

March 8, 2018

Ms. Sally Dewes
Environmental Engineer II
New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau B, Section D
625 Broadway
Albany, New York 12233-7016

**Re: Howland Hook Marine Terminal – Port Ivory Facility Sites 1 and 2
Formerly VCP Site Number V-00674-2
40 Western Avenue, Staten Island, New York
2017 Periodic Review Reports**

Ms. Dewes:

Enclosed are the Periodic Review Reports (PRR) which documents activities completed on behalf of The Port Authority of New York and New Jersey by TRC Engineers Inc. at Site 1 and 2 of the Howland Hook Marine Terminal (HHMT) - Port Ivory Facility located at 40 Western Avenue, Staten Island, New York (the Site), during the 2017 reporting period (January 23, 2017 through January 22, 2018). The PRRs are being submitted in accordance with the Site Management Plan (SMP) and Deed Restriction for the Site.

If you have any questions, please call Angela Altieri 212-435-6106.

Very truly yours,



Robert P. Pruno, P.E.
Chief Environmental Engineer

Enclosures

cc: A. Altieri, W. Glynn



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Ms. Sally Dewes
Environmental Engineer II
New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau B, Section D
625 Broadway
Albany, New York 12233-7016

**Re: Howland Hook Marine Terminal – Port Ivory Facility Site 1
Formerly VCP Site Number V-00615-2
40 Western Avenue, Staten Island, New York
2017 Periodic Review Report**

Dear Ms. Dewes:

This Periodic Review Report (PRR) documents activities completed on behalf of The Port Authority of New York and New Jersey (the Port Authority) by TRC at Site 1 of the Howland Hook Marine Terminal (HHMT) - Port Ivory Facility located at 40 Western Avenue, Staten Island, New York (the Site), during the 2017 reporting period (January 23, 2017 through January 22, 2018). The PRR is being submitted in accordance with the Site Management Plan (SMP) and Deed Restriction for the Site, and includes the following information:

- Identification, assessment and certification of the Engineering Control/Institutional Control (EC/IC) required by the remedy for the Site;
- Results of the required Site inspections;
- Applicable inspection forms and other records generated for the Site during the reporting period;
- Data summary tables of contaminants of concern by media (groundwater and surface water), which include a listing of parameters analyzed, along with the applicable standards, with exceedances highlighted;
- Results of analyses, copies of laboratory data sheets, and the required laboratory data deliverables for samples collected during the reporting period;
- A site evaluation, which includes the following:
 - The compliance of the remedy with the requirements of the Site-specific Remedial Action Work Plan (RAWP);
 - Any new conclusions or observations regarding Site contamination based on inspections or data generated by the Monitoring Plan for the media being monitored;

- Recommendations regarding any necessary changes to the remedy and/or Monitoring Plan; and
- The overall performance and effectiveness of the remedy.

Consistent with the recommendations in the 2016 PRR, additionally presented in this PRR are the results of the analysis of groundwater samples collected from monitoring wells PRW-7A through PRW-7E for toluene and monitored natural attenuation (MNA) parameters, and the results of the analysis of surface water samples SW-6 and SW-7 for toluene.

There were no areas of non-compliance with respect to the requirements of the SMP during the 2017 reporting period. Annual submission of Periodic Review Reports will continue; however, the following changes to the Monitoring Plan are recommended:

- Discontinuation of the surface water sampling program and removal of monitoring wells PRW-1, PRW-2, PRW-3, PRW-4, PRW-5 and PRW-6 from the groundwater sampling program. Proposed is annual collection of groundwater samples from only PRW-7, PRW-7A, PRW-7B, PRW-7C, PRW-7D, and PRW-7E for analysis for toluene and sulfate. Additionally, groundwater surface elevation measurements will be collected annually from the same six wells and nearby Site 1 well (PRW-4) and Site 2 wells (PRW-11 and PRW-12) to confirm groundwater flow direction in the northwest portion of Site 1. The locations of the monitoring wells are shown on **Figure 3**.

The rationale for the suggested changes in monitoring requirements is presented below.

Site Description

The Site is a portion of the HHMT - Port Ivory Facility, which consists of three parcels: Block 1309, Lot 10; Block 1338, Lot 1; and Block 1400, Lot 1. Public roadways separate the three parcels: Western Avenue separates Block 1400, Lot 1 from Block 1338, Lot 1 and Richmond Terrace separates Block 1309, Lot 10 from Block 1338, Lot 1 and Block 1400, Lot 1. As shown on **Figure 1**, the HHMT - Port Ivory Facility is bordered by Bridge Creek to the west, the Arthur Kill to the north, wetlands and undeveloped land to the east, and railroad tracks to the south.

The Site consists of 14.95 acres of the 123.75-acre HHMT - Port Ivory Facility (refer to **Figure 1**). The Site is bordered by Site 2 (Area 2A) to the east and south, Richmond Terrace to the north, and Bridge Creek to the west. Vehicular access to the northern portion of the Site is provided from Richmond Terrace. There is a paved roadway oriented east-west on the central portion of the Site which provides access to the New York Container Terminal (NYCT) property. The NYCT property is across Bridge Creek west of the Site. Currently there are no structures on the Site and it is used for container storage by NYCT.

The Port Authority is in the process of redeveloping the HHMT - Port Ivory Facility for industrial use; specifically, the Port Authority intends to utilize the Site as an intermodal facility. With regard to the HHMT - Port Ivory Facility, an intermodal facility is defined as a facility where cargo transported by ship is transferred to intermediate and final destinations via rail or truck.

Site History

The Port Authority purchased the HHMT - Port Ivory Facility from P&G in 2000. P&G used the Facility for the manufacture, warehousing, and distribution of edible oils, baking mixes, orange juice, and other



foodstuffs; manufacture, warehousing, and distribution of soaps and cleaning products; and, burning of wood chips for fuel. In addition, numerous easements were established by various energy companies for underground pipelines that conveyed petroleum products. Operations at the P&G Facility began in or about 1908 and continued through approximately 1990.

The Port Authority entered into the NYSDEC VCP in June 2004. The Port Authority's objective for entering into the VCP was to investigate and remediate soil, surface water, sediment, and/or groundwater with NYSDEC oversight. The impacts are attributable to prior Facility operations by P&G that were/are unrelated to the Port Authority. The Port Authority had established different redevelopment schedules for different areas at the HHMT - Port Ivory Facility, and the NYSDEC agreed to expedite the processing of information pertaining to each area. Accordingly, the Port Authority agreed to establish three VCP sites at the facility and to submit assessment, investigation, and remedial action documentation for each site.

Remedial Investigation

After cessation of P&G operations at the Port Ivory Facility, the Port Authority removed most of the remaining infrastructure at Site 1. The Port Authority retained Hatch Mott McDonald (HMM) to conduct the necessary environmental investigations. HMM's environmental evaluation efforts at the Site included a Phase I Environmental Site Assessment (Phase I ESA) with a supplemental file review, a Site Investigation (SI), a Remedial Investigation (RI), a Supplemental Remedial Investigation (SRI) and a Focused Supplemental Remedial Investigation (FSRI). The results of these investigations are summarized in a Comprehensive Remedial Investigation Report (CRIR) dated July 2007.

Both the Phase I ESA and the SI were conducted prior to the Port Authority's purchase of the Facility in December 2000, while the RI and SRI were conducted subsequent to the transfer of the property from P&G to the Port Authority. The RI and SRI were conducted to characterize the nature and extent of impacts in environmental media at and immediately adjacent to the Site. Based on the results of the RI and SRI, the Port Authority identified 18 areas of concern (AOCs) at Site 1. Based on the results of the RI, remedial action was deemed necessary at five AOCs, which are described below.

Interim Remedial Measure (IRM) and Remedial Actions

The Port Authority completed an IRM consisting of excavation and off-Site disposal of soil at five AOCs. The IRM was completed to address petroleum impacts at AOC-Area A, AOC-Area B and AOC-Former Structures (FS-1B), and elevated concentrations of arsenic at AOC-Wood Yard; and to delineate the extent of petroleum impacts at AOC-UST2. Separate IRM reports were not generated; however, the IRM is documented in the CRIR, dated July 2007 and the Final Engineering Report (FER) dated March 2014. A summary of the IRM activities conducted in connection with each of the five AOCs is presented in the table below.



Summary of Completed IRM		
Area of Concern	Nature of Concern	Remedy
AOC-Area A	Petroleum impacted soil near several former ASTs.	Soil was excavated and disposed of off-site and post-excavation soil samples were collected. Semi-volatile organic compounds (SVOCs) detected in post-excavation soil samples were attributed to fill material.
AOC-Area B	Petroleum impacted soil near several former ASTs.	Soil was excavated and disposed of off-site and post-excavation soil samples were collected. SVOCs detected in post-excavation soil samples were attributed to fill material.
AOC-Former Structures (Vicinity of FS-1B)	Light non-aqueous phase liquid (LNAPL)-impacted soil encountered near soil boring.	Soil was excavated and disposed of off-site and post-excavation soil samples were collected. SVOCs detected in post-excavation soil samples were attributed to fill material.
AOC-Wood Yard	Elevated concentrations of arsenic in subsurface soil to a maximum depth of approximately 1.5 feet below ground surface.	Soil was excavated and disposed of off-site.
AOC- UST2	Presence of mobile LNAPL identified during the RI and SRI.	Six test pits were excavated to delineate the horizontal extent of mobile LNAPL. Additional remedial action was performed in accordance with the RAWP.

Following completion of the IRM, construction of an environmental cap and establishment of a Deed Restriction were implemented in accordance with the March 2007 RAWP. Additionally, excavation and off-site disposal of soil and the removal of mobile LNAPL via vacuum extraction at AOC-UST2 were performed in accordance with the RAWP. One volatile organic compound (VOC), acetone, and four SVOCs (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene and chrysene) were detected in post-excavation soil samples collected from AOC-UST2 at concentrations similar to concentrations in soil throughout the HHMT - Port Ivory Facility.

The FER documented that the Site 1 AOCs had been satisfactorily addressed. NYSDEC issued a “Release and Covenant Not to Sue” determination letter dated May 27, 2014 after reviewing the FER and SMP.

Following completion of the remedial measures, impacted soil and groundwater remain at Site 1. As a result, an EC and an IC are required to protect human health and the environment. The Port Authority constructed an environmental cap as an EC and established a Site-wide Deed Restriction as an IC. Additional details regarding the EC and IC are provided below.

Note that the VCP will be terminated by March 31, 2018 as part of a Department-wide initiative; however, compliance with the provisions in the SMP and Deed Restriction are required until the NYSDEC informs the Port Authority in writing that the Deed Restriction is no longer needed.



Engineering Control

The EC for the Site consists of an environmental cap. As required in the RAWP, exposure to impacted soil and groundwater beneath the Site is prevented by an environmental cap placed above the impacted soil. The environmental cap consists of concrete pavement, asphalt pavement, or one foot of crushed stone.

The environmental cap is a permanent control, and must be maintained and inspected until the NYSDEC confirms in writing that the Site-wide Deed Restriction is no longer necessary. Inspection of the EC is discussed below.

Institutional Control

The IC is required by the RAWP to (1) implement, maintain, and monitor the EC, (2) prevent future exposure to impacted soil and groundwater remaining beneath the Site, (3) prevent groundwater usage without treatment, and, (4) limit the use and development of the Site to industrial and commercial uses only. The IC for the Site is a Deed Restriction, which the Port Authority recorded at the Richmond County Courthouse.

General provisions of the Deed Restriction include the following:

- Compliance with the Deed Restriction and the NYSDEC-approved SMP;
- Limiting the use and development of the property to industrial/commercial uses only;
- Restricting disturbance of the environmental cap unless in accordance with the SMP;
- Periodic inspection of the environmental cap as specified in the SMP;
- Operation and maintenance of the environmental cap as specified in the SMP; and,
- Restricting the use of groundwater as a source of potable water, without necessary water quality treatment as determined by NYSDOH.

The Deed Restriction will notify future property owners of the impacts at the Site. The Deed Restriction will remain in effect until the NYSDEC informs the Port Authority in writing that the Deed Restriction is no longer needed.

Site Inspections

The SMP requires periodic inspections of the Site to confirm that the cap continues to limit exposure to underlying impacted soil and groundwater. TRC representatives Ms. Lindsay O'Hara and Ms. Emily Ebert conducted inspections of Site 1 on April 28, 2017 and October 10, 2017. The inspections confirmed that the environmental cap in Site 1 is in good condition and that it continues to limit exposure to underlying impacted soil and groundwater.

The conditions of the environmental cap during the April 28, 2017 and October 10, 2017 inspections are presented on **Figure 2**. Photographic documentation of the Site inspections is provided in **Attachment A**.

Groundwater Monitoring Well Installation and Groundwater and Surface Water Monitoring

On February, 28, 2017, one groundwater monitoring well, PRW-7E, was installed north of PRW-7A and Site 1 (across Richmond Terrace) and developed in accordance with the 2016 Site 1 Investigation Report



dated November 4, 2016. The location of PRW-7E is shown on **Figure 2**. The well construction and boring logs are provided in **Attachment B**.

In March 2017, five (5) surface water samples (including one duplicate) were collected from Bridge Creek and groundwater samples were collected from monitoring wells PRW-1 through PRW-7, PRW-7A, PRW-7B, PRW-7C, and PRW-7D. In April 2017, a groundwater sample was collected from PRW-7E. Additionally, surface water elevations were measured at three (3) gauging stations along Bridge Creek in March 2017. The locations of the Site 1 monitoring wells, as well as the surface water sampling points and gauging stations, are shown on **Figure 3**. Groundwater sampling logs are provided in **Attachment C**.

Attached are the tabulated results of the analyses of the groundwater samples and the surface water samples (refer to **Tables 1 through 7**). Also attached are the groundwater surface elevation contour maps generated from high tide and low tide measurements recorded on March 20, 2017 (refer to **Figures 4 and 5**). Laboratory analytical data packages are provided in **Attachment D**. A brief discussion of the analytical results is presented below. There was no evidence of impacts (e.g., odor or discoloration) observed during the groundwater and surface water sampling.

Groundwater Sampling – Summary of Analytical Results

Groundwater samples collected from monitoring wells PRW-1 through PRW-7 were analyzed for VOCs, SVOCs, metals (filtered and unfiltered) and cyanide; and groundwater samples collected from monitoring wells PRW-7A, PRW-7B, PRW-7C, PRW-7D, and PRW-7E were analyzed for toluene and natural attenuation parameters including magnesium (total), total alkalinity, total kjeldahl nitrogen, total organic carbon, and sulfate. Note that in a response to a request in the 2015 PRR, the NYSDEC approved the elimination of pesticides and PCBs from the groundwater sampling plan. As shown on the attached tables, the following compounds/parameters were detected at concentrations above the NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1 Class GA Standards and Guidance Values (Class GA Values)¹:

- VOCs: toluene (in PRW-2, PRW-4, PRW-7, PRW-7A, PRW-7B, PRW-7C, and PRW-7D);
- SVOCs: benzo(a)anthracene (in PRW-1 and PRW-6), benzo(a)pyrene (in PRW-1), benzo(b)fluoranthene (in PRW-1, PRW-4, and PRW-6), chrysene (in PRW-1 and PRW-6), and indeno(1,2,3-cd) pyrene (in PRW-6); and,
- Metal: lead (in PRW-6, unfiltered).

There were no other VOCs, SVOCs or metals detected at concentrations above Class GA Values. Additionally, cyanide was not detected at a concentration above the Class GA Value. Shown on **Figure 6** are the results of analyses of groundwater samples collected in 2014, 2015, 2016, and 2017 which are above Class GA Values.

¹ The Class GA Values are not shown on Table 4 since these samples were collected to monitor for natural attenuation and not for the purpose of comparison to regulatory criteria.

Data Validation – PRW-7E

The results of analyses of the groundwater sample collected from PRW-7E were validated in accordance with the proposed actions outlined in the 2016 Site 1 Investigation Report dated November 4, 2016. The results of the data validation are summarized in a Data Usability Summary Report. QA/QC procedures for data completeness; sample holding time and preservation; instrument tuning results; instrument initial and continuing calibration; surrogate spike recovery; matrix spike recovery; matrix spike duplicate recovery and relative percent difference; blank spike recoveries; contamination of calibration blanks, method blanks, or trip blanks; interference check sample results, serial dilution results, internal standards performance; laboratory duplicate results; and reported quantitation limits are documented in the DUSR.

Based on the DUSR, no data were rejected, the analytical data satisfies the analytical quality control criteria, and the data are acceptable for use, with noted data qualifiers. The DUSR is included in **Attachment E**.

Surface Water Elevations – Summary of Results

The surface water elevations measured in Bridge Creek during high tide and low tide in March 2017 are presented below.

Surface Water Elevations – March 2017		
Gauging Station Number	Low Tide Elevation (Feet)	High Tide Elevation (Feet)
1	1.58	2.58
2	0.24	1.65
3	-0.45	1.67

Note: Datum is NAVD 1988

Review of the surface water elevations indicates that during low tide the surface water flowed north toward Gauging Station No. 3 and the Arthur Kill, and during high tide surface water flowed north from Gauging Station No. 1 to Gauging Station No. 2, and then stagnated or flowed south from Gauging Station No. 3. The locations of the gauging stations are shown on **Figure 3**.

Surface Water Sampling – Summary of Analytical Results

Three surface water samples, SW-4 and SW-5 (and one duplicate), collected in March 2017 were analyzed for VOCs, SVOCs, metals (filtered and unfiltered), and cyanide. Surface water samples SW-6 and SW-7, also collected in March 2017, were analyzed for toluene. Note that in a response to a request in the 2015 PRR, the NYSDEC approved the elimination of pesticides and PCBs from the surface water sampling plan.

As shown in the attached tables, the following parameters were detected at concentrations above the TOGS 1.1.1 Ambient Water Quality Standards and Guidance Values for Class SD Saline Surface Water (AWQSGVs):

- SVOC: benzo(a)pyrene in surface water sample SW-5; and,
- Metals: copper (in unfiltered surface water sample SW-4 and in unfiltered surface water sample SW-5 and its unfiltered duplicate sample), mercury (in unfiltered surface water sample SW-5 and its unfiltered duplicate sample), and zinc (in the unfiltered duplicate of SW-5).



There were no VOCs, or other SVOCs or metals detected at concentrations above the AWQSGVs. Cyanide and toluene were not detected in the surface water samples at concentrations above the AWQS. The results exceeding the AWQSGVs for Class SD Saline Surface Water are shown on **Figure 6**.

Conclusions – Groundwater and Surface Water Sampling

The highest toluene concentration detected during the March 2017 sampling event is 84,000 micrograms per liter ($\mu\text{g/L}$) in the sample collected from PRW-7. Toluene was detected in surrounding wells (PRW-7A through PRW-7D) at concentrations ranging between 22 and 22,000 $\mu\text{g/L}$. Note that toluene was not detected in PRW-7E, the crossgradient well installed north of PRW-7 in April 2017. Additionally, toluene was detected above the Class GA Value in PRW-2 (at a concentration of 17 $\mu\text{g/L}$) and PRW-4 (at a concentration of 60 $\mu\text{g/L}$).

Based on the results of the March 2017 and prior sampling events, concentrations of toluene in groundwater appear to be stable or decreasing, and toluene concentrations in groundwater have not impacted surface water. Sulfate was detected in PRW-7A, PRW-7C, PRW-7D, and PRW-7E at concentrations ranging between 39 and 190 milligrams per liter (mg/L). The presence of sulfate in groundwater will enhance anaerobic degradation, and based on the observed concentrations, there appears to be a sufficient amount of sulfate to maintain attenuation rates. Note that gypsum was identified in the soil column in the borings for monitoring wells PRW-7B and PRW-7D, which should act as a long term source of sulfate to groundwater and continually promote the degradation of toluene.

With the exception of benzo(a)pyrene, no compounds detected above the Class GA Values in groundwater were detected in surface water above the AWQSGVs. Benzo(a)pyrene was detected in only one surface water sample and only one groundwater sample at concentrations marginally above the comparison criteria. Further, no metals were detected in filtered surface water or groundwater samples at concentrations above comparison criteria.

Based on review of the 2014 through 2017 annual groundwater and surface water sampling data, discontinuation of annual surface water sampling is recommended since surface water quality at Bridge Creek has not been degraded by Site groundwater. Removal of monitoring wells PRW-1, PRW-2, PRW-3, PRW-4, PRW-5 and PRW-6 from the annual groundwater sampling program is also proposed. The collection of groundwater surface elevations and groundwater samples from PRW-7, PRW-7A, PRW-7B, PRW-7C, PRW-7D, and PRW-7E for analysis for toluene and sulfate on an annual basis is proposed to monitor the degradation of toluene. Additionally, collection of groundwater surface elevations from nearby wells (PRW-4, PRW-11, and PRW-12) on an annual basis is recommended to confirm the groundwater flow direction in the northwest portion of Site 1. The locations of the monitoring wells are shown on **Figure 3**.

Removal of monitoring wells PRW-1, PRW-2, PRW-3, PRW-4, PRW-5 and PRW-6 from the annual groundwater sampling program is recommended since concentrations of toluene in groundwater appear to be stable or decreasing, and LNAPL has not been detected in any well since 2014. Although marginal exceedances of screening criteria for a limited number of VOC, SVOCs and metals were detected in groundwater and/or surface water, the sampling results are not indicative of a release, groundwater quality is stable, and remedial actions are not warranted based on the low concentrations. Finally, TRC notes that Site 1 is not proposed for development and groundwater is not utilized as a potable source.

Certification of Engineering and Institutional Controls

The annual certification for Site 1, consisting of a completed NYSDEC Institutional and Engineering Controls Certification Form (Form 1), dated March 8, 2018, is attached. The annual certification has been prepared in accordance with the SMP and has been signed by a Qualified Environmental Professional.

Conclusions and Recommendations

Based on evaluation of the inspection and monitoring data presented in this PRR, the following can be concluded:

- The EC and IC are in place, perform properly and remain effective;
- Groundwater and surface water conditions are stable and consistent with the results of previous sampling events performed at Site 1; and,
- Surface water quality at Bridge Creek has not been degraded by Site groundwater.

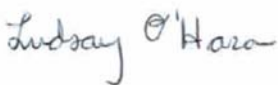
As mentioned above, Site 1 is not proposed for development and groundwater is not utilized as a potable source.

TRC recommends discontinuation of the surface water sampling program and removal of monitoring wells PRW-1, PRW-2, PRW-3, PRW-4, PRW-5 and PRW-6 from the groundwater sampling program. Proposed is collection of groundwater samples on an annual basis from only PRW-7, PRW-7A, PRW-7B, PRW-7C, PRW-7D, and PRW-7E for analysis for toluene and sulfate. Additionally, groundwater surface elevation measurements will be collected from these six wells and nearby Site 1 wells PRW-4 and Site 2 wells PRW-11 and PRW-12 to confirm the groundwater flow direction in the northwest portion of Site 1. The locations of the monitoring wells are shown on **Figure 3**.

As noted above, NYSDEC approval is requested for discontinuation of future surface water sampling and modifications to the groundwater sampling program. Following NYSDEC approval, the Site 1 monitoring wells (with the exception of PRW-4, PRW-7 and PRW-7A through PRW-7E) will be decommissioned in accordance with NYSDEC CP-43 Groundwater Monitoring Well Decommissioning Policy.

Please let me know if you have any questions pertaining to this PRR.

Very truly yours,
TRC Engineers, Inc.



Lindsay O'Hara, CHMM
Project Manager
Email: lohara@trcsolutions.com
Phone No.: (203) 278-5305



Enclosures:

Figure 1 – Site Location Map

Figure 2 – Engineering Control Map - Environmental Cap (April 27, 2017 and October 10, 2017 Inspections)

Figure 3 – Groundwater and Surface Water Sampling Locations and Surface Water Gauging Stations

Figure 4 – Groundwater Surface Elevation Contour Map (High Tide – March 20, 2017)

Figure 5 – Groundwater Surface Elevation Contour Map (Low Tide – March 20, 2017)

Figure 6 – Summary of 2014, 2015, 2016, and 2017 Groundwater and Surface Water Sampling Results

Table 1 – Summary of 2017 Results of Analysis of Groundwater for Volatile Organic Compounds

Table 2 – Summary of 2017 Results of Analysis of Groundwater for Semi-Volatile Organic Compounds

Table 3 – Summary of 2017 Results of Analysis of Groundwater for Metals and Cyanide

Table 4 – Summary of 2017 Results of Analysis of Groundwater for Natural Attenuation Parameters

Table 5 – Summary of 2017 Results of Analysis of Surface Water for Volatile Organic Compounds

Table 6 – Summary of 2017 Results of Analysis of Surface Water for Semi-Volatile Organic Compounds

Table 7 – Summary of 2017 Results of Analysis of Surface Water for Metals and Cyanide

Attachment A – Photograph Log

Attachment B – Monitoring Well Construction and Boring Logs (PRW-7E)

Attachment C – Groundwater Sampling Logs

Attachment D – Laboratory Analytical Data Reports (on CD)

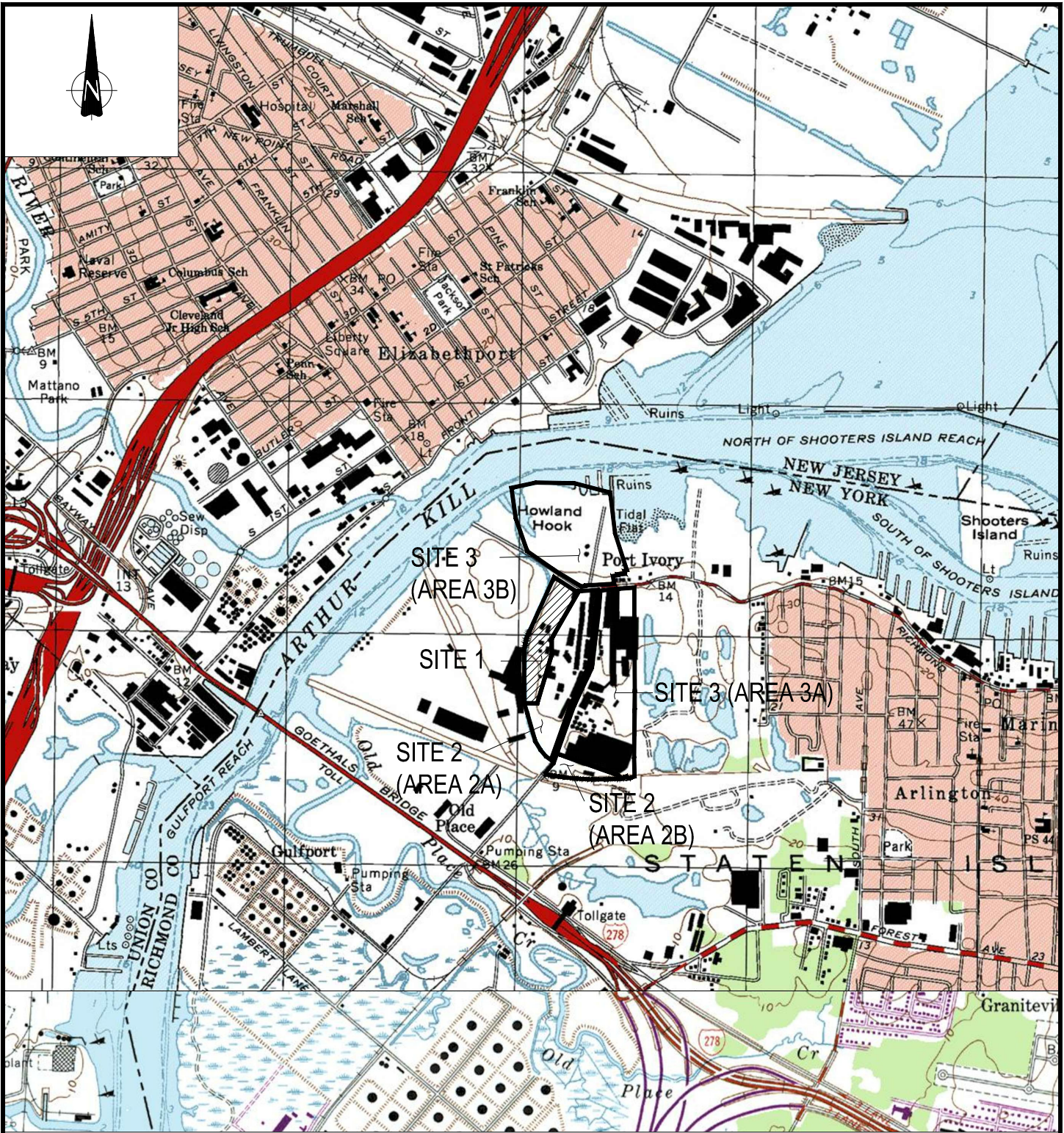
Attachment E – Data Usability Summary Report

Form 1 - NYSDEC Institutional and Engineering Controls Certification Form

cc. W. Glynn, PANYNJ
C. Guder, PANYNJ
A. Altieri, PANYNJ
B. Francese, TRC
D. Glass, TRC

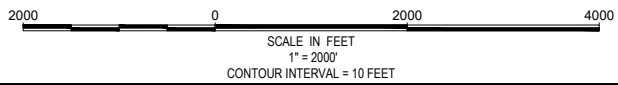


FIGURES



SOURCE:
 UNITED STATES GEOLOGICAL SURVEY
 7.5 MINUTE SERIES TOPOGRAPHIC QUADRANGLES
 ELIZABETH AND ARTHUR KILL, NY-NJ, 1967,
 PHOTOREVISED 1981

NOTES:
 HHMT - PORT IVORY FACILITY CONSISTS
 OF SITES 1 THROUGH 3.



THE PORT AUTHORITY OF NY & NJ L.O'HARA H.DELGADO B.FRANCESE Designed by Drawn by Checked by	HHMT - PORT IVORY FACILITY SITE 1	Discipline ENGINEERING DEPARTMENT	FEBRUARY 2018 Date	1 of 6 Workorder Number
		SITE LOCATION MAP	Contract Number PID Number	Drawing Number FIGURE 1



No.	Date	Revision	Approved
ENGINEERING DEPARTMENT			
HHMT			
PORT IVORY			
FACILITY - SITE 1			

ENVIRONMENTAL

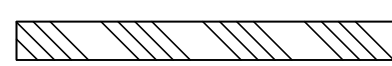

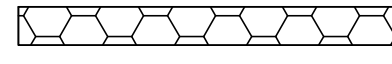

Title

**ENGINEERING
CONTROL MAP -
ENVIRONMENTAL CAP
(APRIL 20, 2017 AND
OCTOBER 10, 2017
INSPECTIONS)**

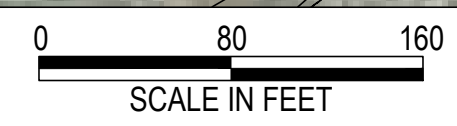
This drawing subject to conditions in contract. All inventions, ideas, designs and methods herein are reserved to Port Authority and may not be used without its written consent. All recipients of Contract documents, including bidders and those who do not bid and their prospective subcontractors and suppliers who may receive all or a part of the Contract documents or copies thereof, shall make every effort to ensure the secure and appropriate disposal of the Contract documents to prevent further disclosure of the information contained in the documents. Secure and appropriate disposal includes methods of document destruction such as shredding or arrangements with refuse handlers that ensure that third persons will not have access to the documents' contents either before, during or after disposal. Documents may also be returned for disposal purposes to the Contract Desk, 2 Montgomery Street, 1st Floor, Jersey City, NJ 07302 or the office of the Director of Procurement, 4 World Trade Center, 21st Floor, New York, NY 10007. It is a violation of law for any person to alter a document in any way, unless acting under the direction of a licensed professional engineer or registered architect. If this document bearing the seal of an engineer/architect is altered, the altering engineer/architect shall affix to the document their seal and the notation "altered by" followed by their signature and the date of such alteration, and a specific description of the alteration.

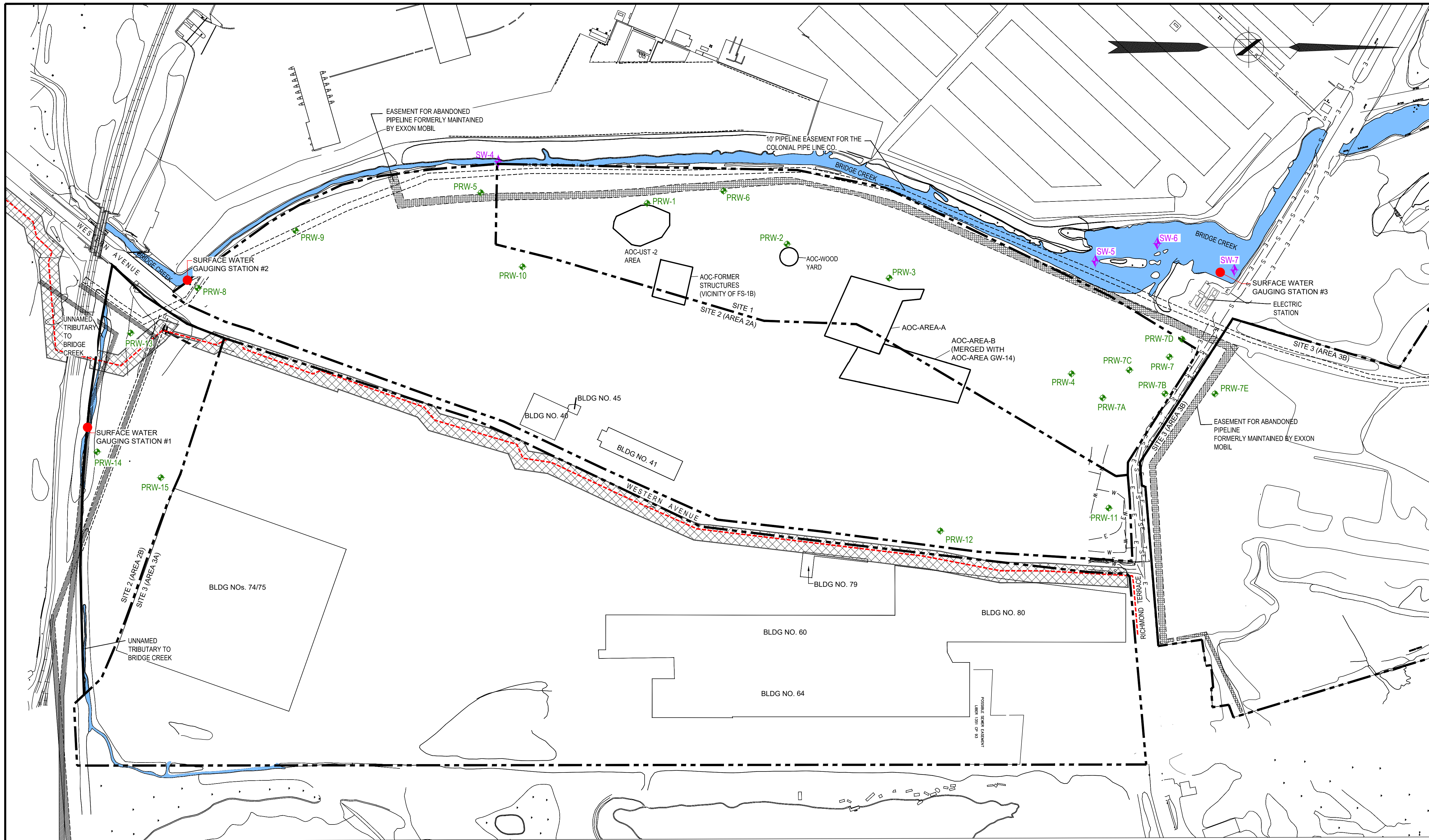
Designed by L.O'HARA
 Drawn by H.DELGADO
 Checked by B.FRANCESE
 Date FEBRUARY 2018
 Contract Number

Drawing Number **FIGURE 2**
 PID#

- LEGEND:**
-  ASPHALT COVER
 -  CONCRETE COVER
 -  CRUSHED STONE COVER
 -  SITE BOUNDARY

- NOTES:**
- BUILDING NO. 40 HAS BEEN DEMOLISHED. A MODULAR BUILDING MOUNTED ON PIERS HAS BEEN CONSTRUCTED IN THE FOOTPRINT OF FORMER BUILDING 40.
 - CONDITIONS OF THE ENVIRONMENTAL CAP WERE CONSISTENT BETWEEN THE APRIL 20, 2017 AND OCTOBER 10, 2017 SITE INSPECTIONS.





