Corp, Camden NJ

Job ID: 630-32239-1

## **Client Sample ID: C-5 GRAB**

Date Collected: 04/27/22 09:32  
Date Received: 04/28/22 06:50

## **Lab Sample ID: 630-32239-1**

Matrix: Sediment  
Percent Solids: 43.0

### **General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	49000		2300	2300	mg/Kg	⊗		05/04/22 10:57	1

## **Client Sample ID: C-6 GRAB**

Date Collected: 04/27/22 10:06  
Date Received: 04/28/22 06:50

## **Lab Sample ID: 630-32239-2**

Matrix: Sediment

### **General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	53.2		0.1	0.1	%			05/10/22 06:22	1
Percent Solids	46.8		0.1	0.1	%			05/10/22 06:22	1

### **Method: D2216-90 - Water (Moisture) Content**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Moisture Content	132.7				%			06/14/22 21:52	1

### **Method: D422 - Grain Size**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.2				%			06/14/22 21:56	1
Sieve Size 3 inch - Percent Finer	100.0				% Passing			06/14/22 21:56	1
Sand	20.5				%			06/14/22 21:56	1
Sieve Size 2 inch - Percent Finer	100.0				% Passing			06/14/22 21:56	1
Coarse Sand	1.7				%			06/14/22 21:56	1
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing			06/14/22 21:56	1
Medium Sand	1.9				%			06/14/22 21:56	1
Sieve Size 1 inch - Percent Finer	100.0				% Passing			06/14/22 21:56	1
Fine Sand	16.9				%			06/14/22 21:56	1
Sieve Size 0.75 inch - Percent Finer	100.0				% Passing			06/14/22 21:56	1
Sieve Size 0.375 inch - Percent Finer	100.0				% Passing			06/14/22 21:56	1
Silt	56.9				%			06/14/22 21:56	1
Clay	22.4				%			06/14/22 21:56	1
Sieve Size #4 - Percent Finer	99.8				% Passing			06/14/22 21:56	1
Sieve Size #10 - Percent Finer	98.1				% Passing			06/14/22 21:56	1
Sieve Size #20 - Percent Finer	97.5				% Passing			06/14/22 21:56	1
Sieve Size #40 - Percent Finer	96.2				% Passing			06/14/22 21:56	1
Sieve Size #60 - Percent Finer	91.9				% Passing			06/14/22 21:56	1
Sieve Size #80 - Percent Finer	88.4				% Passing			06/14/22 21:56	1
Sieve Size #100 - Percent Finer	87.0				% Passing			06/14/22 21:56	1
Sieve Size #200 - Percent Finer	79.3				% Passing			06/14/22 21:56	1
Hydrometer Reading 1 - Percent Finer	60.7				% Passing			06/14/22 21:56	1
Hydrometer Reading 2 - Percent Finer	48.8				% Passing			06/14/22 21:56	1
Hydrometer Reading 3 - Percent Finer	43.5				% Passing			06/14/22 21:56	1
Hydrometer Reading 4 - Percent Finer	27.7				% Passing			06/14/22 21:56	1
Hydrometer Reading 5 - Percent Finer	22.4				% Passing			06/14/22 21:56	1
Hydrometer Reading 6 - Percent Finer	14.3				% Passing			06/14/22 21:56	1

# Client Sample Results

Client: ST Hudson Engineers, Inc.  
 Project/Site: South Jersey Port Corp, Camden NJ

Job ID: 630-32239-1

## Client Sample ID: C-6 GRAB

Lab Sample ID: 630-32239-2

Date Collected: 04/27/22 10:06  
 Date Received: 04/28/22 06:50

Matrix: Sediment

### Method: D422 - Grain Size (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hydrometer Reading 7 - Percent	10.3				% Passing			06/14/22 21:56	1
Finer									

## Client Sample ID: C-6 GRAB

Lab Sample ID: 630-32239-2

Date Collected: 04/27/22 10:06  
 Date Received: 04/28/22 06:50

Matrix: Sediment  
 Percent Solids: 46.8

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	47000		2100	2100	mg/Kg	☀		05/04/22 11:20	1

## Client Sample ID: SC-3 COMPOSITE (C5 + C6)

Lab Sample ID: 630-32239-3

Date Collected: 04/28/22 06:50  
 Date Received: 04/28/22 06:50

Matrix: Sediment  
 Percent Solids: 41.1

### Method: EPA 8270E LL - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.20	U	0.20	0.074	mg/Kg	☀	05/10/22 19:55	05/13/22 23:25	5
1,2-Dichlorobenzene	0.20	U	0.20	0.065	mg/Kg	☀	05/10/22 19:55	05/13/22 23:25	5
1,2,4,5-Tetrachlorobenzene	200	U	200	80	ug/Kg	☀	05/10/22 19:55	05/13/22 23:25	5
1,3-Dichlorobenzene	0.20	U	0.20	0.067	mg/Kg	☀	05/10/22 19:55	05/13/22 23:25	5
1,4-Dichlorobenzene	0.20	U	0.20	0.074	mg/Kg	☀	05/10/22 19:55	05/13/22 23:25	5
1,4-Dioxane	0.40	U	0.40	0.063	mg/Kg	☀	05/10/22 19:55	05/13/22 23:25	5
1,2-Diphenylhydrazine(as Azobenzene)	0.20	U	0.20	0.090	mg/Kg	☀	05/10/22 19:55	05/13/22 23:25	5
1,2,4-Trichlorobenzene	0.20	U	0.20	0.061	mg/Kg	☀	05/10/22 19:55	05/13/22 23:25	5
2-Chloronaphthalene	0.041	U	0.041	0.0093	mg/Kg	☀	05/10/22 19:55	05/13/22 23:25	5
2-Chlorophenol	0.20	U	0.20	0.074	mg/Kg	☀	05/10/22 19:55	05/13/22 23:25	5
2,3,4,6-Tetrachlorophenol	200	U	200	84	ug/Kg	☀	05/10/22 19:55	05/13/22 23:25	5
2,4-Dichlorophenol	0.041	U	0.041	0.016	mg/Kg	☀	05/10/22 19:55	05/13/22 23:25	5
2,4-Dimethylphenol	0.20	U	0.20	0.068	mg/Kg	☀	05/10/22 19:55	05/13/22 23:25	5
2,4-Dinitrophenol	2.0	U	2.0	1.3	mg/Kg	☀	05/10/22 19:55	05/13/22 23:25	5
2,4-Dinitrotoluene	0.20	U	0.20	0.12	mg/Kg	☀	05/10/22 19:55	05/13/22 23:25	5
2,6-Dinitrotoluene	0.20	U	0.20	0.078	mg/Kg	☀	05/10/22 19:55	05/13/22 23:25	5
<b>2-Methylnaphthalene</b>	<b>0.025</b>	<b>J</b>	0.041	0.0097	mg/Kg	☀	05/10/22 19:55	05/13/22 23:25	5
2-Methylphenol	0.20	U	0.20	0.058	mg/Kg	☀	05/10/22 19:55	05/13/22 23:25	5
Methylphenol, 3 & 4	0.20	U	0.20	0.059	mg/Kg	☀	05/10/22 19:55	05/13/22 23:25	5
2-Nitroaniline	1.0	U	1.0	0.092	mg/Kg	☀	05/10/22 19:55	05/13/22 23:25	5
3-Nitroaniline	1.0	U	1.0	0.051	mg/Kg	☀	05/10/22 19:55	05/13/22 23:25	5
4-Nitroaniline	1.0	U	1.0	0.075	mg/Kg	☀	05/10/22 19:55	05/13/22 23:25	5
2-Nitrophenol	0.20	U	0.20	0.074	mg/Kg	☀	05/10/22 19:55	05/13/22 23:25	5
4-Nitrophenol	1.0	U	1.0	0.14	mg/Kg	☀	05/10/22 19:55	05/13/22 23:25	5
2,2'-Oxybis[1-chloropropane]	0.041	U	0.041	0.015	mg/Kg	☀	05/10/22 19:55	05/13/22 23:25	5
2,4,5-Trichlorophenol	0.20	U	0.20	0.070	mg/Kg	☀	05/10/22 19:55	05/13/22 23:25	5
2,4,6-Trichlorophenol	0.20	U	0.20	0.067	mg/Kg	☀	05/10/22 19:55	05/13/22 23:25	5
4-Chloro-3-methylphenol	0.20	U	0.20	0.071	mg/Kg	☀	05/10/22 19:55	05/13/22 23:25	5
4-Chlorophenyl phenyl ether	0.20	U	0.20	0.067	mg/Kg	☀	05/10/22 19:55	05/13/22 23:25	5
4,6-Dinitro-2-methylphenol	1.0	U	1.0	0.35	mg/Kg	☀	05/10/22 19:55	05/13/22 23:25	5
Cresols, Total	0.40	U	0.40	0.11	mg/Kg	☀	05/10/22 19:55	05/13/22 23:25	5
<b>Acenaphthene</b>	<b>0.026</b>	<b>J</b>	0.041	0.012	mg/Kg	☀	05/10/22 19:55	05/13/22 23:25	5
<b>Acenaphthylene</b>	<b>0.044</b>		0.041	0.0088	mg/Kg	☀	05/10/22 19:55	05/13/22 23:25	5





## Client Sample Results

Client: ST Hudson Engineers, Inc.

Job ID: 630-32239-1

Project/Site: South Jersey Port Corp, Camden NJ

### Client Sample ID: SC-3 COMPOSITE (C5 + C6)

Lab Sample ID: 630-32239-3

Matrix: Sediment

Percent Solids: 41.1

Date Collected: 04/28/22 06:50

Date Received: 04/28/22 06:50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene (Surr) (1C)	66		33 - 126	05/04/22 20:32	05/11/22 16:38	1
Tetrachloro-m-xylene (Surr) (2C)	59		33 - 126	05/04/22 20:32	05/11/22 16:38	1
DCB Decachlorobiphenyl (Surr) (1C)	1391	S1+	26 - 170	05/04/22 20:32	05/11/22 16:38	1
DCB Decachlorobiphenyl (Surr) (2C)	1613	S1+	26 - 170	05/04/22 20:32	05/11/22 16:38	1

### Method: EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	11000	^2	7.2	5.1	mg/Kg	☀	05/18/22 09:29	05/25/22 01:06	1
Arsenic	8.1		0.12	0.069	mg/Kg	☀	05/18/22 09:29	05/25/22 01:06	1
Barium	150		1.2	0.73	mg/Kg	☀	05/18/22 09:29	05/25/22 01:06	1
Antimony	0.56		0.24	0.13	mg/Kg	☀	05/18/22 09:29	05/25/22 01:06	1
Beryllium	1.2		0.12	0.086	mg/Kg	☀	05/18/22 09:29	05/25/22 01:06	1
Cadmium	1.6		0.12	0.067	mg/Kg	☀	05/18/22 09:29	05/25/22 01:06	1
Calcium	3700		60	24	mg/Kg	☀	05/18/22 09:29	05/25/22 01:06	1
Chromium	31		0.24	0.21	mg/Kg	☀	05/18/22 09:29	05/25/22 01:06	1
Cobalt	15		0.060	0.043	mg/Kg	☀	05/18/22 09:29	05/25/22 01:06	1
Copper	40		0.36	0.25	mg/Kg	☀	05/18/22 09:29	05/25/22 01:06	1
Magnesium	3700		60	5.4	mg/Kg	☀	05/18/22 09:29	05/25/22 01:06	1
Manganese	1700	^2	0.60	0.51	mg/Kg	☀	05/18/22 09:29	05/25/22 01:06	1
Iron	26000	^2	6.0	5.7	mg/Kg	☀	05/18/22 09:29	05/25/22 01:06	1
Lead	55		0.12	0.079	mg/Kg	☀	05/18/22 09:29	05/25/22 01:06	1
Potassium	1300		60	17	mg/Kg	☀	05/18/22 09:29	05/25/22 01:06	1
Nickel	24		0.12	0.11	mg/Kg	☀	05/18/22 09:29	05/25/22 01:06	1
Selenium	1.1		0.60	0.15	mg/Kg	☀	05/18/22 09:29	05/25/22 01:06	1
Sodium	130		60	31	mg/Kg	☀	05/18/22 09:29	05/25/22 01:06	1
Silver	0.31		0.12	0.033	mg/Kg	☀	05/18/22 09:29	05/25/22 01:06	1
Thallium	0.15		0.12	0.083	mg/Kg	☀	05/18/22 09:29	05/25/22 01:06	1
Vanadium	26		0.12	0.11	mg/Kg	☀	05/18/22 09:29	05/25/22 01:06	1
Zinc	270		0.60	0.57	mg/Kg	☀	05/18/22 09:29	05/25/22 01:06	1