No.	Date	Revision	Approved

ENGINEERING DEPARTMENT			
HHMT			
PORT IVORY			
FACILITY - SITE 1			

ENVIRONMENTAL

Title

**GROUNDWATER AND
SURFACE WATER
SAMPLING LOCATIONS
AND SURFACE WATER
GAUGING STATIONS**

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Designed by	L.O'HARA
Drawn by	H.DELGADO
Checked by	B.FRANCESE
Date	FEBRUARY 2018
Contract Number	

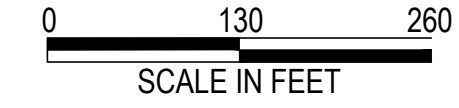
Drawing Number **FIGURE 3**
PID#

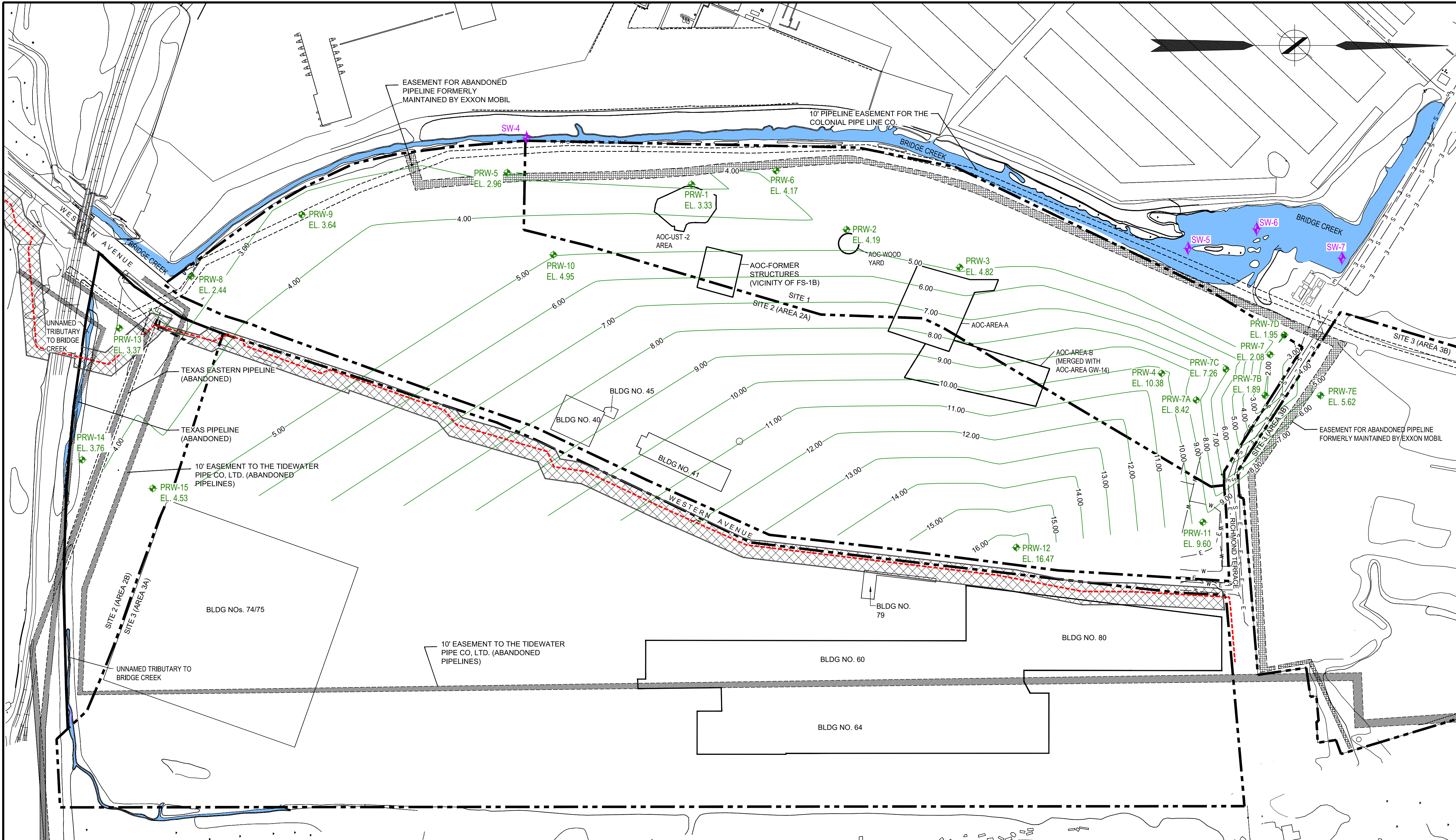
LEGEND (SYMBOLS NOT TO SCALE):

- | | | | |
|-----------|---|---------------|---|
| — — — — — | SITE BOUNDARY | — E — E — E — | APPROXIMATE LOCATION OF ELECTRIC LINE |
| — — — — — | EXISTING BUILDING | — S — S — S — | APPROXIMATE LOCATION OF SANITARY LINE |
| SW-4 | SURFACE WATER SAMPLING LOCATION | — T — T — T — | APPROXIMATE LOCATION OF TELECOMMUNICATION LINE |
| PRW-7 | GROUNDWATER MONITORING WELL LOCATION | — W — W — W — | APPROXIMATE LOCATION OF WATER LINE |
| --- | 30" SPECTRA PIPELINE | ● | APPROXIMATE LOCATION OF SURFACE WATER GAUGING STATION |
| ▨ | APPROXIMATE AREA OF SPECTRA PIPELINE EASEMENT | | |

NOTE:

- BUILDING NO. 40 HAS BEEN DEMOLISHED. A MODULAR BUILDING MOUNTED ON PIERS HAS BEEN CONSTRUCTED IN THE FOOTPRINT OF FORMER BUILDING 40.





No.	Date	Revision	Approved
ENGINEERING DEPARTMENT			
HHMT			
PORT IVORY FACILITY - SITE 1			

ENVIRONMENTAL	
Title	
GROUNDWATER SURFACE ELEVATION CONTOUR MAP (HIGH TIDE - MARCH 20, 2017)	

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Designed by L.O'HARA
 Drawn by H.DELGADO
 Checked by B.FRANCESE

Date FEBRUARY 2018

Contract Number

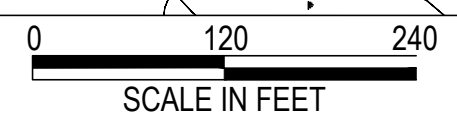
Drawing Number **FIGURE 4**
 PID#

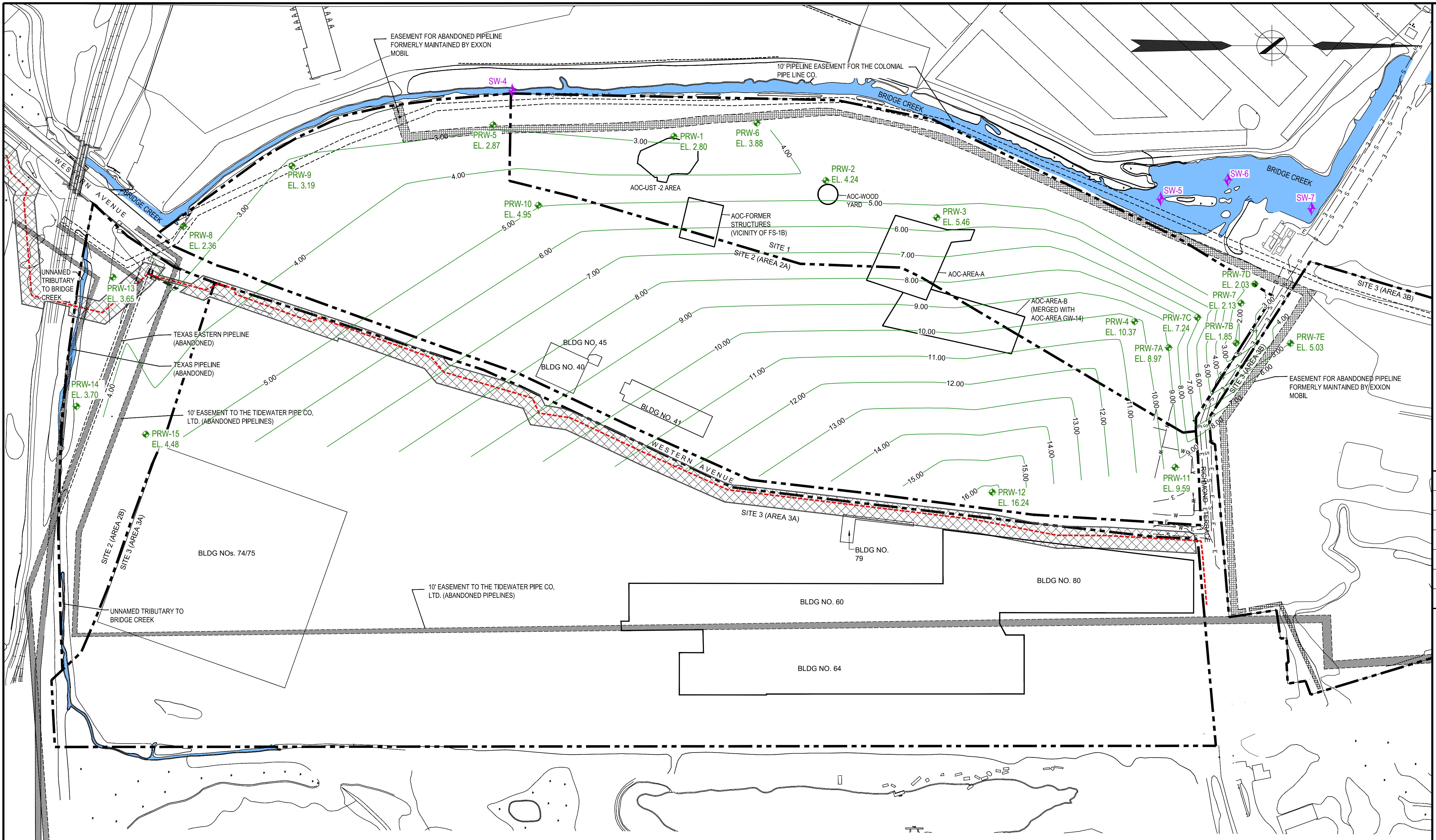
LEGEND (SYMBOLS NOT TO SCALE):

- S --- S --- S --- APPROXIMATE LOCATION OF SANITARY LINE
- T --- T --- T --- APPROXIMATE LOCATION OF TELECOMMUNICATION LINE
- W --- W --- W --- APPROXIMATE LOCATION OF WATER LINE
- E --- E --- E --- APPROXIMATE LOCATION OF ELECTRIC LINE
- SW-4 SURFACE WATER SAMPLING LOCATION
- PRW-7 GROUNDWATER MONITORING WELL LOCATION
- --- 30" SPECTRA PIPELINE
- APPROXIMATE AREA OF SPECTRA PIPELINE EASEMENT
- --- 12.00 --- GROUNDWATER SURFACE ELEVATION CONTOUR (FEET)
- EL. 2.55 --- GROUNDWATER SURFACE ELEVATION (FEET)

NOTES:

1. BUILDING NO. 40 HAS BEEN DEMOLISHED. A MODULAR BUILDING MOUNTED ON PIERS HAS BEEN CONSTRUCTED IN THE FOOTPRINT OF FORMER BUILDING 40.
2. GROUNDWATER SURFACE ELEVATIONS WERE MEASURED DURING HIGH TIDE ON 3/20/2017. DATUM: NAVD 88.





No.	Date	Revision	Approved

ENGINEERING DEPARTMENT			
HHMT			
PORT IVORY			
FACILITY - SITE 1			

ENVIRONMENTAL

Title

**GROUNDWATER
SURFACE ELEVATION
CONTOUR MAP
(LOW TIDE -
MARCH 20, 2017)**

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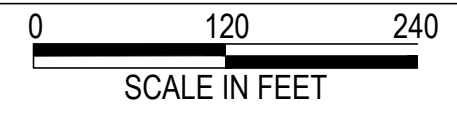
Designed by L.O'HARA
 Drawn by H.DELGADO
 Checked by B.FRANCESE
 Date FEBRUARY 2018

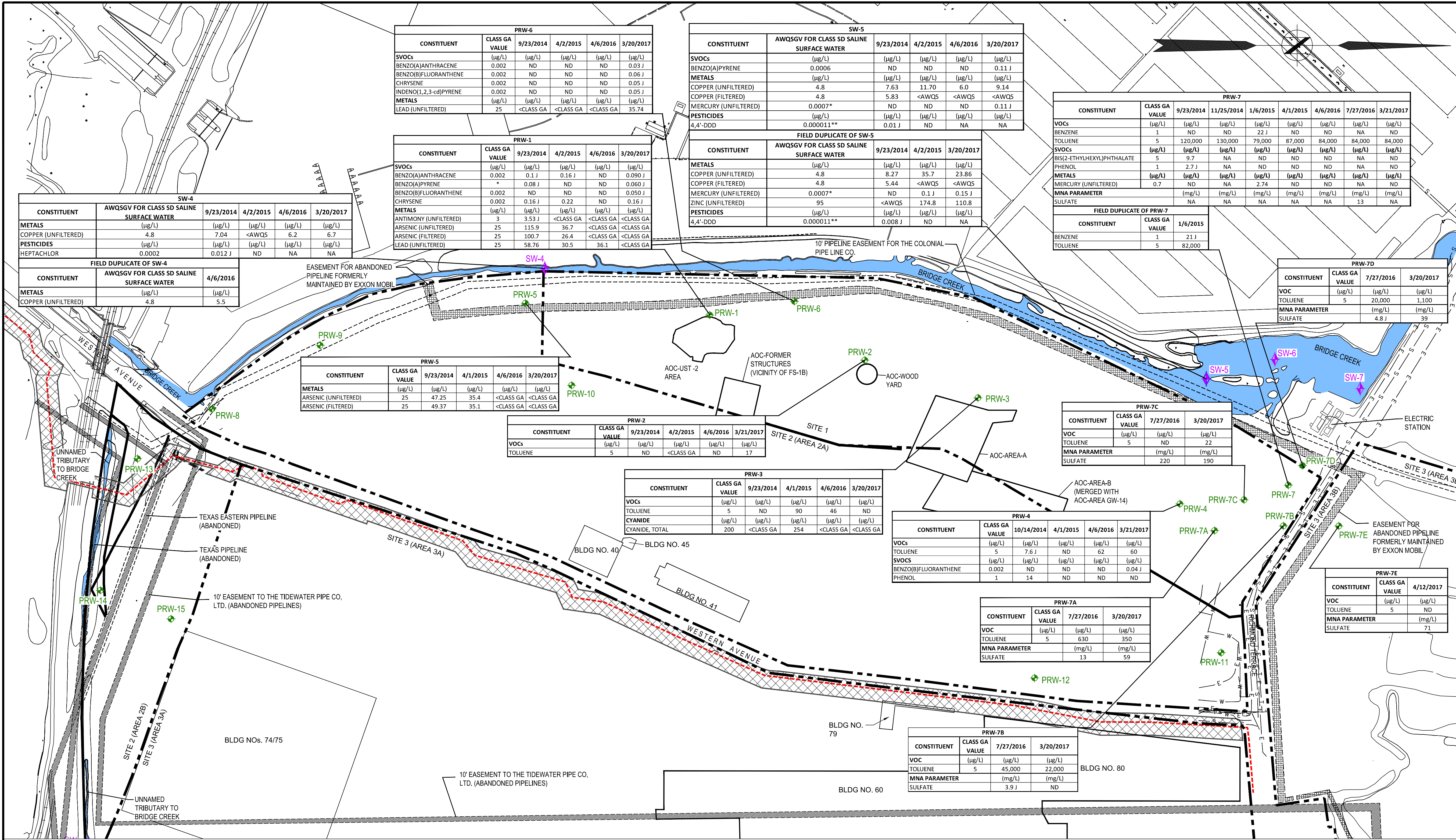
Contract Number
 Drawing Number **FIGURE 5**
 PID#

LEGEND (SYMBOLS NOT TO SCALE):

	SITE BOUNDARY		APPROXIMATE LOCATION OF SANITARY LINE
	EXISTING BUILDING		APPROXIMATE LOCATION OF TELECOMMUNICATION LINE
	SURFACE WATER SAMPLING LOCATION		APPROXIMATE LOCATION OF WATER LINE
	GROUNDWATER MONITORING WELL LOCATION		GROUNDWATER SURFACE ELEVATION CONTOUR (FEET)
	30" SPECTRA PIPELINE		GROUNDWATER SURFACE ELEVATION (FEET)
	APPROXIMATE AREA OF SPECTRA PIPELINE EASEMENT		
	APPROXIMATE LOCATION OF ELECTRIC LINE		

- NOTES:**
- BUILDING NO. 40 HAS BEEN DEMOLISHED. A MODULAR BUILDING MOUNTED ON PIERS HAS BEEN CONSTRUCTED IN THE FOOTPRINT OF FORMER BUILDING 40.
 - GROUNDWATER SURFACE ELEVATIONS WERE MEASURED DURING LOW TIDE ON 3/20/17. DATUM: NAVD 88.





PRW-6					
CONSTITUENT	CLASS GA VALUE	9/23/2014	4/2/2015	4/6/2016	3/20/2017
SVOCs					
BENZO(A)ANTHRACENE	(µg/L)	ND	ND	ND	ND
BENZO(B)FLUORANTHENE	(µg/L)	0.002	ND	ND	0.06 J
CHRYSENE	(µg/L)	0.002	ND	ND	0.05 J
INDENO(1,2,3-cd)PYRENE	(µg/L)	0.002	ND	ND	0.05 J
METALS					
LEAD (UNFILTERED)	(µg/L)	25	<CLASS GA	<CLASS GA	35.74

SW-5					
CONSTITUENT	AWQSGV FOR CLASS SD SALINE SURFACE WATER	9/23/2014	4/2/2015	4/6/2016	3/20/2017
SVOCs					
BENZO(A)PYRENE	(µg/L)	0.0006	ND	ND	0.11 J
METALS					
COPPER (UNFILTERED)	(µg/L)	4.8	7.63	11.70	6.0
COPPER (FILTERED)	(µg/L)	4.8	5.83	<AWQS	<AWQS
MERCURY (UNFILTERED)	(µg/L)	0.0007*	ND	ND	0.11 J
PESTICIDES					
4,4'-DDD	(µg/L)	0.00011**	0.01 J	ND	NA

PRW-7							
CONSTITUENT	CLASS GA VALUE	9/23/2014	11/25/2014	1/6/2015	4/1/2015	4/6/2016	7/27/2016
VOCs							
BENZENE	(µg/L)	1	ND	22 J	ND	ND	NA
TOLUENE	(µg/L)	5	120,000	130,000	79,000	87,000	84,000
SVOCs							
BIS(2-ETHYLHEXYL)PHTHALATE	(µg/L)	1	9.7 J	NA	ND	ND	NA
PHENOL	(µg/L)	1	2.7 J	NA	ND	ND	NA
METALS							
MERCURY (UNFILTERED)	(µg/L)	0.7	ND	NA	2.74	ND	NA
MNA PARAMETER							
SULFATE	(mg/L)	NA	NA	NA	NA	13	NA

SW-4				
CONSTITUENT	AWQSGV FOR CLASS SD SALINE SURFACE WATER	9/23/2014	4/2/2015	4/6/2016
METALS				
COPPER (UNFILTERED)	(µg/L)	4.8	7.04	<AWQS
PESTICIDES				
HEPTACHLOR	(µg/L)	0.0002	0.012 J	ND

PRW-1					
CONSTITUENT	CLASS GA VALUE	9/23/2014	4/2/2015	4/6/2016	3/20/2017
SVOCs					
BENZO(A)ANTHRACENE	(µg/L)	0.002	0.1 J	0.16 J	ND
BENZO(A)PYRENE	(µg/L)	*	0.08 J	ND	0.060 J
BENZO(B)FLUORANTHENE	(µg/L)	0.002	ND	ND	0.050 J
CHRYSENE	(µg/L)	0.002	0.16 J	0.22	ND
METALS					
ANTIMONY (UNFILTERED)	(µg/L)	3	3.53 J	<CLASS GA	<CLASS GA
ARSENIC (UNFILTERED)	(µg/L)	25	115.9	36.7	<CLASS GA
ARSENIC (FILTERED)	(µg/L)	25	100.7	26.4	<CLASS GA
LEAD (UNFILTERED)	(µg/L)	25	58.76	30.5	36.1

FIELD DUPLICATE OF SW-5				
CONSTITUENT	AWQSGV FOR CLASS SD SALINE SURFACE WATER	9/23/2014	4/2/2015	3/20/2017
METALS				
COPPER (UNFILTERED)	(µg/L)	4.8	8.27	35.7
COPPER (FILTERED)	(µg/L)	4.8	5.44	<AWQS
MERCURY (UNFILTERED)	(µg/L)	0.0007*	ND	0.15 J
ZINC (UNFILTERED)	(µg/L)	95	<AWQS	174.8
PESTICIDES				
4,4'-DDD	(µg/L)	0.00011**	0.008 J	ND

FIELD DUPLICATE OF PRW-7	
CONSTITUENT	CLASS GA VALUE
BENZENE	1
TOLUENE	5

PRW-7D			
CONSTITUENT	CLASS GA VALUE	7/27/2016	3/20/2017
VOC			
TOLUENE	(µg/L)	5	20,000
MNA PARAMETER			
SULFATE	(mg/L)	4.8 J	39

PRW-5				
CONSTITUENT	CLASS GA VALUE	9/23/2014	4/1/2015	3/20/2017
METALS				
ARSENIC (UNFILTERED)	(µg/L)	25	47.25	35.4
ARSENIC (FILTERED)	(µg/L)	25	49.37	35.1

PRW-2				
CONSTITUENT	CLASS GA VALUE	9/23/2014	4/2/2015	3/21/2017
VOCs				
TOLUENE	(µg/L)	5	ND	<CLASS GA
MNA PARAMETER				
SULFATE	(mg/L)	220	190	17

PRW-3					
CONSTITUENT	CLASS GA VALUE	9/23/2014	4/1/2015	4/6/2016	3/20/2017
VOCs					
TOLUENE	(µg/L)	5	ND	90	46
CYANIDE	(µg/L)	200	<CLASS GA	254	<CLASS GA
CYANIDE, TOTAL					
	(µg/L)	200	<CLASS GA	254	<CLASS GA

PRW-4					
CONSTITUENT	CLASS GA VALUE	10/14/2014	4/1/2015	4/6/2016	3/21/2017
VOCs					
TOLUENE	(µg/L)	5	7.6 J	ND	62
SVOCs					
BENZO(B)FLUORANTHENE	(µg/L)	0.002	ND	ND	0.04 J
PHENOL	(µg/L)	1	14	ND	ND

PRW-7A			
CONSTITUENT	CLASS GA VALUE	7/27/2016	3/20/2017
VOC			
TOLUENE	(µg/L)	5	630
MNA PARAMETER			
SULFATE	(mg/L)	13	59

PRW-7B			
CONSTITUENT	CLASS GA VALUE	7/27/2016	3/20/2017
VOC			
TOLUENE	(µg/L)	5	45,000
MNA PARAMETER			
SULFATE	(mg/L)	3.9 J	ND

PRW-7C			
CONSTITUENT	CLASS GA VALUE	7/27/2016	3/20/2017
VOC			
TOLUENE	(µg/L)	5	ND
MNA PARAMETER			
SULFATE	(mg/L)	220	190

PRW-7E		
CONSTITUENT	CLASS GA VALUE	4/12/2017
VOC		
TOLUENE	(µg/L)	5
MNA PARAMETER		
SULFATE	(mg/L)	71

LEGEND (SYMBOLS NOT TO SCALE):

- SITE BOUNDARY
- EXISTING BUILDING
- SW-4 ◆ SURFACE WATER SAMPLING LOCATION
- PRW-7 ◆ GROUNDWATER MONITORING WELL LOCATION
- 30" SPECTRA PIPELINE
- APPROXIMATE AREA OF SPECTRA PIPELINE EASEMENT
- APPROXIMATE LOCATION OF ELECTRIC LINE
- APPROXIMATE LOCATION OF SANITARY LINE
- APPROXIMATE LOCATION OF TELECOMMUNICATION LINE
- APPROXIMATE LOCATION OF WATER LINE

- NOTES:**
1. µg/L = MICROGRAM PER LITER
 2. mg/L = MILLIGRAMS PER LITER
 3. CLASS GA VALUES = NYSDEC DIVISION OF WATER TECHNICAL AND OPERATIONAL GUIDANCE SERIES (TOGS) 1.1.1 CLASS GA STANDARDS AND GUIDANCE VALUES
 4. AWQSGV = NYSDEC DIVISION OF WATER TECHNICAL AND OPERATIONAL GUIDANCE SERIES (TOGS) 1.1.1 AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES FOR SD SURFACE WATER
 - 5.
 6. J = ESTIMATED VALUE
 7. NA = NOT ANALYZED
 8. ND = COMPOUND NOT DETECTED
 9. ONLY RESULTS ABOVE CLASS GA VALUES AND SD SURFACE WATER AWQSGVs ARE SHOWN. HOWEVER, ALL TOLUENE AND SULFATE RESULTS FOR WELLS PRW-7 AND PRW-7A THROUGH PRW-7E FROM THE 2016 AND 2017 SAMPLING EVENTS ARE SHOWN FOR REFERENCE.
 10. *BENZO(A)PYRENE EXCEEDANCE IS ANY CONCENTRATION ABOVE THE DETECTION LIMIT.
 11. **APPLIES TO THE SUM OF 4,4'-DDD, 4,4'-DDT AND 4,4'-DDE.
 12. PRW-5 IS CONSIDERED A SITE 1 MONITORING WELL.

No.	Date	Revision	Approved
ENGINEERING DEPARTMENT			
HHMT			
PORT IVORY			
FACILITY - SITE 1			

ENVIRONMENTAL
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SUMMARY OF 2014, 2015, 2016, AND 2017 GROUNDWATER AND SURFACE WATER SAMPLING RESULTS

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Designed by L.O'HARA
 Drawn by H.DELGADO
 Checked by B.FRANCESE

Date FEBRUARY 2018

Contract Number

Drawing Number **FIGURE 6**
 PID#



TABLES

Table 1
The Port Authority of New York and New Jersey
Howland Hook Marine Terminal - Port Ivory Facility - Site 1
Staten Island, New York
Summary of 2017 Results of Analysis of Groundwater for Volatile Organic Compounds

SAMPLE ID		PRW-01				PRW-02				PRW-03			
SAMPLING DATE		3/20/2017				3/21/2017				3/20/2017			
LAB SAMPLE ID		L1708376-15				L1708548-06				L1708376-14			
SAMPLE MATRIX		WATER				WATER				WATER			
UNITS		µg/L				µg/L				µg/L			
VOLATILE ORGANIC COMPOUNDS (VOCs)	Class GA Value (µg/L)	Result	Q	RL	MDL	Result	Q	RL	MDL	Result	Q	RL	MDL
Methylene chloride	5	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
1,1-Dichloroethane	5	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
Chloroform	7	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
2-Chloroethylvinyl ether	NC	ND		10	0.70	ND		10	0.70	ND		10	0.70
Carbon tetrachloride	5	ND		0.50	0.13	ND		0.50	0.13	ND		0.50	0.13
1,2-Dichloropropane	1	ND		1.0	0.14	ND		1.0	0.14	ND		1.0	0.14
Dibromochloromethane	50	ND		0.50	0.15	ND		0.50	0.15	ND		0.50	0.15
1,1,2-Trichloroethane	1	ND		1.5	0.50	ND		1.5	0.50	ND		1.5	0.50
Tetrachloroethene	5	ND		0.5	0.18	ND		0.50	0.18	ND		0.50	0.18
Chlorobenzene	5	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
1,2-Dichloroethane	0.6	ND		0.5	0.13	ND		0.50	0.13	ND		0.50	0.13
1,1,1-Trichloroethane	5	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
Bromodichloromethane	50	ND		0.5	0.19	ND		0.50	0.19	ND		0.50	0.19
trans-1,3-Dichloropropene	NC	ND		0.5	0.16	ND		0.50	0.16	ND		0.50	0.16
cis-1,3-Dichloropropene	NC	ND		0.5	0.14	ND		0.50	0.14	ND		0.50	0.14
1,3-Dichloropropene, Total	0.4	ND		0.5	0.14	ND		0.50	0.14	ND		0.50	0.14
Bromoform	50	ND		2.0	0.65	ND		2.0	0.65	ND		2.0	0.65
1,1,2,2-Tetrachloroethane	5	ND		0.5	0.17	ND		0.50	0.17	ND		0.50	0.17
Benzene	1	ND		0.5	0.16	ND		0.50	0.16	ND		0.50	0.16
Toluene	5	ND		2.5	0.70	17		2.5	0.70	ND		2.5	0.70
Ethylbenzene	5	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
Chloromethane	5	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
Bromomethane	5	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
Vinyl chloride	2	ND		1.0	0.07	ND		1.0	0.07	ND		1.0	0.07
Chloroethane	5	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
1,1-Dichloroethene	5	ND		0.5	0.17	ND		0.50	0.17	ND		0.50	0.17
trans-1,2-Dichloroethene	5	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
Trichloroethene	5	ND		0.5	0.18	ND		0.50	0.18	ND		0.50	0.18
1,2-Dichlorobenzene	3	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
1,3-Dichlorobenzene	3	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
1,4-Dichlorobenzene	3	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
Acrylonitrile	5	ND		5.0	1.5	ND		5.0	1.5	ND		5.0	1.5
Acrolein	5	ND		5.0	0.44	ND		5.0	0.44	ND		5.0	0.44

Notes:

Bold and shaded indicates the value exceeds the value exceeds the corresponding Class GA value.

MDL - Method detection limit

NC - No criterion

ND - Compound not detected

Q - Qualifier

RL - Reporting limit

µg/L - Micrograms per liter

Table 1
The Port Authority of New York and New Jersey
Howland Hook Marine Terminal - Port Ivory Facility - Site 1
Staten Island, New York
Summary of 2017 Results of Analysis of Groundwater for Volatile Organic Compounds

SAMPLE ID		PRW-04				PRW-05				PRW-06			
		3/21/2017				3/20/2017				3/20/2017			
LAB SAMPLE ID		L1708548-08				L1708376-13				L1708376-17			
SAMPLE MATRIX		WATER				WATER				WATER			
UNITS		µg/L				µg/L				µg/L			
VOLATILE ORGANIC COMPOUNDS (VOCs)	Class GA Value (µg/L)	Result	Q	RL	MDL	Result	Q	RL	MDL	Result	Q	RL	MDL
Methylene chloride	5	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
1,1-Dichloroethane	5	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
Chloroform	7	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
2-Chloroethylvinyl ether	NC	ND		10	0.70	ND		10	0.70	ND		10	0.70
Carbon tetrachloride	5	ND		0.50	0.13	ND		0.50	0.13	ND		0.50	0.13
1,2-Dichloropropane	1	ND		1.0	0.14	ND		1.0	0.14	ND		1.0	0.14
Dibromochloromethane	50	ND		0.50	0.15	ND		0.50	0.15	ND		0.50	0.15
1,1,2-Trichloroethane	1	ND		1.5	0.50	ND		1.5	0.50	ND		1.5	0.50
Tetrachloroethene	5	ND		0.50	0.18	ND		0.50	0.18	ND		0.50	0.18
Chlorobenzene	5	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
1,2-Dichloroethane	0.6	ND		0.50	0.13	ND		0.50	0.13	ND		0.50	0.13
1,1,1-Trichloroethane	5	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
Bromodichloromethane	50	ND		0.50	0.19	ND		0.50	0.19	ND		0.50	0.19
trans-1,3-Dichloropropene	NC	ND		0.50	0.16	ND		0.50	0.16	ND		0.50	0.16
cis-1,3-Dichloropropene	NC	ND		0.50	0.14	ND		0.50	0.14	ND		0.50	0.14
1,3-Dichloropropene, Total	0.4	ND		0.50	0.14	ND		0.50	0.14	ND		0.50	0.14
Bromoform	50	ND		2.0	0.65	ND		2.0	0.65	ND		2.0	0.65
1,1,2,2-Tetrachloroethane	5	ND		0.50	0.17	ND		0.50	0.17	ND		0.50	0.17
Benzene	1	ND		0.50	0.16	ND		0.50	0.16	ND		0.50	0.16
Toluene	5	60		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
Ethylbenzene	5	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
Chloromethane	5	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
Bromomethane	5	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
Vinyl chloride	2	ND		1.0	0.07	ND		1.0	0.07	ND		1.0	0.07
Chloroethane	5	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
1,1-Dichloroethene	5	ND		0.50	0.17	ND		0.50	0.17	ND		0.50	0.17
trans-1,2-Dichloroethene	5	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
Trichloroethene	5	ND		0.50	0.18	ND		0.50	0.18	ND		0.50	0.18
1,2-Dichlorobenzene	3	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
1,3-Dichlorobenzene	3	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
1,4-Dichlorobenzene	3	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
Acrylonitrile	5	ND		5.0	1.5	ND		5.0	1.5	ND		5.0	1.5
Acrolein	5	ND		5.0	0.44	ND		5.0	0.44	ND		5.0	0.44

Notes:

Bold and shaded indicates the value exceeds the corresponding Class GA value.

MDL - Method detection limit

NC - No criterion

ND - Compound not detected

Q - Qualifier

RL - Reporting limit

µg/L - Micrograms per liter

Table 1
The Port Authority of New York and New Jersey
Howland Hook Marine Terminal - Port Ivory Facility - Site 1
Staten Island, New York
Summary of 2017 Results of Analysis of Groundwater for Volatile Organic Compounds

SAMPLE ID SAMPLING DATE LAB SAMPLE ID SAMPLE MATRIX UNITS		PRW-07				PRW-7A				PRW-7B			
		3/21/2017				3/20/2017				3/20/2017			
		L1708548-07				L1708376-08				L1708376-09			
		WATER				WATER				WATER			
		µg/L				µg/L				µg/L			
VOLATILE ORGANIC COMPOUNDS (VOCs)	Class GA Value (µg/L)	Result	Q	RL	MDL	Result	Q	RL	MDL	Result	Q	RL	MDL
Methylene chloride	5	ND		2,500	700	NA		NA	NA	NA		NA	NA
1,1-Dichloroethane	5	ND		2,500	700	NA		NA	NA	NA		NA	NA
Chloroform	7	ND		2,500	700	NA		NA	NA	NA		NA	NA
2-Chloroethylvinyl ether	NC	ND		10,000	700	NA		NA	NA	NA		NA	NA
Carbon tetrachloride	5	ND		500	130	NA		NA	NA	NA		NA	NA
1,2-Dichloropropane	1	ND		1,000	140	NA		NA	NA	NA		NA	NA
Dibromochloromethane	50	ND		500	150	NA		NA	NA	NA		NA	NA
1,1,2-Trichloroethane	1	ND		1,500	500	NA		NA	NA	NA		NA	NA
Tetrachloroethene	5	ND		500	180	NA		NA	NA	NA		NA	NA
Chlorobenzene	5	ND		2,500	700	NA		NA	NA	NA		NA	NA
1,2-Dichloroethane	0.6	ND		500	130	NA		NA	NA	NA		NA	NA
1,1,1-Trichloroethane	5	ND		2,500	700	NA		NA	NA	NA		NA	NA
Bromodichloromethane	50	ND		500	190	NA		NA	NA	NA		NA	NA
trans-1,3-Dichloropropene	NC	ND		500	160	NA		NA	NA	NA		NA	NA
cis-1,3-Dichloropropene	NC	ND		500	140	NA		NA	NA	NA		NA	NA
1,3-Dichloropropene, Total	0.4	ND		500	140	NA		NA	NA	NA		NA	NA
Bromoform	50	ND		2,000	650	NA		NA	NA	NA		NA	NA
1,1,2,2-Tetrachloroethane	5	ND		500	170	NA		NA	NA	NA		NA	NA
Benzene	1	ND		500	160	NA		NA	NA	NA		NA	NA
Toluene	5	84,000		2,500	700	350		12	3.5	22,000		1200	350
Ethylbenzene	5	ND		2,500	700	NA		NA	NA	NA		NA	NA
Chloromethane	5	ND		2,500	700	NA		NA	NA	NA		NA	NA
Bromomethane	5	ND		2,500	700	NA		NA	NA	NA		NA	NA
Vinyl chloride	2	ND		1,000	71	NA		NA	NA	NA		NA	NA
Chloroethane	5	ND		2,500	700	NA		NA	NA	NA		NA	NA
1,1-Dichloroethene	5	ND		500	170	NA		NA	NA	NA		NA	NA
trans-1,2-Dichloroethene	5	ND		2,500	700	NA		NA	NA	NA		NA	NA
Trichloroethene	5	ND		500	180	NA		NA	NA	NA		NA	NA
1,2-Dichlorobenzene	3	ND		2,500	700	NA		NA	NA	NA		NA	NA
1,3-Dichlorobenzene	3	ND		2,500	700	NA		NA	NA	NA		NA	NA
1,4-Dichlorobenzene	3	ND		2,500	700	NA		NA	NA	NA		NA	NA
Acrylonitrile	5	ND		5,000	1,500	NA		NA	NA	NA		NA	NA
Acrolein	5	ND		5,000	440	NA		NA	NA	NA		NA	NA

Notes:

Bold and shaded indicates the value exceeds the corresponding Class GA value.

MDL - Method detection limit

NC - No criterion

ND - Compound not detected

Q - Qualifier

RL - Reporting limit

µg/L - Micrograms per liter

Table 1
The Port Authority of New York and New Jersey
Howland Hook Marine Terminal - Port Ivory Facility - Site 1
Staten Island, New York
Summary of 2017 Results of Analysis of Groundwater for Volatile Organic Compounds

SAMPLE ID		PRW-7C				PRW-7D				PRW-7E			
SAMPLING DATE		3/20/2017				3/20/2017				4/12/2017			
LAB SAMPLE ID		L1708376-10				L1708376-11				L1711785-03			
SAMPLE MATRIX		WATER				WATER				WATER			
UNITS		µg/L				µg/L				µg/L			
VOLATILE ORGANIC COMPOUNDS (VOCs)	Class GA Value (µg/L)	Result	Q	RL	MDL	Result	Q	RL	MDL	Result	Q	RL	MDL
Methylene chloride	5	NA		NA	NA	NA		NA	NA	NA		NA	NA
1,1-Dichloroethane	5	NA		NA	NA	NA		NA	NA	NA		NA	NA
Chloroform	7	NA		NA	NA	NA		NA	NA	NA		NA	NA
2-Chloroethylvinyl ether	NC	NA		NA	NA	NA		NA	NA	NA		NA	NA
Carbon tetrachloride	5	NA		NA	NA	NA		NA	NA	NA		NA	NA
1,2-Dichloropropane	1	NA		NA	NA	NA		NA	NA	NA		NA	NA
Dibromochloromethane	50	NA		NA	NA	NA		NA	NA	NA		NA	NA
1,1,2-Trichloroethane	1	NA		NA	NA	NA		NA	NA	NA		NA	NA
Tetrachloroethene	5	NA		NA	NA	NA		NA	NA	NA		NA	NA
Chlorobenzene	5	NA		NA	NA	NA		NA	NA	NA		NA	NA
1,2-Dichloroethane	0.6	NA		NA	NA	NA		NA	NA	NA		NA	NA
1,1,1-Trichloroethane	5	NA		NA	NA	NA		NA	NA	NA		NA	NA
Bromodichloromethane	50	NA		NA	NA	NA		NA	NA	NA		NA	NA
trans-1,3-Dichloropropene	NC	NA		NA	NA	NA		NA	NA	NA		NA	NA
cis-1,3-Dichloropropene	NC	NA		NA	NA	NA		NA	NA	NA		NA	NA
1,3-Dichloropropene, Total	0.4	NA		NA	NA	NA		NA	NA	NA		NA	NA
Bromoform	50	NA		NA	NA	NA		NA	NA	NA		NA	NA
1,1,2,2-Tetrachloroethane	5	NA		NA	NA	NA		NA	NA	NA		NA	NA
Benzene	1	NA		NA	NA	NA		NA	NA	NA		NA	NA
Toluene	5	22		2.5	0.70	1,100		25	7.0	ND		2.5	0.70
Ethylbenzene	5	NA		NA	NA	NA		NA	NA	NA		NA	NA
Chloromethane	5	NA		NA	NA	NA		NA	NA	NA		NA	NA
Bromomethane	5	NA		NA	NA	NA		NA	NA	NA		NA	NA
Vinyl chloride	2	NA		NA	NA	NA		NA	NA	NA		NA	NA
Chloroethane	5	NA		NA	NA	NA		NA	NA	NA		NA	NA
1,1-Dichloroethene	5	NA		NA	NA	NA		NA	NA	NA		NA	NA
trans-1,2-Dichloroethene	5	NA		NA	NA	NA		NA	NA	NA		NA	NA
Trichloroethene	5	NA		NA	NA	NA		NA	NA	NA		NA	NA
1,2-Dichlorobenzene	3	NA		NA	NA	NA		NA	NA	NA		NA	NA
1,3-Dichlorobenzene	3	NA		NA	NA	NA		NA	NA	NA		NA	NA
1,4-Dichlorobenzene	3	NA		NA	NA	NA		NA	NA	NA		NA	NA
Acrylonitrile	5	NA		NA	NA	NA		NA	NA	NA		NA	NA
Acrolein	5	NA		NA	NA	NA		NA	NA	NA		NA	NA

Notes:

Bold and shaded indicates the value exceeds the corresponding Class GA value.

MDL - Method detection limit

NC - No criterion

ND - Compound not detected

Q - Qualifier

RL - Reporting limit

µg/L - Micrograms per liter

Table 1
The Port Authority of New York and New Jersey
Howland Hook Marine Terminal - Port Ivory Facility - Site 1
Staten Island, New York
Summary of 2017 Results of Analysis of Groundwater for Volatile Organic Compounds

SAMPLE ID SAMPLING DATE LAB SAMPLE ID SAMPLE MATRIX UNITS		FIELD BLANK				FIELD BLANK				TRIP BLANK			
		3/20/2017				3/21/2017				3/20/2017			
		L1708376-21				L1708548-09				L1708548-10			
		WATER				WATER				WATER			
		µg/L				µg/L				µg/L			
VOLATILE ORGANIC COMPOUNDS (VOCs)	Class GA Value (µg/L)	Result	Q	RL	MDL	Result	Q	RL	MDL	Result	Q	RL	MDL
Methylene chloride	5	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
1,1-Dichloroethane	5	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
Chloroform	7	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
2-Chloroethylvinyl ether	NC	ND		10	0.70	ND		10	0.70	ND		10	0.70
Carbon tetrachloride	5	ND		0.50	0.13	ND		0.50	0.13	ND		0.50	0.13
1,2-Dichloropropane	1	ND		1.0	0.14	ND		1.0	0.14	ND		1.0	0.14
Dibromochloromethane	50	ND		0.50	0.15	ND		0.50	0.15	ND		0.50	0.15
1,1,2-Trichloroethane	1	ND		1.5	0.50	ND		1.5	0.50	ND		1.5	0.50
Tetrachloroethene	5	ND		0.50	0.18	ND		0.50	0.18	ND		0.50	0.18
Chlorobenzene	5	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
1,2-Dichloroethane	0.6	ND		0.50	0.13	ND		0.50	0.13	ND		0.50	0.13
1,1,1-Trichloroethane	5	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
Bromodichloromethane	50	ND		0.50	0.19	ND		0.50	0.19	ND		0.50	0.19
trans-1,3-Dichloropropene	NC	ND		0.50	0.16	ND		0.50	0.16	ND		0.50	0.16
cis-1,3-Dichloropropene	NC	ND		0.50	0.14	ND		0.50	0.14	ND		0.50	0.14
1,3-Dichloropropene, Total	0.4	ND		0.50	0.14	ND		0.50	0.14	ND		0.50	0.14
Bromoform	50	ND		2.0	0.65	ND		2.0	0.65	ND		2.0	0.65
1,1,2,2-Tetrachloroethane	5	ND		0.50	0.17	ND		0.50	0.17	ND		0.50	0.17
Benzene	1	ND		0.50	0.16	ND		0.50	0.16	ND		0.50	0.16
Toluene	5	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
Ethylbenzene	5	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
Chloromethane	5	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
Bromomethane	5	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
Vinyl chloride	2	ND		1.0	0.07	ND		1.0	0.07	ND		1.0	0.07
Chloroethane	5	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
1,1-Dichloroethene	5	ND		0.50	0.17	ND		0.50	0.17	ND		0.50	0.17
trans-1,2-Dichloroethene	5	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
Trichloroethene	5	ND		0.50	0.18	ND		0.50	0.18	ND		0.50	0.18
1,2-Dichlorobenzene	3	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
1,3-Dichlorobenzene	3	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
1,4-Dichlorobenzene	3	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70
Acrylonitrile	5	ND		5.0	1.5	ND		5.0	1.5	ND		5.0	1.5
Acrolein	5	ND		5.0	0.44	ND		5.0	0.44	ND		5.0	0.44

Notes:

Bold and shaded indicates the value exceeds the corresponding Class GA value.

MDL - Method detection limit

NC - No criterion

ND - Compound not detected

Q - Qualifier

RL - Reporting limit

µg/L - Micrograms per liter

Table 1
The Port Authority of New York and New Jersey
Howland Hook Marine Terminal - Port Ivory Facility - Site 1
Staten Island, New York
Summary of 2017 Results of Analysis of Groundwater for Volatile Organic Compounds

SAMPLE ID		TRIP BLANK				
SAMPLING DATE		3/17/2017				
LAB SAMPLE ID		L1708376-22				
SAMPLE MATRIX		WATER				
UNITS		µg/L				
VOLATILE ORGANIC COMPOUNDS (VOCs)	Class GA Value (µg/L)	Result	Q	RL	MDL	
Methylene chloride	5	ND		2.5	0.70	
1,1-Dichloroethane	5	ND		2.5	0.70	
Chloroform	7	ND		2.5	0.70	
2-Chloroethylvinyl ether	NC	ND		10	0.70	
Carbon tetrachloride	5	ND		0.50	0.13	
1,2-Dichloropropane	1	ND		1.0	0.14	
Dibromochloromethane	50	ND		0.50	0.15	
1,1,2-Trichloroethane	1	ND		1.5	0.50	
Tetrachloroethene	5	ND		0.50	0.18	
Chlorobenzene	5	ND		2.5	0.70	
1,2-Dichloroethane	0.6	ND		0.50	0.13	
1,1,1-Trichloroethane	5	ND		2.5	0.70	
Bromodichloromethane	50	ND		0.50	0.19	
trans-1,3-Dichloropropene	NC	ND		0.50	0.16	
cis-1,3-Dichloropropene	NC	ND		0.50	0.14	
1,3-Dichloropropene, Total	0.4	ND		0.50	0.14	
Bromoform	50	ND		2.0	0.65	
1,1,2,2-Tetrachloroethane	5	ND		0.50	0.17	
Benzene	1	ND		0.50	0.16	
Toluene	5	ND		2.5	0.70	
Ethylbenzene	5	ND		2.5	0.70	
Chloromethane	5	ND		2.5	0.70	
Bromomethane	5	ND		2.5	0.70	
Vinyl chloride	2	ND		1.0	0.07	
Chloroethane	5	ND		2.5	0.70	
1,1-Dichloroethene	5	ND		0.50	0.17	
trans-1,2-Dichloroethene	5	ND		2.5	0.70	
Trichloroethene	5	ND		0.50	0.18	
1,2-Dichlorobenzene	3	ND		2.5	0.70	
1,3-Dichlorobenzene	3	ND		2.5	0.70	
1,4-Dichlorobenzene	3	ND		2.5	0.70	
Acrylonitrile	5	ND		5.0	1.5	
Acrolein	5	ND		5.0	0.44	

Notes:

Bold and shaded indicates the value exceeds the corresponding Class GA value.

MDL - Method detection limit

NC - No criterion

ND - Compound not detected

Q - Qualifier

RL - Reporting limit

µg/L - Micrograms per liter

Table 2
The Port Authority of New York and New Jersey
Howland Hook Marine Terminal - Port Ivory Facility - Site 1
Staten Island, New York
Summary of 2017 Results of Analysis of Groundwater for Semi-Volatile Organic Compounds

SAMPLE ID SAMPLING DATE LAB SAMPLE ID SAMPLE MATRIX UNITS		PRW-01				PRW-02				PRW-03			
		3/20/2017				3/21/2017				3/20/2017			
		L1708376-15				L1708548-06				L1708376-14			
		WATER				WATER				WATER			
		µg/L				µg/L				µg/L			
SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs)	Class GA Value (µg/L)	Result	Q	RL	MDL	Result	Q	RL	MDL	Result	Q	RL	MDL
Benzidine	5	ND		20	8.1	ND		20	8.1	ND		20	8.1
1,2,4-Trichlorobenzene	5	ND		5.0	0.66	ND		5.0	0.66	ND		5.0	0.66
Bis(2-chloroethyl)ether	1	ND		2.0	0.67	ND		2.0	0.67	ND		2.0	0.67
3,3'-Dichlorobenzidine	5	ND		5.0	1.4	ND		5.0	1.4	ND		5.0	1.4
2,4-Dinitrotoluene	5	ND		5.0	0.84	ND		5.0	0.84	ND		5.0	0.84
2,6-Dinitrotoluene	5	ND		5.0	1.1	ND		5.0	1.1	ND		5.0	1.1
(Hydr)Azobenzene	NC	ND		2.0	0.75	ND		2.0	0.75	ND		2.0	0.75
4-Chlorophenyl phenyl ether	NC	ND		2.0	0.62	ND		2.0	0.62	ND		2.0	0.62
4-Bromophenyl phenyl ether	NC	ND		2.0	0.73	ND		2.0	0.73	ND		2.0	0.73
Bis(2-chloroisopropyl)ether	5	ND		2.0	0.70	ND		2.0	0.70	ND		2.0	0.70
Bis(2-chloroethoxy)methane	5	ND		5.0	0.63	ND		5.0	0.63	ND		5.0	0.63
Hexachlorocyclopentadiene	5	ND		20	7.8	ND		20	7.8	ND		20	7.8
Isophorone	50	ND		5.0	0.60	ND		5.0	0.60	ND		5.0	0.60
Nitrobenzene	0.4	ND		2.0	0.75	ND		2.0	0.75	ND		2.0	0.75
Diphenylamine	5	ND		2.0	0.64	ND		2.0	0.64	ND		2.0	0.64
n-Nitrosodi-n-propylamine	NC	ND		5.0	0.70	ND		5.0	0.70	ND		5.0	0.70
Bis(2-ethylhexyl)phthalate	5	2.0	J	3.0	0.91	ND		3.0	0.91	1.7	J	3.0	0.91
Butyl benzyl phthalate	50	ND		5.0	1.3	ND		5.0	1.3	ND		5.0	1.3
Di-n-butylphthalate	50	ND		5.0	0.69	ND		5.0	0.69	ND		5.0	0.69
Di-n-octylphthalate	50	ND		5.0	1.1	ND		5.0	1.1	ND		5.0	1.1
Diethyl phthalate	50	ND		5.0	0.63	ND		5.0	0.63	ND		5.0	0.63
Dimethyl phthalate	50	ND		5.0	0.65	ND		5.0	0.65	ND		5.0	0.65
n-Nitrosodimethylamine	NC	ND		2.0	0.67	ND		2.0	0.67	ND		2.0	0.67
2,4,6-Trichlorophenol	NC	ND		5.0	0.68	ND		5.0	0.68	ND		5.0	0.68
p-Chloro-m-cresol	NC	ND		2.0	0.62	ND		2.0	0.62	ND		2.0	0.62
2-Chlorophenol	NC	ND		2.0	0.63	ND		2.0	0.63	ND		2.0	0.63
2,4-Dichlorophenol	5	ND		5.0	0.77	ND		5.0	0.77	ND		5.0	0.77
2,4-Dimethylphenol	50	ND		5.0	1.6	ND		5.0	1.6	ND		5.0	1.6
2-Nitrophenol	NC	ND		10	1.5	ND		10	1.5	ND		10	1.5
4-Nitrophenol	NC	ND		10	1.8	ND		10	1.8	ND		10	1.8
2,4-Dinitrophenol	10	ND		20	5.5	ND		20	5.5	ND		20	5.5
4,6-Dinitro-o-cresol	NC	ND		10	2.1	ND		10	2.1	ND		10	2.1
Phenol	1	ND		5.0	1.9	ND		5.0	1.9	ND		5.0	1.9
Acenaphthene	20	0.62		0.10	0.040	ND		0.10	0.040	ND		0.10	0.040
2-Chloronaphthalene	10	ND		0.20	0.040	ND		0.20	0.040	ND		0.20	0.040
Fluoranthene	50	0.12	J	0.20	0.040	ND		0.20	0.040	ND		0.20	0.040
Hexachlorobutadiene	0.5	ND		0.50	0.040	ND		0.50	0.040	ND		0.50	0.040
Naphthalene	10	0.10	J	0.20	0.040	ND		0.20	0.040	ND		0.20	0.040
Benzo(a)anthracene	0.002	0.090	J	0.20	0.020	ND		0.20	0.020	ND		0.20	0.020
Benzo(a)pyrene	ND	0.060	J	0.20	0.040	ND		0.20	0.040	ND		0.20	0.040
Benzo(b)fluoranthene	0.002	0.050	J	0.20	0.020	ND		0.20	0.020	ND		0.20	0.020
Benzo(k)fluoranthene	0.002	ND		0.20	0.040	ND		0.20	0.040	ND		0.20	0.040
Chrysene	0.002	0.16	J	0.20	0.040	ND		0.20	0.040	ND		0.20	0.040
Acenaphthylene	NC	0.10	J	0.20	0.040	ND		0.20	0.040	ND		0.20	0.040
Anthracene	50	0.22		0.20	0.040	ND		0.20	0.040	0.060	J	0.20	0.040
Benzo(ghi)perylene	NC	0.060	J	0.20	0.040	ND		0.20	0.040	ND		0.20	0.040
Fluorene	50	0.16	J	0.20	0.040	ND		0.20	0.040	ND		0.20	0.040
Phenanthrene	50	0.060	J	0.20	0.020	0.040	J	0.20	0.020	ND		0.20	0.020
Dibenzo(a,h)anthracene	NC	ND		0.20	0.040	ND		0.20	0.040	ND		0.20	0.040
Indeno(1,2,3-cd)Pyrene	0.002	ND		0.20	0.040	ND		0.20	0.040	ND		0.20	0.040
Pyrene	50	0.45		0.20	0.040	ND		0.20	0.040	ND		0.20	0.040
Pentachlorophenol	1	ND		0.80	0.22	ND		0.80	0.22	ND		0.80	0.22
Hexachlorobenzene	0.04	ND		0.80	0.030	ND		0.80	0.030	ND		0.80	0.030
Hexachloroethane	5	ND		0.80	0.030	ND		0.80	0.030	ND		0.80	0.030

Notes:

Bold and shaded indicates the value exceeds the corresponding Class GA value.

J - Estimated value

MDL - Method detection limit

NC - No criterion

ND - Compound not detected

RL - Reporting limit

µg/L - Micrograms per liter

Table 2
The Port Authority of New York and New Jersey
Howland Hook Marine Terminal - Port Ivory Facility - Site 1
Staten Island, New York
Summary of 2017 Results of Analysis of Groundwater for Semi-Volatile Organic Compounds

SAMPLE ID SAMPLING DATE LAB SAMPLE ID SAMPLE MATRIX UNITS		PRW-04				PRW-05				PRW-06			
		3/21/2017				3/20/2017				3/20/2017			
		L1708548-08				L1708376-13				L1708376-17			
		WATER				WATER				WATER			
		µg/L				µg/L				µg/L			
SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs)	Class GA Value (µg/L)	Result	Q	RL	MDL	Result	Q	RL	MDL	Result	Q	RL	MDL
Benzidine	5	ND		20	8.1	ND		20	8.1	ND		20	8.1
1,2,4-Trichlorobenzene	5	ND		5.0	0.66	ND		5.0	0.66	ND		5.0	0.66
Bis(2-chloroethyl)ether	1	ND		2.0	0.67	ND		2.0	0.67	ND		2.0	0.67
3,3'-Dichlorobenzidine	5	ND		5.0	1.4	ND		5.0	1.4	ND		5.0	1.4
2,4-Dinitrotoluene	5	ND		5.0	0.84	ND		5.0	0.84	ND		5.0	0.84
2,6-Dinitrotoluene	5	ND		5.0	1.1	ND		5.0	1.1	ND		5.0	1.1
(Hydr)Azobenzene	NC	ND		2.0	0.75	ND		2.0	0.75	ND		2.0	0.75
4-Chlorophenyl phenyl ether	NC	ND		2.0	0.62	ND		2.0	0.62	ND		2.0	0.62
4-Bromophenyl phenyl ether	NC	ND		2.0	0.73	ND		2.0	0.73	ND		2.0	0.73
Bis(2-chloroisopropyl)ether	5	ND		2.0	0.70	ND		2.0	0.70	ND		2.0	0.70
Bis(2-chloroethoxy)methane	5	ND		5.0	0.63	ND		5.0	0.63	ND		5.0	0.63
Hexachlorocyclopentadiene	5	ND		20	7.8	ND		20	7.8	ND		20	7.8
Isophorone	50	ND		5.0	0.60	ND		5.0	0.60	ND		5.0	0.60
Nitrobenzene	0.4	ND		2.0	0.75	ND		2.0	0.75	ND		2.0	0.75
Diphenylamine	5	ND		2.0	0.64	ND		2.0	0.64	ND		2.0	0.64
n-Nitrosodi-n-propylamine	NC	ND		5.0	0.70	ND		5.0	0.70	ND		5.0	0.70
Bis(2-ethylhexyl)phthalate	5	ND		3.0	0.91	1.6	J	3.0	0.91	1.9	J	3.0	0.91
Butyl benzyl phthalate	50	ND		5.0	1.3	ND		5.0	1.3	ND		5.0	1.3
Di-n-butylphthalate	50	ND		5.0	0.69	ND		5.0	0.69	ND		5.0	0.69
Di-n-octylphthalate	50	ND		5.0	1.1	ND		5.0	1.1	ND		5.0	1.1
Diethyl phthalate	50	ND		5.0	0.63	ND		5.0	0.63	ND		5.0	0.63
Dimethyl phthalate	50	ND		5.0	0.65	ND		5.0	0.65	ND		5.0	0.65
n-Nitrosodimethylamine	NC	ND		2.0	0.67	ND		2.0	0.67	ND		2.0	0.67
2,4,6-Trichloropheol	NC	ND		5.0	0.68	ND		5.0	0.68	ND		5.0	0.68
p-Chloro-m-cresol	NC	ND		2.0	0.62	ND		2.0	0.62	ND		2.0	0.62
2-Chlorophenol	NC	ND		2.0	0.63	ND		2.0	0.63	ND		2.0	0.63
2,4-Dichlorophenol	5	ND		5.0	0.77	ND		5.0	0.77	ND		5.0	0.77
2,4-Dimethylphenol	50	ND		5.0	1.6	ND		5.0	1.6	ND		5.0	1.6
2-Nitrophenol	NC	ND		10	1.5	ND		10	1.5	ND		10	1.5
4-Nitrophenol	NC	ND		10	1.8	ND		10	1.8	ND		10	1.8
2,4-Dinitrophenol	10	ND		20	5.5	ND		20	5.5	ND		20	5.5
4,6-Dinitro-o-cresol	NC	ND		10	2.1	ND		10	2.1	ND		10	2.1
Phenol	1	ND		5.0	1.9	ND		5.0	1.9	ND		5.0	1.9
Acenaphthene	20	ND		0.10	0.040	ND		0.10	0.040	ND		0.10	0.040
2-Chloronaphthalene	10	ND		0.20	0.040	ND		0.20	0.040	ND		0.20	0.040
Fluoranthene	50	ND		0.20	0.040	ND		0.20	0.040	0.050	J	0.20	0.040
Hexachlorobutadiene	0.5	ND		0.50	0.040	ND		0.50	0.040	ND		0.50	0.040
Naphthalene	10	ND		0.20	0.040	ND		0.20	0.040	ND		0.20	0.040
Benzo(a)anthracene	0.002	ND		0.20	0.020	ND		0.20	0.020	0.030	J	0.20	0.020
Benzo(a)pyrene	ND	ND		0.20	0.040	ND		0.20	0.040	ND		0.20	0.040
Benzo(b)fluoranthene	0.002	0.040	J	0.20	0.020	ND		0.20	0.020	0.060	J	0.20	0.020
Benzo(k)fluoranthene	0.002	ND		0.20	0.040	ND		0.20	0.040	ND		0.20	0.040
Chrysene	0.002	ND		0.20	0.040	ND		0.20	0.040	0.050	J	0.20	0.040
Acenaphthylene	NC	ND		0.20	0.040	ND		0.20	0.040	ND		0.20	0.040
Anthracene	50	ND		0.20	0.040	ND		0.20	0.040	ND		0.20	0.040
Benzo(ghi)perylene	NC	ND		0.20	0.040	ND		0.20	0.040	0.060	J	0.20	0.040
Fluorene	50	ND		0.20	0.040	ND		0.20	0.040	ND		0.20	0.040
Phenanthrene	50	ND		0.20	0.020	ND		0.20	0.020	0.030	J	0.20	0.020
Dibenzo(a,h)anthracene	NC	ND		0.20	0.040	ND		0.20	0.040	ND		0.20	0.040
Indeno(1,2,3-cd)Pyrene	0.002	ND		0.20	0.040	ND		0.20	0.040	0.050	J	0.20	0.040
Pyrene	50	ND		0.20	0.040	ND		0.20	0.040	0.060	J	0.20	0.040
Pentachlorophenol	1	ND		0.80	0.22	ND		0.80	0.22	ND		0.80	0.22
Hexachlorobenzene	0.04	ND		0.80	0.030	ND		0.80	0.030	ND		0.80	0.030
Hexachloroethane	5	ND		0.80	0.030	ND		0.80	0.030	ND		0.80	0.030

Notes:

Bold and shaded indicates the value exceeds the corresponding Class GA value.

J - Estimated value

MDL - Method detection limit

NC - No criterion

ND - Compound not detected

RL - Reporting limit

µg/L - Micrograms per liter

Table 2
The Port Authority of New York and New Jersey
Howland Hook Marine Terminal - Port Ivory Facility - Site 1
Staten Island, New York
Summary of 2017 Results of Analysis of Groundwater for Semi-Volatile Organic Compounds

SAMPLE ID SAMPLING DATE LAB SAMPLE ID SAMPLE MATRIX UNITS		PRW-07				FIELD BLANK			
		3/21/2017				3/21/2017			
		L1708548-07				L1708548-09			
		WATER				WATER			
		µg/L				µg/L			
SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs)	Class GA Value (µg/L)	Result	Q	RL	MDL	Result	Q	RL	MDL
Benzidine	5	ND		20	8.1	ND		20	8.1
1,2,4-Trichlorobenzene	5	ND		5.0	0.66	ND		5.0	0.66
Bis(2-chloroethyl)ether	1	ND		2.0	0.67	ND		2.0	0.67
3,3'-Dichlorobenzidine	5	ND		5.0	1.4	ND		5.0	1.4
2,4-Dinitrotoluene	5	ND		5.0	0.84	ND		5.0	0.84
2,6-Dinitrotoluene	5	ND		5.0	1.1	ND		5.0	1.1
(Hydr)Azobenzene	NC	ND		2.0	0.75	ND		2.0	0.75
4-Chlorophenyl phenyl ether	NC	ND		2.0	0.62	ND		2.0	0.62
4-Bromophenyl phenyl ether	NC	ND		2.0	0.73	ND		2.0	0.73
Bis(2-chloroisopropyl)ether	5	ND		2.0	0.70	ND		2.0	0.70
Bis(2-chloroethoxy)methane	5	ND		5.0	0.63	ND		5.0	0.63
Hexachlorocyclopentadiene	5	ND		20	7.8	ND		20	7.8
Isophorone	50	ND		5.0	0.60	ND		5.0	0.60
Nitrobenzene	0.4	ND		2.0	0.75	ND		2.0	0.75
Diphenylamine	5	ND		2.0	0.64	ND		2.0	0.64
n-Nitrosodi-n-propylamine	NC	ND		5.0	0.70	ND		5.0	0.70
Bis(2-ethylhexyl)phthalate	5	ND		3.0	0.91	ND		3.0	0.91
Butyl benzyl phthalate	50	ND		5.0	1.3	ND		5.0	1.3
Di-n-butylphthalate	50	ND		5.0	0.69	ND		5.0	0.69
Di-n-octylphthalate	50	ND		5.0	1.1	ND		5.0	1.1
Diethyl phthalate	50	1.9	J	5.0	0.63	ND		5.0	0.63
Dimethyl phthalate	50	ND		5.0	0.65	ND		5.0	0.65
n-Nitrosodimethylamine	NC	ND		2.0	0.67	ND		2.0	0.67
2,4,6-Trichloropheol	NC	ND		5.0	0.68	ND		5.0	0.68
p-Chloro-m-cresol	NC	ND		2.0	0.62	ND		2.0	0.62
2-Chlorophenol	NC	ND		2.0	0.63	ND		2.0	0.63
2,4-Dichlorophenol	5	ND		5.0	0.77	ND		5.0	0.77
2,4-Dimethylphenol	50	ND		5.0	1.6	ND		5.0	1.6
2-Nitrophenol	NC	ND		10	1.5	ND		10	1.5
4-Nitrophenol	NC	ND		10	1.8	ND		10	1.8
2,4-Dinitrophenol	10	ND		20	5.5	ND		20	5.5
4,6-Dinitro-o-cresol	NC	ND		10	2.1	ND		10	2.1
Phenol	1	ND		5.0	1.9	ND		5.0	1.9
Acenaphthene	20	ND		0.20	0.070	ND		0.10	0.040
2-Chloronaphthalene	10	ND		0.40	0.070	ND		0.20	0.040
Fluoranthene	50	ND		0.40	0.080	ND		0.20	0.040
Hexachlorobutadiene	0.5	ND		1.00	0.070	ND		0.50	0.040
Naphthalene	10	0.21	J	0.40	0.090	ND		0.20	0.040
Benzo(a)anthracene	0.002	ND		0.40	0.040	ND		0.20	0.020
Benzo(a)pyrene	ND	ND		0.40	0.080	ND		0.20	0.040
Benzo(b)fluoranthene	0.002	ND		0.40	0.030	ND		0.20	0.020
Benzo(k)fluoranthene	0.002	ND		0.40	0.080	ND		0.20	0.040
Chrysene	0.002	ND		0.40	0.080	ND		0.20	0.040
Acenaphthylene	NC	ND		0.40	0.070	ND		0.20	0.040
Anthracene	50	0.1	J	0.40	0.070	ND		0.20	0.040
Benzo(ghi)perylene	NC	ND		0.40	0.080	ND		0.20	0.040
Fluorene	50	ND		0.40	0.070	ND		0.20	0.040
Phenanthrene	50	0.060	J	0.40	0.030	ND		0.20	0.020
Dibenzo(a,h)anthracene	NC	ND		0.40	0.080	ND		0.20	0.040
Indeno(1,2,3-cd)Pyrene	0.002	ND		0.40	0.080	ND		0.20	0.040
Pyrene	50	ND		0.40	0.080	ND		0.20	0.040
Pentachlorophenol	1	ND		1.60	0.44	ND		0.80	0.22
Hexachlorobenzene	0.04	ND		1.60	0.060	ND		0.80	0.030
Hexachloroethane	5	ND		1.60	0.060	ND		0.80	0.030

Notes:

Bold and shaded indicates the value exceeds the corresponding Class GA value.

J - Estimated value

MDL - Method detection limit

NC - No criterion

ND - Compound not detected

RL - Reporting limit

µg/L - Micrograms per liter

Table 3
The Port Authority of New York and New Jersey
Howland Hook Marine Terminal - Port Ivory Facility - Site 1
Staten Island, New York
Summary of 2017 Results of Analysis of Groundwater for Metals and Cyanide

SAMPLE ID		PRW-01								PRW-02							
		3/20/2017								3/21/2017							
SAMPLING DATE		L1708376-15								L1708548-06							
LAB SAMPLE ID		WATER								WATER							
SAMPLE MATRIX		µg/L								µg/L							
UNITS		FILTERED				UNFILTERED				FILTERED				UNFILTERED			
SAMPLE PREPARATION		Result	Q	RL	MDL	Result	Q	RL	MDL	Result	Q	RL	MDL	Result	Q	RL	MDL
METALS	Class GA Value (µg/L)																
Antimony	3	1.06	J	4	0.42	0.93	J	4	0.42	1.72	J	4	0.42	ND		4	0.42
Arsenic	25	2.15		0.5	0.16	6.6		0.5	0.16	0.47	J	0.5	0.16	0.46	J	0.5	0.16
Barium	1,000	9.19		0.5	0.17	39.03		0.5	0.17	226.1		0.5	0.17	247.9		0.5	0.17
Beryllium	3	ND		0.5	0.1	ND		0.5	0.1	ND		0.5	0.1	ND		0.5	0.1
Cadmium	5	ND		0.2	0.05	0.15	J	0.2	0.05	ND		0.2	0.05	ND		0.2	0.05
Chromium	50	0.37	J	1	0.17	13.3		1	0.17	ND		1	0.17	0.37	J	1	0.17
Copper	200	1.43		1	0.38	36.73		1	0.38	ND		1	0.38	0.84	J	1	0.38
Lead	25	ND		1	0.34	13.98		1	0.34	ND		1	0.34	0.59	J	1	0.34
Mercury	0.7	ND		0.2	0.06	ND		0.2	0.06	ND		0.2	0.06	ND		0.2	0.06
Nickel	100	1.13	J	2	0.55	7.85		2	0.55	0.87	J	2	0.55	1.01	J	2	0.55
Selenium	10	ND		5	1.73	ND		5	1.73	ND		5	1.73	ND		5	1.73
Silver	50	ND		0.4	0.16	ND		0.4	0.16	ND		0.4	0.16	ND		0.4	0.16
Thallium	0.5	ND		0.5	0.14	ND		0.5	0.14	ND		0.5	0.14	ND		0.5	0.14
Zinc	2,000	6.68	J	10	3.41	158.8		10	3.41	ND		10	3.41	5.17	J	10	3.41
CYANIDE	Class GA Value (µg/L)	Result	Q	RL	MDL	Result	Q	RL	MDL	Result	Q	RL	MDL	Result	Q	RL	MDL
Cyanide, Total	200	NA		NA	NA	5		5	1	NA		NA	NA	45		5	1

Notes:

Bold and shaded indicates the value exceeds the corresponding Class GA value.

J - Estimated value

MDL - Method detection limit

NA - Not analyzed

ND - Compound not detected

RL - Reporting limit

µg/L - Micrograms per liter

Table 3
The Port Authority of New York and New Jersey
Howland Hook Marine Terminal - Port Ivory Facility - Site 1
Staten Island, New York
Summary of 2017 Results of Analysis of Groundwater for Metals and Cyanide

SAMPLE ID		PRW-03								PRW-04							
		3/20/2017								3/21/2017							
SAMPLING DATE		L1708376-14								L1708548-08							
LAB SAMPLE ID		WATER								WATER							
SAMPLE MATRIX		µg/L								µg/L							
UNITS		FILTERED				UNFILTERED				FILTERED				UNFILTERED			
SAMPLE PREPARATION		Result	Q	RL	MDL	Result	Q	RL	MDL	Result	Q	RL	MDL	Result	Q	RL	MDL
METALS	Class GA Value (µg/L)																
Antimony	3	0.52	J	4	0.42	0.46	J	4	0.42	1.48	J	4	0.42	0.82	J	4	0.42
Arsenic	25	6.65		0.5	0.16	10.45		0.5	0.16	1.12		0.5	0.16	1.49		0.5	0.16
Barium	1,000	33.82		0.5	0.17	38.24		0.5	0.17	20.24		0.5	0.17	35.34		0.5	0.17
Beryllium	3	ND		0.5	0.1	ND		0.5	0.1	ND		0.5	0.1	ND		0.5	0.1
Cadmium	5	ND		0.2	0.05	ND		0.2	0.05	ND		0.2	0.05	0.06	J	0.2	0.05
Chromium	50	ND		1	0.17	0.40	J	1	0.17	3.76		1	0.17	9.92		1	0.17
Copper	200	ND		1	0.38	0.94	J	1	0.38	3.72		1	0.38	13.11		1	0.38
Lead	25	ND		1	0.34	0.45	J	1	0.34	1.66		1	0.34	8.07		1	0.34
Mercury	0.7	ND		0.2	0.06	ND		0.2	0.06	ND		0.2	0.06	ND		0.2	0.06
Nickel	100	2.2		2	0.55	2.15		2	0.55	1.47	J	2	0.55	4.47		2	0.55
Selenium	10	ND		5	1.73	ND		5	1.73	ND		5	1.73	ND		5	1.73
Silver	50	ND		0.4	0.16	ND		0.4	0.16	ND		0.4	0.16	ND		0.4	0.16
Thallium	0.5	ND		0.5	0.14	ND		0.5	0.14	ND		0.5	0.14	ND		0.5	0.14
Zinc	2,000	ND		10	3.41	4.1	J	10	3.41	7.78	J	10	3.41	34.41		10	3.41
CYANIDE	Class GA Value (µg/L)	Result	Q	RL	MDL	Result	Q	RL	MDL	Result	Q	RL	MDL	Result	Q	RL	MDL
Cyanide, Total	200	NA		NA	NA	21		5	1	NA		NA	NA	ND		5	1

Notes:

Bold and shaded indicates the value exceeds the corresponding Class GA value.

J - Estimated value

MDL - Method detection limit

NA - Not analyzed

ND - Compound not detected

RL - Reporting limit

µg/L - Micrograms per liter

Table 3
The Port Authority of New York and New Jersey
Howland Hook Marine Terminal - Port Ivory Facility - Site 1
Staten Island, New York
Summary of 2017 Results of Analysis of Groundwater for Metals and Cyanide

SAMPLE ID		PRW-05								PRW-06							
		3/20/2017								3/20/2017							
SAMPLING DATE		L1708376-13								L1708376-17							
LAB SAMPLE ID		WATER								WATER							
SAMPLE MATRIX		µg/L								µg/L							
UNITS		FILTERED				UNFILTERED				FILTERED				UNFILTERED			
SAMPLE PREPARATION		Result	Q	RL	MDL	Result	Q	RL	MDL	Result	Q	RL	MDL	Result	Q	RL	MDL
METALS	Class GA Value (µg/L)																
Antimony	3	1.07	J	4	0.42	1.02	J	4	0.42	1.6	J	4	0.42	1.9	J	4	0.42
Arsenic	25	5.44		0.5	0.16	21.56		0.5	0.16	0.88		0.5	0.16	12.44		0.5	0.16
Barium	1,000	28.11		0.5	0.17	36.35		0.5	0.17	25.49		0.5	0.17	53.66		0.5	0.17
Beryllium	3	ND		0.5	0.1	ND		0.5	0.1	ND		0.5	0.1	0.15	J	0.5	0.1
Cadmium	5	ND		0.2	0.05	ND		0.2	0.05	ND		0.2	0.05	0.21		0.2	0.05
Chromium	50	0.24	J	1	0.17	1.48		1	0.17	ND		1	0.17	21.86		1	0.17
Copper	200	2.42		1	0.38	13.98		1	0.38	0.92	J	1	0.38	70.27		1	0.38
Lead	25	ND		1	0.34	1.84		1	0.34	ND		1	0.34	35.74		1	0.34
Mercury	0.7	ND		0.2	0.06	ND		0.2	0.06	ND		0.2	0.06	ND		0.2	0.06
Nickel	100	8.09		2	0.55	10.36		2	0.55	41.34		2	0.55	84.58		2	0.55
Selenium	10	ND		5	1.73	ND		5	1.73	ND		5	1.73	ND		5	1.73
Silver	50	ND		0.4	0.16	ND		0.4	0.16	ND		0.4	0.16	ND		0.4	0.16
Thallium	0.5	ND		0.5	0.14	ND		0.5	0.14	ND		0.5	0.14	ND		0.5	0.14
Zinc	2,000	11.83		10	3.41	22.41		10	3.41	11.14		10	3.41	166.4		10	3.41
CYANIDE	Class GA Value (µg/L)	Result	Q	RL	MDL	Result	Q	RL	MDL	Result	Q	RL	MDL	Result	Q	RL	MDL
Cyanide, Total	200	NA		NA	NA	15		5	1	NA		NA	NA	2	J	5	1

Notes:

Bold and shaded indicates the value exceeds the corresponding Class GA value.

J - Estimated value

MDL - Method detection limit

NA - Not analyzed

ND - Compound not detected

RL - Reporting limit

µg/L - Micrograms per liter

Table 3
The Port Authority of New York and New Jersey
Howland Hook Marine Terminal - Port Ivory Facility - Site 1
Staten Island, New York
Summary of 2017 Results of Analysis of Groundwater for Metals and Cyanide

SAMPLE ID		PRW-07								FIELD BLANK							
		3/21/2017								3/21/2017							
SAMPLING DATE		L1708548-07								L1708548-09							
LAB SAMPLE ID		WATER								WATER							
SAMPLE MATRIX		µg/L								µg/L							
UNITS		FILTERED				UNFILTERED				FILTERED				UNFILTERED			
SAMPLE PREPARATION		Result	Q	RL	MDL	Result	Q	RL	MDL	Result	Q	RL	MDL	Result	Q	RL	MDL
METALS	Class GA Value (µg/L)																
Antimony	3	0.58	J	4	0.42	ND		4	0.42	0.89	J	4	0.42	1.5	J	4	0.42
Arsenic	25	2.67		0.5	0.16	1.87		0.5	0.16	ND		0.5	0.16	ND		0.5	0.16
Barium	1,000	33.89		0.5	0.17	33.18		0.5	0.17	ND		0.5	0.17	ND		0.5	0.17
Beryllium	3	ND		0.5	0.1	ND		0.5	0.1	ND		0.5	0.1	ND		0.5	0.1
Cadmium	5	ND		0.2	0.05	ND		0.2	0.05	ND		0.2	0.05	ND		0.2	0.05
Chromium	50	1.74		1	0.17	1.41		1	0.17	ND		1	0.17	ND		1	0.17
Copper	200	1.09		1	0.38	ND		1	0.38	ND		1	0.38	ND		1	0.38
Lead	25	ND		1	0.34	ND		1	0.34	ND		1	0.34	ND		1	0.34
Mercury	0.7	ND		0.2	0.06	ND		0.2	0.06	ND		0.2	0.06	ND		0.2	0.06
Nickel	100	10.44		2	0.55	10.2		2	0.55	ND		2	0.55	ND		2	0.55
Selenium	10	ND		5	1.73	ND		5	1.73	ND		5	1.73	ND		5	1.73
Silver	50	ND		0.4	0.16	ND		0.4	0.16	ND		0.4	0.16	ND		0.4	0.16
Thallium	0.5	ND		0.5	0.14	ND		0.5	0.14	ND		0.5	0.14	ND		0.5	0.14
Zinc	2,000	4.87	J	10	3.41	ND		10	3.41	ND		10	3.41	ND		10	3.41
CYANIDE	Class GA Value (µg/L)	Result	Q	RL	MDL	Result	Q	RL	MDL	Result	Q	RL	MDL	Result	Q	RL	MDL
Cyanide, Total	200	NA		NA	NA	5		5	1	NA		NA	NA	ND		5	1

Notes:

Bold and shaded indicates the value exceeds the corresponding Class GA value.