### Method: EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20		0.034	0.022	mg/Kg	☀	05/25/22 06:50	05/25/22 16:01	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	58.9		0.1	0.1	%			05/10/22 06:22	1
Percent Solids	41.1		0.1	0.1	%			05/10/22 06:22	1
Cr (III)	31		0.50	0.21	mg/Kg			05/26/22 14:15	1
Cr (VI)	2.0	U	2.0	1.0	mg/Kg	☀	05/16/22 11:38	05/19/22 14:42	2
Cyanide, Total	5.2		0.44	0.34	mg/Kg	☀	05/09/22 12:00	05/10/22 13:20	1
Total Organic Carbon - Duplicates	54000		2400	2400	mg/Kg	☀		05/10/22 20:00	1

### Method: D2216-90 - Water (Moisture) Content

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Moisture Content	137.2			%				06/14/22 21:52	1

### Method: D422 - Grain Size

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.2			%				06/14/22 21:58	1
Sieve Size 3 inch - Percent Finer	100.0			% Passing				06/14/22 21:58	1

Eurofins Environment Testing Philadelphia, LLC

# Client Sample Results

Client: ST Hudson Engineers, Inc.

Job ID: 630-32239-1

Project/Site: South Jersey Port Corp, Camden NJ

**Client Sample ID: SC-3 COMPOSITE (C5 + C6)**

**Lab Sample ID: 630-32239-3**

Date Collected: 04/28/22 06:50

Matrix: Sediment

Date Received: 04/28/22 06:50

Percent Solids: 41.1

**Method: D422 - Grain Size (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sand	16.0				%			06/14/22 21:58	1
Sieve Size 2 inch - Percent Finer	100.0				% Passing			06/14/22 21:58	1
Coarse Sand	1.2				%			06/14/22 21:58	1
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing			06/14/22 21:58	1
Medium Sand	1.0				%			06/14/22 21:58	1
Sieve Size 1 inch - Percent Finer	100.0				% Passing			06/14/22 21:58	1
Fine Sand	13.8				%			06/14/22 21:58	1
Sieve Size 0.75 inch - Percent Finer	100.0				% Passing			06/14/22 21:58	1
Finer									1
Sieve Size 0.375 inch - Percent Finer	100.0				% Passing			06/14/22 21:58	1
Finer									1
Silt	60.8				%			06/14/22 21:58	1
Clay	23.0				%			06/14/22 21:58	1
Sieve Size #4 - Percent Finer	99.8				% Passing			06/14/22 21:58	1
Sieve Size #10 - Percent Finer	98.6				% Passing			06/14/22 21:58	1
Sieve Size #20 - Percent Finer	98.4				% Passing			06/14/22 21:58	1
Sieve Size #40 - Percent Finer	97.6				% Passing			06/14/22 21:58	1
Sieve Size #60 - Percent Finer	94.9				% Passing			06/14/22 21:58	1
Sieve Size #80 - Percent Finer	93.0				% Passing			06/14/22 21:58	1
Sieve Size #100 - Percent Finer	91.0				% Passing			06/14/22 21:58	1
Sieve Size #200 - Percent Finer	83.8				% Passing			06/14/22 21:58	1
Hydrometer Reading 1 - Percent Finer	58.8				% Passing			06/14/22 21:58	1
Hydrometer Reading 2 - Percent Finer	48.4				% Passing			06/14/22 21:58	1
Hydrometer Reading 3 - Percent Finer	38.0				% Passing			06/14/22 21:58	1
Hydrometer Reading 4 - Percent Finer	31.4				% Passing			06/14/22 21:58	1
Hydrometer Reading 5 - Percent Finer	23.0				% Passing			06/14/22 21:58	1
Hydrometer Reading 6 - Percent Finer	14.4				% Passing			06/14/22 21:58	1
Hydrometer Reading 7 - Percent Finer	10.1				% Passing			06/14/22 21:58	1

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## Particle Size of Soils by ASTM D422

Sample ID: C-5 GRAB  
 Lab ID: 630-32239-A-1

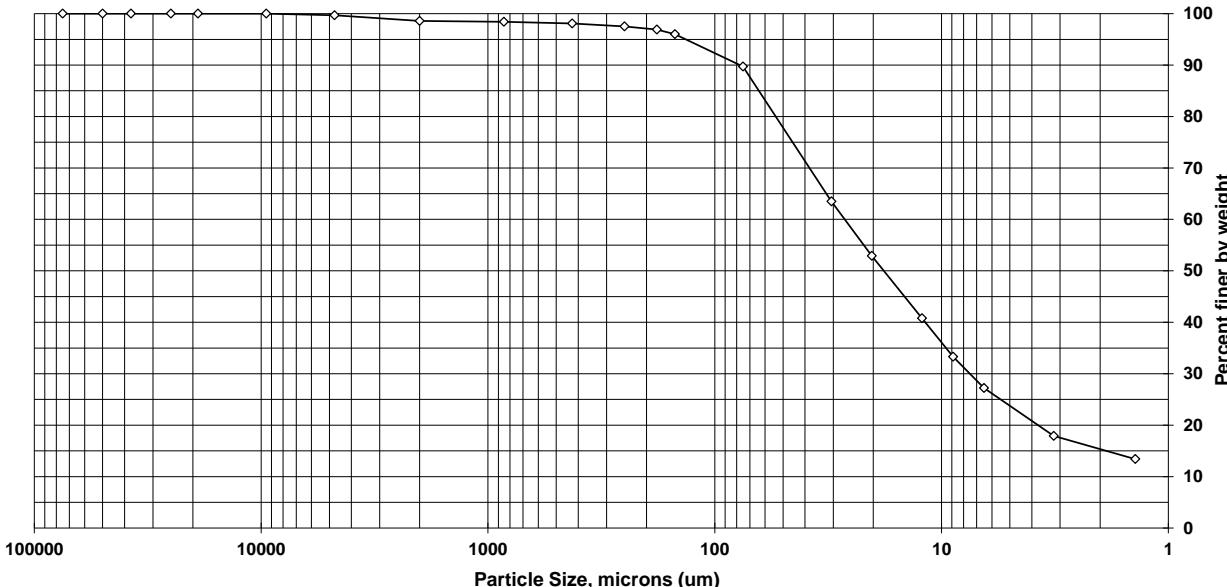
Percent Solids: 41.4%  
 Specific Gravity: 2.650

Date Received: 4/28/2022  
 Start Date: 6/14/2022  
 End Date: 6/22/2022

Shape (> #10): na

Non-soil material: plant

Hardness (> #10): na



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	99.7	0.3
#10	2000	98.6	1.1
#20	850	98.4	0.2
#40	425	98.1	0.3
#60	250	97.5	0.6
#80	180	96.9	0.6
#100	150	96.0	0.9
#200	75	89.7	6.3
Hyd1	30.6	63.5	26.2
Hyd2	20.3	52.9	10.6
Hyd3	12.2	40.8	12.1
Hyd4	8.9	33.3	7.5
Hyd5	6.5	27.2	6.1
Hyd6	3.2	17.9	9.3
Hyd7	1.4	13.4	4.5

Soil Classification	Percent of sample
Gravel	0.3
Sand	10.0
Coarse Sand	1.1
Medium Sand	0.5
Fine Sand	8.4
Silt	62.5
Clay	27.2

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## Particle Size of Soils by ASTM D422

Sample ID: C-6 GRAB  
 Lab ID: 630-32239-A-2

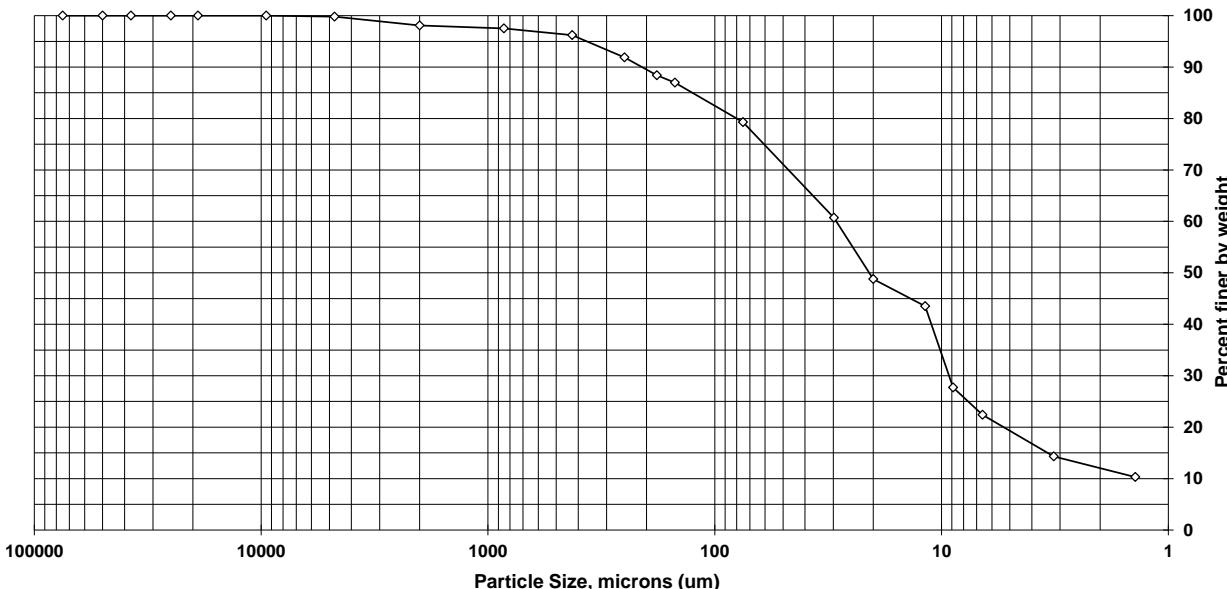
Percent Solids: 43.0%  
 Specific Gravity: 2.650