J - Estimated value

MDL - Method detection limit

NA - Not analyzed

ND - Compound not detected

RL - Reporting limit

µg/L - Micrograms per liter

Table 4
The Port Authority of New York and New Jersey
Howland Hook Marine Terminal - Port Ivory Facility - Site 1
Staten Island, New York
Summary of 2017 Results of Analysis of Groundwater for Natural Attenuation Parameters

SAMPLE ID	PRW-7A				PRW-7B				PRW-7C				PRW-7D				PRW-7E			
	3/20/2017				3/20/2017				3/20/2017				3/20/2017				4/12/2017			
SAMPLING DATE	L1708376-08				L1708376-09				L1708376-10				L1708376-11				L1711785-03			
LAB SAMPLE ID	WATER				WATER				WATER				WATER				WATER			
SAMPLE MATRIX	mg/L				mg/L				mg/L				mg/L				mg/L			
UNITS																				
MONITORED NATURAL ATTENUATION PARAMETERS	Result	Q	RL	MDL	Result	Q	RL	MDL	Result	Q	RL	MDL	Result	Q	RL	MDL	Result	Q	RL	MDL
Alkalinity, Total	745		5.00	NA	601		4.00	NA	134		2.00	NA	564		2.00	NA	1,480		5.00	NA
Nitrogen, Total Kjeldahl	41.3		3.00	0.660	2.99		0.300	0.066	3.02		0.300	0.066	11.8		0.300	0.066	3.07		0.300	0.066
Sulfate	59		25	3.4	ND		10	1.4	190		50	6.8	39		10	1.4	71		50	6.8
Total Organic Carbon	171		20.0	4.56	22.6		10.0	2.28	20.5		10.0	2.28	8.17		5.00	1.14	11.9		2.50	0.570
Magnesium, Total	0.281		0.0700	0.0242	29.4		0.0070	0.0242	12.4		0.0070	0.0242	39.5		0.0070	0.0242	0.390		0.0700	0.0242

Notes:

- MDL - Method detection limit
- NC - No criterion
- ND - Compound not detected
- RL - Reporting limit
- mg/L - Milligrams per liter

Table 5
The Port Authority of New York and New Jersey
Howland Hook Marine Terminal - Port Ivory Facility - Site 1
Staten Island, New York
Summary of 2017 Results of Analysis of Surface Water for Volatile Organic Compounds

SAMPLE ID	New York State AWQSGV for Class SD Saline Surface Water (µg/L)	SW-4				SW-5				DUP-1				SW-6				SW-7				
		3/20/2017				3/20/2017				3/20/2017				3/20/2017				3/20/2017				
		L1708376-04				L1708376-05				L1708376-19				L1708376-06				L1708376-07				
		WATER				WATER				WATER				WATER				WATER				
VOLATILE ORGANIC COMPOUNDS (VOCs)		µg/L				µg/L				µg/L				µg/L				µg/L				
		Result	Q	RL	MDL	Result	Q	RL	MDL	Result	Q	RL	MDL	Result	Q	RL	MDL	Result	Q	RL	MDL	
Methylene chloride	200	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70	NA				NA				
1,1-Dichloroethane	NC	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70	NA				NA				
Chloroform	NC	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70	NA				NA				
2-Chloroethylvinyl ether	NC	ND		10	0.70	ND		10	0.70	ND		10	0.70	NA				NA				
Carbon tetrachloride	NC	ND		0.50	0.13	ND		0.50	0.13	ND		0.50	0.13	NA				NA				
1,2-Dichloropropane	NC	ND		1.0	0.14	ND		1.0	0.14	ND		1.0	0.14	NA				NA				
Dibromochloromethane	NC	ND		0.50	0.15	ND		0.50	0.15	ND		0.50	0.15	NA				NA				
1,1,2-Trichloroethane	NC	ND		1.5	0.50	ND		1.5	0.50	ND		1.5	0.50	NA				NA				
Tetrachloroethene	1	ND		0.50	0.18	ND		0.50	0.18	ND		0.50	0.18	NA				NA				
Chlorobenzene	50	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70	NA				NA				
1,2-Dichloroethane	NC	ND		0.50	0.13	ND		0.50	0.13	ND		0.50	0.13	NA				NA				
1,1,1-Trichloroethane	NC	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70	NA				NA				
Bromodichloromethane	NC	ND		0.50	0.19	ND		0.50	0.19	ND		0.50	0.19	NA				NA				
trans-1,3-Dichloropropene	NC	ND		0.50	0.16	ND		0.50	0.16	ND		0.50	0.16	NA				NA				
cis-1,3-Dichloropropene	NC	ND		0.50	0.14	ND		0.50	0.14	ND		0.50	0.14	NA				NA				
1,3-Dichloropropene, Total	NC	ND		0.50	0.14	ND		0.50	0.14	ND		0.50	0.14	NA				NA				
Bromoform	NC	ND		2.0	0.65	ND		2.0	0.65	ND		2.0	0.65	NA				NA				
1,1,2,2-Tetrachloroethane	NC	ND		0.50	0.17	ND		0.50	0.17	ND		0.50	0.17	NA				NA				
Benzene	10	ND		0.50	0.16	ND		0.50	0.16	ND		0.50	0.16	NA				NA				
Toluene	430	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70	
Ethylbenzene	41	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70	NA				NA				
Chloromethane	NC	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70	NA				NA				
Bromomethane	NC	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70	NA				NA				
Vinyl chloride	NC	ND		1.0	0.070	ND		1.0	0.070	ND		1.0	0.070	NA				NA				
Chloroethane	NC	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70	NA				NA				
1,1-Dichloroethene	NC	ND		0.5	0.17	ND		0.5	0.17	ND		0.5	0.17	NA				NA				
trans-1,2-Dichloroethene	NC	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70	NA				NA				
Trichloroethene	40	ND		0.50	0.18	ND		0.50	0.18	ND		0.50	0.18	NA				NA				
1,2-Dichlorobenzene	50*	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70	NA				NA				
1,3-Dichlorobenzene	50*	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70	NA				NA				
1,4-Dichlorobenzene	50*	ND		2.5	0.70	ND		2.5	0.70	ND		2.5	0.70	NA				NA				
Acrylonitrile	NC	ND		5.0	1.5	ND		5.0	1.5	ND		5.0	1.5	NA				NA				
Acrolein	NC	ND		5.0	0.44	ND		5.0	0.44	ND		5.0	0.44	NA				NA				

Notes:

AWQSGV = Ambient Water Quality Standards and Guidance Values for SD water classification as published in the Division of Water Technical and Operational Guidance Series (1.1.1).

Bold and shaded indicates the value exceeds the corresponding AWQSGV.

RL - Reporting limit

NA - Not analyzed

NC - No criterion

ND - Compound not detected

MDL - Method detection limit

µg/L - Micrograms per liter

DUP-1 is a duplicate of sample SW-5

Table 6
The Port Authority of New York and New Jersey
Howland Hook Marine Terminal - Port Ivory Facility - Site 1
Staten Island, New York
Summary of 2017 Results of Analysis of Surface Water for Semi-Volatile Organic Compounds

SAMPLE ID	SW-4	SW-5				DUP-1							
		3/20/2017				3/20/2017							
SAMPLING DATE	L1708376-04				L1708376-05				L1708376-19				
LAB SAMPLE ID	WATER				WATER				WATER				
SAMPLE MATRIX	µg/L				µg/L				µg/L				
UNITS													
SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs)	New York State AWQSGV for Class SD Saline Surface Water (µg/L)	Result	Q	RL	MDL	Result	Q	RL	MDL	Result	Q	RL	MDL
1,2,4-Trichlorobenzene	50	ND		5.0	0.66	ND		5.0	0.66	ND		5.0	0.66
Benzidine	NC	ND		20	8.1	ND		20	8.1	ND		20	8.1
n-Nitrosodimethylamine	NC	ND		2.0	0.67	ND		2.0	0.67	ND		2.0	0.67
Bis(2-chloroethyl)ether	NC	ND		2.0	0.67	ND		2.0	0.67	ND		2.0	0.67
3,3'-Dichlorobenzidine	NC	ND		5.0	1.4	ND		5.0	1.4	ND		5.0	1.4
2,4-Dinitrotoluene	NC	ND		5.0	0.84	ND		5.0	0.84	ND		5.0	0.84
2,6-Dinitrotoluene	NC	ND		5.0	1.1	ND		5.0	1.1	ND		5.0	1.1
(Hydr)Azobenzene	NC	ND		2.0	0.75	ND		2.0	0.75	ND		2.0	0.75
4-Chlorophenyl phenyl ether	NC	ND		2.0	0.62	ND		2.0	0.62	ND		2.0	0.62
4-Bromophenyl phenyl ether	NC	ND		2.0	0.73	ND		2.0	0.73	ND		2.0	0.73
Bis(2-chloroisopropyl)ether	NC	ND		2.0	0.7	ND		2.0	0.7	ND		2.0	0.7
Bis(2-chloroethoxy)methane	NC	ND		5.0	0.63	ND		5.0	0.63	ND		5.0	0.63
Hexachlorocyclopentadiene	NC	ND		20	7.8	ND		20	7.8	ND		20	7.8
Isophorone	NC	ND		5.0	0.6	ND		5.0	0.6	ND		5.0	0.6
Nitrobenzene	NC	ND		2.0	0.75	ND		2.0	0.75	ND		2.0	0.75
Diphenylamine	NC	ND		2.0	0.64	ND		2.0	0.64	ND		2.0	0.64
n-Nitrosodi-n-propylamine	NC	ND		5.0	0.7	ND		5.0	0.7	ND		5.0	0.7
Bis(2-ethylhexyl)phthalate	NC	1.7	J	3.0	0.91	1.9	J	3.0	0.91	2.0	J	3.0	0.91
Butyl benzyl phthalate	NC	ND		5.0	1.3	ND		5.0	1.3	ND		5.0	1.3
Di-n-butylphthalate	NC	ND		5.0	0.69	ND		5.0	0.69	ND		5.0	0.69
Di-n-octylphthalate	NC	ND		5.0	1.1	ND		5.0	1.1	ND		5.0	1.1
Diethyl phthalate	NC	ND		5.0	0.63	ND		5.0	0.63	ND		5.0	0.63
Dimethyl phthalate	NC	ND		5.0	0.65	ND		5.0	0.65	ND		5.0	0.65
2,4,6-Trichlorophenol	NC	ND		5.0	0.68	ND		5.0	0.68	ND		5.0	0.68
p-Chloro-m-cresol	NC	ND		2.0	0.62	ND		2.0	0.62	ND		2.0	0.62
2-Chlorophenol	NC	ND		2.0	0.63	ND		2.0	0.63	ND		2.0	0.63
2,4-Dichlorophenol	NC	ND		5.0	0.77	ND		5.0	0.77	ND		5.0	0.77
2,4-Dimethylphenol	1,000	ND		5.0	1.6	ND		5.0	1.6	ND		5.0	1.6
2-Nitrophenol	NC	ND		10	1.5	ND		10	1.5	ND		10	1.5
4-Nitrophenol	NC	ND		10	1.8	ND		10	1.8	ND		10	1.8
2,4-Dinitrophenol	400	ND		20	5.5	ND		20	5.5	ND		20	5.5
4,6-Dinitro-o-cresol	NC	ND		10	2.1	ND		10	2.1	ND		10	2.1
Phenol	NC	ND		5.0	1.9	ND		5.0	1.9	ND		5.0	1.9
Acenaphthene	60	0.09	J	0.10	0.04	0.08	J	0.10	0.040	0.10	J	0.10	0.040
2-Chloronaphthalene	NC	ND		0.20	0.04	ND		0.20	0.040	ND		0.20	0.040
Fluoranthene	NC	ND		0.20	0.04	0.18	J	0.20	0.040	0.07	J	0.20	0.040
Hexachlorobutadiene	0.01	ND		0.50	0.04	ND		0.50	0.040	ND		0.50	0.040
Naphthalene	140	ND		0.20	0.04	0.04	J	0.20	0.040	ND		0.20	0.040
Benzo(a)anthracene	NC	ND		0.20	0.02	0.09	J	0.20	0.020	0.04	J	0.20	0.020
Benzo(a)pyrene	0.0006	ND		0.20	0.04	0.11	J	0.20	0.040	ND		0.20	0.040
Benzo(b)fluoranthene	NC	ND		0.20	0.02	0.19	J	0.20	0.020	0.07	J	0.20	0.020
Benzo(k)fluoranthene	NC	ND		0.20	0.04	0.07	J	0.20	0.040	ND		0.20	0.040
Chrysene	NC	ND		0.20	0.04	0.10	J	0.20	0.040	ND		0.20	0.040
Acenaphthylene	NC	ND		0.20	0.04	0.04	J	0.20	0.040	ND		0.20	0.040
Anthracene	50	ND		0.20	0.04	0.06	J	0.20	0.040	ND		0.20	0.040
Benzo(ghi)perylene	NC	ND		0.20	0.04	0.08	J	0.20	0.040	ND		0.20	0.040
Fluorene	23	ND		0.20	0.04	ND		0.20	0.040	ND		0.20	0.040
Phenanthrene	14	ND		0.20	0.02	0.06	J	0.20	0.020	0.04	J	0.20	0.020
Dibenzo(a,h)anthracene	NC	ND		0.20	0.04	ND		0.20	0.040	ND		0.20	0.040
Indeno(1,2,3-cd)Pyrene	NC	ND		0.20	0.04	0.07	J	0.20	0.040	ND		0.20	0.040
Pyrene	NC	ND		0.20	0.04	0.19	J	0.20	0.040	0.08	J	0.20	0.040
Pentachlorophenol	NC	ND		0.80	0.22	ND		0.80	0.22	ND		0.80	0.22
Hexachlorobenzene	0.00003	ND		0.80	0.03	ND		0.80	0.030	ND		0.80	0.030
Hexachloroethane	0.6	ND		0.80	0.03	ND		0.80	0.030	ND		0.80	0.030

Notes:

AWQSGV = Ambient Water Quality Standards and Guidance Values for SD water classification as published in the Division of Water Technical and Operational Guidance Series (1.1.1).

Bold and shaded indicates the value exceeds corresponding AWQSGV.

J - Estimated value

MDL - Method detection limit

NC - No criterion

ND - Compound not detected

RL - Reporting limit

µg/L - Micrograms per liter

DUP-1 is a duplicate of sample SW-5

Table 7
The Port Authority of New York and New Jersey
Howland Hook Marine Terminal - Port Ivory Facility - Site 1
Staten Island, New York
Summary of 2017 Results of Analysis of Surface Water for Metals and Cyanide

SAMPLE ID SAMPLING DATE LAB SAMPLE ID SAMPLE MATRIX UNITS SAMPLE PREPARATION		SW-4								SW-5								DUP-1							
		3/20/2017								3/20/2017								3/20/2017							
		L1708376-04								L1708376-05								L1708376-19							
		WATER								WATER								WATER							
		µg/L								µg/L								µg/L							
		FILTERED				UNFILTERED				FILTERED				UNFILTERED				FILTERED				UNFILTERED			
METALS	New York State AWQSGV for Class SD Saline Surface Water (µg/L)	Result	Q	RL	MDL	Result	Q	RL	MDL	Result	Q	RL	MDL	Result	Q	RL	MDL	Result	Q	RL	MDL	Result	Q	RL	MDL
Antimony	NC	2.08	J	4.0	0.42	3.42	J	4.0	0.42	1.13	J	4.0	0.42	2.62	J	4.0	0.42	0.8	J	4.0	0.42	0.78	J	4.0	0.42
Arsenic	120*	1.46		0.5	0.16	4.4		0.5	0.16	1.54		0.5	0.16	5.43		0.5	0.16	1.38		0.5	0.16	4.18		0.5	0.16
Barium	NC	76.2		0.5	0.17	80.85		0.5	0.17	60.7		2.5	0.86	66.22		0.5	0.17	61.02		2.5	0.86	76.49		2.5	0.86
Beryllium	NC	ND		0.5	0.1	ND		0.5	0.1	ND		0.5	0.1	ND		0.5	0.1	ND		0.5	0.1	ND		0.5	0.1
Cadmium	21	ND		0.2	0.05	0.14	J	0.2	0.05	ND		0.2	0.05	0.19	J	0.2	0.05	ND		0.2	0.05	0.29		0.2	0.05
Chromium	NC	0.32	J	1.0	0.17	1.65		1.0	0.17	0.32	J	1.0	0.17	4.11		1.0	0.17	0.35	J	1.0	0.17	10.13		1.0	0.17
Copper	4.8	1.76		1.0	0.38	6.7		1.0	0.38	0.81	J	1.0	0.38	9.14		1.0	0.38	0.57	J	1.0	0.38	23.86		1.0	0.38
Lead	204	0.48	J	1.0	0.34	7.04		1.0	0.34	ND		5.0	1.71	15.34		1.0	0.34	ND		5.0	1.71	29.2		5.0	1.71
Mercury	0.0007*	ND		0.2	0.06	ND		0.2	0.06	ND		0.2	0.06	0.11	J	0.2	0.06	ND		0.2	0.06	0.15	J	0.2	0.06
Nickel	74	3.5		2.0	0.55	3.88		2.0	0.55	3.23		2.0	0.55	4.46		2.0	0.55	2.99		2.0	0.55	8.81		2.0	0.55
Selenium	NC	ND		5.0	1.73	ND		5.0	1.73	ND		5.0	1.73	ND		5.0	1.73	ND		5.0	1.73	ND		5.0	1.73
Silver	2.3	ND		0.4	0.16	ND		0.4	0.16	ND		0.4	0.16	ND		0.4	0.16	ND		0.4	0.16	ND		0.4	0.16
Thallium	NC	ND		0.5	0.14	ND		0.5	0.14	ND		2.5	0.71	ND		0.5	0.14	ND		2.5	0.71	ND		2.5	0.71
Zinc	95	31.02		10	3.41	71.43		10	3.41	16.83		10	3.41	73.34		10	3.41	16.01		10	3.41	110.8		10	3.41
CYANIDE	New York State AWQSGV for Class SD Saline Surface Water (µg/L)	Result		RL	MDL	Result		RL	MDL	Result		RL	MDL	Result		RL	MDL	Result		RL	MDL	Result		RL	MDL
Cyanide	3,000	NA		NA	NA	4	J	5	1	NA		NA	NA	8		5	1	NA		NA	NA	5		5	1

Notes:
AWQSGV = Ambient Water Quality Standards and Guidance Values for SD water classification as published in the Division of Water Technical and Operational Guidance Series (1.1.1).
Bold and shaded indicates the value exceeds corresponding AWQSGV.
J - Estimated value
NA - Not analyzed
NC - No criterion
ND - Compound not detected
MDL - Method detection limit
RL - Reporting limit
µg/L - Micrograms per liter
* Applies to filtered only
DUP-1 is a duplicate of sample SW-5

**ATTACHMENT A – PHOTOGRAPH
LOG**

Attachment A
Photograph Log – April 20, 2017



Photo 1: View of environmental cover (gravel) in Site 1 taken facing west.




Photo 2: View of environmental cover (gravel) in Site 1 taken facing southwest.



Photo 3: View of environmental cover (concrete) in Site 1 taken facing northwest.



Photo 4: View of environmental cover (gravel/concrete/asphalt) in Site 1 taken facing northwest.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	
266179	L. O'Hara and E. Ebert	1 of 1	The Port Authority of New York and New Jersey	Port Ivory Site 1 40 Western Avenue Staten Island, New York	

Attachment A Photograph Log – October 10, 2017



Photo 1: View of environmental cover (gravel) in Site 1 taken facing east.



Photo 2: View of environmental cover (concrete and gravel) in Site 1 taken facing north.



Photo 3: View of environmental cover (gravel) in Site 1 taken facing west.




Photo 4: View of environmental cover (gravel and concrete) in Site 1 taken facing west.



Photo 5: View of environmental cover (asphalt) in Site 1 taken facing southeast.



Photo 6: Environmental cover (gravel) in Site 1 taken facing west.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	
233179	L. O'Hara and E. Ebert	1 of 1	The Port Authority of New York and New Jersey	Port Ivory Site 1 40 Western Avenue Staten Island, New York	

**ATTACHMENT B – MONITORING
WELL CONSTRUCTION AND
BORING LOGS (PRW-7E)**



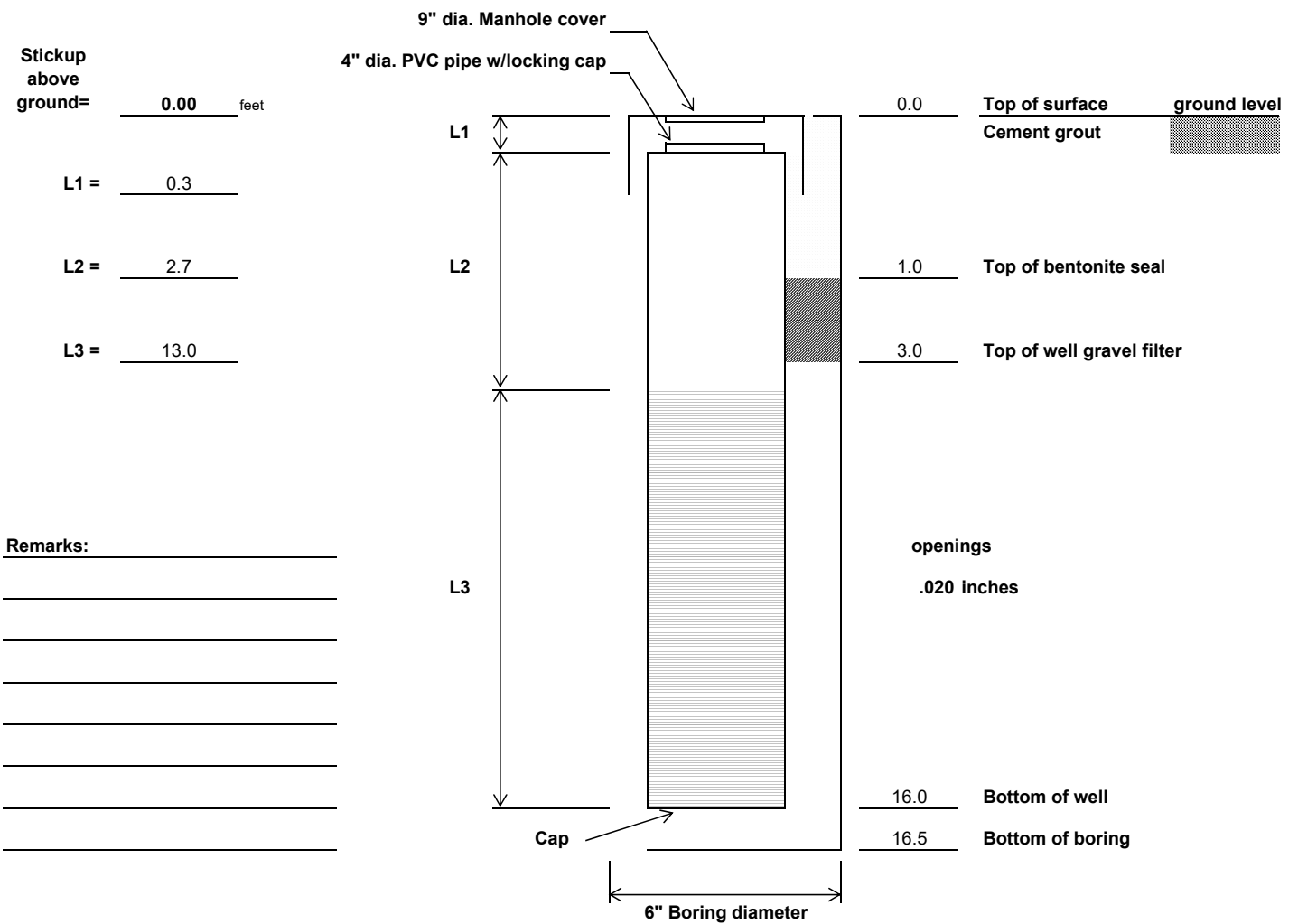
Engineering Department
Materials Engineering Unit

Well Installation Report

PROJECT: Howland Hook Port Ivory Well Install		AGREEMENT NO.: 426-17-048
LOCATION: Intersection of Terrace St and Western Ave		DRILLING CONSULTANT: Craig
WELL NO.: PRW-7E	WELL TYPE: Type A Monitor Well	DATE: 2/28/2017
DRILLER: M.Goreski		INSPECTOR: A.Peters

Well Development Report (NOTE: WATER LEVEL READINGS FROM TOP OF PVC)

DATE:	WATER LEVEL BEFORE:	WATER LEVEL AFTER:
TAKEN	MINUTES AFTER DEVELOPMENT	TURBIDITY READING: NTU



**ATTACHMENT C –
GROUNDWATER SAMPLING
LOGS**

Field Data
Water Levels and NAPL Gauging

Client: <u>Port Authority</u>	EST Technician: <u>M. Spata, C. Bachmann</u>
Site: <u>Port Ivory</u>	Weather: <u>30's sunny</u>
Date: <u>2/20/2017</u>	

LOW TIDE (9:03 AM)

Well ID	PID (PPM)	Depth to LNAPL from TOC (ft)	Depth to Water from TOC (ft)
PRW-1	0.0	ND	5.31
PRW-2	11.1	ND	5.5
PRW-3	0.0	ND	7.72
PRW-4	5.8	ND	3.55
PRW-5	5.9	ND	3.88
PRW-6	3.5	ND	4.44
PRW-7	6.7	ND	12.69
PRW-7A	16.3	ND	6.21
PRW-7B	23.9	ND	8.23
PRW-7C	0.1	ND	6.97
PRW-7D	0.0	ND	9.08
PRW-7E	0.0	ND	2.82
PRW-8	0.1	ND	2.44
PRW-9	5.5	ND	2.09
PRW-10	5.1	ND	5.24
PRW-11	0.0	ND	8.69
PRW-12	0.0	ND	1.87
PRW-13	0.0	ND	2.69
PRW-14	0.0	ND	3.91
PRW-15	0.9	ND	4.19

Field Data
Water Levels and NAPL Gauging

Client: <u>Port Authority</u>	EST Technician: <u>M. Spata, C. Bachmann</u>
Site: <u>Port Ivory</u>	Weather: <u>40's partly cloudy</u>
Date: <u>2/20/2017</u>	

HIGH TIDE (2:52 PM)

Well ID	PID (PPM)	Depth to LNAPL from TOC (ft)	Depth to Water from TOC (ft)
PRW-1	0.0	ND	4.78
PRW-2	6.6	ND	5.55
PRW-3	0.0	ND	8.36
PRW-4	0.1	ND	3.54
PRW-5	3.7	ND	3.79
PRW-6	1.1	ND	4.15
PRW-7	0.1	ND	12.74
PRW-7A	0.0	ND	6.76
PRW-7B	0.0	ND	8.19
PRW-7C	0.0	ND	6.95
PRW-7D	0.0	ND	9.16
PRW-7E	0.0	ND	2.23
PRW-8	0.0	ND	2.36
PRW-9	2.1	ND	1.64
PRW-10	4.9	ND	5.24
PRW-11	0.0	ND	8.68
PRW-12	0.1	ND	1.69
PRW-13	0.0	ND	2.97
PRW-14	0.0	ND	3.85
PRW-15	0.5	ND	4.14

**Surface Water Sampling
FIELD DATA SHEETS**

Client: <u>Port Authority</u>		EST Technician: <u>R. DeBerardinis, M. Spata</u>						
Site: <u>Port Ivory</u>		Weather: <u>Clear, cold, 30's</u>						
Date: <u>3/20/2017</u>								
Sample ID	pH (pH units)	Temperature (°C)	Specific Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Salinity (PPT)	Turbidity (NTU)	Time
SW-1	7.59	5.41	1089	1091.00	-20.8	0.54	22.1	12:35
SW-2	7.58	6.19	1144	10.79	-16.8	0.57	8.63	12:10
SW-3	7.62	4.53	10288	9.37	-21.5	5.79	24.1	11:55
SW-4	7.53	4.73	12355	10.72	-20.2	7.01	14.8	11:40
SW-5	7.54	4.28	12206	9.37	-25.4	6.94	12.4	10:40
SW-6	7.48	4.94	14808	10.70	-24.3	8.52	27.5	10:05
SW-7	7.24	2.80	15008	11.13	31.1	8.58	38.2	9:50

SW-5 is DUP-1, SW-1 is DUP-2

**LOW FLOW SAMPLING
FIELD DATA SHEETS**

Client: Port Authority EST Technician: M. Spata
 Site: Port Ivory Weather: 40's Partly cloudy
 Date: 3/20/2017

Monitoring Well #: PRW-01 Well Depth: 11.70 ft Screened/Open Interval: NA ft
 Well Permit #: NA Well Diameter: 4 inches

PID Readings (ppm)
 Background: 0.0 Pump Intake Depth: 9.5 ft below TOC
 Beneath Outer Cap: 0.0 Depth to Water Before Pump Installation: 4.91 ft below TOC
 Beneath Inner Cap: 0.0 Purge Method stainless steel submersible pump

TIME	Purging	Sampling	pH (pH units)		Temperature (°C)		Specific Conductivity (uS/cm)		Dissolved Oxygen (mg/L)		Redox Potential (mV)		Turbidity (NTU)		Pumping Rate (ml/min)	Depth to Water (ft below TOC)
			Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change		
1350	X		7.24	NA	13.64	NA	5191	NA	1.24	NA	-64.1	NA	159	NA	200	5.03
1355	X		7.25	0.01	13.86	0.22	5072	-119	1.03	-0.21	-62.8	1.3	144	-15	200	5.05
1400	X		7.27	0.02	13.94	0.08	4984	-88	0.82	-0.21	-60.3	2.5	138	-6	200	5.08
1405	X		7.26	-0.01	14.04	0.10	4986	2	0.69	-0.13	-57.4	2.9	131	-7	200	5.08
1410	X		7.25	-0.01	14.13	0.09	4876	-110	0.63	-0.06	-54.3	3.1	126	-5	200	5.08
1415	X		7.25	0.00	14.31	0.18	4814	-62	0.60	-0.03	-53.1	1.2	124	-2	200	5.08
1420	X		7.25	0.00	14.37	0.06	4761	-53	0.59	-0.01	-52.7	0.4	117	-7	200	5.08

Purge Start: **13:45** Sample notes:
 Purge End: **14:20**
 Sample Time: **14:21**

*INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity

**LOW FLOW SAMPLING
FIELD DATA SHEETS**

Client: Port Authority EST Technician: Z. Moir
 Site: Port Ivory Weather: Cloudy, 50's
 Date: 3/21/2017

Monitoring Well #: PRW-02 Well Depth: 14.82 ft Screened/Open Interval: NA ft
 Well Permit #: NA Well Diameter: 4 inches

PID Readings (ppm)
 Background: 0.0 Pump Intake Depth: 9.50 ft below TOC
 Beneath Outer Cap: 0.0 Depth to Water Before Pump Installation: 5.49 ft below TOC
 Beneath Inner Cap: 8.8 Purge Method stainless steel submersible pump

TIME	Purging	Sampling	pH (pH units)		Temperature (°C)		Specific Conductivity (uS/cm)		Dissolved Oxygen (mg/L)		Redox Potential (mV)		Turbidity (NTU)		Pumping Rate (ml/min)	Depth to Water (ft below TOC)
			Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change		
1415	X		7.13	NA	14.16	NA	2700	NA	0.43	NA	-150.2	NA	24.2	NA	200	5.70
1420	X		7.13	0.00	14.28	0.12	2720	20	0.33	-0.10	-149.9	0.3	18.0	-6.2	200	5.66
1425	X		7.13	0.00	14.25	-0.03	2528	-192	0.32	-0.01	-158.4	-8.5	17.4	-0.6	200	5.67
1430	X		7.13	0.00	14.25	0.00	2541	13	0.20	-0.12	-165.7	-7.3	16.8	-0.6	200	5.68
1435	X		7.13	0.00	14.38	0.13	2552	11	0.18	-0.02	-169.7	-4.0	15.9	-0.9	200	5.66
1440	X		7.13	0.00	14.46	0.08	2567	15	0.18	0.00	-172.6	-2.9	15.2	-0.7	200	5.67

Purge Start: **14:06** Sample notes:
 Purge End: **14:40**
 Sample Time: **14:41**

*INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity

**LOW FLOW SAMPLING
FIELD DATA SHEETS**

Client: Port Authority EST Technician: Z. Moir
 Site: Port Ivory Weather: Sunny, 40's
 Date: 3/20/2017

Monitoring Well #: PRW-03 Well Depth: 17.31 ft Screened/Open Interval: NA ft
 Well Permit #: NA Well Diameter: 4 inches

PID Readings (ppm)
 Background: 0.0 Pump Intake Depth: 10.50 ft below TOC
 Beneath Outer Cap: 0.0 Depth to Water Before Pump Installation: 7.44 ft below TOC
 Beneath Inner Cap: 0.0 Purge Method stainless steel submersible pump

TIME	Purging	Sampling	pH (pH units)		Temperature (°C)		Specific Conductivity (uS/cm)		Dissolved Oxygen (mg/L)		Redox Potential (mV)		Turbidity (NTU)		Pumping Rate (ml/min)	Depth to Water (ft below TOC)
			Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change		
1325	X		7.52	NA	11.79	NA	531	NA	0.46	NA	-41.8	NA	9.26	NA	200	7.81
1330	X		7.54	0.02	11.62	-0.17	533	2	0.33	-0.13	-56.8	-15.0	8.73	-0.53	200	7.86
1335	X		7.53	-0.01	11.05	-0.57	525	-8	0.26	-0.07	-61.1	-4.3	8.38	-0.35	200	7.91
1340	X		7.51	-0.02	10.98	-0.07	524	-1	0.37	0.11	-62.3	-1.2	8.13	-0.25	200	7.96
1345	X		7.52	0.01	10.92	-0.06	521	-3	0.35	-0.02	-63.6	-1.3	7.82	-0.31	200	7.99
1350	X		7.54	0.02	10.98	0.06	520	-1	0.27	-0.08	-61.7	1.9	7.81	-0.01	200	8.02
1355	X		7.49	-0.05	10.74	-0.24	516	-4	0.29	0.02	-63.6	-1.9	7.80	-0.01	200	8.05
1400	X		7.49	0.00	10.81	0.07	512	-4	0.28	-0.01	-63.6	0.0	7.82	0.02	200	8.09

Purge Start: **13:20** Sample notes:
 Purge End: **14:00**
 Sample Time: **14:01**

*INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity

**LOW FLOW SAMPLING
FIELD DATA SHEETS**

Client: Port Authority EST Technician: Z. Moir
 Site: Port Ivory Weather: Cloudy, 40's
 Date: 3/21/2017

Monitoring Well #: PRW-04 Well Depth: 16.14 ft Screened/Open Interval: NA ft
 Well Permit #: NA Well Diameter: 4 inches

PID Readings (ppm)
 Background: 0.0 Pump Intake Depth: 9.50 ft below TOC
 Beneath Outer Cap: 0.0 Depth to Water Before Pump Installation: 3.53 ft below TOC
 Beneath Inner Cap: 0.1 Purge Method stainless steel submersible pump

TIME	Purging	Sampling	pH (pH units)		Temperature (°C)		Specific Conductivity (uS/cm)		Dissolved Oxygen (mg/L)		Redox Potential (mV)		Turbidity (NTU)		Pumping Rate (ml/min)	Depth to Water (ft below TOC)
			Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change		
1250	X		8.85	NA	11.15	NA	285	NA	7.12	NA	-178.4	NA	135.0	NA	200	3.82
1255	X		8.84	-0.01	10.88	-0.27	226	-59	7.05	-0.07	-173.6	4.8	121.0	-14.0	200	4.02
1300	X		8.84	0.00	10.90	0.02	216	-10	6.87	-0.18	-168.3	5.3	116.0	-5.0	200	4.17
1305	X		8.82	-0.02	10.99	0.09	221	5	6.22	-0.65	-161.6	6.7	104.0	-12.0	200	4.32
1310	X		8.82	0.00	11.05	0.06	228	7	6.03	-0.19	-158.5	3.1	99.6	-4.4	200	4.29
1315	X		8.80	-0.02	11.00	-0.05	238	10	6.00	-0.03	-153.2	5.3	93.8	-5.8	200	4.29
1320	X		8.79	-0.01	11.06	0.06	247	9	5.98	-0.02	-149.7	3.5	91.4	-2.4	200	4.29

Purge Start: **12:45** Sample notes:
 Purge End: **13:20**
 Sample Time: **13:21**

*INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity

**LOW FLOW SAMPLING
FIELD DATA SHEETS**

Client: Port Authority EST Technician: Z. Moir
 Site: Port Ivory Weather: Sunny, 30's
 Date: 3/20/2017

Monitoring Well #: PRW-05 Well Depth: 11.58 ft Screened/Open Interval: NA ft
 Well Permit #: NA Well Diameter: 4 inches

PID Readings (ppm)
 Background: 0.0 Pump Intake Depth: 7.00 ft below TOC
 Beneath Outer Cap: 0.0 Depth to Water Before Pump Installation: 3.80 ft below TOC
 Beneath Inner Cap: 0.0 Purge Method stainless steel submersible pump

TIME	Purging	Sampling	pH (pH units)		Temperature (°C)		Specific Conductivity (uS/cm)		Dissolved Oxygen (mg/L)		Redox Potential (mV)		Turbidity (NTU)		Pumping Rate (ml/min)	Depth to Water (ft below TOC)
			Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change		
1135	X		6.92	NA	8.88	NA	201	NA	1.50	NA	127.9	NA	42.8	NA	200	3.91
1140	X		6.82	-0.10	9.08	0.20	190	-11	1.21	-0.29	120.8	-7.1	42.3	-0.5	200	3.84
1145	X		6.74	-0.08	9.01	-0.07	186	-4	1.45	0.24	113.1	-7.7	41.0	-1.3	200	3.84
1150	X		6.75	0.01	8.93	-0.08	185	-1	1.40	-0.05	110.2	-2.9	40.4	-0.6	200	3.84
1155	X		6.68	-0.07	9.18	0.25	185	0	1.22	-0.18	106.7	-3.5	39.1	-1.3	200	3.84
1200	X		6.70	0.02	9.43	0.25	187	2	1.36	0.14	98.8	-7.9	38.6	-0.5	200	3.84
1205	X		6.68	-0.02	9.57	0.14	191	4	0.99	-0.37	97.4	-1.4	36.0	-2.6	200	3.84
1210	X		6.65	-0.03	9.48	-0.09	199	8	0.97	-0.02	92.1	-5.3	34.6	-1.4	200	3.84
1215	X		6.62	-0.03	9.63	0.15	201	2	0.92	-0.05	87.8	-4.3	33.4	-1.2	200	3.84

Purge Start: **11:27** Sample notes:
 Purge End: **12:15**
 Sample Time: **12:16**

*INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity

**LOW FLOW SAMPLING
FIELD DATA SHEETS**

Client: Port Authority EST Technician: R. DeBerardinis
 Site: Port Ivory Weather: Clear, cool, 48°F
 Date: 3/20/2017

Monitoring Well #: PRW-06 Well Depth: 12.97 ft Screened/Open Interval: NA ft
 Well Permit #: NA Well Diameter: 4 inches

PID Readings (ppm)
 Background: 0.0 Pump Intake Depth: 9.0 ft below TOC
 Beneath Outer Cap: 0.0 Depth to Water Before Pump Installation: 4.15 ft below TOC
 Beneath Inner Cap: 2.1 Purge Method stainless steel submersible pump

TIME	Purging	Sampling	pH (pH units)		Temperature (°C)		Specific Conductivity (uS/cm)		Dissolved Oxygen (mg/L)		Redox Potential (mV)		Turbidity (NTU)		Pumping Rate (ml/min)	Depth to Water (ft below TOC)
			Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change		
1345	X		6.67	NA	12.58	NA	607	NA	1.70	NA	5.4	NA	260	NA	250	4.41
1350	X		6.67	0.00	12.63	0.05	596	-11	1.78	0.08	5.1	-0.3	159	-101	250	4.50
1355	X		6.67	0.00	12.69	0.06	589	-7	1.89	0.11	4.7	-0.4	128	-31	250	4.52
1400	X		6.68	0.01	12.72	0.03	584	-5	1.95	0.06	4.4	-0.3	111	-17	250	4.54
1405	X		6.68	0.00	12.74	0.02	576	-8	2.07	0.12	4.9	0.5	105	-6	250	4.55
1410	X		6.68	0.00	12.77	0.03	573	-3	2.11	0.04	5.4	0.5	104	-1	250	4.55
1415	X		6.68	0.00	12.80	0.03	568	-5	2.17	0.06	6.0	0.6	99.3	-4.7	250	4.56

Purge Start: **13:40** Sample notes: Puddle surrounding well - pulled gripper plug and put on 4" riser, some surrounding water got into well.
 Purge End: **14:15**
 Sample Time: **14:16**

*INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity

**LOW FLOW SAMPLING
FIELD DATA SHEETS**

Client: Port Authority EST Technician: Z. Moir
 Site: Port Ivory Weather: Cloudy, 40's
 Date: 3/21/2017

Monitoring Well #: PRW-07 Well Depth: 24.39 ft Screened/Open Interval: NA ft
 Well Permit #: NA Well Diameter: 4 inches

PID Readings (ppm)
 Background: 0.0 Pump Intake Depth: 18.00 ft below TOC
 Beneath Outer Cap: 0.0 Depth to Water Before Pump Installation: 12.69 ft below TOC
 Beneath Inner Cap: 0.1 Purge Method stainless steel submersible pump

TIME	Purging	Sampling	pH (pH units)		Temperature (°C)		Specific Conductivity (uS/cm)		Dissolved Oxygen (mg/L)		Redox Potential (mV)		Turbidity (NTU)		Pumping Rate (ml/min)	Depth to Water (ft below TOC)
			Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change		
1130	X		7.99	NA	15.11	NA	3187	NA	0.21	NA	-285.9	NA	10.3	NA	200	12.78
1135	X		8.02	0.03	15.28	0.17	3244	57	0.15	-0.06	-297.8	-11.9	10.2	-0.1	200	12.73
1140	X		8.02	0.00	15.07	-0.21	3316	72	0.01	-0.14	-322.7	-24.9	10.2	0.0	200	12.73
1145	X		8.03	0.01	15.19	0.12	3376	60	0.00	-0.01	-331.2	-8.5	10.1	-0.1	200	12.73
1150	X		8.03	0.00	15.23	0.04	3419	43	0.00	0.00	-338.2	-7.0	9.98	-0.12	200	12.73
1155	X		8.03	0.00	15.06	-0.17	3452	33	0.00	0.00	-342.1	-3.9	9.91	-0.07	200	12.73
1200	X		8.04	0.01	15.03	-0.03	3481	29	0.00	0.00	-348.0	-5.9	9.86	-0.05	200	12.73

Purge Start: **11:22** Sample notes: The pump intake (10-11) feet is not sufficient because of DTW is below level.
 Purge End: **12:00** Small white bubbles in sample jars
 Sample Time: **12:01**

*INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity

**LOW FLOW SAMPLING
FIELD DATA SHEETS**

Client: Port Authority EST Technician: C. Bachmann
 Site: Port Ivory Weather: Clear, cold, 30's/40's
 Date: 3/20/2017

Monitoring Well #: PRW-7A Well Depth: 18.83 ft Screened/Open Interval: NA ft
 Well Permit #: NA Well Diameter: 4 inches

PID Readings (ppm)
 Background: 0.0 Pump Intake Depth: 10.5 ft below TOC
 Beneath Outer Cap: 0.0 Depth to Water Before Pump Installation: 6.21 ft below TOC
 Beneath Inner Cap: 16.3 Purge Method stainless steel submersible pump

TIME	Purging	Sampling	pH (pH units)		Temperature (°C)		Specific Conductivity (uS/cm)		Dissolved Oxygen (mg/L)		Redox Potential (mV)		Turbidity (NTU)		Pumping Rate (ml/min)	Depth to Water (ft below TOC)
			Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change		
930	X		12.52	NA	10.05	NA	4515	NA	0.95	NA	-81.4	NA	31.4	NA	250	6.54
935	X		12.54	0.02	9.62	-0.43	4487	-28	0.68	-0.27	-97.8	-16.4	27.3	-4.1	250	6.56
940	X		12.49	-0.05	9.79	0.17	4501	14	0.53	-0.15	-104.9	-7.1	23.5	-3.8	250	6.57
945	X		12.47	-0.02	9.91	0.12	4497	-4	0.42	-0.11	-108.6	-3.7	19.2	-4.3	250	6.58
950	X		12.50	0.03	10.17	0.26	4484	-13	0.39	-0.03	-115.2	-6.6	15.1	-4.1	250	6.59
955	X		12.53	0.03	10.25	0.08	4477	-7	0.31	-0.08	-119.2	-4.0	11.3	-3.8	250	6.61
1000	X		12.51	-0.02	10.36	0.11	4472	-5	0.27	-0.04	-123.4	-4.2	8.43	-2.87	250	6.62
1005	X		12.53	0.02	10.47	0.11	4467	-5	0.23	-0.04	-125.7	-2.3	7.32	-1.11	250	6.64
1010	X		12.52	-0.01	10.53	0.06	4465	-2	0.21	-0.02	-126.2	-0.5	7.29	-0.03	250	6.65
1015	X		12.52	0.00	10.61	0.08	4462	-3	0.20	-0.01	-126.8	-0.6	7.27	-0.02	250	6.67

Purge Start: **9:22** Sample notes:
 Purge End: **10:15**
 Sample Time: **10:17**

*INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity

**LOW FLOW SAMPLING
FIELD DATA SHEETS**

Client: Port Authority EST Technician: C. Bachmann
 Site: Port Ivory Weather: Clear, cold, 30's/40's
 Date: 3/20/2017

Monitoring Well #: PRW-7B Well Depth: 16.34 ft Screened/Open Interval: NA ft
 Well Permit #: NA Well Diameter: 4 inches

PID Readings (ppm)
 Background: 0.0 Pump Intake Depth: 10.5 ft below TOC
 Beneath Outer Cap: 0.0 Depth to Water Before Pump Installation: 8.24 ft below TOC
 Beneath Inner Cap: 23.9 Purge Method stainless steel submersible pump

TIME	Purging	Sampling	pH (pH units)		Temperature (°C)		Specific Conductivity (uS/cm)		Dissolved Oxygen (mg/L)		Redox Potential (mV)		Turbidity (NTU)		Pumping Rate (ml/min)	Depth to Water (ft below TOC)
			Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change		
1045	X		6.91	NA	9.71	NA	2102	NA	0.85	NA	-187.3	NA	62.3	NA	250	8.39
1050	X		6.89	-0.02	9.63	-0.08	2110	8	0.74	-0.11	-180.9	6.4	54.7	-7.6	250	8.41
1055	X		6.87	-0.02	9.54	-0.09	2116	6	0.68	-0.06	-177.4	3.5	48.6	-6.1	250	8.42
1100	X		6.89	0.02	9.67	0.13	2105	-11	0.64	-0.04	-183.5	-6.1	37.5	-11.1	250	8.42
1105	X		6.90	0.01	9.83	0.16	2089	-16	0.59	-0.05	-187.6	-4.1	29.4	-8.1	250	8.43
1110	X		6.89	-0.01	9.94	0.11	2076	-13	0.57	-0.02	-190.8	-3.2	22.3	-7.1	250	8.43
1115	X		6.87	-0.02	10.13	0.19	2071	-5	0.53	-0.04	-191.7	-0.9	19.1	-3.2	250	8.44
1120	X		6.85	-0.02	10.24	0.11	2065	-6	0.49	-0.04	-193.2	-1.5	18.0	-1.1	250	8.44
1125	X		6.86	0.01	10.38	0.14	2062	-3	0.47	-0.02	-193.8	-0.6	17.9	-0.1	250	8.45
1130	X		6.85	-0.01	10.46	0.08	2059	-3	0.45	-0.02	-194.3	-0.5	17.7	-0.2	250	8.45

Purge Start: **10:40** Sample notes:
 Purge End: **11:30**
 Sample Time: **11:32**

*INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity

**LOW FLOW SAMPLING
FIELD DATA SHEETS**

Client: Port Authority EST Technician: C. Bachmann
 Site: Port Ivory Weather: Clear, cool, 40's
 Date: 3/20/2017

Monitoring Well #: PRW-7C Well Depth: 15.74 ft Screened/Open Interval: NA ft
 Well Permit #: NA Well Diameter: 4 inches

PID Readings (ppm)
 Background: 0.0 Pump Intake Depth: 10.5 ft below TOC
 Beneath Outer Cap: 0.0 Depth to Water Before Pump Installation: 6.99 ft below TOC
 Beneath Inner Cap: 0.1 Purge Method stainless steel submersible pump

TIME	Purging	Sampling	pH (pH units)		Temperature (°C)		Specific Conductivity (uS/cm)		Dissolved Oxygen (mg/L)		Redox Potential (mV)		Turbidity (NTU)		Pumping Rate (ml/min)	Depth to Water (ft below TOC)
			Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change		
1205	X		9.41	NA	10.77	NA	742	NA	0.71	NA	-269.3	NA	74.6	NA	250	7.03
1210	X		9.43	0.02	10.84	0.07	744	2	0.49	-0.22	-261.5	7.8	59.2	-15.4	250	7.03
1215	X		9.46	0.03	10.96	0.12	746	2	0.30	-0.19	-257.8	3.7	48.3	-10.9	250	7.04
1220	X		9.45	-0.01	11.03	0.07	748	2	0.25	-0.05	-255.3	2.5	34.7	-13.6	250	7.04
1225	X		9.43	-0.02	11.12	0.09	749	1	0.21	-0.04	-253.7	1.6	23.6	-11.1	250	7.04
1230	X		9.41	-0.02	11.25	0.13	749	0	0.17	-0.04	-251.4	2.3	18.2	-5.4	250	7.05
1235	X		9.39	-0.02	11.34	0.09	750	1	0.16	-0.01	-250.8	0.6	17.6	-0.6	250	7.05
1240	X		9.39	0.00	11.41	0.07	751	1	0.15	-0.01	-250.3	0.5	17.4	-0.2	250	7.05
1245	X		9.40	0.01	11.48	0.07	752	1	0.16	0.01	-250.1	0.2	17.1	-0.3	250	7.05

Purge Start: **12:00** Sample notes:
 Purge End: **12:45**
 Sample Time: **12:47**

*INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity

**LOW FLOW SAMPLING
FIELD DATA SHEETS**

Client: Port Authority EST Technician: C. Bachmann
 Site: Port Ivory Weather: Clear, cool, 40's
 Date: 3/20/2017

Monitoring Well #: PRW-7D Well Depth: 17.91 ft Screened/Open Interval: NA ft
 Well Permit #: NA Well Diameter: 4 inches

PID Readings (ppm)
 Background: 0.0 Pump Intake Depth: 11.0 ft below TOC
 Beneath Outer Cap: 0.0 Depth to Water Before Pump Installation: 9.07 ft below TOC
 Beneath Inner Cap: 0.0 Purge Method stainless steel submersible pump

TIME	Purging	Sampling	pH (pH units)		Temperature (°C)		Specific Conductivity (uS/cm)		Dissolved Oxygen (mg/L)		Redox Potential (mV)		Turbidity (NTU)		Pumping Rate (ml/min)	Depth to Water (ft below TOC)
			Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change		
1335	X		7.15	NA	11.18	NA	1349	NA	0.77	NA	-134.8	NA	89.3	NA	250	9.21
1340	X		7.11	-0.04	11.06	-0.12	1353	4	0.61	-0.16	-131.2	3.6	80.6	-8.7	250	9.24
1345	X		7.06	-0.05	11.15	0.09	1360	7	0.50	-0.11	-130.1	1.1	71.4	-9.2	250	9.27
1350	X		7.03	-0.03	11.23	0.08	1367	7	0.43	-0.07	-128.6	1.5	60.7	-10.7	250	9.31
1355	X		7.00	-0.03	11.34	0.11	1374	7	0.37	-0.06	-127.3	1.3	48.2	-12.5	250	9.33
1400	X		6.98	-0.02	11.41	0.07	1381	7	0.32	-0.05	-125.9	1.4	39.1	-9.1	250	9.35
1405	X		6.96	-0.02	11.56	0.15	1385	4	0.29	-0.03	-124.7	1.2	32.6	-6.5	250	9.37
1410	X		6.97	0.01	11.67	0.11	1387	2	0.27	-0.02	-124.1	0.6	27.8	-4.8	250	9.39
1415	X		6.97	0.00	11.72	0.05	1390	3	0.26	-0.01	-123.8	0.3	27.4	-0.4	250	9.42
1420	X		6.97	0.00	11.83	0.11	1392	2	0.24	-0.02	-123.5	0.3	27.1	-0.3	250	9.44

Purge Start: **13:30** Sample notes:
 Purge End: **14:20**
 Sample Time: **14:23**

*INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity

Field Instrument and Calibration Data Sheet

Site: <u>Port Ivory</u>	Client: <u>Port Authority</u>
Field Personnel: <u>R. DeBerardinis</u>	
Date: <u>3/20/2017</u>	Start Time: <u>5:55</u> Stop: <u>6:10</u>

	Meter (model/EST ID)	Probe (EST ID)
DO	<u>YSI 556 / MPM 02</u>	<u>MPP 02</u>
pH	<u>YSI 556 / MPM 02</u>	<u>MPP 02</u>
Spec. Cond	<u>YSI 556 / MPM 02</u>	<u>MPP 02</u>
ORP	<u>YSI 556 / MPM 02</u>	<u>MPP 02</u>
Turbidity	<u>LaMotte 2020 we / Turb 02</u>	

* All meters are temperature compensating (except Turbidity)

Dissolved Oxygen		Turbidity		ORP	
Water Temp	<u>14.38</u>	0.00 NTU	<u>0.00</u>	Temp °C	<u>13.98</u>
Baro Pres.	<u>764.9</u>	1.00 NTU	<u>1.00</u>	246mV ±	
O2 Satur %	<u>100</u>	10.00NTU	<u>10.00</u>	10mV	<u>247.5</u>
Zero mg/L	<u>0.07</u>				

Specific Conductance		
Standard 1000 ± 10 uS/cm	Lot # and Exp Date	
Reading <u>1000</u>	<u>A6315 Nov-21</u>	
Temp °C <u>14.10</u>		

pH Calibration		
Buffer 4 <u>4.00</u>	Temp °C <u>14.10</u>	Lot # and Exp Date <u>C686697 Feb-18</u>
Buffer 7 <u>7.05</u>	Temp °C <u>14.08</u>	<u>C688260 Apr-18</u>
Buffer 10 <u>10.12</u>	Temp °C <u>14.24</u>	<u>C690364 Aug-18</u>

Field Instrument and Calibration Data Sheet

Site: Port Ivory Client: Port Authority
 Field Personnel: R. DeBerardinis
 Date: 3/20/2017 Start Time: 5:30 Stop: 6:00

	Meter (model/EST ID)	Probe (EST ID)
DO	<u>YSI 556 / MPM 01</u>	<u>MPP 01</u>
pH	<u>YSI 556 / MPM 01</u>	<u>MPP 01</u>
Spec. Cond	<u>YSI 556 / MPM 01</u>	<u>MPP 01</u>
ORP	<u>YSI 556 / MPM 01</u>	<u>MPP 01</u>
Turbidity	<u>LaMotte 2020 we / Turb 01</u>	

* All meters are temperature compensating (except Turbidity)

Dissolved Oxygen		Turbidity		ORP	
Water Temp	<u>12.97</u>	0.00 NTU	<u>0.00</u>	Temp °C	<u>11.97</u>
Baro Pres.	<u>766.0</u>	1.00 NTU	<u>1.00</u>	246mV ±	
O2 Satur %	<u>100</u>	10.00NTU	<u>10.00</u>	10mV	<u>248.0</u>
Zero mg/L	<u>0.07</u>				

Specific Conductance		
Standard 1000 ± 10 uS/cm		Lot # and Exp Date
Reading	<u>1000</u>	<u>A6315 Nov-21</u>
Temp °C	<u>12.38</u>	

pH Calibration		
Buffer 4	<u>4.00</u>	Temp °C <u>13.12</u> Lot # and Exp Date <u>C686697 Feb-18</u>
Buffer 7	<u>7.05</u>	Temp °C <u>13.22</u> <u>C688260 Apr-18</u>
Buffer 10	<u>10.15</u>	Temp °C <u>13.38</u> <u>C690364 Aug-18</u>

Field Instrument and Calibration Data Sheet

Site: <u>Port Ivory</u>	Client: <u>Port Authority</u>
Field Personnel: <u>M. Spata</u>	
Date: <u>3/20/2017</u>	Start Time: <u>5:45</u>
	Stop: <u>6:05</u>

	Meter (model/EST ID)	Probe (EST ID)
DO	<u>YSI 556 / MPM 05</u>	<u>MPP 05</u>
pH	<u>YSI 556 / MPM 05</u>	<u>MPP 05</u>
Spec. Cond	<u>YSI 556 / MPM 05</u>	<u>MPP 05</u>
ORP	<u>YSI 556 / MPM 05</u>	<u>MPP 05</u>
Turbidity	<u>HACH 2100Q / Turb 05</u>	

* All meters are temperature compensating (except Turbidity)

Dissolved Oxygen		Turbidity		ORP	
Water Temp	<u>13.97</u>	20.0 NTU	<u>19.9</u>	Temp °C	<u>13.21</u>
Baro Pres.	<u>764.8</u>	100 NTU	<u>99.9</u>	246mV ±	
O2 Satur %	<u>100</u>	800 NTU	<u>799</u>	10mV	<u>246.5</u>
Zero mg/L	<u>0.08</u>	10.0 NTU	<u>9.85</u> (check)		

Specific Conductance		
Standard 1000 ± 10 uS/cm	Lot # and Exp Date	
Reading <u>1000</u>	<u>A6315 Nov-21</u>	
Temp °C <u>9.51</u>		

pH Calibration		
Buffer 4 <u>4.00</u>	Temp °C <u>11.28</u>	Lot # and Exp Date <u>C686697 Feb-18</u>
Buffer 7 <u>7.05</u>	Temp °C <u>12.11</u>	<u>C688260 Apr-18</u>
Buffer 10 <u>10.16</u>	Temp °C <u>10.62</u>	<u>C690364 Aug-18</u>

Field Instrument and Calibration Data Sheet

Site: Port Ivory Client: Port Authority
 Field Personnel: M. Spata
 Date: 3/21/2017 Start Time: 5:50 Stop: 6:15

	Meter (model/EST ID)	Probe (EST ID)
DO	<u>YSI 556 / MPM 05</u>	<u>MPP 05</u>
pH	<u>YSI 556 / MPM 05</u>	<u>MPP 05</u>
Spec. Cond	<u>YSI 556 / MPM 05</u>	<u>MPP 05</u>
ORP	<u>YSI 556 / MPM 05</u>	<u>MPP 05</u>
Turbidity	<u>HACH 2100Q / Turb 05</u>	

* All meters are temperature compensating (except Turbidity)

Dissolved Oxygen		Turbidity		ORP	
Water Temp	<u>15.83</u>	20.0 NTU	<u>19.8</u>	Temp °C	<u>9.15</u>
Baro Pres.	<u>759.4</u>	100 NTU	<u>99.9</u>	246mV ±	
O2 Satur %	<u>100</u>	800 NTU	<u>798</u>	10mV	<u>252.5</u>
Zero mg/L	<u>0.08</u>	10.0 NTU	<u>9.82</u> (check)		

Specific Conductance		
Standard 1000 ± 10 uS/cm		Lot # and Exp Date
Reading	<u>1000</u>	<u>A6315 Nov-21</u>
Temp °C	<u>9.30</u>	

pH Calibration		
Buffer 4	<u>4.00</u>	Temp °C <u>15.75</u> Lot # and Exp Date <u>C686697 Feb-18</u>
Buffer 7	<u>7.06</u>	Temp °C <u>16.02</u> <u>C688260 Apr-18</u>
Buffer 10	<u>10.10</u>	Temp °C <u>16.05</u> <u>C690364 Aug-18</u>

Field Instrument and Calibration Data Sheet

Site: <u>Port Ivory</u>	Client: <u>Port Authority</u>
Field Personnel: <u>Z. Moir</u>	
Date: <u>3/20/2017</u>	Start Time: <u>6:00</u> Stop: <u>6:25</u>

	Meter (model/EST ID)	Probe (EST ID)
DO	<u>YSI 556 / MPM 04</u>	<u>MPP 04</u>
pH	<u>YSI 556 / MPM 04</u>	<u>MPP 04</u>
Spec. Cond	<u>YSI 556 / MPM 04</u>	<u>MPP 04</u>
ORP	<u>YSI 556 / MPM 04</u>	<u>MPP 04</u>
Turbidity	<u>HACH 2100Q / Turb 07</u>	

* All meters are temperature compensating (except Turbidity)

Dissolved Oxygen		Turbidity		ORP	
Water Temp	<u>14.82</u>	20.0 NTU	<u>19.6</u>	Temp °C	<u>13.98</u>
Baro Pres.	<u>766.7</u>	100 NTU	<u>101</u>	246mV ±	
O2 Satur %	<u>100</u>	800 NTU	<u>804</u>	10mV	<u>245.0</u>
Zero mg/L	<u>0.10</u>	10.0 NTU	<u>10.1</u> (check)		

Specific Conductance	
Standard 1000 ± 10 uS/cm	Lot # and Exp Date
Reading <u>1000</u>	<u>A6315 Nov-21</u>
Temp °C <u>14.02</u>	

pH Calibration		
Buffer 4	<u>4.00</u>	Temp °C <u>14.01</u> Lot # and Exp Date <u>C686697 Feb-18</u>
Buffer 7	<u>7.05</u>	Temp °C <u>14.02</u> <u>C688260 Apr-18</u>
Buffer 10	<u>10.19</u>	Temp °C <u>14.00</u> <u>C690364 Aug-18</u>

Field Instrument and Calibration Data Sheet

Site: <u>Port Ivory</u>	Client: <u>Port Authority</u>
Field Personnel: <u>Z. Moir</u>	
Date: <u>3/21/2017</u>	Start Time: <u>6:00</u> Stop: <u>6:30</u>

	Meter (model/EST ID)	Probe (EST ID)
DO	<u>YSI 556 / MPM 04</u>	<u>MPP 04</u>
pH	<u>YSI 556 / MPM 04</u>	<u>MPP 04</u>
Spec. Cond	<u>YSI 556 / MPM 04</u>	<u>MPP 04</u>
ORP	<u>YSI 556 / MPM 04</u>	<u>MPP 04</u>
Turbidity	<u>HACH 2100Q / Turb 07</u>	

* All meters are temperature compensating (except Turbidity)

Dissolved Oxygen		Turbidity		ORP	
Water Temp	<u>16.33</u>	20.0 NTU	<u>20.3</u>	Temp °C	<u>15.99</u>
Baro Pres.	<u>760.6</u>	100 NTU	<u>100</u>	246mV ±	
O2 Satur %	<u>100</u>	800 NTU	<u>795</u>	10mV	<u>243.0</u>
Zero mg/L	<u>0.09</u>	10.0 NTU	<u>9.71</u> (check)		

Specific Conductance		
Standard 1000 ± 10 uS/cm	Reading	Temp °C
	<u>1000</u>	<u>16.11</u>
	Lot # and Exp Date	
	<u>A6315 Nov-21</u>	

pH Calibration		
Buffer 4	Temp °C	Lot # and Exp Date
<u>4.00</u>	<u>16.00</u>	<u>C686697 Feb-18</u>
Buffer 7	Temp °C	
<u>7.04</u>	<u>16.90</u>	<u>C688260 Apr-18</u>
Buffer 10	Temp °C	
<u>10.08</u>	<u>16.27</u>	<u>C690364 Aug-18</u>

**LOW FLOW SAMPLING
FIELD DATA SHEETS**

Client: Port Authority EST Technician: R. DeBerardinis
 Site: Port Ivory Weather: Clear, cool, 51°F
 Date: 4/13/2017

Monitoring Well #: PRW-7E Well Depth: 12.77 ft Screened/Open Interval: N/A ft
 Well Permit #: N/A Well Diameter: 4 inches

PID Readings (ppm)
 Background: 0.0 Pump Intake Depth: 10.0 ft below TOC
 Beneath Outer Cap: 0.0 Depth to Water Before Pump Installation: 2.53 ft below TOC
 Beneath Inner Cap: 0.0 Purge Method stainless steel submersible pump

TIME	Purging	Sampling	pH (pH units)		Temperature (°C)		Specific Conductivity (uS/cm)		Dissolved Oxygen (mg/L)		Redox Potential (mV)		Turbidity (NTU)		Pumping Rate (ml/min)	Depth to Water (ft below TOC)
			Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change		
835	X		12.72	NA	11.90	NA	7558	NA	1.31	NA	-152.5	NA	63.3	NA	200	2.76
840	X		12.70	-0.02	12.38	0.48	7592	34	1.11	-0.20	-182.6	-30.1	58.7	-4.6	200	2.83
845	X		12.68	-0.02	12.50	0.12	7610	18	1.02	-0.09	-190.4	-7.8	64.9	6.2	200	2.90
850	X		12.67	-0.01	12.61	0.11	7628	18	0.90	-0.12	-196.7	-6.3	68.5	3.6	200	2.96
855	X		12.67	0.00	12.67	0.06	7608	-20	0.88	-0.02	-191.8	4.9	71.8	3.3	200	3.03
900	X		12.68	0.01	12.78	0.11	7573	-35	0.92	0.04	-195.7	-3.9	75.3	3.5	200	3.09
905	X		12.69	0.01	12.81	0.03	7537	-36	0.89	-0.03	-192.4	3.3	67.9	-7.4	200	3.15
910	X		12.69	0.00	12.88	0.07	7524	-13	0.93	0.04	-190.1	2.3	67.1	-0.8	200	3.22
915	X		12.69	0.00	12.93	0.05	7514	-10	0.95	0.02	-188.7	1.4	64.0	-3.1	200	3.30
920		X	12.68	-0.01	12.97	0.04	7502	-12	0.91	-0.04	-184.0	4.7	66.3	2.3	200	3.37

Purge Start: **8:30** Sample notes: Field Blank at 8:20
 Purge End: **9:15**
 Sample Time: **9:16**

*INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity

Field Instrument and Calibration Data Sheet

Site: <u>Port Ivory</u>	Client: <u>Port Authority</u>
Field Personnel: <u>R. DeBerardinis</u>	
Date: <u>4/13/2017</u>	Start Time: <u>6:20</u> Stop: <u>6:50</u>

	Meter (model/EST ID)	Probe (EST ID)
DO	<u>YSI 556 / MPM 02</u>	<u>MPP 02</u>
pH	<u>YSI 556 / MPM 02</u>	<u>MPP 02</u>
Spec. Cond	<u>YSI 556 / MPM 02</u>	<u>MPP 02</u>
ORP	<u>YSI 556 / MPM 02</u>	<u>MPP 02</u>
Turbidity	<u>LaMotte 2020 we / Turb 02</u>	

* All meters are temperature compensating (except Turbidity)

Dissolved Oxygen		Turbidity		ORP	
Water Temp	<u>11.42</u>	0.00 NTU	<u>0.00</u>	Temp °C	<u>11.87</u>
Baro Pres.	<u>770.2</u>	1.00 NTU	<u>1.00</u>	246mV ±	
O2 Satur %	<u>100</u>	10.00NTU	<u>10.00</u>	10mV	<u>248.0</u>
Zero mg/L	<u>0.05</u>				

Specific Conductance		Lot # and Exp Date
Standard 1000 ± 10 uS/cm		
Reading	<u>1000</u>	<u>A6315 Nov-21</u>
Temp °C	<u>11.22</u>	

pH Calibration			Lot # and Exp Date	
Buffer 4	<u>4.00</u>	Temp °C	<u>11.60</u>	<u>C693379 Dec-18</u>
Buffer 7	<u>7.05</u>	Temp °C	<u>11.37</u>	<u>C794240 Feb-19</u>
Buffer 10	<u>10.15</u>	Temp °C	<u>11.16</u>	<u>C690364 Aug-18</u>

**ATTACHMENT D – LABORATORY
ANALYTICAL DATA REPORTS**



ANALYTICAL REPORT

Lab Number:	L1708548
Client:	Port Authority of New York/New Jersey Four World Trade Center 150 Greenwich St - 20th Floor New York, NY 10007
ATTN:	Angela Altieri
Phone:	(212) 435-6106
Project Name:	SITE 1-2_SPM_2017 (PORT IVORY)
Project Number:	Not Specified
Report Date:	03/27/17

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

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

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



Project Name: SITE 1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708548
Report Date: 03/27/17

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1708548-01	PRW-8	WATER	STATEN ISLAND, NY	03/21/17 09:41	03/21/17
L1708548-02	PRW-15	WATER	STATEN ISLAND, NY	03/21/17 11:16	03/21/17
L1708548-03	PRW-14	WATER	STATEN ISLAND, NY	03/21/17 12:26	03/21/17
L1708548-04	PRW-13	WATER	STATEN ISLAND, NY	03/21/17 13:36	03/21/17
L1708548-05	PRW-10	WATER	STATEN ISLAND, NY	03/20/17 10:26	03/21/17
L1708548-06	PRW-2	WATER	STATEN ISLAND, NY	03/21/17 14:41	03/21/17
L1708548-07	PRW-7	WATER	STATEN ISLAND, NY	03/21/17 12:01	03/21/17
L1708548-08	PRW-4	WATER	STATEN ISLAND, NY	03/21/17 13:21	03/21/17
L1708548-09	FB-032117	WATER	STATEN ISLAND, NY	03/21/17 10:17	03/21/17
L1708548-10	TRIP BLANK	WATER	STATEN ISLAND, NY	03/20/17 00:00	03/21/17

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

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

Please contact Client Services at 800-624-9220 with any questions.

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708548
Report Date: 03/27/17

Case Narrative (continued)

Report Submission

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

Sample Receipt

L1708548-04 and -08: Headspace was noted in the sample containers submitted for Volatile Organics. The analysis was performed at the client's request.

Volatile Organics

L1708548-01 through -04, -07, -09, and -10: The pH of the sample was less than two. It should be noted that 2-chloroethylvinyl ether breaks down under acidic conditions.

The WG988067-6/-7 MS/MSD recoveries, performed on L1708548-01, are below the acceptance criteria for 2-chloroethylvinyl ether (0%/0%) due to the concentration of this compound falling below the reported detection limit.

Semivolatile Organics

The WG987295-4/-5 MS/MSD recoveries, performed on L1708548-01, are below the acceptance criteria for benzidine (0%/0%), due to the concentration of this compound falling below the reported detection limit.

Semivolatile Organics by SIM

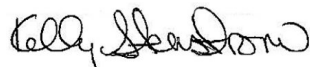
L1708548-04 and -07: The sample has elevated detection limits due to the dilution required by the sample matrix.

Dissolved Metals

The WG988417-3 MS recovery, performed on L1708548-01, is outside the acceptance criteria for cadmium (131%). A post digestion spike was performed and was within acceptance criteria.