Date Received: 4/28/2022  
 Start Date: 6/14/2022  
 End Date: 6/22/2022

Shape (> #10): na

Non-soil material: plant

Hardness (> #10): na



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	99.8	0.2
#10	2000	98.1	1.7
#20	850	97.5	0.6
#40	425	96.2	1.3
#60	250	91.9	4.3
#80	180	88.4	3.5
#100	150	87.0	1.4
#200	75	79.3	7.7
Hyd1	29.8	60.7	18.6
Hyd2	20	48.8	11.9
Hyd3	11.8	43.5	5.3
Hyd4	8.9	27.7	15.8
Hyd5	6.6	22.4	5.3
Hyd6	3.2	14.3	8.1
Hyd7	1.4	10.3	4.0

Soil Classification	Percent of sample
Gravel	0.2
Sand	20.5
Coarse Sand	1.7
Medium Sand	1.9
Fine Sand	16.9
Silt	56.9
Clay	22.4

1  
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15

## Particle Size of Soils by ASTM D422

Sample ID: SC-3 COMPOSITE (C5 +  
Lab ID: 630-32239-A-3

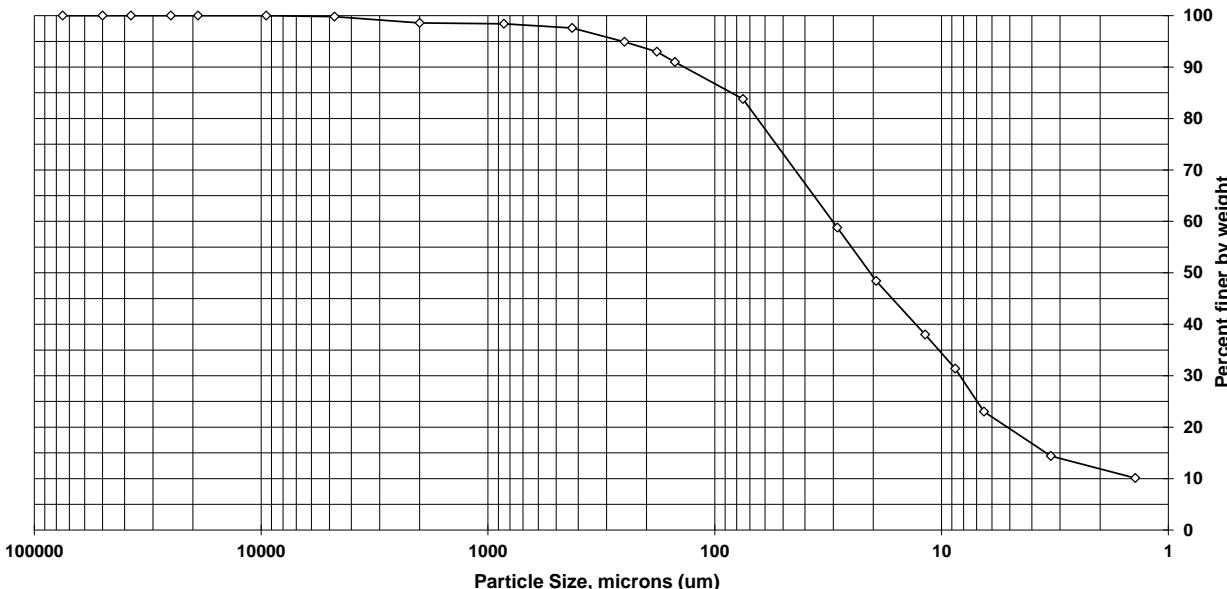
Percent Solids: 42.2%  
Specific Gravity: 2.650

Date Received: 4/28/2022  
Start Date: 6/14/2022  
End Date: 6/22/2022

Shape (> #10): na

Non-soil material: plant

Hardness (> #10): na



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	99.8	0.2
#10	2000	98.6	1.2
#20	850	98.4	0.2
#40	425	97.6	0.8
#60	250	94.9	2.7
#80	180	93.0	1.9
#100	150	91.0	2.0
#200	75	83.8	7.2
Hyd1	28.8	58.8	25.0
Hyd2	19.4	48.4	10.4
Hyd3	11.8	38.0	10.4
Hyd4	8.7	31.4	6.6
Hyd5	6.5	23.0	8.4
Hyd6	3.3	14.4	8.6
Hyd7	1.4	10.1	4.3

Soil Classification	Percent of sample
Gravel	0.2
Sand	16.0
Coarse Sand	1.2
Medium Sand	1.0
Fine Sand	13.8
Silt	60.8
Clay	23.0

# TestAmerica Burlington

**Sediment Grain Size - D422**

Client	
Client Sample ID	C-5 GRAB
Lab Sample ID	630-32239-A-1

Date Received	4/28/2022
Start Date	06/14/2022 12:00
End Date	06/22/2022 13:56

**Dry Weight Determination**

Tin Weight	1.06 g
Wet Sample + Tin	35.11 g
Dry Sample + Tin	15.14 g
% Moisture	58.65 %

Non-soil material:	plant
Shape (> #10):	na
Hardness (> #10):	na
Date/Time in oven	06/14/2022 21:55
Date/Time out of oven	06/15/2022 15:40

Sample Weights	Tare (g)	Pan+Samp (g)	Samp (g)
Sample Weight (Wet)	47.90	176.39	128.49
Sample Weight (Oven Dried)			53.1

Hydrometer Data	
Serial Number	542325
Calib. Date (mm/dd/yyyy)	12/10/2021
Low Temp (C)	17.0
Reading at Low Temp	1.0030
High Temp (C)	23.0
Reading at High Temp	1.0020
Hydrometer Cal Slope	-0.000166667
Hydrometer Cal Intercept	1.005833333
Default Soil Gravity	2.6500

Sample Split (oven dried)	Tare (g)	Pan+Samp (g)	Samp (g)
Sample >=#10			0.72
Sample <#10			52.4
% Passing #10			40.8

**Gravel/Sand Fraction (Sieves)**

Sample Fraction	Size (um)	Pan Tare (g)	Pan+Sample (g)	Sample	% Finer	Classification	Sub Class
3 inch	75000			0.00 g	100.0	Gravel	
2 inch	50000			0.00 g	100.0	Gravel	
1.5 inch	37500			0.00 g	100.0	Gravel	
1 inch	25000			0.00 g	100.0	Gravel	
3/4 inch	19000			0.00 g	100.0	Gravel	
3/8 inch	9500			0.00 g	100.0	Gravel	
#4	4750	488.01	488.15	0.14 g	99.7	Gravel	
#10	2000	462.62	463.20	0.58 g	98.6	Sand	Coarse
#20	850	377.56	377.67	0.11 g	98.4	Sand	Medium
#40	425	365.73	365.91	0.18 g	98.1	Sand	Medium
#60	250	347.79	348.11	0.32 g	97.5	Sand	Fine
#80	180	336.89	337.22	0.33 g	96.9	Sand	Fine
#100	150	327.20	327.67	0.47 g	96.0	Sand	Fine
#200	75	312.25	315.60	3.35 g	89.7	Sand	Fine
				0.00 g	89.7		

**Adjusted Hydrometer Sample Mass**

Hydrometer Sample Mass (g)	53.1
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**Silt/Clay Fraction (Hydrometer Test)**

Hydrometer Test Time (min)	Actual	Spec. Gravity	Temp C	Particle Size (Micron)	% Finer	Classification	Sub Class
2	2	1.0235	20.0	30.6	63.5	Silt	
5	5	1.0200	20.0	20.3	52.9	Silt	
15	15	1.0160	20.0	12.2	40.8	Silt	
30	30	1.0135	20.0	8.9	33.3	Silt	
60	59	1.0115	20.0	6.5	27.2	Silt	
250	256	1.0085	19.5	3.2	17.9	Clay	
1440	1440	1.0070	19.5	1.4	13.4	Clay	

# TestAmerica Burlington

**Sediment Grain Size - D422**

Client	
Client Sample ID	C-6 GRAB
Lab Sample ID	630-32239-A-2

Date Received	4/28/2022
Start Date	06/14/2022 21:56
End Date	06/22/2022 14:04

**Dry Weight Determination**

Tin Weight	1.06 g
Wet Sample + Tin	29.71 g
Dry Sample + Tin	13.37 g
% Moisture	57.03 %

Non-soil material:	plant
Shape (> #10):	na
Hardness (> #10):	na
Date/Time in oven	06/14/2022 21:57
Date/Time out of oven	06/15/2022 15:40

Sample Weights	Tare (g)	Pan+Samp (g)	Samp (g)
Sample Weight (Wet)	44.64	186.31	141.67
Sample Weight (Oven Dried)			60.9

Hydrometer Data	
Serial Number	542325
Calib. Date (mm/dd/yyyy)	12/10/2021
Low Temp (C)	17.0
Reading at Low Temp	1.0030
High Temp (C)	23.0
Reading at High Temp	1.0020
Hydrometer Cal Slope	-0.000166667
Hydrometer Cal Intercept	1.005833333
Default Soil Gravity	2.6500

**Gravel/Sand Fraction (Sieves)**

Sample Fraction	Size (um)	Pan Tare (g)	Pan+Sample (g)	Sample	% Finer	Classification	Sub Class
3 inch	75000			0.00 g	100.0	Gravel	
2 inch	50000			0.00 g	100.0	Gravel	
1.5 inch	37500			0.00 g	100.0	Gravel	
1 inch	25000			0.00 g	100.0	Gravel	
3/4 inch	19000			0.00 g	100.0	Gravel	
3/8 inch	9500			0.00 g	100.0	Gravel	
#4	4750	488.01	488.15	0.14 g	99.8	Gravel	
#10	2000	462.62	463.65	1.03 g	98.1	Sand	Coarse
#20	850	373.01	373.38	0.37 g	97.5	Sand	Medium
#40	425	361.15	361.94	0.79 g	96.2	Sand	Medium
#60	250	351.40	354.01	2.61 g	91.9	Sand	Fine
#80	180	318.54	320.69	2.15 g	88.4	Sand	Fine
#100	150	327.74	328.57	0.83 g	87.0	Sand	Fine
#200	75	313.63	318.31	4.68 g	79.3	Sand	Fine
				0.00 g	79.3		

**Adjusted Hydrometer Sample Mass**

Hydrometer Sample Mass (g)	60.9
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**Silt/Clay Fraction (Hydrometer Test)**

Hydrometer Test Time (min)	Actual	Spec. Gravity	Temp C	Particle Size (Micron)	% Finer	Classification	Sub Class
2	2	1.0255	20.0	29.8	60.7	Silt	
5	5	1.0210	20.0	20	48.8	Silt	
15	15	1.0190	20.0	11.8	43.5	Silt	
30	30	1.0130	20.0	8.9	27.7	Silt	
60	58	1.0110	20.0	6.6	22.4	Silt	
250	256	1.0080	19.5	3.2	14.3	Clay	
1440	1440	1.0065	19.4	1.4	10.3	Clay	

# TestAmerica Burlington

**Sediment Grain Size - D422**

Client  
Client Sample ID SC-3 COMPOSITE (C5 +  
Lab Sample ID 630-32239-A-3

Date Received 4/28/2022  
Start Date 06/14/2022 21:58  
End Date 06/22/2022 14:14

**Dry Weight Determination**

Tin Weight	1.03 g
Wet Sample + Tin	48.11 g
Dry Sample + Tin	20.88 g
% Moisture	57.84 %

Non-soil material: plant  
Shape (> #10): na  
Hardness (> #10): na

**Sample Weights**

Tare (g)	Pan+Samp (g)	Samp (g)
Sample Weight (Wet)	44.06	209.34
Sample Weight (Oven Dried)		165.28