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

Authorized Signature:

 Kelly Stenstrom

Title: Technical Director/Representative

Date: 03/27/17

ORGANICS

VOLATILES

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-01
Client ID: PRW-8
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 03/24/17 13:08
Analyst: BD

Date Collected: 03/21/17 09:41
Date Received: 03/21/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
2-Chloroethylvinyl ether	ND		ug/l	10	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-01

Date Collected: 03/21/17 09:41

Client ID: PRW-8

Date Received: 03/21/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS - Westborough Lab

1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Acrolein	ND		ug/l	5.0	0.44	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	106		70-130

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-02
Client ID: PRW-15
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 03/24/17 13:40
Analyst: BD

Date Collected: 03/21/17 11:16
Date Received: 03/21/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
2-Chloroethylvinyl ether	ND		ug/l	10	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-02

Date Collected: 03/21/17 11:16

Client ID: PRW-15

Date Received: 03/21/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Acrolein	ND		ug/l	5.0	0.44	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	110		70-130

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-03
Client ID: PRW-14
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 03/24/17 14:12
Analyst: BD

Date Collected: 03/21/17 12:26
Date Received: 03/21/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
2-Chloroethylvinyl ether	ND		ug/l	10	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-03

Date Collected: 03/21/17 12:26

Client ID: PRW-14

Date Received: 03/21/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Acrolein	ND		ug/l	5.0	0.44	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	105		70-130

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-04
Client ID: PRW-13
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 03/24/17 14:44
Analyst: BD

Date Collected: 03/21/17 13:36
Date Received: 03/21/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
2-Chloroethylvinyl ether	ND		ug/l	10	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	0.22	J	ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-04

Date Collected: 03/21/17 13:36

Client ID: PRW-13

Date Received: 03/21/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Acrolein	ND		ug/l	5.0	0.44	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	108		70-130

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-05
 Client ID: PRW-10
 Sample Location: STATEN ISLAND, NY
 Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 03/27/17 07:38
 Analyst: MM

Date Collected: 03/20/17 10:26
 Date Received: 03/21/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
2-Chloroethylvinyl ether	ND		ug/l	10	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-05

Date Collected: 03/20/17 10:26

Client ID: PRW-10

Date Received: 03/21/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Acrolein	ND		ug/l	5.0	0.44	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	100		70-130

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-06
Client ID: PRW-2
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 03/27/17 08:04
Analyst: MM

Date Collected: 03/21/17 14:41
Date Received: 03/21/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
2-Chloroethylvinyl ether	ND		ug/l	10	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	17		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-06

Date Collected: 03/21/17 14:41

Client ID: PRW-2

Date Received: 03/21/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS - Westborough Lab

1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Acrolein	ND		ug/l	5.0	0.44	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	102		70-130

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-07 D
 Client ID: PRW-7
 Sample Location: STATEN ISLAND, NY
 Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 03/24/17 15:16
 Analyst: BD

Date Collected: 03/21/17 12:01
 Date Received: 03/21/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2500	700	1000
1,1-Dichloroethane	ND		ug/l	2500	700	1000
Chloroform	ND		ug/l	2500	700	1000
2-Chloroethylvinyl ether	ND		ug/l	10000	700	1000
Carbon tetrachloride	ND		ug/l	500	130	1000
1,2-Dichloropropane	ND		ug/l	1000	140	1000
Dibromochloromethane	ND		ug/l	500	150	1000
1,1,2-Trichloroethane	ND		ug/l	1500	500	1000
Tetrachloroethene	ND		ug/l	500	180	1000
Chlorobenzene	ND		ug/l	2500	700	1000
1,2-Dichloroethane	ND		ug/l	500	130	1000
1,1,1-Trichloroethane	ND		ug/l	2500	700	1000
Bromodichloromethane	ND		ug/l	500	190	1000
trans-1,3-Dichloropropene	ND		ug/l	500	160	1000
cis-1,3-Dichloropropene	ND		ug/l	500	140	1000
1,3-Dichloropropene, Total	ND		ug/l	500	140	1000
Bromoform	ND		ug/l	2000	650	1000
1,1,1,2-Tetrachloroethane	ND		ug/l	500	170	1000
Benzene	ND		ug/l	500	160	1000
Toluene	84000		ug/l	2500	700	1000
Ethylbenzene	ND		ug/l	2500	700	1000
Chloromethane	ND		ug/l	2500	700	1000
Bromomethane	ND		ug/l	2500	700	1000
Vinyl chloride	ND		ug/l	1000	71.	1000
Chloroethane	ND		ug/l	2500	700	1000
1,1-Dichloroethene	ND		ug/l	500	170	1000
trans-1,2-Dichloroethene	ND		ug/l	2500	700	1000
Trichloroethene	ND		ug/l	500	180	1000
1,2-Dichlorobenzene	ND		ug/l	2500	700	1000
1,3-Dichlorobenzene	ND		ug/l	2500	700	1000

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-07 D

Date Collected: 03/21/17 12:01

Client ID: PRW-7

Date Received: 03/21/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	2500	700	1000
Acrylonitrile	ND		ug/l	5000	1500	1000
Acrolein	ND		ug/l	5000	440	1000

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	107		70-130

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-08
Client ID: PRW-4
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 03/27/17 08:29
Analyst: MM

Date Collected: 03/21/17 13:21
Date Received: 03/21/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
2-Chloroethylvinyl ether	ND		ug/l	10	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	60		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-08

Date Collected: 03/21/17 13:21

Client ID: PRW-4

Date Received: 03/21/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS - Westborough Lab

1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Acrolein	ND		ug/l	5.0	0.44	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	103		70-130

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-09
Client ID: FB-032117
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 03/24/17 12:04
Analyst: BD

Date Collected: 03/21/17 10:17
Date Received: 03/21/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
2-Chloroethylvinyl ether	ND		ug/l	10	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-09

Date Collected: 03/21/17 10:17

Client ID: FB-032117

Date Received: 03/21/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS - Westborough Lab

1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Acrolein	ND		ug/l	5.0	0.44	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	112		70-130
Dibromofluoromethane	105		70-130

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-10
 Client ID: TRIP BLANK
 Sample Location: STATEN ISLAND, NY
 Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 03/24/17 12:36
 Analyst: BD

Date Collected: 03/20/17 00:00
 Date Received: 03/21/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
2-Chloroethylvinyl ether	ND		ug/l	10	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-10

Date Collected: 03/20/17 00:00

Client ID: TRIP BLANK

Date Received: 03/21/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Acrolein	ND		ug/l	5.0	0.44	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	105		70-130

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708548

Project Number: Not Specified

Report Date: 03/27/17

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 03/24/17 11:32
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04,07,09-10 Batch: WG988067-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
2-Chloroethylvinyl ether	ND		ug/l	10	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708548

Project Number: Not Specified

Report Date: 03/27/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 03/24/17 11:32
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04,07,09-10 Batch: WG988067-5					
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Acrolein	ND		ug/l	5.0	0.44

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	113		70-130
Dibromofluoromethane	103		70-130

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708548

Project Number: Not Specified

Report Date: 03/27/17

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 03/27/17 06:48
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 05-06,08 Batch: WG988450-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
2-Chloroethylvinyl ether	ND		ug/l	10	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
 Analytical Date: 03/27/17 06:48
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 05-06,08 Batch: WG988450-5					
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Acrolein	ND		ug/l	5.0	0.44

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	100		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708548

Project Number: Not Specified

Report Date: 03/27/17

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04,07,09-10 Batch: WG988067-3 WG988067-4								
Methylene chloride	100		100		70-130	0		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	110		110		70-130	0		20
2-Chloroethylvinyl ether	21	Q	19	Q	70-130	10		20
Carbon tetrachloride	120		120		63-132	0		20
1,2-Dichloropropane	94		95		70-130	1		20
Dibromochloromethane	120		110		63-130	9		20
1,1,2-Trichloroethane	100		99		70-130	1		20
Tetrachloroethene	100		100		70-130	0		20
Chlorobenzene	100		100		75-130	0		20
1,2-Dichloroethane	120		110		70-130	9		20
1,1,1-Trichloroethane	110		110		67-130	0		20
Bromodichloromethane	110		110		67-130	0		20
trans-1,3-Dichloropropene	100		100		70-130	0		20
cis-1,3-Dichloropropene	100		98		70-130	2		20
Bromoform	110		120		54-136	9		20
1,1,2,2-Tetrachloroethane	96		100		67-130	4		20
Benzene	100		98		70-130	2		20
Toluene	100		100		70-130	0		20
Ethylbenzene	110		100		70-130	10		20
Chloromethane	130		130		64-130	0		20

Lab Control Sample Analysis Batch Quality Control

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708548
Report Date: 03/27/17

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04,07,09-10 Batch: WG988067-3 WG988067-4								
Bromomethane	180	Q	170	Q	39-139	6		20
Vinyl chloride	140		130		55-140	7		20
Chloroethane	140	Q	130		55-138	7		20
1,1-Dichloroethene	100		110		61-145	10		20
trans-1,2-Dichloroethene	110		100		70-130	10		20
Trichloroethene	100		100		70-130	0		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Acrylonitrile	100		98		70-130	2		20
Acrolein	130		120		40-160	8		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	110		107		70-130
Toluene-d8	100		99		70-130
4-Bromofluorobenzene	98		102		70-130
Dibromofluoromethane	105		104		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708548

Project Number: Not Specified

Report Date: 03/27/17

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05-06,08 Batch: WG988450-3 WG988450-4								
Methylene chloride	110		100		70-130	10		20
1,1-Dichloroethane	110		110		70-130	0		20
Chloroform	110		110		70-130	0		20
2-Chloroethylvinyl ether	77		63	Q	70-130	20		20
Carbon tetrachloride	94		90		63-132	4		20
1,2-Dichloropropane	110		100		70-130	10		20
Dibromochloromethane	92		92		63-130	0		20
1,1,2-Trichloroethane	100		98		70-130	2		20
Tetrachloroethene	92		91		70-130	1		20
Chlorobenzene	96		96		75-130	0		20
1,2-Dichloroethane	110		110		70-130	0		20
1,1,1-Trichloroethane	100		99		67-130	1		20
Bromodichloromethane	100		97		67-130	3		20
trans-1,3-Dichloropropene	98		97		70-130	1		20
cis-1,3-Dichloropropene	100		100		70-130	0		20
Bromoform	88		84		54-136	5		20
1,1,1,2-Tetrachloroethane	97		96		67-130	1		20
Benzene	100		100		70-130	0		20
Toluene	96		96		70-130	0		20
Ethylbenzene	96		95		70-130	1		20
Chloromethane	96		96		64-130	0		20

Lab Control Sample Analysis Batch Quality Control

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708548
Report Date: 03/27/17

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05-06,08 Batch: WG988450-3 WG988450-4								
Bromomethane	89		83		39-139	7		20
Vinyl chloride	99		92		55-140	7		20
Chloroethane	100		98		55-138	2		20
1,1-Dichloroethene	96		91		61-145	5		20
trans-1,2-Dichloroethene	99		100		70-130	1		20
Trichloroethene	100		100		70-130	0		20
1,2-Dichlorobenzene	94		93		70-130	1		20
1,3-Dichlorobenzene	93		91		70-130	2		20
1,4-Dichlorobenzene	92		92		70-130	0		20
Acrylonitrile	120		120		70-130	0		20
Acrolein	100		96		40-160	4		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	105		103		70-130
Toluene-d8	97		97		70-130
4-Bromofluorobenzene	96		96		70-130
Dibromofluoromethane	103		101		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708548

Project Number: Not Specified

Report Date: 03/27/17

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04,07,09-10 QC Batch ID: WG988067-6 WG988067-7 QC Sample: L1708548-01 Client ID: PRW-8												
Methylene chloride	ND	10	3.2	32	Q	4.7	47	Q	70-130	38	Q	20
1,1-Dichloroethane	ND	10	3.0	30	Q	4.4	44	Q	70-130	38	Q	20
Chloroform	ND	10	3.2	32	Q	4.6	46	Q	70-130	36	Q	20
2-Chloroethylvinyl ether	ND	10	ND	0	Q	ND	0	Q	70-130	NC		20
Carbon tetrachloride	ND	10	3.4	34	Q	4.9	49	Q	63-132	36	Q	20
1,2-Dichloropropane	ND	10	2.6	26	Q	3.8	38	Q	70-130	38	Q	20
Dibromochloromethane	ND	10	2.6	26	Q	4.1	41	Q	63-130	45	Q	20
1,1,2-Trichloroethane	ND	10	2.7	27	Q	4.1	41	Q	70-130	41	Q	20
Tetrachloroethene	ND	10	3.0	30	Q	4.6	46	Q	70-130	42	Q	20
Chlorobenzene	ND	10	3.0	30	Q	4.1	41	Q	75-130	31	Q	20
1,2-Dichloroethane	ND	10	3.4	34	Q	4.8	48	Q	70-130	34	Q	20
1,1,1-Trichloroethane	ND	10	3.2	32	Q	4.8	48	Q	67-130	40	Q	20
Bromodichloromethane	ND	10	2.8	28	Q	4.1	41	Q	67-130	38	Q	20
trans-1,3-Dichloropropene	ND	10	2.4	24	Q	3.6	36	Q	70-130	40	Q	20
cis-1,3-Dichloropropene	ND	10	2.3	23	Q	3.5	35	Q	70-130	41	Q	20
Bromoform	ND	10	2.6	26	Q	3.9	39	Q	54-136	40	Q	20
1,1,1,2-Tetrachloroethane	ND	10	2.5	25	Q	3.6	36	Q	67-130	36	Q	20
Benzene	ND	10	2.8	28	Q	4.2	42	Q	70-130	40	Q	20
Toluene	ND	10	3.0	30	Q	4.3	43	Q	70-130	36	Q	20
Ethylbenzene	ND	10	2.9	29	Q	4.2	42	Q	70-130	37	Q	20
Chloromethane	ND	10	4.6	46	Q	6.7	67		64-130	37	Q	20

Matrix Spike Analysis

Batch Quality Control

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708548
Report Date: 03/27/17

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04,07,09-10 QC Batch ID: WG988067-6 WG988067-7 QC Sample: L1708548-01 Client ID: PRW-8												
Bromomethane	ND	10	4.9	49		7.5	75		39-139	42	Q	20
Vinyl chloride	ND	10	4.5	45	Q	6.8	68		55-140	41	Q	20
Chloroethane	ND	10	4.9	49	Q	6.7	67		55-138	31	Q	20
1,1-Dichloroethene	ND	10	3.4	34	Q	4.8	48	Q	61-145	34	Q	20
trans-1,2-Dichloroethene	ND	10	3.2	32	Q	4.7	47	Q	70-130	38	Q	20
Trichloroethene	ND	10	3.0	30	Q	4.3	43	Q	70-130	36	Q	20
1,2-Dichlorobenzene	ND	10	2.7	27	Q	3.7	37	Q	70-130	31	Q	20
1,3-Dichlorobenzene	ND	10	2.8	28	Q	4.0	40	Q	70-130	35	Q	20
1,4-Dichlorobenzene	ND	10	2.9	29	Q	4.0	40	Q	70-130	32	Q	20
Acrylonitrile	ND	10	2.8J	28	Q	3.9J	39	Q	70-130	33	Q	20
Acrolein	ND	10	3.4J	34	Q	5.1	51		40-160	40	Q	20

<i>Surrogate</i>	<i>MS % Recovery</i>	<i>Qualifier</i>	<i>MSD % Recovery</i>	<i>Qualifier</i>	<i>Acceptance Criteria</i>
1,2-Dichloroethane-d4	111		113		70-130
4-Bromofluorobenzene	106		104		70-130
Dibromofluoromethane	107		107		70-130
Toluene-d8	102		102		70-130

SEMIVOLATILES

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-01
 Client ID: PRW-8
 Sample Location: STATEN ISLAND, NY
 Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 03/23/17 15:16
 Analyst: SZ

Date Collected: 03/21/17 09:41
 Date Received: 03/21/17
 Field Prep: Not Specified
 Extraction Method: EPA 3510C
 Extraction Date: 03/22/17 13:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzidine	ND		ug/l	20	8.1	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.66	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1
Azobenzene	ND		ug/l	2.0	0.75	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	5.0	0.60	1
Nitrobenzene	ND		ug/l	2.0	0.75	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	0.91	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1
Diethyl phthalate	ND		ug/l	5.0	0.63	1
Dimethyl phthalate	ND		ug/l	5.0	0.65	1
n-Nitrosodimethylamine	ND		ug/l	2.0	0.67	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1
2-Chlorophenol	ND		ug/l	2.0	0.63	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.77	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.6	1
2-Nitrophenol	ND		ug/l	10	1.5	1
4-Nitrophenol	ND		ug/l	10	1.8	1

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-01

Date Collected: 03/21/17 09:41

Client ID: PRW-8

Date Received: 03/21/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

2,4-Dinitrophenol	ND		ug/l	20	5.5	1
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1	1
Phenol	ND		ug/l	5.0	1.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	43		21-120
Phenol-d6	29		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	70		15-120
2,4,6-Tribromophenol	85		10-120
4-Terphenyl-d14	66		41-149

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-01
 Client ID: PRW-8
 Sample Location: STATEN ISLAND, NY
 Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 03/23/17 11:05
 Analyst: KL

Date Collected: 03/21/17 09:41
 Date Received: 03/21/17
 Field Prep: Not Specified
 Extraction Method: EPA 3510C
 Extraction Date: 03/22/17 13:21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	ND		ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	ND		ug/l	0.20	0.04	1
Benzo(a)anthracene	0.03	J	ug/l	0.20	0.02	1
Benzo(a)pyrene	ND		ug/l	0.20	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.20	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.04	1
Chrysene	ND		ug/l	0.20	0.04	1
Acenaphthylene	ND		ug/l	0.20	0.04	1
Anthracene	ND		ug/l	0.20	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.20	0.04	1
Fluorene	ND		ug/l	0.20	0.04	1
Phenanthrene	ND		ug/l	0.20	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.20	0.04	1
Pyrene	ND		ug/l	0.20	0.04	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	38		21-120
Phenol-d6	30		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	64		15-120
2,4,6-Tribromophenol	80		10-120
4-Terphenyl-d14	57		41-149

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-02
 Client ID: PRW-15
 Sample Location: STATEN ISLAND, NY
 Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 03/24/17 09:08
 Analyst: CB

Date Collected: 03/21/17 11:16
 Date Received: 03/21/17
 Field Prep: Not Specified
 Extraction Method: EPA 3510C
 Extraction Date: 03/22/17 13:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzidine	ND		ug/l	20	8.1	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.66	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1
Azobenzene	ND		ug/l	2.0	0.75	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	5.0	0.60	1
Nitrobenzene	ND		ug/l	2.0	0.75	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	0.91	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1
Diethyl phthalate	ND		ug/l	5.0	0.63	1
Dimethyl phthalate	ND		ug/l	5.0	0.65	1
n-Nitrosodimethylamine	ND		ug/l	2.0	0.67	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1
2-Chlorophenol	ND		ug/l	2.0	0.63	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.77	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.6	1
2-Nitrophenol	ND		ug/l	10	1.5	1
4-Nitrophenol	ND		ug/l	10	1.8	1

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-02

Date Collected: 03/21/17 11:16

Client ID: PRW-15

Date Received: 03/21/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

2,4-Dinitrophenol	ND		ug/l	20	5.5	1
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1	1
Phenol	ND		ug/l	5.0	1.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	50		21-120
Phenol-d6	34		10-120
Nitrobenzene-d5	82		23-120
2-Fluorobiphenyl	75		15-120
2,4,6-Tribromophenol	78		10-120
4-Terphenyl-d14	77		41-149

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-02
 Client ID: PRW-15
 Sample Location: STATEN ISLAND, NY
 Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 03/23/17 11:29
 Analyst: KL

Date Collected: 03/21/17 11:16
 Date Received: 03/21/17
 Field Prep: Not Specified
 Extraction Method: EPA 3510C
 Extraction Date: 03/22/17 13:21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.12		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	ND		ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	ND		ug/l	0.20	0.04	1
Benzo(a)anthracene	0.04	J	ug/l	0.20	0.02	1
Benzo(a)pyrene	ND		ug/l	0.20	0.04	1
Benzo(b)fluoranthene	0.04	J	ug/l	0.20	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.04	1
Chrysene	ND		ug/l	0.20	0.04	1
Acenaphthylene	ND		ug/l	0.20	0.04	1
Anthracene	ND		ug/l	0.20	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.20	0.04	1
Fluorene	ND		ug/l	0.20	0.04	1
Phenanthrene	ND		ug/l	0.20	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.20	0.04	1
Pyrene	0.08	J	ug/l	0.20	0.04	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	40		21-120
Phenol-d6	32		10-120
Nitrobenzene-d5	67		23-120
2-Fluorobiphenyl	67		15-120
2,4,6-Tribromophenol	84		10-120
4-Terphenyl-d14	57		41-149

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-03
 Client ID: PRW-14
 Sample Location: STATEN ISLAND, NY
 Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 03/24/17 09:34
 Analyst: CB

Date Collected: 03/21/17 12:26
 Date Received: 03/21/17
 Field Prep: Not Specified
 Extraction Method: EPA 3510C
 Extraction Date: 03/22/17 13:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzidine	ND		ug/l	20	8.1	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.66	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1
Azobenzene	ND		ug/l	2.0	0.75	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	5.0	0.60	1
Nitrobenzene	ND		ug/l	2.0	0.75	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	0.91	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1
Diethyl phthalate	ND		ug/l	5.0	0.63	1
Dimethyl phthalate	ND		ug/l	5.0	0.65	1
n-Nitrosodimethylamine	ND		ug/l	2.0	0.67	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1
2-Chlorophenol	ND		ug/l	2.0	0.63	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.77	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.6	1
2-Nitrophenol	ND		ug/l	10	1.5	1
4-Nitrophenol	ND		ug/l	10	1.8	1

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-03

Date Collected: 03/21/17 12:26

Client ID: PRW-14

Date Received: 03/21/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

2,4-Dinitrophenol	ND		ug/l	20	5.5	1
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1	1
Phenol	ND		ug/l	5.0	1.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	52		21-120
Phenol-d6	37		10-120
Nitrobenzene-d5	82		23-120
2-Fluorobiphenyl	78		15-120
2,4,6-Tribromophenol	85		10-120
4-Terphenyl-d14	82		41-149

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-03
 Client ID: PRW-14
 Sample Location: STATEN ISLAND, NY
 Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 03/23/17 11:54
 Analyst: KL

Date Collected: 03/21/17 12:26
 Date Received: 03/21/17
 Field Prep: Not Specified
 Extraction Method: EPA 3510C
 Extraction Date: 03/22/17 13:21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	ND		ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	ND		ug/l	0.20	0.04	1
Benzo(a)anthracene	ND		ug/l	0.20	0.02	1
Benzo(a)pyrene	ND		ug/l	0.20	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.20	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.04	1
Chrysene	ND		ug/l	0.20	0.04	1
Acenaphthylene	ND		ug/l	0.20	0.04	1
Anthracene	ND		ug/l	0.20	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.20	0.04	1
Fluorene	ND		ug/l	0.20	0.04	1
Phenanthrene	ND		ug/l	0.20	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.20	0.04	1
Pyrene	ND		ug/l	0.20	0.04	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	41		21-120
Phenol-d6	33		10-120
Nitrobenzene-d5	68		23-120
2-Fluorobiphenyl	68		15-120
2,4,6-Tribromophenol	85		10-120
4-Terphenyl-d14	60		41-149

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-04
Client ID: PRW-13
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 03/24/17 09:59
Analyst: CB

Date Collected: 03/21/17 13:36
Date Received: 03/21/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 03/22/17 13:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzidine	ND		ug/l	20	8.1	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.66	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1
Azobenzene	ND		ug/l	2.0	0.75	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	5.0	0.60	1
Nitrobenzene	ND		ug/l	2.0	0.75	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	0.91	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1
Diethyl phthalate	ND		ug/l	5.0	0.63	1
Dimethyl phthalate	ND		ug/l	5.0	0.65	1
n-Nitrosodimethylamine	ND		ug/l	2.0	0.67	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1
2-Chlorophenol	ND		ug/l	2.0	0.63	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.77	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.6	1
2-Nitrophenol	ND		ug/l	10	1.5	1
4-Nitrophenol	ND		ug/l	10	1.8	1

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-04

Date Collected: 03/21/17 13:36

Client ID: PRW-13

Date Received: 03/21/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

2,4-Dinitrophenol	ND		ug/l	20	5.5	1
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1	1
Phenol	ND		ug/l	5.0	1.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	48		21-120
Phenol-d6	35		10-120
Nitrobenzene-d5	87		23-120
2-Fluorobiphenyl	75		15-120
2,4,6-Tribromophenol	97		10-120
4-Terphenyl-d14	79		41-149

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-04 D
 Client ID: PRW-13
 Sample Location: STATEN ISLAND, NY
 Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 03/23/17 14:22
 Analyst: KL

Date Collected: 03/21/17 13:36
 Date Received: 03/21/17
 Field Prep: Not Specified
 Extraction Method: EPA 3510C
 Extraction Date: 03/22/17 13:21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.50	0.18	5
2-Chloronaphthalene	ND		ug/l	1.0	0.18	5
Fluoranthene	ND		ug/l	1.0	0.19	5
Hexachlorobutadiene	ND		ug/l	2.5	0.18	5
Naphthalene	ND		ug/l	1.0	0.22	5
Benzo(a)anthracene	ND		ug/l	1.0	0.09	5
Benzo(a)pyrene	ND		ug/l	1.0	0.20	5
Benzo(b)fluoranthene	ND		ug/l	1.0	0.08	5
Benzo(k)fluoranthene	ND		ug/l	1.0	0.21	5
Chrysene	ND		ug/l	1.0	0.19	5
Acenaphthylene	0.28	J	ug/l	1.0	0.18	5
Anthracene	0.28	J	ug/l	1.0	0.18	5
Benzo(ghi)perylene	ND		ug/l	1.0	0.21	5
Fluorene	ND		ug/l	1.0	0.18	5
Phenanthrene	ND		ug/l	1.0	0.08	5
Dibenzo(a,h)anthracene	ND		ug/l	1.0	0.20	5
Indeno(1,2,3-cd)pyrene	ND		ug/l	1.0	0.20	5
Pyrene	ND		ug/l	1.0	0.20	5
Pentachlorophenol	ND		ug/l	4.0	1.1	5
Hexachlorobenzene	ND		ug/l	4.0	0.16	5
Hexachloroethane	ND		ug/l	4.0	0.15	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	41		21-120
Phenol-d6	38		10-120
Nitrobenzene-d5	77		23-120
2-Fluorobiphenyl	81		15-120
2,4,6-Tribromophenol	97		10-120
4-Terphenyl-d14	87		41-149

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-05
Client ID: PRW-10
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 03/24/17 10:25
Analyst: CB

Date Collected: 03/20/17 10:26
Date Received: 03/21/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 03/22/17 13:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzidine	ND		ug/l	20	8.1	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.66	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1
Azobenzene	ND		ug/l	2.0	0.75	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	5.0	0.60	1
Nitrobenzene	ND		ug/l	2.0	0.75	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	0.91	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1
Diethyl phthalate	ND		ug/l	5.0	0.63	1
Dimethyl phthalate	ND		ug/l	5.0	0.65	1
n-Nitrosodimethylamine	ND		ug/l	2.0	0.67	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1
2-Chlorophenol	ND		ug/l	2.0	0.63	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.77	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.6	1
2-Nitrophenol	ND		ug/l	10	1.5	1
4-Nitrophenol	ND		ug/l	10	1.8	1

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-05

Date Collected: 03/20/17 10:26

Client ID: PRW-10

Date Received: 03/21/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

2,4-Dinitrophenol	ND		ug/l	20	5.5	1
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1	1
Phenol	ND		ug/l	5.0	1.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	49		21-120
Phenol-d6	31		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	74		15-120
2,4,6-Tribromophenol	87		10-120
4-Terphenyl-d14	76		41-149

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-05
 Client ID: PRW-10
 Sample Location: STATEN ISLAND, NY
 Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 03/23/17 12:18
 Analyst: KL

Date Collected: 03/20/17 10:26
 Date Received: 03/21/17
 Field Prep: Not Specified
 Extraction Method: EPA 3510C
 Extraction Date: 03/22/17 13:21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	ND		ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	ND		ug/l	0.20	0.04	1
Benzo(a)anthracene	ND		ug/l	0.20	0.02	1
Benzo(a)pyrene	ND		ug/l	0.20	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.20	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.04	1
Chrysene	ND		ug/l	0.20	0.04	1
Acenaphthylene	ND		ug/l	0.20	0.04	1
Anthracene	0.04	J	ug/l	0.20	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.20	0.04	1
Fluorene	ND		ug/l	0.20	0.04	1
Phenanthrene	ND		ug/l	0.20	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.20	0.04	1
Pyrene	ND		ug/l	0.20	0.04	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	35		21-120
Phenol-d6	28		10-120
Nitrobenzene-d5	60		23-120
2-Fluorobiphenyl	61		15-120
2,4,6-Tribromophenol	81		10-120
4-Terphenyl-d14	52		41-149

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-06
Client ID: PRW-2
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 03/24/17 10:51
Analyst: CB

Date Collected: 03/21/17 14:41
Date Received: 03/21/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 03/22/17 13:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzidine	ND		ug/l	20	8.1	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.66	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1
Azobenzene	ND		ug/l	2.0	0.75	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	5.0	0.60	1
Nitrobenzene	ND		ug/l	2.0	0.75	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	0.91	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1
Diethyl phthalate	ND		ug/l	5.0	0.63	1
Dimethyl phthalate	ND		ug/l	5.0	0.65	1
n-Nitrosodimethylamine	ND		ug/l	2.0	0.67	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1
2-Chlorophenol	ND		ug/l	2.0	0.63	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.77	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.6	1
2-Nitrophenol	ND		ug/l	10	1.5	1
4-Nitrophenol	ND		ug/l	10	1.8	1

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-06

Date Collected: 03/21/17 14:41

Client ID: PRW-2

Date Received: 03/21/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

2,4-Dinitrophenol	ND		ug/l	20	5.5	1
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1	1
Phenol	ND		ug/l	5.0	1.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	44		21-120
Phenol-d6	31		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	73		15-120
2,4,6-Tribromophenol	89		10-120
4-Terphenyl-d14	87		41-149

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-06
 Client ID: PRW-2
 Sample Location: STATEN ISLAND, NY
 Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 03/23/17 12:43
 Analyst: KL

Date Collected: 03/21/17 14:41
 Date Received: 03/21/17
 Field Prep: Not Specified
 Extraction Method: EPA 3510C
 Extraction Date: 03/22/17 13:21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	ND		ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	ND		ug/l	0.20	0.04	1
Benzo(a)anthracene	ND		ug/l	0.20	0.02	1
Benzo(a)pyrene	ND		ug/l	0.20	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.20	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.04	1
Chrysene	ND		ug/l	0.20	0.04	1
Acenaphthylene	ND		ug/l	0.20	0.04	1
Anthracene	ND		ug/l	0.20	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.20	0.04	1
Fluorene	ND		ug/l	0.20	0.04	1
Phenanthrene	0.04	J	ug/l	0.20	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.20	0.04	1
Pyrene	ND		ug/l	0.20	0.04	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	35		21-120
Phenol-d6	28		10-120
Nitrobenzene-d5	61		23-120
2-Fluorobiphenyl	68		15-120
2,4,6-Tribromophenol	94		10-120
4-Terphenyl-d14	61		41-149

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-07
Client ID: PRW-7
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 03/24/17 11:16
Analyst: CB

Date Collected: 03/21/17 12:01
Date Received: 03/21/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 03/22/17 13:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzidine	ND		ug/l	20	8.1	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.66	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1
Azobenzene	ND		ug/l	2.0	0.75	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	5.0	0.60	1
Nitrobenzene	ND		ug/l	2.0	0.75	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	0.91	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1
Diethyl phthalate	1.9	J	ug/l	5.0	0.63	1
Dimethyl phthalate	ND		ug/l	5.0	0.65	1
n-Nitrosodimethylamine	ND		ug/l	2.0	0.67	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1
2-Chlorophenol	ND		ug/l	2.0	0.63	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.77	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.6	1
2-Nitrophenol	ND		ug/l	10	1.5	1
4-Nitrophenol	ND		ug/l	10	1.8	1

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-07

Date Collected: 03/21/17 12:01

Client ID: PRW-7

Date Received: 03/21/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

2,4-Dinitrophenol	ND		ug/l	20	5.5	1
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1	1
Phenol	ND		ug/l	5.0	1.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	38		21-120
Phenol-d6	27		10-120
Nitrobenzene-d5	66		23-120
2-Fluorobiphenyl	56		15-120
2,4,6-Tribromophenol	76		10-120
4-Terphenyl-d14	64		41-149

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-07 D
 Client ID: PRW-7
 Sample Location: STATEN ISLAND, NY
 Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 03/23/17 15:59
 Analyst: DV

Date Collected: 03/21/17 12:01
 Date Received: 03/21/17
 Field Prep: Not Specified
 Extraction Method: EPA 3510C
 Extraction Date: 03/22/17 13:21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.20	0.07	2
2-Chloronaphthalene	ND		ug/l	0.40	0.07	2
Fluoranthene	ND		ug/l	0.40	0.08	2
Hexachlorobutadiene	ND		ug/l	1.0	0.07	2
Naphthalene	0.21	J	ug/l	0.40	0.09	2
Benzo(a)anthracene	ND		ug/l	0.40	0.04	2
Benzo(a)pyrene	ND		ug/l	0.40	0.08	2
Benzo(b)fluoranthene	ND		ug/l	0.40	0.03	2
Benzo(k)fluoranthene	ND		ug/l	0.40	0.08	2
Chrysene	ND		ug/l	0.40	0.08	2
Acenaphthylene	ND		ug/l	0.40	0.07	2
Anthracene	0.10	J	ug/l	0.40	0.07	2
Benzo(ghi)perylene	ND		ug/l	0.40	0.08	2
Fluorene	ND		ug/l	0.40	0.07	2
Phenanthrene	0.06	J	ug/l	0.40	0.03	2
Dibenzo(a,h)anthracene	ND		ug/l	0.40	0.08	2
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.40	0.08	2
Pyrene	ND		ug/l	0.40	0.08	2
Pentachlorophenol	ND		ug/l	1.6	0.44	2
Hexachlorobenzene	ND		ug/l	1.6	0.06	2
Hexachloroethane	ND		ug/l	1.6	0.06	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	26		21-120
Phenol-d6	23		10-120
Nitrobenzene-d5	49		23-120
2-Fluorobiphenyl	53		15-120
2,4,6-Tribromophenol	55		10-120
4-Terphenyl-d14	55		41-149

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-08
Client ID: PRW-4
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 03/24/17 11:42
Analyst: CB

Date Collected: 03/21/17 13:21
Date Received: 03/21/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 03/22/17 13:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzidine	ND		ug/l	20	8.1	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.66	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1
Azobenzene	ND		ug/l	2.0	0.75	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	5.0	0.60	1
Nitrobenzene	ND		ug/l	2.0	0.75	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	0.91	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1
Diethyl phthalate	ND		ug/l	5.0	0.63	1
Dimethyl phthalate	ND		ug/l	5.0	0.65	1
n-Nitrosodimethylamine	ND		ug/l	2.0	0.67	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1
2-Chlorophenol	ND		ug/l	2.0	0.63	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.77	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.6	1
2-Nitrophenol	ND		ug/l	10	1.5	1
4-Nitrophenol	ND		ug/l	10	1.8	1

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-08

Date Collected: 03/21/17 13:21

Client ID: PRW-4

Date Received: 03/21/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

2,4-Dinitrophenol	ND		ug/l	20	5.5	1
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1	1
Phenol	ND		ug/l	5.0	1.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	41		21-120
Phenol-d6	29		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	73		15-120
2,4,6-Tribromophenol	76		10-120
4-Terphenyl-d14	82		41-149

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-08
 Client ID: PRW-4
 Sample Location: STATEN ISLAND, NY
 Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 03/23/17 13:32
 Analyst: KL

Date Collected: 03/21/17 13:21
 Date Received: 03/21/17
 Field Prep: Not Specified
 Extraction Method: EPA 3510C
 Extraction Date: 03/22/17 13:21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	ND		ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	ND		ug/l	0.20	0.04	1
Benzo(a)anthracene	ND		ug/l	0.20	0.02	1
Benzo(a)pyrene	ND		ug/l	0.20	0.04	1
Benzo(b)fluoranthene	0.04	J	ug/l	0.20	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.04	1
Chrysene	ND		ug/l	0.20	0.04	1
Acenaphthylene	ND		ug/l	0.20	0.04	1
Anthracene	ND		ug/l	0.20	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.20	0.04	1
Fluorene	ND		ug/l	0.20	0.04	1
Phenanthrene	ND		ug/l	0.20	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.20	0.04	1
Pyrene	ND		ug/l	0.20	0.04	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	32		21-120
Phenol-d6	26		10-120
Nitrobenzene-d5	60		23-120
2-Fluorobiphenyl	64		15-120
2,4,6-Tribromophenol	81		10-120
4-Terphenyl-d14	58		41-149

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-09
Client ID: FB-032117
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 03/24/17 12:07
Analyst: CB

Date Collected: 03/21/17 10:17
Date Received: 03/21/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 03/22/17 13:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzidine	ND		ug/l	20	8.1	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.66	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1
Azobenzene	ND		ug/l	2.0	0.75	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	5.0	0.60	1
Nitrobenzene	ND		ug/l	2.0	0.75	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	0.91	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1
Diethyl phthalate	ND		ug/l	5.0	0.63	1
Dimethyl phthalate	ND		ug/l	5.0	0.65	1
n-Nitrosodimethylamine	ND		ug/l	2.0	0.67	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1
2-Chlorophenol	ND		ug/l	2.0	0.63	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.77	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.6	1
2-Nitrophenol	ND		ug/l	10	1.5	1
4-Nitrophenol	ND		ug/l	10	1.8	1

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-09

Date Collected: 03/21/17 10:17

Client ID: FB-032117

Date Received: 03/21/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

2,4-Dinitrophenol	ND		ug/l	20	5.5	1
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1	1
Phenol	ND		ug/l	5.0	1.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	51		21-120
Phenol-d6	34		10-120
Nitrobenzene-d5	90		23-120
2-Fluorobiphenyl	80		15-120
2,4,6-Tribromophenol	83		10-120
4-Terphenyl-d14	87		41-149

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-09
 Client ID: FB-032117
 Sample Location: STATEN ISLAND, NY
 Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 03/23/17 13:57
 Analyst: KL

Date Collected: 03/21/17 10:17
 Date Received: 03/21/17
 Field Prep: Not Specified
 Extraction Method: EPA 3510C
 Extraction Date: 03/22/17 13:21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	ND		ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	ND		ug/l	0.20	0.04	1
Benzo(a)anthracene	ND		ug/l	0.20	0.02	1
Benzo(a)pyrene	ND		ug/l	0.20	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.20	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.04	1
Chrysene	ND		ug/l	0.20	0.04	1
Acenaphthylene	ND		ug/l	0.20	0.04	1
Anthracene	ND		ug/l	0.20	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.20	0.04	1
Fluorene	ND		ug/l	0.20	0.04	1
Phenanthrene	ND		ug/l	0.20	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.20	0.04	1
Pyrene	ND		ug/l	0.20	0.04	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	39		21-120
Phenol-d6	31		10-120
Nitrobenzene-d5	66		23-120
2-Fluorobiphenyl	76		15-120
2,4,6-Tribromophenol	84		10-120
4-Terphenyl-d14	66		41-149

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708548
Report Date: 03/27/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 03/23/17 11:03
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 03/22/17 13:19

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-09 Batch: WG987295-1					
Benzidine	ND		ug/l	20	8.1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.66
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1
Azobenzene	ND		ug/l	2.0	0.75
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63
Hexachlorocyclopentadiene	ND		ug/l	20	7.8
Isophorone	ND		ug/l	5.0	0.60
Nitrobenzene	ND		ug/l	2.0	0.75
NDPA/DPA	ND		ug/l	2.0	0.64
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	0.91
Butyl benzyl phthalate	ND		ug/l	5.0	1.3
Di-n-butylphthalate	ND		ug/l	5.0	0.69
Di-n-octylphthalate	ND		ug/l	5.0	1.1
Diethyl phthalate	ND		ug/l	5.0	0.63
Dimethyl phthalate	ND		ug/l	5.0	0.65
n-Nitrosodimethylamine	ND		ug/l	2.0	0.67
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68
p-Chloro-m-cresol	ND		ug/l	2.0	0.62
2-Chlorophenol	ND		ug/l	2.0	0.63
2,4-Dichlorophenol	ND		ug/l	5.0	0.77
2,4-Dimethylphenol	ND		ug/l	5.0	1.6
2-Nitrophenol	ND		ug/l	10	1.5

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708548

Project Number: Not Specified

Report Date: 03/27/17

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270D
 Analytical Date: 03/23/17 11:03
 Analyst: SZ

Extraction Method: EPA 3510C
 Extraction Date: 03/22/17 13:19

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-09 Batch: WG987295-1					
4-Nitrophenol	ND		ug/l	10	1.8
2,4-Dinitrophenol	ND		ug/l	20	5.5
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1
Phenol	ND		ug/l	5.0	1.9

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	49		21-120
Phenol-d6	32		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	94		10-120
4-Terphenyl-d14	76		41-149

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708548

Project Number: Not Specified

Report Date: 03/27/17

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270D-SIM
 Analytical Date: 03/23/17 08:38
 Analyst: KL

Extraction Method: EPA 3510C
 Extraction Date: 03/22/17 13:21

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-09 Batch: WG987297-1					
Acenaphthene	ND		ug/l	0.10	0.04
2-Chloronaphthalene	ND		ug/l	0.20	0.04
Fluoranthene	0.04	J	ug/l	0.20	0.04
Hexachlorobutadiene	ND		ug/l	0.50	0.04
Naphthalene	ND		ug/l	0.20	0.04
Benzo(a)anthracene	0.03	J	ug/l	0.20	0.02
Benzo(a)pyrene	ND		ug/l	0.20	0.04
Benzo(b)fluoranthene	ND		ug/l	0.20	0.02
Benzo(k)fluoranthene	ND		ug/l	0.20	0.04
Chrysene	ND		ug/l	0.20	0.04
Acenaphthylene	ND		ug/l	0.20	0.04
Anthracene	ND		ug/l	0.20	0.04
Benzo(ghi)perylene	ND		ug/l	0.20	0.04
Fluorene	ND		ug/l	0.20	0.04
Phenanthrene	0.03	J	ug/l	0.20	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.04
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.20	0.04
Pyrene	ND		ug/l	0.20	0.04
Pentachlorophenol	ND		ug/l	0.80	0.22
Hexachlorobenzene	ND		ug/l	0.80	0.03
Hexachloroethane	ND		ug/l	0.80	0.03

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270D-SIM
 Analytical Date: 03/23/17 08:38
 Analyst: KL

Extraction Method: EPA 3510C
 Extraction Date: 03/22/17 13:21

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-09 Batch: WG987297-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	42		21-120
Phenol-d6	34		10-120
Nitrobenzene-d5	77		23-120
2-Fluorobiphenyl	72		15-120
2,4,6-Tribromophenol	98		10-120
4-Terphenyl-d14	71		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708548

Project Number: Not Specified

Report Date: 03/27/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 Batch: WG987295-2 WG987295-3								
Benzidine	20		23		10-75	14		30
1,2,4-Trichlorobenzene	65		79		39-98	19		30
Bis(2-chloroethyl)ether	62		74		40-140	18		30
3,3'-Dichlorobenzidine	39	Q	49		40-140	23		30
2,4-Dinitrotoluene	81		88		48-143	8		30
2,6-Dinitrotoluene	82		89		40-140	8		30
Azobenzene	76		85		40-140	11		30
4-Chlorophenyl phenyl ether	76		86		40-140	12		30
4-Bromophenyl phenyl ether	83		93		40-140	11		30
Bis(2-chloroisopropyl)ether	56		68		40-140	19		30
Bis(2-chloroethoxy)methane	71		79		40-140	11		30
Hexachlorocyclopentadiene	64		78		40-140	20		30
Isophorone	72		80		40-140	11		30
Nitrobenzene	66		78		40-140	17		30
NDPA/DPA	77		88		40-140	13		30
n-Nitrosodi-n-propylamine	69		78		29-132	12		30
Bis(2-ethylhexyl)phthalate	83		94		40-140	12		30
Butyl benzyl phthalate	69		77		40-140	11		30
Di-n-butylphthalate	78		87		40-140	11		30
Di-n-octylphthalate	84		93		40-140	10		30
Diethyl phthalate	79		88		40-140	11		30

Lab Control Sample Analysis Batch Quality Control

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708548
Report Date: 03/27/17

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 Batch: WG987295-2 WG987295-3								
Dimethyl phthalate	82		87		40-140	6		30
n-Nitrosodimethylamine	41		47		22-74	14		30
2,4,6-Trichlorophenol	84		93		30-130	10		30
p-Chloro-m-cresol	81		88		23-97	8		30
2-Chlorophenol	65		78		27-123	18		30
2,4-Dichlorophenol	79		88		30-130	11		30
2,4-Dimethylphenol	80		86		30-130	7		30
2-Nitrophenol	73		86		30-130	16		30
4-Nitrophenol	63		66		10-80	5		30
2,4-Dinitrophenol	77		86		20-130	11		30
4,6-Dinitro-o-cresol	85		93		20-164	9		30
Phenol	31		36		12-110	15		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
2-Fluorophenol	45		54		21-120
Phenol-d6	33		38		10-120
Nitrobenzene-d5	66		78		23-120
2-Fluorobiphenyl	74		81		15-120
2,4,6-Tribromophenol	88		98		10-120
4-Terphenyl-d14	67		73		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708548

Project Number: Not Specified

Report Date: 03/27/17

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-09 Batch: WG987297-2 WG987297-3								
Acenaphthene	75		72		37-111	4		40
2-Chloronaphthalene	79		76		40-140	4		40
Fluoranthene	76		75		40-140	1		40
Hexachlorobutadiene	82		79		40-140	4		40
Naphthalene	74		71		40-140	4		40
Benzo(a)anthracene	82		81		40-140	1		40
Benzo(a)pyrene	82		83		40-140	1		40
Benzo(b)fluoranthene	92		85		40-140	8		40
Benzo(k)fluoranthene	71		73		40-140	3		40
Chrysene	68		67		40-140	1		40
Acenaphthylene	82		80		40-140	2		40
Anthracene	76		76		40-140	0		40
Benzo(ghi)perylene	84		82		40-140	2		40
Fluorene	79		76		40-140	4		40
Phenanthrene	72		70		40-140	3		40
Dibenzo(a,h)anthracene	84		81		40-140	4		40
Indeno(1,2,3-cd)pyrene	83		81		40-140	2		40
Pyrene	75		74		26-127	1		40
Pentachlorophenol	72		71		9-103	1		40
Hexachlorobenzene	87		85		40-140	2		40
Hexachloroethane	76		72		40-140	5		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708548

Project Number: Not Specified

Report Date: 03/27/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-09 Batch: WG987297-2 WG987297-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	44		45		21-120
Phenol-d6	36		37		10-120
Nitrobenzene-d5	73		71		23-120
2-Fluorobiphenyl	71		70		15-120
2,4,6-Tribromophenol	96		95		10-120
4-Terphenyl-d14	65		64		41-149

Matrix Spike Analysis

Batch Quality Control

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708548

Project Number: Not Specified

Report Date: 03/27/17

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Semivolatiles Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG987295-4 WG987295-5 QC Sample: L1708548-01 Client ID: PRW-8												
Benzidine	ND	40	ND	0	Q	ND	0	Q	10-75	NC		30
1,2,4-Trichlorobenzene	ND	40	32	80		31	78		39-98	3		30
Bis(2-chloroethyl)ether	ND	40	29	73		28	70		40-140	4		30
3,3'-Dichlorobenzidine	ND	40	13	33	Q	18	45		40-140	32	Q	30
2,4-Dinitrotoluene	ND	40	35	88		34	85		48-143	3		30
2,6-Dinitrotoluene	ND	40	34	85		35	88		40-140	3		30
Azobenzene	ND	40	33	83		33	83		40-140	0		30
4-Chlorophenyl phenyl ether	ND	40	34	85		33	83		40-140	3		30
4-Bromophenyl phenyl ether	ND	40	36	90		36	90		40-140	0		30
Bis(2-chloroisopropyl)ether	ND	40	27	68		26	65		40-140	4		30
Bis(2-chloroethoxy)methane	ND	40	31	78		31	78		40-140	0		30
Hexachlorocyclopentadiene	ND	40	34	85		34	85		40-140	0		30
Isophorone	ND	40	31	78		31	78		40-140	0		30
Nitrobenzene	ND	40	31	78		30	75		40-140	3		30
NDPA/DPA	ND	40	32	80		33	83		40-140	3		30
n-Nitrosodi-n-propylamine	ND	40	31	78		30	75		29-132	3		30
Bis(2-ethylhexyl)phthalate	ND	40	35	88		37	93		40-140	6		30
Butyl benzyl phthalate	ND	40	30	75		30	75		40-140	0		30
Di-n-butylphthalate	ND	40	33	83		34	85		40-140	3		30
Di-n-octylphthalate	ND	40	37	93		37	93		40-140	0		30
Diethyl phthalate	ND	40	34	85		34	85		40-140	0		30

Matrix Spike Analysis

Batch Quality Control

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708548

Project Number: Not Specified

Report Date: 03/27/17

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG987295-4 WG987295-5 QC Sample: L1708548-01 Client ID: PRW-8												
Dimethyl phthalate	ND	40	33	83		34	85		40-140	3		30
n-Nitrosodimethylamine	ND	40	16	40		18	45		22-74	12		30
2,4,6-Trichlorophenol	ND	40	36	90		37	93		30-130	3		30
p-Chloro-m-cresol	ND	40	35	88		34	85		23-97	3		30
2-Chlorophenol	ND	40	31	78		30	75		27-123	3		30
2,4-Dichlorophenol	ND	40	35	88		35	88		30-130	0		30
2,4-Dimethylphenol	ND	40	20	50		24	60		30-130	18		30
2-Nitrophenol	ND	40	34	85		33	83		30-130	3		30
4-Nitrophenol	ND	40	30	75		28	70		10-80	7		30
2,4-Dinitrophenol	ND	40	34	85		34	85		20-130	0		30
4,6-Dinitro-o-cresol	ND	40	36	90		36	90		20-164	0		30
Phenol	ND	40	14	35		14	35		12-110	0		30

<i>Surrogate</i>	<i>MS % Recovery</i>	<i>Qualifier</i>	<i>MSD % Recovery</i>	<i>Qualifier</i>	<i>Acceptance Criteria</i>
2,4,6-Tribromophenol	93		98		10-120
2-Fluorobiphenyl	77		79		15-120
2-Fluorophenol	52		52		21-120
4-Terphenyl-d14	68		72		41-149
Nitrobenzene-d5	74		75		23-120
Phenol-d6	36		36		10-120

Matrix Spike Analysis

Batch Quality Control

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708548

Project Number: Not Specified

Report Date: 03/27/17

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG987297-4 WG987297-5 QC Sample: L1708548-01 Client ID: PRW-8												
Acenaphthene	ND	40	29	73		31	78		37-111	7		40
2-Chloronaphthalene	ND	40	31	78		32	80		40-140	3		40
Fluoranthene	ND	40	29	73		31	78		40-140	7		40
Hexachlorobutadiene	ND	40	32	80		34	85		40-140	6		40
Naphthalene	ND	40	29	73		30	75		40-140	3		40
Benzo(a)anthracene	0.03J	40	31	78		33	83		40-140	6		40
Benzo(a)pyrene	ND	40	31	78		34	85		40-140	9		40
Benzo(b)fluoranthene	ND	40	33	83		36	90		40-140	9		40
Benzo(k)fluoranthene	ND	40	28	70		30	75		40-140	7		40
Chrysene	ND	40	27	68		28	70		40-140	4		40
Acenaphthylene	ND	40	31	78		32	80		40-140	3		40
Anthracene	ND	40	29	73		31	78		40-140	7		40
Benzo(ghi)perylene	ND	40	32	80		34	85		40-140	6		40
Fluorene	ND	40	30	75		32	80		40-140	6		40
Phenanthrene	ND	40	28	70		30	75		40-140	7		40
Dibenzo(a,h)anthracene	ND	40	32	80		34	85		40-140	6		40
Indeno(1,2,3-cd)pyrene	ND	40	32	80		34	85		40-140	6		40
Pyrene	ND	40	28	70		30	75		26-127	7		40
Pentachlorophenol	ND	40	28	70		30	75		9-103	7		40
Hexachlorobenzene	ND	40	34	85		36	90		40-140	6		40
Hexachloroethane	ND	40	29	73		31	78		40-140	7		40

Matrix Spike Analysis

Batch Quality Control

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708548
Report Date: 03/27/17

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
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Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG987297-4 WG987297-5 QC Sample: L1708548-01 Client ID: PRW-8

<i>Surrogate</i>	<i>MS</i>		<i>MSD</i>		<i>Acceptance Criteria</i>
	<i>% Recovery</i>	<i>Qualifier</i>	<i>% Recovery</i>	<i>Qualifier</i>	
2,4,6-Tribromophenol	81		90		10-120
2-Fluorobiphenyl	81		87		15-120
2-Fluorophenol	48		52		21-120
4-Terphenyl-d14	68		75		41-149
Nitrobenzene-d5	76		83		23-120
Phenol-d6	39		42		10-120

METALS

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708548

Project Number: Not Specified

Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708548-01

Date Collected: 03/21/17 09:41

Client ID: PRW-8

Date Received: 03/21/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	0.00102	J	mg/l	0.00400	0.00042	1	03/24/17 11:04	03/25/17 11:17	EPA 3005A	1,6020A	AM
Arsenic, Total	0.04833		mg/l	0.00050	0.00016	1	03/24/17 11:04	03/25/17 11:17	EPA 3005A	1,6020A	AM
Barium, Total	0.01096		mg/l	0.00050	0.00017	1	03/24/17 11:04	03/25/17 11:17	EPA 3005A	1,6020A	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	03/24/17 11:04	03/25/17 11:17	EPA 3005A	1,6020A	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	03/24/17 11:04	03/25/17 11:17	EPA 3005A	1,6020A	AM
Chromium, Total	0.00145		mg/l	0.00100	0.00017	1	03/24/17 11:04	03/25/17 11:17	EPA 3005A	1,6020A	AM
Copper, Total	0.00252		mg/l	0.00100	0.00038	1	03/24/17 11:04	03/25/17 11:17	EPA 3005A	1,6020A	AM
Lead, Total	0.00072	J	mg/l	0.00100	0.00034	1	03/24/17 11:04	03/25/17 11:17	EPA 3005A	1,6020A	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	03/23/17 12:05	03/23/17 18:47	EPA 7470A	1,7470A	EA
Nickel, Total	0.00173	J	mg/l	0.00200	0.00055	1	03/24/17 11:04	03/25/17 11:17	EPA 3005A	1,6020A	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	03/24/17 11:04	03/25/17 11:17	EPA 3005A	1,6020A	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	03/24/17 11:04	03/25/17 11:17	EPA 3005A	1,6020A	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	03/24/17 11:04	03/25/17 11:17	EPA 3005A	1,6020A	AM
Zinc, Total	0.00866	J	mg/l	0.01000	0.00341	1	03/24/17 11:04	03/25/17 11:17	EPA 3005A	1,6020A	AM
Dissolved Metals - Mansfield Lab											
Antimony, Dissolved	ND		mg/l	0.00400	0.00042	1	03/27/17 05:45	03/27/17 14:11	EPA 3005A	1,6020A	BM
Arsenic, Dissolved	0.01208		mg/l	0.00050	0.00016	1	03/27/17 05:45	03/27/17 14:11	EPA 3005A	1,6020A	BM
Barium, Dissolved	0.00881		mg/l	0.00050	0.00017	1	03/27/17 05:45	03/27/17 14:11	EPA 3005A	1,6020A	BM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	03/27/17 05:45	03/27/17 14:11	EPA 3005A	1,6020A	BM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	03/27/17 05:45	03/27/17 14:11	EPA 3005A	1,6020A	BM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	03/27/17 05:45	03/27/17 14:11	EPA 3005A	1,6020A	BM
Copper, Dissolved	0.00111		mg/l	0.00100	0.00038	1	03/27/17 05:45	03/27/17 14:11	EPA 3005A	1,6020A	BM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	03/27/17 05:45	03/27/17 14:11	EPA 3005A	1,6020A	BM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	03/24/17 09:27	03/24/17 18:19	EPA 7470A	1,7470A	EA
Nickel, Dissolved	0.00094	J	mg/l	0.00200	0.00055	1	03/27/17 05:45	03/27/17 14:11	EPA 3005A	1,6020A	BM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	03/27/17 05:45	03/27/17 14:11	EPA 3005A	1,6020A	BM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	03/27/17 05:45	03/27/17 14:11	EPA 3005A	1,6020A	BM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	03/27/17 05:45	03/27/17 14:11	EPA 3005A	1,6020A	BM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	03/27/17 05:45	03/27/17 14:11	EPA 3005A	1,6020A	BM



Project Name: SITE 1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708548

Project Number: Not Specified

Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708548-02
 Client ID: PRW-15
 Sample Location: STATEN ISLAND, NY
 Matrix: Water

Date Collected: 03/21/17 11:16
 Date Received: 03/21/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	0.00059	J	mg/l	0.00400	0.00042	1	03/24/17 11:04	03/25/17 11:29	EPA 3005A	1,6020A	AM
Arsenic, Total	0.01861		mg/l	0.00050	0.00016	1	03/24/17 11:04	03/25/17 11:29	EPA 3005A	1,6020A	AM
Barium, Total	0.1975		mg/l	0.00050	0.00017	1	03/24/17 11:04	03/25/17 11:29	EPA 3005A	1,6020A	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	03/24/17 11:04	03/25/17 11:29	EPA 3005A	1,6020A	AM
Cadmium, Total	0.00008	J	mg/l	0.00020	0.00005	1	03/24/17 11:04	03/25/17 11:29	EPA 3005A	1,6020A	AM
Chromium, Total	0.00231		mg/l	0.00100	0.00017	1	03/24/17 11:04	03/25/17 11:29	EPA 3005A	1,6020A	AM
Copper, Total	0.00452		mg/l	0.00100	0.00038	1	03/24/17 11:04	03/25/17 11:29	EPA 3005A	1,6020A	AM
Lead, Total	0.00481		mg/l	0.00100	0.00034	1	03/24/17 11:04	03/25/17 11:29	EPA 3005A	1,6020A	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	03/23/17 12:05	03/23/17 18:58	EPA 7470A	1,7470A	EA
Nickel, Total	0.00296		mg/l	0.00200	0.00055	1	03/24/17 11:04	03/25/17 11:29	EPA 3005A	1,6020A	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	03/24/17 11:04	03/25/17 11:29	EPA 3005A	1,6020A	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	03/24/17 11:04	03/25/17 11:29	EPA 3005A	1,6020A	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	03/24/17 11:04	03/25/17 11:29	EPA 3005A	1,6020A	AM
Zinc, Total	0.02631		mg/l	0.01000	0.00341	1	03/24/17 11:04	03/25/17 11:29	EPA 3005A	1,6020A	AM
Dissolved Metals - Mansfield Lab											
Antimony, Dissolved	0.00076	J	mg/l	0.00400	0.00042	1	03/27/17 05:45	03/27/17 14:01	EPA 3005A	1,6020A	BM
Arsenic, Dissolved	0.00119		mg/l	0.00050	0.00016	1	03/27/17 05:45	03/27/17 14:01	EPA 3005A	1,6020A	BM
Barium, Dissolved	0.08794		mg/l	0.00050	0.00017	1	03/27/17 05:45	03/27/17 14:01	EPA 3005A	1,6020A	BM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	03/27/17 05:45	03/27/17 14:01	EPA 3005A	1,6020A	BM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	03/27/17 05:45	03/27/17 14:01	EPA 3005A	1,6020A	BM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	03/27/17 05:45	03/27/17 14:01	EPA 3005A	1,6020A	BM
Copper, Dissolved	0.00106		mg/l	0.00100	0.00038	1	03/27/17 05:45	03/27/17 14:01	EPA 3005A	1,6020A	BM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	03/27/17 05:45	03/27/17 14:01	EPA 3005A	1,6020A	BM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	03/24/17 09:27	03/24/17 18:24	EPA 7470A	1,7470A	EA
Nickel, Dissolved	0.00224		mg/l	0.00200	0.00055	1	03/27/17 05:45	03/27/17 14:01	EPA 3005A	1,6020A	BM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	03/27/17 05:45	03/27/17 14:01	EPA 3005A	1,6020A	BM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	03/27/17 05:45	03/27/17 14:01	EPA 3005A	1,6020A	BM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	03/27/17 05:45	03/27/17 14:01	EPA 3005A	1,6020A	BM
Zinc, Dissolved	0.00558	J	mg/l	0.01000	0.00341	1	03/27/17 05:45	03/27/17 14:01	EPA 3005A	1,6020A	BM



Project Name: SITE 1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708548

Project Number: Not Specified

Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708548-03
 Client ID: PRW-14
 Sample Location: STATEN ISLAND, NY
 Matrix: Water

Date Collected: 03/21/17 12:26
 Date Received: 03/21/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	0.00298	J	mg/l	0.00400	0.00042	1	03/24/17 11:04	03/25/17 11:33	EPA 3005A	1,6020A	AM
Arsenic, Total	0.00324		mg/l	0.00050	0.00016	1	03/24/17 11:04	03/25/17 11:33	EPA 3005A	1,6020A	AM
Barium, Total	0.07788		mg/l	0.00050	0.00017	1	03/24/17 11:04	03/25/17 11:33	EPA 3005A	1,6020A	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	03/24/17 11:04	03/25/17 11:33	EPA 3005A	1,6020A	AM
Cadmium, Total	0.00118		mg/l	0.00020	0.00005	1	03/24/17 11:04	03/25/17 11:33	EPA 3005A	1,6020A	AM
Chromium, Total	0.00122		mg/l	0.00100	0.00017	1	03/24/17 11:04	03/25/17 11:33	EPA 3005A	1,6020A	AM
Copper, Total	0.01265		mg/l	0.00100	0.00038	1	03/24/17 11:04	03/25/17 11:33	EPA 3005A	1,6020A	AM
Lead, Total	0.00230		mg/l	0.00100	0.00034	1	03/24/17 11:04	03/25/17 11:33	EPA 3005A	1,6020A	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	03/23/17 12:05	03/23/17 19:00	EPA 7470A	1,7470A	EA
Nickel, Total	0.00404		mg/l	0.00200	0.00055	1	03/24/17 11:04	03/25/17 11:33	EPA 3005A	1,6020A	AM
Selenium, Total	0.0189		mg/l	0.00500	0.00173	1	03/24/17 11:04	03/25/17 11:33	EPA 3005A	1,6020A	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	03/24/17 11:04	03/25/17 11:33	EPA 3005A	1,6020A	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	03/24/17 11:04	03/25/17 11:33	EPA 3005A	1,6020A	AM
Zinc, Total	0.09014		mg/l	0.01000	0.00341	1	03/24/17 11:04	03/25/17 11:33	EPA 3005A	1,6020A	AM
Dissolved Metals - Mansfield Lab											
Antimony, Dissolved	0.00339	J	mg/l	0.00400	0.00042	1	03/27/17 05:45	03/27/17 14:04	EPA 3005A	1,6020A	BM
Arsenic, Dissolved	0.00116		mg/l	0.00050	0.00016	1	03/27/17 05:45	03/27/17 14:04	EPA 3005A	1,6020A	BM
Barium, Dissolved	0.06771		mg/l	0.00050	0.00017	1	03/27/17 05:45	03/27/17 14:04	EPA 3005A	1,6020A	BM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	03/27/17 05:45	03/27/17 14:04	EPA 3005A	1,6020A	BM
Cadmium, Dissolved	0.00103		mg/l	0.00020	0.00005	1	03/27/17 05:45	03/27/17 14:04	EPA 3005A	1,6020A	BM
Chromium, Dissolved	0.00045	J	mg/l	0.00100	0.00017	1	03/27/17 05:45	03/27/17 14:04	EPA 3005A	1,6020A	BM
Copper, Dissolved	0.00636		mg/l	0.00100	0.00038	1	03/27/17 05:45	03/27/17 14:04	EPA 3005A	1,6020A	BM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	03/27/17 05:45	03/27/17 14:04	EPA 3005A	1,6020A	BM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	03/24/17 09:27	03/24/17 18:26	EPA 7470A	1,7470A	EA
Nickel, Dissolved	0.00341		mg/l	0.00200	0.00055	1	03/27/17 05:45	03/27/17 14:04	EPA 3005A	1,6020A	BM
Selenium, Dissolved	0.0188		mg/l	0.00500	0.00173	1	03/27/17 05:45	03/27/17 14:04	EPA 3005A	1,6020A	BM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	03/27/17 05:45	03/27/17 14:04	EPA 3005A	1,6020A	BM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	03/27/17 05:45	03/27/17 14:04	EPA 3005A	1,6020A	BM
Zinc, Dissolved	0.08087		mg/l	0.01000	0.00341	1	03/27/17 05:45	03/27/17 14:04	EPA 3005A	1,6020A	BM



Project Name: SITE 1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708548
Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708548-04
 Client ID: PRW-13
 Sample Location: STATEN ISLAND, NY
 Matrix: Water

Date Collected: 03/21/17 13:36
 Date Received: 03/21/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	0.00103	J	mg/l	0.00400	0.00042	1	03/24/17 11:04	03/25/17 11:24	EPA 3005A	1,6020A	AM
Arsenic, Total	0.06533		mg/l	0.00050	0.00016	1	03/24/17 11:04	03/25/17 11:24	EPA 3005A	1,6020A	AM
Barium, Total	0.3014		mg/l	0.00050	0.00017	1	03/24/17 11:04	03/25/17 11:24	EPA 3005A	1,6020A	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	03/24/17 11:04	03/25/17 11:24	EPA 3005A	1,6020A	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	03/24/17 11:04	03/25/17 11:24	EPA 3005A	1,6020A	AM
Chromium, Total	0.00227		mg/l	0.00100	0.00017	1	03/24/17 11:04	03/25/17 11:24	EPA 3005A	1,6020A	AM
Copper, Total	0.00331		mg/l	0.00100	0.00038	1	03/24/17 11:04	03/25/17 11:24	EPA 3005A	1,6020A	AM
Lead, Total	0.00092	J	mg/l	0.00100	0.00034	1	03/24/17 11:04	03/25/17 11:24	EPA 3005A	1,6020A	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	03/23/17 12:05	03/23/17 19:02	EPA 7470A	1,7470A	EA
Nickel, Total	0.01650		mg/l	0.00200	0.00055	1	03/24/17 11:04	03/25/17 11:24	EPA 3005A	1,6020A	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	03/24/17 11:04	03/25/17 11:24	EPA 3005A	1,6020A	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	03/24/17 11:04	03/25/17 11:24	EPA 3005A	1,6020A	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	03/24/17 11:04	03/25/17 11:24	EPA 3005A	1,6020A	AM
Zinc, Total	0.04993		mg/l	0.01000	0.00341	1	03/24/17 11:04	03/25/17 11:24	EPA 3005A	1,6020A	AM
Dissolved Metals - Mansfield Lab											
Antimony, Dissolved	0.00129	J	mg/l	0.00400	0.00042	1	03/27/17 05:45	03/27/17 14:44	EPA 3005A	1,6020A	BM
Arsenic, Dissolved	0.02060		mg/l	0.00050	0.00016	1	03/27/17 05:45	03/27/17 14:44	EPA 3005A	1,6020A	BM
Barium, Dissolved	0.1440		mg/l	0.00050	0.00017	1	03/27/17 05:45	03/27/17 14:44	EPA 3005A	1,6020A	BM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	03/27/17 05:45	03/27/17 14:44	EPA 3005A	1,6020A	BM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	03/27/17 05:45	03/27/17 14:44	EPA 3005A	1,6020A	BM
Chromium, Dissolved	0.00124		mg/l	0.00100	0.00017	1	03/27/17 05:45	03/27/17 14:44	EPA 3005A	1,6020A	BM
Copper, Dissolved	0.00182		mg/l	0.00100	0.00038	1	03/27/17 05:45	03/27/17 14:44	EPA 3005A	1,6020A	BM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	03/27/17 05:45	03/27/17 14:44	EPA 3005A	1,6020A	BM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	03/24/17 09:27	03/24/17 18:28	EPA 7470A	1,7470A	EA
Nickel, Dissolved	0.01223		mg/l	0.00200	0.00055	1	03/27/17 05:45	03/27/17 14:44	EPA 3005A	1,6020A	BM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	03/27/17 05:45	03/27/17 14:44	EPA 3005A	1,6020A	BM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	03/27/17 05:45	03/27/17 14:44	EPA 3005A	1,6020A	BM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	03/27/17 05:45	03/27/17 14:44	EPA 3005A	1,6020A	BM
Zinc, Dissolved	0.02605		mg/l	0.01000	0.00341	1	03/27/17 05:45	03/27/17 14:44	EPA 3005A	1,6020A	BM



Project Name: SITE 1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708548
Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708548-05
 Client ID: PRW-10
 Sample Location: STATEN ISLAND, NY
 Matrix: Water

Date Collected: 03/20/17 10:26
 Date Received: 03/21/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	0.00055	J	mg/l	0.00400	0.00042	1	03/24/17 11:04	03/25/17 11:36	EPA 3005A	1,6020A	AM
Arsenic, Total	0.01080		mg/l	0.00050	0.00016	1	03/24/17 11:04	03/25/17 11:36	EPA 3005A	1,6020A	AM
Barium, Total	0.01386		mg/l	0.00050	0.00017	1	03/24/17 11:04	03/25/17 11:36	EPA 3005A	1,6020A	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	03/24/17 11:04	03/25/17 11:36	EPA 3005A	1,6020A	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	03/24/17 11:04	03/25/17 11:36	EPA 3005A	1,6020A	AM
Chromium, Total	0.00124		mg/l	0.00100	0.00017	1	03/24/17 11:04	03/25/17 11:36	EPA 3005A	1,6020A	AM
Copper, Total	0.00263		mg/l	0.00100	0.00038	1	03/24/17 11:04	03/25/17 11:36	EPA 3005A	1,6020A	AM
Lead, Total	0.00229		mg/l	0.00100	0.00034	1	03/24/17 11:04	03/25/17 11:36	EPA 3005A	1,6020A	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	03/23/17 12:05	03/23/17 19:04	EPA 7470A	1,7470A	EA
Nickel, Total	0.00177	J	mg/l	0.00200	0.00055	1	03/24/17 11:04	03/25/17 11:36	EPA 3005A	1,6020A	AM
Selenium, Total	0.00236	J	mg/l	0.00500	0.00173	1	03/24/17 11:04	03/25/17 11:36	EPA 3005A	1,6020A	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	03/24/17 11:04	03/25/17 11:36	EPA 3005A	1,6020A	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	03/24/17 11:04	03/25/17 11:36	EPA 3005A	1,6020A	AM
Zinc, Total	0.00894	J	mg/l	0.01000	0.00341	1	03/24/17 11:04	03/25/17 11:36	EPA 3005A	1,6020A	AM
Dissolved Metals - Mansfield Lab											
Antimony, Dissolved	0.00070	J	mg/l	0.00400	0.00042	1	03/27/17 05:45	03/27/17 14:08	EPA 3005A	1,6020A	BM
Arsenic, Dissolved	0.00881		mg/l	0.00050	0.00016	1	03/27/17 05:45	03/27/17 14:08	EPA 3005A	1,6020A	BM
Barium, Dissolved	0.01108		mg/l	0.00050	0.00017	1	03/27/17 05:45	03/27/17 14:08	EPA 3005A	1,6020A	BM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	03/27/17 05:45	03/27/17 14:08	EPA 3005A	1,6020A	BM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	03/27/17 05:45	03/27/17 14:08	EPA 3005A	1,6020A	BM
Chromium, Dissolved	0.00030	J	mg/l	0.00100	0.00017	1	03/27/17 05:45	03/27/17 14:08	EPA 3005A	1,6020A	BM
Copper, Dissolved	0.00103		mg/l	0.00100	0.00038	1	03/27/17 05:45	03/27/17 14:08	EPA 3005A	1,6020A	BM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	03/27/17 05:45	03/27/17 14:08	EPA 3005A	1,6020A	BM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	03/24/17 09:27	03/24/17 18:30	EPA 7470A	1,7470A	EA
Nickel, Dissolved	0.00081	J	mg/l	0.00200	0.00055	1	03/27/17 05:45	03/27/17 14:08	EPA 3005A	1,6020A	BM
Selenium, Dissolved	0.00207	J	mg/l	0.00500	0.00173	1	03/27/17 05:45	03/27/17 14:08	EPA 3005A	1,6020A	BM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	03/27/17 05:45	03/27/17 14:08	EPA 3005A	1,6020A	BM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	03/27/17 05:45	03/27/17 14:08	EPA 3005A	1,6020A	BM
Zinc, Dissolved	0.00491	J	mg/l	0.01000	0.00341	1	03/27/17 05:45	03/27/17 14:08	EPA 3005A	1,6020A	BM



Project Name: SITE 1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708548

Project Number: Not Specified

Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708548-06
 Client ID: PRW-2
 Sample Location: STATEN ISLAND, NY
 Matrix: Water

Date Collected: 03/21/17 14:41
 Date Received: 03/21/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	ND		mg/l	0.00400	0.00042	1	03/24/17 11:04	03/25/17 11:40	EPA 3005A	1,6020A	AM
Arsenic, Total	0.00046	J	mg/l	0.00050	0.00016	1	03/24/17 11:04	03/25/17 11:40	EPA 3005A	1,6020A	AM
Barium, Total	0.2479		mg/l	0.00050	0.00017	1	03/24/17 11:04	03/25/17 11:40	EPA 3005A	1,6020A	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	03/24/17 11:04	03/25/17 11:40	EPA 3005A	1,6020A	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	03/24/17 11:04	03/25/17 11:40	EPA 3005A	1,6020A	AM
Chromium, Total	0.00037	J	mg/l	0.00100	0.00017	1	03/24/17 11:04	03/25/17 11:40	EPA 3005A	1,6020A	AM
Copper, Total	0.00084	J	mg/l	0.00100	0.00038	1	03/24/17 11:04	03/25/17 11:40	EPA 3005A	1,6020A	AM
Lead, Total	0.00059	J	mg/l	0.00100	0.00034	1	03/24/17 11:04	03/25/17 11:40	EPA 3005A	1,6020A	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	03/23/17 12:05	03/23/17 19:06	EPA 7470A	1,7470A	EA
Nickel, Total	0.00101	J	mg/l	0.00200	0.00055	1	03/24/17 11:04	03/25/17 11:40	EPA 3005A	1,6020A	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	03/24/17 11:04	03/25/17 11:40	EPA 3005A	1,6020A	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	03/24/17 11:04	03/25/17 11:40	EPA 3005A	1,6020A	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	03/24/17 11:04	03/25/17 11:40	EPA 3005A	1,6020A	AM
Zinc, Total	0.00517	J	mg/l	0.01000	0.00341	1	03/24/17 11:04	03/25/17 11:40	EPA 3005A	1,6020A	AM
Dissolved Metals - Mansfield Lab											
Antimony, Dissolved	0.00172	J	mg/l	0.00400	0.00042	1	03/27/17 05:45	03/27/17 14:37	EPA 3005A	1,6020A	BM
Arsenic, Dissolved	0.00047	J	mg/l	0.00050	0.00016	1	03/27/17 05:45	03/27/17 14:37	EPA 3005A	1,6020A	BM
Barium, Dissolved	0.2261		mg/l	0.00050	0.00017	1	03/27/17 05:45	03/27/17 14:37	EPA 3005A	1,6020A	BM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	03/27/17 05:45	03/27/17 14:37	EPA 3005A	1,6020A	BM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	03/27/17 05:45	03/27/17 14:37	EPA 3005A	1,6020A	BM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	03/27/17 05:45	03/27/17 14:37	EPA 3005A	1,6020A	BM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	03/27/17 05:45	03/27/17 14:37	EPA 3005A	1,6020A	BM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	03/27/17 05:45	03/27/17 14:37	EPA 3005A	1,6020A	BM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	03/24/17 09:27	03/24/17 18:35	EPA 7470A	1,7470A	EA
Nickel, Dissolved	0.00087	J	mg/l	0.00200	0.00055	1	03/27/17 05:45	03/27/17 14:37	EPA 3005A	1,6020A	BM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	03/27/17 05:45	03/27/17 14:37	EPA 3005A	1,6020A	BM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	03/27/17 05:45	03/27/17 14:37	EPA 3005A	1,6020A	BM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	03/27/17 05:45	03/27/17 14:37	EPA 3005A	1,6020A	BM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	03/27/17 05:45	03/27/17 14:37	EPA 3005A	1,6020A	BM



Project Name: SITE 1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708548

Project Number: Not Specified

Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708548-07
 Client ID: PRW-7
 Sample Location: STATEN ISLAND, NY
 Matrix: Water

Date Collected: 03/21/17 12:01
 Date Received: 03/21/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	ND		mg/l	0.00400	0.00042	1	03/24/17 11:04	03/25/17 12:55	EPA 3005A	1,6020A	AM
Arsenic, Total	0.00187		mg/l	0.00050	0.00016	1	03/24/17 11:04	03/25/17 12:55	EPA 3005A	1,6020A	AM
Barium, Total	0.03318		mg/l	0.00050	0.00017	1	03/24/17 11:04	03/25/17 12:55	EPA 3005A	1,6020A	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	03/24/17 11:04	03/25/17 12:55	EPA 3005A	1,6020A	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	03/24/17 11:04	03/25/17 12:55	EPA 3005A	1,6020A	AM
Chromium, Total	0.00141		mg/l	0.00100	0.00017	1	03/24/17 11:04	03/25/17 12:55	EPA 3005A	1,6020A	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	03/24/17 11:04	03/25/17 12:55	EPA 3005A	1,6020A	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	03/24/17 11:04	03/25/17 12:55	EPA 3005A	1,6020A	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	03/23/17 12:05	03/23/17 19:07	EPA 7470A	1,7470A	EA
Nickel, Total	0.01020		mg/l	0.00200	0.00055	1	03/24/17 11:04	03/25/17 12:55	EPA 3005A	1,6020A	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	03/24/17 11:04	03/25/17 12:55	EPA 3005A	1,6020A	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	03/24/17 11:04	03/25/17 12:55	EPA 3005A	1,6020A	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	03/24/17 11:04	03/25/17 12:55	EPA 3005A	1,6020A	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	03/24/17 11:04	03/25/17 12:55	EPA 3005A	1,6020A	AM
Dissolved Metals - Mansfield Lab											
Antimony, Dissolved	0.00058	J	mg/l	0.00400	0.00042	1	03/27/17 05:45	03/27/17 14:51	EPA 3005A	1,6020A	BM
Arsenic, Dissolved	0.00267		mg/l	0.00050	0.00016	1	03/27/17 05:45	03/27/17 14:51	EPA 3005A	1,6020A	BM
Barium, Dissolved	0.03389		mg/l	0.00050	0.00017	1	03/27/17 05:45	03/27/17 14:51	EPA 3005A	1,6020A	BM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	03/27/17 05:45	03/27/17 14:51	EPA 3005A	1,6020A	BM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	03/27/17 05:45	03/27/17 14:51	EPA 3005A	1,6020A	BM
Chromium, Dissolved	0.00174		mg/l	0.00100	0.00017	1	03/27/17 05:45	03/27/17 14:51	EPA 3005A	1,6020A	BM
Copper, Dissolved	0.00109		mg/l	0.00100	0.00038	1	03/27/17 05:45	03/27/17 14:51	EPA 3005A	1,6020A	BM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	03/27/17 05:45	03/27/17 14:51	EPA 3005A	1,6020A	BM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	03/24/17 09:27	03/24/17 18:36	EPA 7470A	1,7470A	EA
Nickel, Dissolved	0.01044		mg/l	0.00200	0.00055	1	03/27/17 05:45	03/27/17 14:51	EPA 3005A	1,6020A	BM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	03/27/17 05:45	03/27/17 14:51	EPA 3005A	1,6020A	BM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	03/27/17 05:45	03/27/17 14:51	EPA 3005A	1,6020A	BM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	03/27/17 05:45	03/27/17 14:51	EPA 3005A	1,6020A	BM
Zinc, Dissolved	0.00487	J	mg/l	0.01000	0.00341	1	03/27/17 05:45	03/27/17 14:51	EPA 3005A	1,6020A	BM



Project Name: SITE 1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708548

Project Number: Not Specified

Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708548-08
 Client ID: PRW-4
 Sample Location: STATEN ISLAND, NY
 Matrix: Water