Date/Time in oven 06/14/2022 22:00  
Date/Time out of oven 06/15/2022 15:40

**Sample Split (oven dried)**

Tare (g)	Pan+Samp (g)	Samp (g)
Sample >=#10		0.96
Sample <#10		68.7
% Passing #10		41.6

**Hydrometer Data**

Serial Number	542325
Calib. Date (mm/dd/yyyy)	12/10/2021
Low Temp (C)	17.0
Reading at Low Temp	1.0030
High Temp (C)	23.0
Reading at High Temp	1.0020
Hydrometer Cal Slope	-0.000166667
Hydrometer Cal Intercept	1.005833333
Default Soil Gravity	2.6500

**Gravel/Sand Fraction (Sieves)**

Sample Fraction	Size (um)	Pan Tare (g)	Pan+Sample (g)	Sample	% Finer	Classification	Sub Class
3 inch	75000			0.00 g	100.0	Gravel	
2 inch	50000			0.00 g	100.0	Gravel	
1.5 inch	37500			0.00 g	100.0	Gravel	
1 inch	25000			0.00 g	100.0	Gravel	
3/4 inch	19000			0.00 g	100.0	Gravel	
3/8 inch	9500			0.00 g	100.0	Gravel	
#4	4750	488.01	488.12	0.11 g	99.8	Gravel	
#10	2000	462.62	463.47	0.85 g	98.6	Sand	Coarse
#20	850	377.56	377.69	0.13 g	98.4	Sand	Medium
#40	425	365.73	366.27	0.54 g	97.6	Sand	Medium
#60	250	347.79	349.70	1.91 g	94.9	Sand	Fine
#80	180	336.89	338.23	1.34 g	93.0	Sand	Fine
#100	150	327.20	328.57	1.37 g	91.0	Sand	Fine
#200	75	312.25	317.27	5.02 g	83.8	Sand	Fine
				0.00 g	83.8		

**Adjusted Hydrometer Sample Mass**

Hydrometer Sample Mass (g) 69.7

**Silt/Clay Fraction (Hydrometer Test)**

Hydrometer Test Time (min)	Actual	Spec. Gravity	Temp C	Particle Size (Micron)	% Finer	Classification	Sub Class
2	2	1.0280	20.0	28.8	58.8	Silt	
5	5	1.0235	20.0	19.4	48.4	Silt	
15	15	1.0190	20.0	11.8	38	Silt	
30	29	1.0160	20.7	8.7	31.4	Silt	
60	58	1.0125	20.0	6.5	23	Silt	
250	250	1.0090	18.5	3.3	14.4	Clay	
1440	1434	1.0070	19.4	1.4	10.1	Clay	

## Surrogate Summary

Client: ST Hudson Engineers, Inc.

Job ID: 630-32239-1

Project/Site: South Jersey Port Corp, Camden NJ

### Method: EPA 8270E LL - Semivolatile Organic Compounds (GC/MS)

Matrix: Sediment

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		FBP (35-105)	2FP (32-105)	TBP (20-119)	NBZ (34-109)	PHL (34-105)	TPHL (20-117)
630-32239-3	SC-3 COMPOSITE (C5 + C6)	41	37	38	41	40	40
LCS 180-398304/2-A	Lab Control Sample	69	78	83	76	71	82
MB 180-398304/1-A	Method Blank	73	87	83	82	74	88

#### Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)

2FP = 2-Fluorophenol (Surr)

TBP = 2,4,6-Tribromophenol (Surr)

NBZ = Nitrobenzene-d5 (Surr)

PHL = Phenol-d5 (Surr)

TPHL = Terphenyl-d14 (Surr)

### Method: EPA 8081B LL - Organochlorine Pesticides (GC)

Matrix: Sediment

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TCX1 (10-105)	TCX2 (10-105)	DCB1 (25-107)	DCB2 (25-107)
630-32239-3	SC-3 COMPOSITE (C5 + C6)	31	30	91	133 S1+
LCS 180-397409/2-B	Lab Control Sample	54	49	79	75
MB 180-397409/1-B	Method Blank	62	56	88	81

#### Surrogate Legend

TCX = Tetrachloro-m-xylene (Surr)

DCB = DCB Decachlorobiphenyl (Surr)

### Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) (GC)

Matrix: Sediment

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TCX1 (33-126)	TCX2 (33-126)	DCB1 (26-170)	DCB2 (26-170)
630-32239-3	SC-3 COMPOSITE (C5 + C6)	66	59	1391 S1+	1613 S1+
LCS 180-397683/2-C	Lab Control Sample	88	75	88	92
MB 180-397683/1-C	Method Blank	89	80	81	83

#### Surrogate Legend

TCX = Tetrachloro-m-xylene (Surr)

DCB = DCB Decachlorobiphenyl (Surr)





# QC Sample Results

Client: ST Hudson Engineers, Inc.

Project/Site: South Jersey Port Corp, Camden NJ

Job ID: 630-32239-1

## **Method: EPA 8270E LL - Semivolatile Organic Compounds (GC/MS) (Continued)**

**Lab Sample ID: LCS 180-398304/2-A****Matrix: Sediment****Analysis Batch: 398523****Client Sample ID: Lab Control Sample****Prep Type: Total/NA****Prep Batch: 398304**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1,2,4,5-Tetrachlorobenzene	667	439		ug/Kg	66	40 - 103	
1,3-Dichlorobenzene	0.667	0.487		mg/Kg	73	41 - 100	
1,4-Dichlorobenzene	0.667	0.479		mg/Kg	72	41 - 100	
1,4-Dioxane	0.667	0.536		mg/Kg	80	10 - 133	
1,2-Diphenylhydrazine(as Azobenzene)	0.667	0.517		mg/Kg	78	39 - 111	
1,2,4-Trichlorobenzene	0.667	0.487		mg/Kg	73	44 - 100	
2-Chloronaphthalene	0.667	0.450		mg/Kg	68	47 - 100	
2-Chlorophenol	0.667	0.483		mg/Kg	72	43 - 100	
2,3,4,6-Tetrachlorophenol	667	509		ug/Kg	76	43 - 107	
2,4-Dichlorophenol	0.667	0.525		mg/Kg	79	48 - 101	
2,4-Dimethylphenol	0.667	0.517		mg/Kg	78	46 - 103	
2,4-Dinitrophenol	1.33	0.636		mg/Kg	48	31 - 112	
2,4-Dinitrotoluene	0.667	0.520		mg/Kg	78	48 - 106	
2,6-Dinitrotoluene	0.667	0.534		mg/Kg	80	48 - 109	
2-Methylnaphthalene	0.667	0.456		mg/Kg	68	44 - 100	
2-Methylphenol	0.667	0.475		mg/Kg	71	43 - 101	
Methylphenol, 3 & 4	0.667	0.468		mg/Kg	70	43 - 104	
2-Nitroaniline	0.667	0.514		mg/Kg	77	40 - 122	
3-Nitroaniline	0.667	0.507		mg/Kg	76	39 - 107	
4-Nitroaniline	0.667	0.495		mg/Kg	74	41 - 110	
2-Nitrophenol	0.667	0.540		mg/Kg	81	48 - 108	
4-Nitrophenol	1.33	1.07		mg/Kg	81	33 - 131	
2,2'-oxybis[1-chloropropane]	0.667	0.315		mg/Kg	47	33 - 101	
2,4,5-Trichlorophenol	0.667	0.490		mg/Kg	73	47 - 108	
2,4,6-Trichlorophenol	0.667	0.500		mg/Kg	75	47 - 108	
4-Chloro-3-methylphenol	0.667	0.518		mg/Kg	78	47 - 108	
4-Chlorophenyl phenyl ether	0.667	0.441		mg/Kg	66	45 - 100	
4,6-Dinitro-2-methylphenol	1.33	1.08		mg/Kg	81	47 - 104	
Cresols, Total	1.33	0.943		mg/Kg	71	43 - 102	
Acenaphthene	0.667	0.473		mg/Kg	71	41 - 100	
Acenaphthylene	0.667	0.460		mg/Kg	69	45 - 100	
Acetophenone	0.667	0.457		mg/Kg	69	40 - 100	
Aniline	0.667	0.445		mg/Kg	67	36 - 100	
Anthracene	0.667	0.540		mg/Kg	81	47 - 100	
Atrazine	0.667	0.528		mg/Kg	79	46 - 102	
Benzaldehyde	0.667	0.508		mg/Kg	76	10 - 125	
Benzidine	0.667	0.67	U	mg/Kg	19	10 - 100	
Benzo[a]anthracene	0.667	0.511		mg/Kg	77	47 - 100	
Benzo[b]fluoranthene	0.667	0.386		mg/Kg	58	44 - 100	
Benzo[k]fluoranthene	0.667	0.380		mg/Kg	57	43 - 100	
Benzoic acid	0.667	0.174		mg/Kg	26	22 - 123	
Benzo[g,h,i]perylene	0.667	0.406		mg/Kg	61	45 - 103	
Benzo[a]pyrene	0.667	0.361		mg/Kg	54	45 - 101	
Bis(2-chloroethoxy)methane	0.667	0.434		mg/Kg	65	45 - 100	
Bis(2-chloroethyl)ether	0.667	0.419		mg/Kg	63	39 - 101	
Bis(2-ethylhexyl) phthalate	0.667	0.520		mg/Kg	78	45 - 109	
4-Bromophenyl phenyl ether	0.667	0.500		mg/Kg	75	17 - 104	
Butyl benzyl phthalate	0.667	0.553		mg/Kg	83	45 - 110	

Eurofins Environment Testing Philadelphia, LLC

**QC Sample Results**

Client: ST Hudson Engineers, Inc.

Job ID: 630-32239-1

Project/Site: South Jersey Port Corp, Camden NJ

**Method: EPA 8270E LL - Semivolatile Organic Compounds (GC/MS) (Continued)****Lab Sample ID: LCS 180-398304/2-A****Client Sample ID: Lab Control Sample****Matrix: Sediment****Prep Type: Total/NA****Analysis Batch: 398523****Prep Batch: 398304**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Caprolactam	0.667	0.506		mg/Kg	76	46 - 109	
Carbazole	0.667	0.539		mg/Kg	81	46 - 100	
4-Chloroaniline	0.667	0.462		mg/Kg	69	38 - 100	
Chrysene	0.667	0.493		mg/Kg	74	44 - 100	
Dibenz(a,h)anthracene	0.667	0.408		mg/Kg	61	46 - 107	
Dibenzofuran	0.667	0.470		mg/Kg	71	47 - 100	
Di-n-butyl phthalate	0.667	0.569		mg/Kg	85	50 - 105	
Di-n-octyl phthalate	0.667	0.391		mg/Kg	59	34 - 106	
Diethyl phthalate	0.667	0.484		mg/Kg	73	45 - 105	
Dimethyl phthalate	0.667	0.512		mg/Kg	77	46 - 101	
Fluoranthene	0.667	0.554		mg/Kg	83	49 - 102	
Fluorene	0.667	0.481		mg/Kg	72	46 - 100	
Hexachlorobenzene	0.667	0.466		mg/Kg	70	45 - 101	
Hexachlorobutadiene	0.667	0.459		mg/Kg	69	38 - 110	
Hexachlorocyclopentadiene	0.667	0.467		mg/Kg	70	31 - 116	
Hexachloroethane	0.667	0.480		mg/Kg	72	40 - 100	
Indeno[1,2,3-cd]pyrene	0.667	0.405		mg/Kg	61	48 - 104	
Isophorone	0.667	0.479		mg/Kg	72	46 - 105	
Naphthalene	0.667	0.482		mg/Kg	72	43 - 100	
Nitrobenzene	0.667	0.504		mg/Kg	76	43 - 107	
N-Nitrosodimethylamine	0.667	0.551		mg/Kg	83	29 - 121	
N-Nitrosodiphenylamine	0.667	0.519		mg/Kg	78	46 - 100	
N-Nitrosodi-n-propylamine	0.667	0.488		mg/Kg	73	40 - 109	
Pentachlorophenol	1.33	0.973		mg/Kg	73	34 - 112	
Phenanthrene	0.667	0.530		mg/Kg	80	46 - 100	
Phenol	0.667	0.470		mg/Kg	71	42 - 103	
Pyrene	0.667	0.525		mg/Kg	79	44 - 102	
Pyridine	1.33	1.02		mg/Kg	76	25 - 109	
Benzyl alcohol	0.667	0.464		mg/Kg	70	40 - 104	
3,3'-Dichlorobenzidine	0.667	0.452		mg/Kg	68	34 - 101	

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl (Surr)	69		35 - 105
2-Fluorophenol (Surr)	78		32 - 105
2,4,6-Tribromophenol (Surr)	83		20 - 119
Nitrobenzene-d5 (Surr)	76		34 - 109
Phenol-d5 (Surr)	71		34 - 105
Terphenyl-d14 (Surr)	82		20 - 117

**Method: EPA 8081B LL - Organochlorine Pesticides (GC)****Lab Sample ID: MB 180-397409/1-B****Client Sample ID: Method Blank****Matrix: Sediment****Prep Type: Total/NA****Analysis Batch: 399020****Prep Batch: 397409**

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Aldrin (1C)	0.000042	U	0.000042	0.000013	mg/Kg		05/03/22 01:43	05/17/22 10:57	1
alpha-BHC (1C)	0.000042	U	0.000042	0.000010	mg/Kg		05/03/22 01:43	05/17/22 10:57	1
beta-BHC (1C)	0.000042	U	0.000042	0.000011	mg/Kg		05/03/22 01:43	05/17/22 10:57	1

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# QC Sample Results

Client: ST Hudson Engineers, Inc.  
Project/Site: South Jersey Port Corp, Camden NJ

Job ID: 630-32239-1

## Method: EPA 8081B LL - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 180-397409/2-B

Matrix: Sediment

Analysis Batch: 399020

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 397409

Analyte	Spike		LCS Result	LCS Qualifier	Unit	D	%Rec	
	Added	%					D	%Rec
Endrin aldehyde (1C)	0.00167		0.000945		mg/Kg	57	27 - 124	
Endrin ketone (1C)	0.00167		0.00103		mg/Kg	62	46 - 128	
Heptachlor (1C)	0.00167		0.000845		mg/Kg	51	24 - 146	
Heptachlor epoxide (1C)	0.00167		0.000961		mg/Kg	58	25 - 142	
Methoxychlor (1C)	0.00167		0.000958		mg/Kg	57	31 - 136	

Surrogate	LCS		LCS		Limits
	%Recovery	Qualifier	Qualifer	Limits	
Tetrachloro-m-xylene (Surr) (1C)	54			10 - 105	
Tetrachloro-m-xylene (Surr) (2C)	49			10 - 105	
DCB Decachlorobiphenyl (Surr) (1C)	79			25 - 107	
DCB Decachlorobiphenyl (Surr) (2C)	75			25 - 107	

## Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) (GC)

Lab Sample ID: MB 180-397683/1-C

Matrix: Sediment

Analysis Batch: 398311

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 397683

Analyte	MB		MB		D	Prepared	Analyzed	Dil Fac
	Result	Qualifier	RL	MDL	Unit			
PCB-1016 (1C)	0.00042	U	0.00042	0.00014	mg/Kg	05/04/22 20:32	05/11/22 09:11	1
PCB-1221 (1C)	0.00042	U	0.00042	0.00015	mg/Kg	05/04/22 20:32	05/11/22 09:11	1
PCB-1232 (1C)	0.00042	U	0.00042	0.00010	mg/Kg	05/04/22 20:32	05/11/22 09:11	1
PCB-1242 (1C)	0.00042	U	0.00042	0.000061	mg/Kg	05/04/22 20:32	05/11/22 09:11	1
PCB-1248 (1C)	0.00042	U	0.00042	0.00010	mg/Kg	05/04/22 20:32	05/11/22 09:11	1
PCB-1254 (1C)	0.00042	U	0.00042	0.00013	mg/Kg	05/04/22 20:32	05/11/22 09:11	1
PCB-1260 (1C)	0.00042	U	0.00042	0.00012	mg/Kg	05/04/22 20:32	05/11/22 09:11	1

Surrogate	MB		MB		Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier	Qualifer	Limits			
Tetrachloro-m-xylene (Surr) (1C)	89			33 - 126	05/04/22 20:32	05/11/22 09:11	1
Tetrachloro-m-xylene (Surr) (2C)	80			33 - 126	05/04/22 20:32	05/11/22 09:11	1
DCB Decachlorobiphenyl (Surr) (1C)	81			26 - 170	05/04/22 20:32	05/11/22 09:11	1
DCB Decachlorobiphenyl (Surr) (2C)	83			26 - 170	05/04/22 20:32	05/11/22 09:11	1

Lab Sample ID: LCS 180-397683/2-C

Matrix: Sediment

Analysis Batch: 398311

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 397683

Analyte	Spike		LCS Result	LCS Qualifier	Unit	D	%Rec	
	Added	%					D	%Rec
PCB-1016 (1C)	0.0333		0.0219		mg/Kg	66	32 - 126	
PCB-1260 (1C)	0.0333		0.0319		mg/Kg	96	40 - 121	

Surrogate	LCS		LCS		Limits
	%Recovery	Qualifier	Qualifer	Limits	
Tetrachloro-m-xylene (Surr) (1C)	88			33 - 126	

# QC Sample Results

Client: ST Hudson Engineers, Inc.

Job ID: 630-32239-1

Project/Site: South Jersey Port Corp, Camden NJ

**Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) (GC) (Continued)**
**Lab Sample ID: LCS 180-397683/2-C**
**Client Sample ID: Lab Control Sample**
**Matrix: Sediment**
**Prep Type: Total/NA**
**Analysis Batch: 398311**
**Prep Batch: 397683**

<b>Surrogate</b>	<b>LCS</b>	<b>LCS</b>	
	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>
Tetrachloro-m-xylene (Surr) (2C)	75		33 - 126
DCB Decachlorobiphenyl (Surr) (1C)	88		26 - 170
DCB Decachlorobiphenyl (Surr) (2C)	92		26 - 170

**Method: EPA 6020B - Metals (ICP/MS)**
**Lab Sample ID: MB 180-399173/1-A**
**Client Sample ID: Method Blank**
**Matrix: Sediment**
**Prep Type: Total/NA**
**Analysis Batch: 399861**
**Prep Batch: 399173**

<b>Analyte</b>	<b>MB</b>		<b>RL</b>	<b>MDL</b>	<b>Unit</b>	<b>D</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
	<b>Result</b>	<b>Qualifier</b>							
Aluminum	6.0	U	6.0	4.2	mg/Kg		05/18/22 09:29	05/25/22 02:04	1
Arsenic	0.10	U	0.10	0.058	mg/Kg		05/18/22 09:29	05/25/22 02:04	1
Barium	1.0	U	1.0	0.61	mg/Kg		05/18/22 09:29	05/25/22 02:04	1
Antimony	0.20	U	0.20	0.11	mg/Kg		05/18/22 09:29	05/25/22 02:04	1
Beryllium	0.10	U	0.10	0.072	mg/Kg		05/18/22 09:29	05/25/22 02:04	1
Cadmium	0.10	U	0.10	0.056	mg/Kg		05/18/22 09:29	05/25/22 02:04	1
Calcium	50	U	50	20	mg/Kg		05/18/22 09:29	05/25/22 02:04	1
Chromium	0.20	U	0.20	0.18	mg/Kg		05/18/22 09:29	05/25/22 02:04	1
Cobalt	0.050	U	0.050	0.036	mg/Kg		05/18/22 09:29	05/25/22 02:04	1
Copper	0.30	U	0.30	0.21	mg/Kg		05/18/22 09:29	05/25/22 02:04	1
Magnesium	50	U	50	4.5	mg/Kg		05/18/22 09:29	05/25/22 02:04	1
Manganese	0.50	U	0.50	0.43	mg/Kg		05/18/22 09:29	05/25/22 02:04	1
Iron	5.0	U	5.0	4.8	mg/Kg		05/18/22 09:29	05/25/22 02:04	1
Lead	0.10	U	0.10	0.066	mg/Kg		05/18/22 09:29	05/25/22 02:04	1
Potassium	50	U	50	15	mg/Kg		05/18/22 09:29	05/25/22 02:04	1
Nickel	0.10	U	0.10	0.094	mg/Kg		05/18/22 09:29	05/25/22 02:04	1
Selenium	0.50	U	0.50	0.12	mg/Kg		05/18/22 09:29	05/25/22 02:04	1
Sodium	50	U	50	26	mg/Kg		05/18/22 09:29	05/25/22 02:04	1
Silver	0.10	U	0.10	0.028	mg/Kg		05/18/22 09:29	05/25/22 02:04	1
Thallium	0.10	U	0.10	0.070	mg/Kg		05/18/22 09:29	05/25/22 02:04	1
Vanadium	0.10	U	0.10	0.094	mg/Kg		05/18/22 09:29	05/25/22 02:04	1
Zinc	0.50	U	0.50	0.48	mg/Kg		05/18/22 09:29	05/25/22 02:04	1

**Lab Sample ID: LCS 180-399173/2-A**
**Client Sample ID: Lab Control Sample**
**Matrix: Sediment**
**Prep Type: Total/NA**
**Analysis Batch: 399861**
**Prep Batch: 399173**

<b>Analyte</b>	<b>Spike</b>		<b>Result</b>	<b>LCS</b>	<b>LCS</b>	<b>Unit</b>	<b>D</b>	<b>%Rec</b>	<b>Limits</b>
	<b>Added</b>	<b>Qualifier</b>							
Aluminum	500		456			mg/Kg		91	80 - 120
Arsenic	100		89.5			mg/Kg		89	80 - 120
Barium	100		94.4			mg/Kg		94	80 - 120
Antimony	25.0		25.1			mg/Kg		101	80 - 120
Beryllium	50.0		47.1			mg/Kg		94	80 - 120
Cadmium	50.0		49.0			mg/Kg		98	80 - 120
Calcium	2500		2220			mg/Kg		89	80 - 120
Chromium	50.0		49.8			mg/Kg		100	80 - 120

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# QC Sample Results

Client: ST Hudson Engineers, Inc.

Job ID: 630-32239-1

Project/Site: South Jersey Port Corp, Camden NJ

## Method: EPA 6020B - Metals (ICP/MS) (Continued)

**Lab Sample ID: LCS 180-399173/2-A**

**Matrix: Sediment**

**Analysis Batch: 399861**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 399173**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Cobalt	50.0	45.8		mg/Kg		92	80 - 120
Copper	50.0	44.2		mg/Kg		88	80 - 120
Magnesium	2500	2410		mg/Kg		97	80 - 120
Manganese	50.0	44.1		mg/Kg		88	80 - 120
Iron	500	508		mg/Kg		102	80 - 120
Lead	50.0	48.2		mg/Kg		96	80 - 120
Potassium	2500	2320		mg/Kg		93	80 - 120
Nickel	50.0	46.5		mg/Kg		93	80 - 120
Selenium	100	94.4		mg/Kg		94	80 - 120
Sodium	2500	2480		mg/Kg		99	80 - 120
Silver	25.0	23.3		mg/Kg		93	80 - 120
Thallium	100	97.5		mg/Kg		97	80 - 120
Vanadium	50.0	48.9		mg/Kg		98	80 - 120
Zinc	25.0	22.2		mg/Kg		89	80 - 120

## Method: EPA 7471B - Mercury (CVAA)

**Lab Sample ID: MB 180-399815/1-A**

**Client Sample ID: Method Blank**

**Matrix: Sediment**

**Prep Type: Total/NA**

**Analysis Batch: 399815**

**Prep Batch: 399815**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.017	U	0.017	0.011	mg/Kg		05/25/22 06:50	05/25/22 15:49	1

**Lab Sample ID: LCS 180-399815/2-A**

**Client Sample ID: Lab Control Sample**

**Matrix: Sediment**

**Prep Type: Total/NA**

**Analysis Batch: 399815**

**Prep Batch: 399815**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.208	0.177		mg/Kg		85	80 - 120

## Method: EPA 7196A - Chromium, Hexavalent

**Lab Sample ID: MB 180-398936/1-A**

**Client Sample ID: Method Blank**

**Matrix: Sediment**

**Prep Type: Total/NA**

**Analysis Batch: 399404**

**Prep Batch: 398936**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.40	U	0.40	0.21	mg/Kg		05/16/22 11:38	05/19/22 14:13	1

**Lab Sample ID: LCSI 180-398936/3-A**

**Client Sample ID: Lab Control Sample**

**Matrix: Sediment**

**Prep Type: Total/NA**

**Analysis Batch: 399404**

**Prep Batch: 398936**

Analyte	Spike Added	LCSI Result	LCSI Qualifier	Unit	D	%Rec	Limits
Cr (VI)	708	729		mg/Kg		103	80 - 120

# QC Sample Results

Client: ST Hudson Engineers, Inc.

Job ID: 630-32239-1

Project/Site: South Jersey Port Corp, Camden NJ

## Method: EPA 7196A - Chromium, Hexavalent (Continued)

**Lab Sample ID: LCSS 180-398936/2-A**

**Matrix: Sediment**

**Analysis Batch: 399404**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 398936**

Analyste	Spike Added	LCSS Result	LCSS Qualifier	Unit	D	%Rec	%Rec Limits
Cr (VI)	20.0	18.3		mg/Kg		92	80 - 120

## Method: EPA 9014 - Cyanide

**Lab Sample ID: MB 180-398091/4-A**

**Matrix: Sediment**

**Analysis Batch: 398281**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 398091**

Analyste	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.50	U	0.50	0.38	mg/Kg		05/09/22 12:00	05/10/22 12:46	1

**Lab Sample ID: HLCS 180-398091/2-A**

**Matrix: Sediment**

**Analysis Batch: 398281**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 398091**

Analyste	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.252		mg/Kg		101	90 - 110

**Lab Sample ID: LCS 180-398091/3-A**

**Matrix: Sediment**

**Analysis Batch: 398281**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 398091**

Analyste	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	23.1	22.6		mg/Kg		98	25 - 150

**Lab Sample ID: LLCS 180-398091/1-A**

**Matrix: Sediment**

**Analysis Batch: 398281**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 398091**

Analyste	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.0500	0.0482		mg/Kg		96	90 - 110

## Method: EPA-Lloyd Kahn - Organic Carbon, Total (TOC)

**Lab Sample ID: MB 180-397614/4**

**Matrix: Sediment**

**Analysis Batch: 397614**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyste	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	1000	U	1000	970	mg/Kg		05/03/22 12:46		1

**Lab Sample ID: LCS 180-397614/5**

**Matrix: Sediment**

**Analysis Batch: 397614**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyste	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon - Duplicates	35300	32000		mg/Kg		91	75 - 125

# QC Sample Results

Client: ST Hudson Engineers, Inc.

Job ID: 630-32239-1

Project/Site: South Jersey Port Corp, Camden NJ

## Method: EPA-Lloyd Kahn - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: MB 180-398354/4

Matrix: Sediment

Analysis Batch: 398354

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	1000	U	1000	970	mg/Kg			05/10/22 13:08	1

Lab Sample ID: LCS 180-398354/5

Matrix: Sediment

Analysis Batch: 398354

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Total Organic Carbon - Duplicates	35300	36400		mg/Kg		103	75 - 125

# QC Association Summary

Client: ST Hudson Engineers, Inc.  
Project/Site: South Jersey Port Corp, Camden NJ

Job ID: 630-32239-1

## GC/MS Semi VOA

### Prep Batch: 398304

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
630-32239-3	SC-3 COMPOSITE (C5 + C6)	Total/NA	Sediment	3541	
MB 180-398304/1-A	Method Blank	Total/NA	Sediment	3541	
LCS 180-398304/2-A	Lab Control Sample	Total/NA	Sediment	3541	

### Analysis Batch: 398523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-398304/1-A	Method Blank	Total/NA	Sediment	EPA 8270E LL	398304
LCS 180-398304/2-A	Lab Control Sample	Total/NA	Sediment	EPA 8270E LL	398304

### Analysis Batch: 398683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
630-32239-3	SC-3 COMPOSITE (C5 + C6)	Total/NA	Sediment	EPA 8270E LL	398304

## GC Semi VOA

### Prep Batch: 397409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
630-32239-3	SC-3 COMPOSITE (C5 + C6)	Total/NA	Sediment	3541	
MB 180-397409/1-B	Method Blank	Total/NA	Sediment	3541	
LCS 180-397409/2-B	Lab Control Sample	Total/NA	Sediment	3541	

### Prep Batch: 397683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
630-32239-3	SC-3 COMPOSITE (C5 + C6)	Total/NA	Sediment	3541	
MB 180-397683/1-C	Method Blank	Total/NA	Sediment	3541	
LCS 180-397683/2-C	Lab Control Sample	Total/NA	Sediment	3541	

### Analysis Batch: 398311

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
630-32239-3	SC-3 COMPOSITE (C5 + C6)	Total/NA	Sediment	EPA 8082A	398316
MB 180-397683/1-C	Method Blank	Total/NA	Sediment	EPA 8082A	398316
LCS 180-397683/2-C	Lab Control Sample	Total/NA	Sediment	EPA 8082A	398316

### Cleanup Batch: 398315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
630-32239-3	SC-3 COMPOSITE (C5 + C6)	Total/NA	Sediment	3665A	397683
MB 180-397683/1-C	Method Blank	Total/NA	Sediment	3665A	397683
LCS 180-397683/2-C	Lab Control Sample	Total/NA	Sediment	3665A	397683

### Cleanup Batch: 398316

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
630-32239-3	SC-3 COMPOSITE (C5 + C6)	Total/NA	Sediment	3660B	398315
MB 180-397683/1-C	Method Blank	Total/NA	Sediment	3660B	398315
LCS 180-397683/2-C	Lab Control Sample	Total/NA	Sediment	3660B	398315

### Cleanup Batch: 398801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
630-32239-3	SC-3 COMPOSITE (C5 + C6)	Total/NA	Sediment	3640A	397409
MB 180-397409/1-B	Method Blank	Total/NA	Sediment	3640A	397409
LCS 180-397409/2-B	Lab Control Sample	Total/NA	Sediment	3640A	397409

# QC Association Summary

Client: ST Hudson Engineers, Inc.  
Project/Site: South Jersey Port Corp, Camden NJ

Job ID: 630-32239-1

## GC Semi VOA

### Analysis Batch: 399020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
630-32239-3	SC-3 COMPOSITE (C5 + C6)	Total/NA	Sediment	EPA 8081B LL	398801
MB 180-397409/1-B	Method Blank	Total/NA	Sediment	EPA 8081B LL	398801
LCS 180-397409/2-B	Lab Control Sample	Total/NA	Sediment	EPA 8081B LL	398801

## Metals

### Prep Batch: 399173

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
630-32239-3	SC-3 COMPOSITE (C5 + C6)	Total/NA	Sediment	3050B	8
MB 180-399173/1-A	Method Blank	Total/NA	Sediment	3050B	9
LCS 180-399173/2-A	Lab Control Sample	Total/NA	Sediment	3050B	10

### Prep Batch: 399815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
630-32239-3	SC-3 COMPOSITE (C5 + C6)	Total/NA	Sediment	7471B	11
MB 180-399815/1-A	Method Blank	Total/NA	Sediment	7471B	12
LCS 180-399815/2-A	Lab Control Sample	Total/NA	Sediment	7471B	13

### Analysis Batch: 399861

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
630-32239-3	SC-3 COMPOSITE (C5 + C6)	Total/NA	Sediment	EPA 6020B	399173
MB 180-399173/1-A	Method Blank	Total/NA	Sediment	EPA 6020B	399173
LCS 180-399173/2-A	Lab Control Sample	Total/NA	Sediment	EPA 6020B	399173

### Analysis Batch: 399957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
630-32239-3	SC-3 COMPOSITE (C5 + C6)	Total/NA	Sediment	EPA 7471B	399815
MB 180-399815/1-A	Method Blank	Total/NA	Sediment	EPA 7471B	399815
LCS 180-399815/2-A	Lab Control Sample	Total/NA	Sediment	EPA 7471B	399815

## General Chemistry

### Analysis Batch: 397614

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
630-32239-1	C-5 GRAB	Total/NA	Sediment	EPA-Lloyd Kahn	
630-32239-2	C-6 GRAB	Total/NA	Sediment	EPA-Lloyd Kahn	
MB 180-397614/4	Method Blank	Total/NA	Sediment	EPA-Lloyd Kahn	
LCS 180-397614/5	Lab Control Sample	Total/NA	Sediment	EPA-Lloyd Kahn	

### Prep Batch: 398091

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
630-32239-3	SC-3 COMPOSITE (C5 + C6)	Total/NA	Sediment	9010C	
MB 180-398091/4-A	Method Blank	Total/NA	Sediment	9010C	
HLCS 180-398091/2-A	Lab Control Sample	Total/NA	Sediment	9010C	
LCS 180-398091/3-A	Lab Control Sample	Total/NA	Sediment	9010C	
LLCS 180-398091/1-A	Lab Control Sample	Total/NA	Sediment	9010C	

### Analysis Batch: 398191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
630-32239-1	C-5 GRAB	Total/NA	Sediment	2540G	
630-32239-2	C-6 GRAB	Total/NA	Sediment	2540G	
630-32239-3	SC-3 COMPOSITE (C5 + C6)	Total/NA	Sediment	2540G	

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# QC Association Summary

Client: ST Hudson Engineers, Inc.  
Project/Site: South Jersey Port Corp, Camden NJ

Job ID: 630-32239-1

## General Chemistry

### Analysis Batch: 398281

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
630-32239-3	SC-3 COMPOSITE (C5 + C6)	Total/NA	Sediment	EPA 9014	398091
MB 180-398091/4-A	Method Blank	Total/NA	Sediment	EPA 9014	398091
HLCS 180-398091/2-A	Lab Control Sample	Total/NA	Sediment	EPA 9014	398091
LCS 180-398091/3-A	Lab Control Sample	Total/NA	Sediment	EPA 9014	398091
LLCS 180-398091/1-A	Lab Control Sample	Total/NA	Sediment	EPA 9014	398091

### Analysis Batch: 398354

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
630-32239-3	SC-3 COMPOSITE (C5 + C6)	Total/NA	Sediment	EPA-Lloyd Kahn	8
MB 180-398354/4	Method Blank	Total/NA	Sediment	EPA-Lloyd Kahn	9
LCS 180-398354/5	Lab Control Sample	Total/NA	Sediment	EPA-Lloyd Kahn	10

### Prep Batch: 398936

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
630-32239-3	SC-3 COMPOSITE (C5 + C6)	Total/NA	Sediment	3060A	11
MB 180-398936/1-A	Method Blank	Total/NA	Sediment	3060A	12
LCSI 180-398936/3-A	Lab Control Sample	Total/NA	Sediment	3060A	13
LCSS 180-398936/2-A	Lab Control Sample	Total/NA	Sediment	3060A	14

### Analysis Batch: 399404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
630-32239-3	SC-3 COMPOSITE (C5 + C6)	Total/NA	Sediment	EPA 7196A	398936
MB 180-398936/1-A	Method Blank	Total/NA	Sediment	EPA 7196A	398936
LCSI 180-398936/3-A	Lab Control Sample	Total/NA	Sediment	EPA 7196A	398936
LCSS 180-398936/2-A	Lab Control Sample	Total/NA	Sediment	EPA 7196A	398936

### Analysis Batch: 400092

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
630-32239-3	SC-3 COMPOSITE (C5 + C6)	Total/NA	Sediment	7196A	

## Geotechnical

### Analysis Batch: 180799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
630-32239-1	C-5 GRAB	Total/NA	Sediment	D2216-90	
630-32239-2	C-6 GRAB	Total/NA	Sediment	D2216-90	
630-32239-3	SC-3 COMPOSITE (C5 + C6)	Total/NA	Sediment	D2216-90	

### Analysis Batch: 181028

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
630-32239-1	C-5 GRAB	Total/NA	Sediment	D422	
630-32239-2	C-6 GRAB	Total/NA	Sediment	D422	
630-32239-3	SC-3 COMPOSITE (C5 + C6)	Total/NA	Sediment	D422	

## Lab Chronicle

Client: ST Hudson Engineers, Inc.  
Project/Site: South Jersey Port Corp, Camden NJ

Job ID: 630-32239-1

### Client Sample ID: C-5 GRAB

Date Collected: 04/27/22 09:32

Date Received: 04/28/22 06:50

**Lab Sample ID: 630-32239-1**

Matrix: Sediment

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	398191	05/10/22 06:22	BAC	TAL PIT
Total/NA	Analysis	D2216-90		1	180799	06/14/22 21:52	MAP	TAL BUR
Total/NA	Analysis	D422		1	181028	06/14/22 12:00	MAP	TAL BUR

### Client Sample ID: C-5 GRAB

Date Collected: 04/27/22 09:32

Date Received: 04/28/22 06:50

**Lab Sample ID: 630-32239-1**

Matrix: Sediment

Percent Solids: 43.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA-Lloyd Kahn		1	397614	05/04/22 10:57	DLF	TAL PIT

### Client Sample ID: C-6 GRAB

Date Collected: 04/27/22 10:06

Date Received: 04/28/22 06:50

**Lab Sample ID: 630-32239-2**

Matrix: Sediment

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	398191	05/10/22 06:22	BAC	TAL PIT
Total/NA	Analysis	D2216-90		1	180799	06/14/22 21:52	MAP	TAL BUR
Total/NA	Analysis	D422		1	181028	06/14/22 21:56	MAP	TAL BUR

### Client Sample ID: C-6 GRAB

Date Collected: 04/27/22 10:06

Date Received: 04/28/22 06:50

**Lab Sample ID: 630-32239-2**

Matrix: Sediment

Percent Solids: 46.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA-Lloyd Kahn		1	397614	05/04/22 11:20	DLF	TAL PIT

### Client Sample ID: SC-3 COMPOSITE (C5 + C6)

**Lab Sample ID: 630-32239-3**

Matrix: Sediment

Date Received: 04/28/22 06:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	398191	05/10/22 06:22	BAC	TAL PIT
Total/NA	Analysis	7196A		1	400092	05/26/22 14:15	RSR	TAL PIT
Total/NA	Analysis	D2216-90		1	180799	06/14/22 21:52	MAP	TAL BUR
Total/NA	Analysis	D422		1	181028	06/14/22 21:58	MAP	TAL BUR

### Client Sample ID: SC-3 COMPOSITE (C5 + C6)

**Lab Sample ID: 630-32239-3**

Matrix: Sediment

Date Received: 04/28/22 06:50

Percent Solids: 41.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			398304	05/10/22 19:55	CSC	TAL PIT
Total/NA	Analysis	EPA 8270E LL		5	398683	05/13/22 23:25	VVP	TAL PIT

## Lab Chronicle

Client: ST Hudson Engineers, Inc.  
 Project/Site: South Jersey Port Corp, Camden NJ

Job ID: 630-32239-1

**Client Sample ID: SC-3 COMPOSITE (C5 + C6)**

**Lab Sample ID: 630-32239-3**

Date Collected: 04/28/22 06:50

Matrix: Sediment

Date Received: 04/28/22 06:50

Percent Solids: 41.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			397409	05/03/22 01:43	CSC	TAL PIT
Total/NA	Cleanup	3640A			398801	05/14/22 11:49	VJC	TAL PIT
Total/NA	Analysis	EPA 8081B LL		5	399020	05/17/22 18:37	DFE	TAL PIT
Total/NA	Prep	3541			397683	05/04/22 20:32	CSC	TAL PIT
Total/NA	Cleanup	3665A			398315	05/11/22 05:47	JMO	TAL PIT
Total/NA	Cleanup	3660B			398316	05/11/22 05:48	JMO	TAL PIT
Total/NA	Analysis	EPA 8082A		1	398311	05/11/22 16:38	JMO	TAL PIT
Total/NA	Prep	3050B			399173	05/18/22 09:29	KWP	TAL PIT
Total/NA	Analysis	EPA 6020B		1	399861	05/25/22 01:06	RSK	TAL PIT
Total/NA	Prep	7471B			399815	05/25/22 06:50	RJR	TAL PIT
Total/NA	Analysis	EPA 7471B		1	399957	05/25/22 16:01	RJR	TAL PIT
Total/NA	Prep	3060A			398936	05/16/22 11:38	PMH	TAL PIT
Total/NA	Analysis	EPA 7196A		2	399404	05/19/22 14:42	PMH	TAL PIT
Total/NA	Prep	9010C			398091	05/09/22 12:00	CMR	TAL PIT
Total/NA	Analysis	EPA 9014		1	398281	05/10/22 13:20	CMR	TAL PIT
Total/NA	Analysis	EPA-Lloyd Kahn		1	398354	05/10/22 20:00	DLF	TAL PIT

**Laboratory References:**

TAL BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

TAL PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

## Accreditation/Certification Summary

Client: ST Hudson Engineers, Inc.

Job ID: 630-32239-1

Project/Site: South Jersey Port Corp, Camden NJ

### Laboratory: Eurofins Burlington

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

Authority	Program	Identification Number	Expiration Date
New Jersey	NELAP	VT972	06-30-22

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
D2216-90		Sediment	Moisture Content
D422		Sediment	Clay
D422		Sediment	Coarse Sand
D422		Sediment	Fine Sand
D422		Sediment	Gravel
D422		Sediment	Hydrometer Reading 1 - Percent Finer
D422		Sediment	Hydrometer Reading 2 - Percent Finer
D422		Sediment	Hydrometer Reading 3 - Percent Finer
D422		Sediment	Hydrometer Reading 4 - Percent Finer
D422		Sediment	Hydrometer Reading 5 - Percent Finer
D422		Sediment	Hydrometer Reading 6 - Percent Finer
D422		Sediment	Hydrometer Reading 7 - Percent Finer
D422		Sediment	Medium Sand
D422		Sediment	Sand
D422		Sediment	Sieve Size #10 - Percent Finer
D422		Sediment	Sieve Size #100 - Percent Finer
D422		Sediment	Sieve Size #20 - Percent Finer
D422		Sediment	Sieve Size #200 - Percent Finer
D422		Sediment	Sieve Size #4 - Percent Finer
D422		Sediment	Sieve Size #40 - Percent Finer
D422		Sediment	Sieve Size #60 - Percent Finer
D422		Sediment	Sieve Size #80 - Percent Finer
D422		Sediment	Sieve Size 0.375 inch - Percent Finer
D422		Sediment	Sieve Size 0.75 inch - Percent Finer
D422		Sediment	Sieve Size 1 inch - Percent Finer
D422		Sediment	Sieve Size 1.5 inch - Percent Finer
D422		Sediment	Sieve Size 2 inch - Percent Finer
D422		Sediment	Sieve Size 3 inch - Percent Finer
D422		Sediment	Silt

### Laboratory: Eurofins Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
New Jersey	NELAP	PA005	05-29-22

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
2540G		Sediment	Percent Moisture
2540G		Sediment	Percent Solids
7196A		Sediment	Cr (III)
EPA 8081B LL	3541	Sediment	Endosulfan, Total (1C)
EPA 8270E LL	3541	Sediment	Cresols, Total

## Method Summary

Client: ST Hudson Engineers, Inc.

Job ID: 630-32239-1

Project/Site: South Jersey Port Corp, Camden NJ

Method	Method Description	Protocol	Laboratory
EPA 8270E LL	Semivolatile Organic Compounds (GC/MS)	SW846	TAL PIT
EPA 8081B LL	Organochlorine Pesticides (GC)	SW846	TAL PIT
EPA 8082A	Polychlorinated Biphenyls (PCBs) (GC)	SW846	TAL PIT
EPA 6020B	Metals (ICP/MS)	SW846	TAL PIT
EPA 7471B	Mercury (CVAA)	SW846	TAL PIT
2540G	SM 2540G	SM22	TAL PIT
7196A	Chromium, Trivalent (Colorimetric)	SW846	TAL PIT
EPA 7196A	Chromium, Hexavalent	SW846	TAL PIT
EPA 9014	Cyanide	SW846	TAL PIT
EPA-Lloyd Kahn	Organic Carbon, Total (TOC)	EPA	TAL PIT
D2216-90	Water (Moisture) Content	ASTM	TAL BUR
D422	Grain Size	ASTM	TAL BUR
3050B	Preparation, Metals	SW846	TAL PIT
3060A	Alkaline Digestion (Chromium, Hexavalent)	SW846	TAL PIT
3541	Automated Soxhlet Extraction (Low Level)	SW846	TAL PIT
3640A	Gel-Permeation Cleanup	SW846	TAL PIT
3660B	Sulfur Cleanup	SW846	TAL PIT
3665A	Sulfuric Acid/Permanganate Cleanup	SW846	TAL PIT
7471B	Preparation, Mercury	SW846	TAL PIT
9010C	Cyanide, Distillation	SW846	TAL PIT

### Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SM22 = Standard Methods For The Examination Of Water And Wastewater, 22nd Edition

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

### Laboratory References:

TAL BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

TAL PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

## Sample Summary

Client: ST Hudson Engineers, Inc.

Job ID: 630-32239-1

Project/Site: South Jersey Port Corp, Camden NJ

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
630-32239-1	C-5 GRAB	Sediment	04/27/22 09:32	04/28/22 06:50
630-32239-2	C-6 GRAB	Sediment	04/27/22 10:06	04/28/22 06:50
630-32239-3	SC-3 COMPOSITE (C5 + C6)	Sediment	04/28/22 06:50	04/28/22 06:50



Environment Testing  
America

213 Witmer Road  
Horsham, PA 19044

Phone: 215-355-3900

## CHAIN OF CUSTODY

Page 1 of 1



X CODES

Lab LIMS No.

630-32239 Chain of Custody

### LAB USE OF

KING WATER

GW: GROUND WATER

WW: WASTEWATER

SO: SOIL

SL: SLUDGE

OIL: OIL

SOL: NON SOIL SOLID

MI: MISCELLANEOUS

X: OTHER

Client/Acct. No.  
Address

Sampling Site Address (if different) Include State

City/State/Zip  
Phone/Fax  
Client Contact:

P.O. No.

PWSID #:

ST Hudson Eng.  
900 Dudley Ave.  
101 Joseph A. Balzano Blvd  
Camden, NJ

Quote #

e-mail: pferry@sthc.com

Number of Containers

PROJECT Balzano Berth 4

Collection

G	C			Matrix
R	O			Code
A	M			
B	P			

Number of Containers

Total	H <sub>2</sub> S	HCl	Vials	HNO <sub>3</sub>	NaOH	ZnAc	UNP	BAC	T
	4			3					

# DI Water

ANALYSIS REQUESTED

Field pH, Temp (°C),  
DO, Cl<sub>2</sub>, Cond. etc.

L  
A  
B  
  
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S  
E  
  
O  
N  
L  
Y

C-5 → S-3

4/27 0932

Grain Size, TOC, % Moisture

C-6

4/27 1006

Hydrometer

DELIVERED  
BY CUSTOMER

SC-3 (Comp of C5 + C6) - same as above

Corso + 8270, 8081, 8082, TAL Metals, CN, CC6, CR3

(Comp created 04/28/22 0650 Grnd)

SAMPLED BY: (Name/Company)

TAT:  STANDARD (10 DAY)

Report Format:  Standard  NJ-RDD  SRP-RDD

Field Parameters Analyzed By:

or DUE DATE / /

Standard + QC  Forms  EDD

Initials

Date/Time:

Please call for pricing and availability for rush (<10 day) turnaround and for all but standard reporting format.

TIME (24 HOUR CLOCK, I.E. 8AM IS 0800, 4 PM IS 1600)

RELINQUISHED BY SAMPLER

1. Paul Ferry

ES MUST BE DOCUMENTED BELOW. USE FULL LEGAL SIGNATURE, DATE AND MILITARY TIME

DATE 04/27/22 TIME 1505 RECEIVED BY 1. Paul Ferry

DELIVERY:  EQC COURIER  CLIENT  
 UPS  FEDEX  OTHER

Custody Seal Number

RELINQUISHED BY

2.

RELINQUISHED BY

3.

RELINQUISHED BY

4.

RELINQUISHED BY

5.

Rec'd Temp.: 1512.0 Initials: CWD Ice/N Location: CTP

COMMENTS:

Hazardous: yes / no

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Vc: 06/08/2021

Company

ORIGIN ID: SEGA (215) 355-3900  
EUROFINS ROAD  
213 WITHER ROAD  
HORSHAM, PA 19044  
UNITED STATES US

TO TEST AMERICA PITTSBURGH  
301 ALPHA DR  
PITTSBURGH PA 15238

(412) 863-7068

REF: DEP11



FedEx  
Express

1797219062001



FRI - 29 APR 10:30A  
PRIORITY OVERNIGHT

15238  
PIT

6723 0230 1424

TRK#  
0201

NA AGCA  
temp  
Uncorrected temp  
Thermometer ID  
Initials ✓ GJK  
CF → effective 11/18/18  
PT-WI-SR-001



630-32239  
Waybill  
15818-DEPARTURE EXP 0722



# Eurofins Environment Testing Philadelphia

213 Witmer Road

Horsham, PA 19044-0962

Phone: 215-355-3900 Fax: 888-785-8567

*PITT 4100*

## Chain of Custody Record

eurofins

Environment Testing  
America

Client Information (Sub Contract Lab)				Sampler:	Lab PM: Dougherty, Erin															
Client Contact: Shipping/Receiving				Phone:	E-Mail: Erin.Dougherty@et.eurofins.us															
Company: Eurofins Environment Testing Northeast,				Accreditations Required (See NELAP - New Jersey)			630-32239-1													
Address: 301 Alpha Drive, RIDC Park, City: Pittsburgh State, Zip: PA, 15238 Phone: 412-963-7058(Tel) 412-963-2468(Fax) Email:  Project Name: South Jersey Port Corp, Camden NJ				Due Date Requested: 5/25/2022	Analysis Requested															
				TAT Requested (days):																
Site:  SSOW#:				PO #:																
				WO #:																
				Project #: 63005446																
				Sample ID:																
				Sample Date	Sample Time	Sample Type (C=comp, G=grab)		Matrix (W=water, S=solid, O=waste/toll, BT=tissue, A=air)												
				Preservation Code:																
C-5 GRAB (630-32239-1)				4/27/22	09:32 Eastern	Sediment		<input checked="" type="checkbox"/> Field Filtered Sample (Yes or No)	<input checked="" type="checkbox"/> Perform MS/MSD (Yes or No)	<input checked="" type="checkbox"/> Moisture Total Solids, % Moisture	<input checked="" type="checkbox"/> Lloyd Kahn Mod/ [M(D)] Organic Carbon, Total (TOC)	<input checked="" type="checkbox"/> 8270E_LL/3541_LL (M(D)) 8081 Pesticides	<input checked="" type="checkbox"/> 8081B_LL/3541_LL (M(D)) 8081 PCBs	<input checked="" type="checkbox"/> 8082A_LL/3541_LL 8082 PCBs	<input checked="" type="checkbox"/> 6020B/2050BB TAI Metals	<input checked="" type="checkbox"/> 7471B/7471B Prep Mercury	<input checked="" type="checkbox"/> 7196A/3060A Chromium, Hexavalent	<input checked="" type="checkbox"/> 7196A_Cr/ Chromium, Trivalent	<input checked="" type="checkbox"/> 9014/9010C Cyanide	Total Number of containers
C-6 GRAB (630-32239-2)				4/27/22	10:06 Eastern	Sediment		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1	
SC-3 COMPOSITE (C5 + C6) (630-32239-3)				4/28/22	06:50 Eastern	Sediment		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2	
Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Philadelphia, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Philadelphia, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Philadelphia, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Philadelphia, LLC.																				
Possible Hazard Identification					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)															
Unconfirmed					<input type="checkbox"/> Return To Client	<input type="checkbox"/> Disposal By Lab	<input type="checkbox"/> Archive For	Months												
Deliverable Requested: I, II, III, IV, Other (specify)					Primary Deliverable Rank: 2															
Special Instructions/QC Requirements:																				
Empty Kit Relinquished by:		Date:	Time:		Method of Shipment:															
Relinquished by: <i>[Signature]</i>		Date/Time: <i>4/28/22 1720</i>	Company <i>607P</i>		Received by: <i>fedex DW</i>	Date/Time: <i>4-29-22 1740</i>		Company <i>ETRPLV</i>												
Relinquished by:		Date/Time:	Company		Received by:	Date/Time: <i>8/9/22 895</i>		Company												
Relinquished by:		Date/Time:	Company		Received by:	Date/Time:		Company												
Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:																

Ver: 06/08/2021



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ORIGIN ID:SEGA (215) 955-3900  
EUROFINS  
213 WITMER ROAD  
HORSHAM, PA 19044  
UNITED STATES US

SHIP DATE: 28APR22  
ACTWGT: 79.10 LB  
CAD: 253948/CAFE3313  
DIMS: 25x14x14 IN

BILL SENDER

TESTAMERICA BURLINGTON LABORATORY  
30 COMMUNITY DR

SOUTH BURLINGTON 05403

REF RT

916  
FZ 915

10:30

1413  
04.29



592106200114

FRI - 29 APR 10:30A  
PRIORITY OVERNIGHT

TRK#  
0201 6723 0230 1413

05403  
VT-US BTV

NL BTVA



Printed 0848439 MTW EXP 07/22

## Login Sample Receipt Checklist

Client: ST Hudson Engineers, Inc.

Job Number: 630-32239-1

**Login Number:** 32239

**List Source:** Eurofins Environment Testing Philadelphia, LLC

**List Number:** 1

**Creator:** Kurz, Chris

### Question

### Answer

### Comment

Radioactivity wasn't checked or is </= background as measured by a survey meter.

The cooler's custody seal, if present, is intact.

Sample custody seals, if present, are intact.

The cooler or samples do not appear to have been compromised or tampered with.

Samples were received on ice.

Cooler Temperature is acceptable.

Cooler Temperature is recorded.

COC is present.

COC is filled out in ink and legible.

COC is filled out with all pertinent information.

Is the Field Sampler's name present on COC?

There are no discrepancies between the containers received and the COC.

Samples are received within Holding Time (excluding tests with immediate HTs)

Sample containers have legible labels.

Containers are not broken or leaking.

Sample collection date/times are provided.

Appropriate sample containers are used.

Sample bottles are completely filled.

Sample Preservation Verified.

There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs

Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").

Multiphasic samples are not present.

Samples do not require splitting or compositing.

Residual Chlorine Checked.

## Login Sample Receipt Checklist

Client: ST Hudson Engineers, Inc.

Job Number: 630-32239-1

**Login Number:** 32239

**List Source:** Eurofins Burlington

**List Number:** 3

**List Creation:** 04/30/22 08:52 AM

**Creator:** Khudaier, Zahraa

Question	Answer	Comment	
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.	6
The cooler's custody seal, if present, is intact.	N/A	Not present	7
Sample custody seals, if present, are intact.	True		8
The cooler or samples do not appear to have been compromised or tampered with.	True		9
Samples were received on ice.	True		10
Cooler Temperature is acceptable.	True		11
Cooler Temperature is recorded.	True	6.4°C	12
COC is present.	True		13
COC is filled out in ink and legible.	True		14
COC is filled out with all pertinent information.	True		15
Is the Field Sampler's name present on COC?	True	Received project as a subcontract.	
There are no discrepancies between the containers received 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.	False		
Sample Preservation Verified.	True		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True		
Multiphasic samples are not present.	True		
Samples do not require splitting or compositing.	True		
Residual Chlorine Checked.	N/A		

## Login Sample Receipt Checklist

Client: ST Hudson Engineers, Inc.

Job Number: 630-32239-1

**Login Number:** 32239

**List Source:** Eurofins Pittsburgh

**List Number:** 2

**List Creation:** 04/29/22 08:06 PM

**Creator:** Watson, Debbie

Question	Answer	Comment	
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A		1
The cooler's custody seal, if present, is intact.	True		2
Sample custody seals, if present, are intact.	True		3
The cooler or samples do not appear to have been compromised or tampered with.	True		4
Samples were received on ice.	True		5
Cooler Temperature is acceptable.	True		6
Cooler Temperature is recorded.	True		7
COC is present.	True		8
COC is filled out in ink and legible.	True		9
COC is filled out with all pertinent information.	True		10
Is the Field Sampler's name present on COC?	N/A		11
There are no discrepancies between the containers received and the COC.	True		12
Samples are received within Holding Time (excluding tests with immediate HTs)	True		13
Sample containers have legible labels.	True		14
Containers are not broken or leaking.	True		15
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		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True		
Multiphasic samples are not present.	True		
Samples do not require splitting or compositing.	True		
Residual Chlorine Checked.	N/A		