Date Collected: 03/21/17 13:21
 Date Received: 03/21/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	0.00082	J	mg/l	0.00400	0.00042	1	03/24/17 11:04	03/25/17 11:46	EPA 3005A	1,6020A	AM
Arsenic, Total	0.00149		mg/l	0.00050	0.00016	1	03/24/17 11:04	03/25/17 11:46	EPA 3005A	1,6020A	AM
Barium, Total	0.03534		mg/l	0.00050	0.00017	1	03/24/17 11:04	03/25/17 11:46	EPA 3005A	1,6020A	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	03/24/17 11:04	03/25/17 11:46	EPA 3005A	1,6020A	AM
Cadmium, Total	0.00006	J	mg/l	0.00020	0.00005	1	03/24/17 11:04	03/25/17 11:46	EPA 3005A	1,6020A	AM
Chromium, Total	0.00992		mg/l	0.00100	0.00017	1	03/24/17 11:04	03/25/17 11:46	EPA 3005A	1,6020A	AM
Copper, Total	0.01311		mg/l	0.00100	0.00038	1	03/24/17 11:04	03/25/17 11:46	EPA 3005A	1,6020A	AM
Lead, Total	0.00807		mg/l	0.00100	0.00034	1	03/24/17 11:04	03/25/17 11:46	EPA 3005A	1,6020A	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	03/23/17 12:05	03/23/17 19:09	EPA 7470A	1,7470A	EA
Nickel, Total	0.00447		mg/l	0.00200	0.00055	1	03/24/17 11:04	03/25/17 11:46	EPA 3005A	1,6020A	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	03/24/17 11:04	03/25/17 11:46	EPA 3005A	1,6020A	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	03/24/17 11:04	03/25/17 11:46	EPA 3005A	1,6020A	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	03/24/17 11:04	03/25/17 11:46	EPA 3005A	1,6020A	AM
Zinc, Total	0.03441		mg/l	0.01000	0.00341	1	03/24/17 11:04	03/25/17 11:46	EPA 3005A	1,6020A	AM
Dissolved Metals - Mansfield Lab											
Antimony, Dissolved	0.00148	J	mg/l	0.00400	0.00042	1	03/27/17 05:45	03/27/17 14:41	EPA 3005A	1,6020A	BM
Arsenic, Dissolved	0.00112		mg/l	0.00050	0.00016	1	03/27/17 05:45	03/27/17 14:41	EPA 3005A	1,6020A	BM
Barium, Dissolved	0.02024		mg/l	0.00050	0.00017	1	03/27/17 05:45	03/27/17 14:41	EPA 3005A	1,6020A	BM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	03/27/17 05:45	03/27/17 14:41	EPA 3005A	1,6020A	BM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	03/27/17 05:45	03/27/17 14:41	EPA 3005A	1,6020A	BM
Chromium, Dissolved	0.00376		mg/l	0.00100	0.00017	1	03/27/17 05:45	03/27/17 14:41	EPA 3005A	1,6020A	BM
Copper, Dissolved	0.00372		mg/l	0.00100	0.00038	1	03/27/17 05:45	03/27/17 14:41	EPA 3005A	1,6020A	BM
Lead, Dissolved	0.00166		mg/l	0.00100	0.00034	1	03/27/17 05:45	03/27/17 14:41	EPA 3005A	1,6020A	BM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	03/24/17 09:27	03/24/17 18:38	EPA 7470A	1,7470A	EA
Nickel, Dissolved	0.00147	J	mg/l	0.00200	0.00055	1	03/27/17 05:45	03/27/17 14:41	EPA 3005A	1,6020A	BM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	03/27/17 05:45	03/27/17 14:41	EPA 3005A	1,6020A	BM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	03/27/17 05:45	03/27/17 14:41	EPA 3005A	1,6020A	BM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	03/27/17 05:45	03/27/17 14:41	EPA 3005A	1,6020A	BM
Zinc, Dissolved	0.00778	J	mg/l	0.01000	0.00341	1	03/27/17 05:45	03/27/17 14:41	EPA 3005A	1,6020A	BM



Project Name: SITE 1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708548

Project Number: Not Specified

Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708548-09
 Client ID: FB-032117
 Sample Location: STATEN ISLAND, NY
 Matrix: Water

Date Collected: 03/21/17 10:17
 Date Received: 03/21/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	0.00150	J	mg/l	0.00400	0.00042	1	03/24/17 11:04	03/25/17 11:14	EPA 3005A	1,6020A	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	03/24/17 11:04	03/25/17 11:14	EPA 3005A	1,6020A	AM
Barium, Total	ND		mg/l	0.00050	0.00017	1	03/24/17 11:04	03/25/17 11:14	EPA 3005A	1,6020A	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	03/24/17 11:04	03/25/17 11:14	EPA 3005A	1,6020A	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	03/24/17 11:04	03/25/17 11:14	EPA 3005A	1,6020A	AM
Chromium, Total	ND		mg/l	0.00100	0.00017	1	03/24/17 11:04	03/25/17 11:14	EPA 3005A	1,6020A	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	03/24/17 11:04	03/25/17 11:14	EPA 3005A	1,6020A	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	03/24/17 11:04	03/25/17 11:14	EPA 3005A	1,6020A	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	03/23/17 12:05	03/23/17 19:11	EPA 7470A	1,7470A	EA
Nickel, Total	ND		mg/l	0.00200	0.00055	1	03/24/17 11:04	03/25/17 11:14	EPA 3005A	1,6020A	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	03/24/17 11:04	03/25/17 11:14	EPA 3005A	1,6020A	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	03/24/17 11:04	03/25/17 11:14	EPA 3005A	1,6020A	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	03/24/17 11:04	03/25/17 11:14	EPA 3005A	1,6020A	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	03/24/17 11:04	03/25/17 11:14	EPA 3005A	1,6020A	AM
Dissolved Metals - Mansfield Lab											
Antimony, Dissolved	0.00089	J	mg/l	0.00400	0.00042	1	03/27/17 05:45	03/27/17 13:58	EPA 3005A	1,6020A	BM
Arsenic, Dissolved	ND		mg/l	0.00050	0.00016	1	03/27/17 05:45	03/27/17 13:58	EPA 3005A	1,6020A	BM
Barium, Dissolved	ND		mg/l	0.00050	0.00017	1	03/27/17 05:45	03/27/17 13:58	EPA 3005A	1,6020A	BM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	03/27/17 05:45	03/27/17 13:58	EPA 3005A	1,6020A	BM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	03/27/17 05:45	03/27/17 13:58	EPA 3005A	1,6020A	BM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	03/27/17 05:45	03/27/17 13:58	EPA 3005A	1,6020A	BM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	03/27/17 05:45	03/27/17 13:58	EPA 3005A	1,6020A	BM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	03/27/17 05:45	03/27/17 13:58	EPA 3005A	1,6020A	BM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	03/24/17 09:27	03/24/17 18:40	EPA 7470A	1,7470A	EA
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	03/27/17 05:45	03/27/17 13:58	EPA 3005A	1,6020A	BM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	03/27/17 05:45	03/27/17 13:58	EPA 3005A	1,6020A	BM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	03/27/17 05:45	03/27/17 13:58	EPA 3005A	1,6020A	BM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	03/27/17 05:45	03/27/17 13:58	EPA 3005A	1,6020A	BM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	03/27/17 05:45	03/27/17 13:58	EPA 3005A	1,6020A	BM



Project Name: SITE 1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708548
Report Date: 03/27/17

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-09 Batch: WG987636-1									
Mercury, Total	ND	mg/l	0.00020	0.00006	1	03/23/17 12:05	03/23/17 18:43	1,7470A	EA

Prep Information

Digestion Method: EPA 7470A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-09 Batch: WG987934-1									
Antimony, Total	0.00103	J	mg/l	0.00400	0.00042	1	03/24/17 11:04	03/25/17 10:34	1,6020A AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	03/24/17 11:04	03/25/17 10:34	1,6020A AM
Barium, Total	ND		mg/l	0.00050	0.00017	1	03/24/17 11:04	03/25/17 10:34	1,6020A AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	03/24/17 11:04	03/25/17 10:34	1,6020A AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	03/24/17 11:04	03/25/17 10:34	1,6020A AM
Chromium, Total	ND		mg/l	0.00100	0.00017	1	03/24/17 11:04	03/25/17 10:34	1,6020A AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	03/24/17 11:04	03/25/17 10:34	1,6020A AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	03/24/17 11:04	03/25/17 10:34	1,6020A AM
Nickel, Total	ND		mg/l	0.00200	0.00055	1	03/24/17 11:04	03/25/17 10:34	1,6020A AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	03/24/17 11:04	03/25/17 10:34	1,6020A AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	03/24/17 11:04	03/25/17 10:34	1,6020A AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	03/24/17 11:04	03/25/17 10:34	1,6020A AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	03/24/17 11:04	03/25/17 10:34	1,6020A AM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-09 Batch: WG987950-1									
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	03/24/17 09:27	03/24/17 18:16	1,7470A EA



Project Name: SITE 1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708548
Report Date: 03/27/17

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-09 Batch: WG988417-1										
Antimony, Dissolved	0.00160	J	mg/l	0.00400	0.00042	1	03/27/17 05:45	03/27/17 13:54	1,6020A	BM
Arsenic, Dissolved	ND		mg/l	0.00050	0.00016	1	03/27/17 05:45	03/27/17 13:54	1,6020A	BM
Barium, Dissolved	ND		mg/l	0.00050	0.00017	1	03/27/17 05:45	03/27/17 13:54	1,6020A	BM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	03/27/17 05:45	03/27/17 13:54	1,6020A	BM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	03/27/17 05:45	03/27/17 13:54	1,6020A	BM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	03/27/17 05:45	03/27/17 13:54	1,6020A	BM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	03/27/17 05:45	03/27/17 13:54	1,6020A	BM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	03/27/17 05:45	03/27/17 13:54	1,6020A	BM
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	03/27/17 05:45	03/27/17 13:54	1,6020A	BM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	03/27/17 05:45	03/27/17 13:54	1,6020A	BM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	03/27/17 05:45	03/27/17 13:54	1,6020A	BM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	03/27/17 05:45	03/27/17 13:54	1,6020A	BM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	03/27/17 05:45	03/27/17 13:54	1,6020A	BM

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708548

Project Number: Not Specified

Report Date: 03/27/17

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Total Metals - Mansfield Lab Associated sample(s): 01-09 Batch: WG987636-2								
Mercury, Total	104		-		80-120	-		
Total Metals - Mansfield Lab Associated sample(s): 01-09 Batch: WG987934-2								
Antimony, Total	100		-		80-120	-		
Arsenic, Total	106		-		80-120	-		
Barium, Total	102		-		80-120	-		
Beryllium, Total	102		-		80-120	-		
Cadmium, Total	116		-		80-120	-		
Chromium, Total	108		-		80-120	-		
Copper, Total	100		-		80-120	-		
Lead, Total	102		-		80-120	-		
Nickel, Total	102		-		80-120	-		
Selenium, Total	98		-		80-120	-		
Silver, Total	104		-		80-120	-		
Thallium, Total	105		-		80-120	-		
Zinc, Total	103		-		80-120	-		
Dissolved Metals - Mansfield Lab Associated sample(s): 01-09 Batch: WG987950-2								
Mercury, Dissolved	98		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708548

Project Number: Not Specified

Report Date: 03/27/17

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-09 Batch: WG988417-2					
Antimony, Dissolved	98	-	80-120	-	
Arsenic, Dissolved	109	-	80-120	-	
Barium, Dissolved	104	-	80-120	-	
Beryllium, Dissolved	105	-	80-120	-	
Cadmium, Dissolved	120	-	80-120	-	
Chromium, Dissolved	106	-	80-120	-	
Copper, Dissolved	109	-	80-120	-	
Lead, Dissolved	109	-	80-120	-	
Nickel, Dissolved	109	-	80-120	-	
Selenium, Dissolved	116	-	80-120	-	
Silver, Dissolved	104	-	80-120	-	
Thallium, Dissolved	109	-	80-120	-	
Zinc, Dissolved	111	-	80-120	-	

Matrix Spike Analysis Batch Quality Control

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708548

Project Number: Not Specified

Report Date: 03/27/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-09			QC Batch ID: WG987636-3 WG987636-4			QC Sample: L1708548-01			Client ID: PRW-8			
Mercury, Total	ND	0.005	0.00501	100		0.00497	99		75-125	1		20
Total Metals - Mansfield Lab Associated sample(s): 01-09			QC Batch ID: WG987934-3 WG987934-4			QC Sample: L1708548-01			Client ID: PRW-8			
Antimony, Total	0.00102J	0.5	0.5029	100		0.5020	100		75-125	0		20
Arsenic, Total	0.04833	0.12	0.1729	104		0.1707	102		75-125	1		20
Barium, Total	0.01096	2	2.014	100		1.987	99		75-125	1		20
Beryllium, Total	ND	0.05	0.04972	99		0.05081	102		75-125	2		20
Cadmium, Total	ND	0.051	0.05696	112		0.05667	111		75-125	1		20
Chromium, Total	0.00145	0.2	0.2115	105		0.2077	103		75-125	2		20
Copper, Total	0.00252	0.25	0.2601	103		0.2593	103		75-125	0		20
Lead, Total	0.00072J	0.51	0.5199	102		0.5252	103		75-125	1		20
Nickel, Total	0.00173J	0.5	0.5066	101		0.4985	100		75-125	2		20
Selenium, Total	ND	0.12	0.134	112		0.123	102		75-125	9		20
Silver, Total	ND	0.05	0.05188	104		0.05002	100		75-125	4		20
Thallium, Total	ND	0.12	0.1250	104		0.1267	106		75-125	1		20
Zinc, Total	0.00866J	0.5	0.5345	107		0.5335	107		75-125	0		20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-09			QC Batch ID: WG987950-3 WG987950-4			QC Sample: L1708548-01			Client ID: PRW-8			
Mercury, Dissolved	ND	0.005	0.00498	100		0.00492	98		75-125	1		20

Matrix Spike Analysis Batch Quality Control

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708548

Project Number: Not Specified

Report Date: 03/27/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-09 QC Batch ID: WG988417-3 WG988417-4 QC Sample: L1708548-01 Client ID: PRW-8									
Antimony, Dissolved	ND	0.5	0.5101	102	0.5406	108	75-125	6	20
Arsenic, Dissolved	0.01208	0.12	0.1526	117	0.1505	115	75-125	1	20
Barium, Dissolved	0.00881	2	2.216	110	2.163	108	75-125	2	20
Beryllium, Dissolved	ND	0.05	0.05510	110	0.05470	109	75-125	1	20
Cadmium, Dissolved	ND	0.051	0.06680	131	Q 0.06377	125	75-125	5	20
Chromium, Dissolved	ND	0.2	0.2289	114	0.2197	110	75-125	4	20
Copper, Dissolved	0.00111	0.25	0.2951	118	0.2872	114	75-125	3	20
Lead, Dissolved	ND	0.51	0.5689	112	0.5638	110	75-125	1	20
Nickel, Dissolved	0.00094J	0.5	0.5771	115	0.5693	114	75-125	1	20
Selenium, Dissolved	ND	0.12	0.146	122	0.137	114	75-125	6	20
Silver, Dissolved	ND	0.05	0.05499	110	0.05522	110	75-125	0	20
Thallium, Dissolved	ND	0.12	0.1330	111	0.1332	111	75-125	0	20
Zinc, Dissolved	ND	0.5	0.6075	122	0.5876	118	75-125	3	20

INORGANICS & MISCELLANEOUS

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-01
Client ID: PRW-8
Sample Location: STATEN ISLAND, NY
Matrix: Water

Date Collected: 03/21/17 09:41
Date Received: 03/21/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	03/22/17 10:40	03/22/17 14:12	1,9010C/9012B	JO



Project Name: SITE 1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708548
Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708548-02
Client ID: PRW-15
Sample Location: STATEN ISLAND, NY
Matrix: Water

Date Collected: 03/21/17 11:16
Date Received: 03/21/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.205		mg/l	0.005	0.001	1	03/22/17 10:40	03/22/17 14:16	1,9010C/9012B	JO



Project Name: SITE 1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708548
Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708548-03
Client ID: PRW-14
Sample Location: STATEN ISLAND, NY
Matrix: Water

Date Collected: 03/21/17 12:26
Date Received: 03/21/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	03/22/17 10:40	03/22/17 14:17	1,9010C/9012B	JO



Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-04
Client ID: PRW-13
Sample Location: STATEN ISLAND, NY
Matrix: Water

Date Collected: 03/21/17 13:36
Date Received: 03/21/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.021		mg/l	0.005	0.001	1	03/22/17 10:40	03/22/17 14:18	1,9010C/9012B	JO



Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-05
Client ID: PRW-10
Sample Location: STATEN ISLAND, NY
Matrix: Water

Date Collected: 03/20/17 10:26
Date Received: 03/21/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	03/22/17 10:40	03/22/17 14:18	1,9010C/9012B	JO



Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-06
Client ID: PRW-2
Sample Location: STATEN ISLAND, NY
Matrix: Water

Date Collected: 03/21/17 14:41
Date Received: 03/21/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.045		mg/l	0.005	0.001	1	03/22/17 10:40	03/22/17 14:19	1,9010C/9012B	JO



Project Name: SITE 1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708548
Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708548-07
Client ID: PRW-7
Sample Location: STATEN ISLAND, NY
Matrix: Water

Date Collected: 03/21/17 12:01
Date Received: 03/21/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.005		mg/l	0.005	0.001	1	03/22/17 10:40	03/22/17 14:20	1,9010C/9012B	JO



Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-08
Client ID: PRW-4
Sample Location: STATEN ISLAND, NY
Matrix: Water

Date Collected: 03/21/17 13:21
Date Received: 03/21/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	03/22/17 10:40	03/22/17 14:21	1,9010C/9012B	JO



Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708548-09
Client ID: FB-032117
Sample Location: STATEN ISLAND, NY
Matrix: Water

Date Collected: 03/21/17 10:17
Date Received: 03/21/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	03/22/17 10:40	03/22/17 14:21	1,9010C/9012B	JO



Project Name: SITE 1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708548

Project Number: Not Specified

Report Date: 03/27/17

Method Blank Analysis
Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-09 Batch: WG987217-1									
Cyanide, Total	ND	mg/l	0.005	0.001	1	03/22/17 10:40	03/22/17 13:58	1,9010C/9012B	JO

Lab Control Sample Analysis

Batch Quality Control

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708548

Project Number: Not Specified

Report Date: 03/27/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-09 Batch: WG987217-2 WG987217-3								
Cyanide, Total	102		106		85-115	4		20

Matrix Spike Analysis
Batch Quality Control

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708548

Project Number: Not Specified

Report Date: 03/27/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG987217-4 WG987217-5 QC Sample: L1708548-01 Client ID: PRW-8												
Cyanide, Total	ND	0.2	0.207	104		0.208	104		80-120	0		20

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Project Number:** Not Specified**Lab Number:** L1708548**Report Date:** 03/27/17**Sample Receipt and Container Information**

Were project specific reporting limits specified? YES

Cooler Information Custody Seal**Cooler**

A	Absent
D	Absent
B	Absent
C	Absent
E	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1708548-01A	Vial HCl preserved	E	N/A	3.6	Y	Absent	NYTCL-8260(14)
L1708548-01A1	Vial HCl preserved	E	N/A	3.6	Y	Absent	NYTCL-8260(14)
L1708548-01A2	Vial HCl preserved	E	N/A	3.6	Y	Absent	NYTCL-8260(14)
L1708548-01B	Vial HCl preserved	E	N/A	3.6	Y	Absent	NYTCL-8260(14)
L1708548-01B1	Vial HCl preserved	E	N/A	3.6	Y	Absent	NYTCL-8260(14)
L1708548-01B2	Vial HCl preserved	E	N/A	3.6	Y	Absent	NYTCL-8260(14)
L1708548-01C	Vial HCl preserved	E	N/A	3.6	Y	Absent	NYTCL-8260(14)
L1708548-01C1	Vial HCl preserved	E	N/A	3.6	Y	Absent	NYTCL-8260(14)
L1708548-01C2	Vial HCl preserved	E	N/A	3.6	Y	Absent	NYTCL-8260(14)
L1708548-01D	Plastic 250ml unpreserved	E	7	3.6	Y	Absent	-
L1708548-01D1	Plastic 250ml unpreserved	E	7	3.6	Y	Absent	-
L1708548-01D2	Plastic 250ml unpreserved	E	7	3.6	Y	Absent	-
L1708548-01E	Plastic 250ml HNO3 preserved	E	<2	3.6	Y	Absent	BA-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180),HG-T(28)
L1708548-01E1	Plastic 250ml HNO3 preserved	E	<2	3.6	Y	Absent	BA-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180),HG-T(28)

*Values in parentheses indicate holding time in days

Project Name: SITE 1-2_SPM_2017 (PORT IVORY)

Project Number: Not Specified

Lab Number: L1708548

Report Date: 03/27/17

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1708548-01E2	Plastic 250ml HNO3 preserved	E	<2	3.6	Y	Absent	BA-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180),HG-T(28)
L1708548-01F	Plastic 250ml NaOH preserved	E	>12	3.6	Y	Absent	TCN-9010(14)
L1708548-01F1	Plastic 250ml NaOH preserved	E	>12	3.6	Y	Absent	TCN-9010(14)
L1708548-01F2	Plastic 250ml NaOH preserved	E	>12	3.6	Y	Absent	TCN-9010(14)
L1708548-01G	Amber 1000ml unpreserved	E	7	3.6	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708548-01G1	Amber 1000ml unpreserved	E	7	3.6	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708548-01G2	Amber 1000ml unpreserved	E	7	3.6	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708548-01H	Amber 1000ml unpreserved	E	7	3.6	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708548-01H1	Amber 1000ml unpreserved	E	7	3.6	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708548-01H2	Amber 1000ml unpreserved	E	7	3.6	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708548-01X	Plastic 120ml HNO3 preserved Fil	E	<2	3.6	Y	Absent	CU-6020S(180),SE-6020S(180),BE-6020S(180),ZN-6020S(180),CR-6020S(180),BA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),CD-6020S(180),HG-S(28)
L1708548-01X1	Plastic 120ml HNO3 preserved Fil	E	<2	3.6	Y	Absent	CU-6020S(180),SE-6020S(180),BE-6020S(180),ZN-6020S(180),CR-6020S(180),BA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),CD-6020S(180),HG-S(28)
L1708548-01X2	Plastic 120ml HNO3 preserved Fil	E	<2	3.6	Y	Absent	CU-6020S(180),SE-6020S(180),BE-6020S(180),ZN-6020S(180),CR-6020S(180),BA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),CD-6020S(180),HG-S(28)
L1708548-02A	Vial HCl preserved	C	N/A	2.3	Y	Absent	NYTCL-8260(14)
L1708548-02B	Vial HCl preserved	C	N/A	2.3	Y	Absent	NYTCL-8260(14)
L1708548-02C	Vial HCl preserved	C	N/A	2.3	Y	Absent	NYTCL-8260(14)
L1708548-02D	Plastic 250ml unpreserved	C	7	2.3	Y	Absent	-

*Values in parentheses indicate holding time in days



Project Name: SITE 1-2_SPM_2017 (PORT IVORY)

Project Number: Not Specified

Lab Number: L1708548

Report Date: 03/27/17

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1708548-02E	Plastic 250ml HNO3 preserved	C	<2	2.3	Y	Absent	BA-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180),HG-T(28)
L1708548-02F	Plastic 250ml NaOH preserved	C	>12	2.3	Y	Absent	TCN-9010(14)
L1708548-02G	Amber 1000ml unpreserved	C	7	2.3	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708548-02H	Amber 1000ml unpreserved	C	7	2.3	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708548-02X	Plastic 120ml HNO3 preserved Fil	C	<2	2.3	Y	Absent	CU-6020S(180),SE-6020S(180),BE-6020S(180),ZN-6020S(180),CR-6020S(180),BA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),CD-6020S(180),HG-S(28)
L1708548-03A	Vial HCl preserved	C	N/A	2.3	Y	Absent	NYTCL-8260(14)
L1708548-03B	Vial HCl preserved	C	N/A	2.3	Y	Absent	NYTCL-8260(14)
L1708548-03C	Vial HCl preserved	C	N/A	2.3	Y	Absent	NYTCL-8260(14)
L1708548-03D	Plastic 250ml unpreserved	C	7	2.3	Y	Absent	-
L1708548-03E	Plastic 250ml HNO3 preserved	C	<2	2.3	Y	Absent	BA-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180),HG-T(28)
L1708548-03F	Plastic 250ml NaOH preserved	C	>12	2.3	Y	Absent	TCN-9010(14)
L1708548-03G	Amber 1000ml unpreserved	C	7	2.3	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708548-03H	Amber 1000ml unpreserved	C	7	2.3	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708548-03X	Plastic 120ml HNO3 preserved Fil	C	<2	2.3	Y	Absent	CU-6020S(180),SE-6020S(180),BE-6020S(180),ZN-6020S(180),CR-6020S(180),BA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),CD-6020S(180),HG-S(28)
L1708548-04A	Vial HCl preserved	C	N/A	2.3	Y	Absent	NYTCL-8260(14)
L1708548-04B	Vial HCl preserved	C	N/A	2.3	Y	Absent	NYTCL-8260(14)
L1708548-04C	Vial HCl preserved	C	N/A	2.3	Y	Absent	NYTCL-8260(14)
L1708548-04D	Plastic 250ml unpreserved	C	7	2.3	Y	Absent	-

*Values in parentheses indicate holding time in days



Project Name: SITE 1-2_SPM_2017 (PORT IVORY)

Project Number: Not Specified

Lab Number: L1708548

Report Date: 03/27/17

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1708548-04E	Plastic 250ml HNO3 preserved	C	<2	2.3	Y	Absent	BA-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180),HG-T(28)
L1708548-04F	Plastic 250ml NaOH preserved	C	>12	2.3	Y	Absent	TCN-9010(14)
L1708548-04G	Amber 1000ml unpreserved	C	7	2.3	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708548-04H	Amber 1000ml unpreserved	C	7	2.3	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708548-04X	Plastic 120ml HNO3 preserved Fil	C	<2	2.3	Y	Absent	CU-6020S(180),SE-6020S(180),BE-6020S(180),ZN-6020S(180),CR-6020S(180),BA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),CD-6020S(180),HG-S(28)
L1708548-05A	Vial HCl preserved	A	N/A	3.1	Y	Absent	NYTCL-8260(14)
L1708548-05B	Vial HCl preserved	A	N/A	3.1	Y	Absent	NYTCL-8260(14)
L1708548-05C	Vial HCl preserved	A	N/A	3.1	Y	Absent	NYTCL-8260(14)
L1708548-05D	Plastic 250ml unpreserved	A	7	3.1	Y	Absent	-
L1708548-05E	Plastic 250ml HNO3 preserved	A	<2	3.1	Y	Absent	BA-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180),HG-T(28)
L1708548-05F	Plastic 250ml NaOH preserved	A	>12	3.1	Y	Absent	TCN-9010(14)
L1708548-05G	Amber 1000ml unpreserved	A	7	3.1	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708548-05H	Amber 1000ml unpreserved	A	7	3.1	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708548-05X	Plastic 120ml HNO3 preserved Fil	A	<2	3.1	Y	Absent	CU-6020S(180),SE-6020S(180),BE-6020S(180),ZN-6020S(180),CR-6020S(180),BA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),CD-6020S(180),HG-S(28)
L1708548-06A	Vial HCl preserved	A	N/A	3.1	Y	Absent	NYTCL-8260(14)
L1708548-06B	Vial HCl preserved	A	N/A	3.1	Y	Absent	NYTCL-8260(14)
L1708548-06C	Vial HCl preserved	A	N/A	3.1	Y	Absent	NYTCL-8260(14)
L1708548-06D	Plastic 250ml unpreserved	A	7	3.1	Y	Absent	-

*Values in parentheses indicate holding time in days



Project Name: SITE 1-2_SPM_2017 (PORT IVORY)

Project Number: Not Specified

Lab Number: L1708548

Report Date: 03/27/17

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1708548-06E	Plastic 250ml HNO3 preserved	A	<2	3.1	Y	Absent	BA-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180),HG-T(28)
L1708548-06F	Plastic 250ml NaOH preserved	A	>12	3.1	Y	Absent	TCN-9010(14)
L1708548-06G	Amber 1000ml unpreserved	A	7	3.1	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708548-06H	Amber 1000ml unpreserved	A	7	3.1	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708548-06X	Plastic 120ml HNO3 preserved Fil	A	<2	3.1	Y	Absent	CU-6020S(180),SE-6020S(180),BE-6020S(180),ZN-6020S(180),CR-6020S(180),BA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),CD-6020S(180),HG-S(28)
L1708548-07A	Vial HCl preserved	B	N/A	2.6	Y	Absent	NYTCL-8260(14)
L1708548-07B	Vial HCl preserved	B	N/A	2.6	Y	Absent	NYTCL-8260(14)
L1708548-07C	Vial HCl preserved	B	N/A	2.6	Y	Absent	NYTCL-8260(14)
L1708548-07D	Plastic 250ml unpreserved	B	7	2.6	Y	Absent	-
L1708548-07E	Plastic 250ml HNO3 preserved	B	<2	2.6	Y	Absent	BA-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180),HG-T(28)
L1708548-07F	Plastic 250ml NaOH preserved	B	>12	2.6	Y	Absent	TCN-9010(14)
L1708548-07G	Amber 1000ml unpreserved	B	7	2.6	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708548-07H	Amber 1000ml unpreserved	B	7	2.6	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708548-07X	Plastic 120ml HNO3 preserved Fil	B	<2	2.6	Y	Absent	CU-6020S(180),SE-6020S(180),BE-6020S(180),ZN-6020S(180),CR-6020S(180),BA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),CD-6020S(180),HG-S(28)
L1708548-08A	Vial HCl preserved	B	N/A	2.6	Y	Absent	NYTCL-8260(14)
L1708548-08B	Vial HCl preserved	B	N/A	2.6	Y	Absent	NYTCL-8260(14)
L1708548-08C	Vial HCl preserved	B	N/A	2.6	Y	Absent	NYTCL-8260(14)
L1708548-08D	Plastic 250ml unpreserved	B	7	2.6	Y	Absent	-

*Values in parentheses indicate holding time in days



Project Name: SITE 1-2_SPM_2017 (PORT IVORY)

Project Number: Not Specified

Lab Number: L1708548

Report Date: 03/27/17

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1708548-08E	Plastic 250ml HNO3 preserved	B	<2	2.6	Y	Absent	BA-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180),HG-T(28)
L1708548-08F	Plastic 250ml NaOH preserved	B	>12	2.6	Y	Absent	TCN-9010(14)
L1708548-08G	Amber 1000ml unpreserved	B	7	2.6	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708548-08H	Amber 1000ml unpreserved	B	7	2.6	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708548-08X	Plastic 120ml HNO3 preserved Fil	B	<2	2.6	Y	Absent	CU-6020S(180),SE-6020S(180),BE-6020S(180),ZN-6020S(180),CR-6020S(180),BA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),CD-6020S(180),HG-S(28)
L1708548-09A	Vial HCl preserved	D	N/A	4.6	Y	Absent	NYTCL-8260(14)
L1708548-09B	Vial HCl preserved	D	N/A	4.6	Y	Absent	NYTCL-8260(14)
L1708548-09C	Vial HCl preserved	D	N/A	4.6	Y	Absent	NYTCL-8260(14)
L1708548-09D	Plastic 250ml unpreserved	D	7	4.6	Y	Absent	-
L1708548-09E	Plastic 250ml HNO3 preserved	D	<2	4.6	Y	Absent	BA-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180),HG-T(28)
L1708548-09F	Plastic 250ml NaOH preserved	D	>12	4.6	Y	Absent	TCN-9010(14)
L1708548-09G	Amber 1000ml unpreserved	D	7	4.6	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708548-09H	Amber 1000ml unpreserved	D	7	4.6	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708548-09X	Plastic 120ml HNO3 preserved Fil	D	<2	4.6	Y	Absent	CU-6020S(180),SE-6020S(180),BE-6020S(180),ZN-6020S(180),CR-6020S(180),BA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),CD-6020S(180),HG-S(28)
L1708548-10A	Vial HCl preserved	E	N/A	3.6	Y	Absent	NYTCL-8260(14)
L1708548-10B	Vial HCl preserved	E	N/A	3.6	Y	Absent	NYTCL-8260(14)

*Values in parentheses indicate holding time in days



Project Name: SITE 1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708548
Report Date: 03/27/17

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the

Report Format: DU Report with 'J' Qualifiers



Project Name: SITE 1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708548**Project Number:** Not Specified**Report Date:** 03/27/17**Data Qualifiers**

- reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
 - D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
 - E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
 - G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
 - H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
 - I** - The lower value for the two columns has been reported due to obvious interference.
 - M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
 - NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
 - P** - The RPD between the results for the two columns exceeds the method-specified criteria.
 - Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
 - R** - Analytical results are from sample re-analysis.
 - RE** - Analytical results are from sample re-extraction.
 - S** - Analytical results are from modified screening analysis.
 - J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
 - ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers



Project Name: SITE 1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708548
Report Date: 03/27/17

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 300: DW: Bromide

EPA 6860: NPW and SCM: Perchlorate

EPA 9010: NPW and SCM: Amenable Cyanide Distillation

EPA 9012B: NPW: Total Cyanide

EPA 9050A: NPW: Specific Conductance

SM3500: NPW: Ferrous Iron

SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO₂, NO₃.

SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility

SM 2540D: TSS

EPA 3005A NPW

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B**

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH, EPA 350.1: Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **SM4500NO3-F, EPA 353.2:** Nitrate-N, **EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.**

EPA 624: Volatile Halocarbons & Aromatics,

EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E.**

Mansfield Facility:

Drinking Water

EPA 200.7: Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. **EPA 200.8:** Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. **EPA 245.1 Hg.**

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.



**NEW YORK
CHAIN OF
CUSTODY**

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page

/ of /

Date Rec'd
in Lab

3/22/17

ALPHA Job #
L1708548

Project Information
Project Name: Site1-2_SPM_2017 (Port Ivory)
Project Location: Staten Island, NY
Charge Code

Deliverables
 ASP-A ASP-B
 EQUIS (1 File) EQUIS (4 File)
 Other

Billing Information
 Same as Client Info
PO #

Client Information
Client: Port Authority of NY & NJ
Address: Four World Trade Center
150 Greenwich Street - 20th Floor
New York, New York 10007
Phone: 212-435-6106
Email: aaltieri@panyni.gov

(Use Project name as Project #)
Project Manager: Angela Altieri
ALPHAQuote #:
Turn-Around Time
Standard Due Date:
Rush (only if pre approved) # of Days:

Regulatory Requirement
 NY TOGS NY Part 375
 AWQ Standards NY CP-51
 NY Restricted Use Other
 NY Unrestricted Use
 NYC Sewer Discharge

Site Information
Is this site impacted by
Petroleum? Yes
Petroleum Product:

These samples have been previously analyzed by Alpha
For EPH, selection is REQUIRED:
 Category 1
 Category 2
For VOC, selection is REQUIRED:
 1,4-Dioxane
 8011
Other project specific requirements/comments:
NYSDEC ASP Category B data deliverables will be provided by the laboratory for the groundwater sample collected from PRW-7E only

ANALYSIS

Sample Filtration
 Done
 Lab to do
Preservation
 Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	Toluene	Magnesium	Total Alkalinity	TKN	TOC	Sulfate	PPVOC (8260)	PP SVOC	Total PP Metals	Dissolved PP Metals	Cyanide	Sample Specific Comments	Total Bottle	
		Date	Time																
08548-01	PRW-8	3/21/17	941	GW	MS							X	X	X	X	X		ms/msd sample	24
02	PRW-15	3/21/17	1116	GW	MS							X	X	X	X	X			8
03	PRW-14	3/21/17	1226	GW	MS							X	X	X	X	X			8
04	PRW-13	3/21/17	1336	GW	MS							X	X	X	X	X		unable to remove all bubbles from vials	8
05	PRW-10	3/21/17	1026	GW	ZM							X	X	X	X	X			8
06	PRW-2	3/21/17	1441	GW	ZM							X	X	X	X	X			8
07	PRW-7	3/21/17	1201	GW	ZM							X	X	X	X	X		unable to remove all bubbles from vials	8
08	PRW-4	3/21/17	1321	GW	ZM							X	X	X	X	X			8
09	FB-032117	3/21/17	1015	AQ	MS							X	X	X	X	X			8
10	Trip Blank	3/20/17	—	AQ	LAB							X							2

Preservative Code:
A = None
B = HCl
C = HNO₃
D = H₂SO₄
E = NaOH
F = MeOH
G = NaHSO₄
H = Na₂S₂O₃
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type	V	P	P	P	V	P	V	A	P	P	P
Preservative	B	C	O	D	D	A	B	A	C	A	E

Relinquished By:	Date/Time	Received By:	Date/Time
<i>[Signature]</i>	3/21/17	<i>[Signature]</i>	3/21/17 18:00
<i>[Signature]</i>	3/21/17 20:00	<i>[Signature]</i>	3-21-17 2130
<i>[Signature]</i>	3-22-17 0130	<i>[Signature]</i>	3/22/17 01:30

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS.



ANALYTICAL REPORT

Lab Number:	L1708376
Client:	Port Authority of New York/New Jersey Four World Trade Center 150 Greenwich St - 20th Floor New York, NY 10007
ATTN:	Angela Altieri
Phone:	(212) 435-6106
Project Name:	SITE1-2_SPM_2017 (PORT IVORY)
Project Number:	Not Specified
Report Date:	03/27/17

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

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



Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1708376-01	SW-1	WATER	STATEN ISLAND, NY	03/20/17 12:35	03/20/17
L1708376-02	SW-2	WATER	STATEN ISLAND, NY	03/20/17 12:10	03/20/17
L1708376-03	SW-3	WATER	STATEN ISLAND, NY	03/20/17 11:55	03/20/17
L1708376-04	SW-4	WATER	STATEN ISLAND, NY	03/20/17 11:40	03/20/17
L1708376-05	SW-5	WATER	STATEN ISLAND, NY	03/20/17 10:40	03/20/17
L1708376-06	SW-6	WATER	STATEN ISLAND, NY	03/20/17 10:05	03/20/17
L1708376-07	SW-7	WATER	STATEN ISLAND, NY	03/20/17 09:50	03/20/17
L1708376-08	PRW-7A	WATER	STATEN ISLAND, NY	03/20/17 10:17	03/20/17
L1708376-09	PRW-7B	WATER	STATEN ISLAND, NY	03/20/17 11:32	03/20/17
L1708376-10	PRW-7C	WATER	STATEN ISLAND, NY	03/20/17 12:47	03/20/17
L1708376-11	PRW-7D	WATER	STATEN ISLAND, NY	03/20/17 14:23	03/20/17
L1708376-12	PRW-09	WATER	STATEN ISLAND, NY	03/20/17 10:41	03/20/17
L1708376-13	PRW-05	WATER	STATEN ISLAND, NY	03/20/17 12:16	03/20/17
L1708376-14	PRW-03	WATER	STATEN ISLAND, NY	03/20/17 14:01	03/20/17
L1708376-15	PRW-01	WATER	STATEN ISLAND, NY	03/20/17 14:21	03/20/17
L1708376-16	PRW-12	WATER	STATEN ISLAND, NY	03/20/17 15:56	03/20/17
L1708376-17	PRW-06	WATER	STATEN ISLAND, NY	03/20/17 14:16	03/20/17
L1708376-18	PRW-11	WATER	STATEN ISLAND, NY	03/20/17 15:51	03/20/17
L1708376-19	DUP-1	WATER	STATEN ISLAND, NY	03/20/17 00:00	03/20/17
L1708376-20	DUP-2	WATER	STATEN ISLAND, NY	03/20/17 00:00	03/20/17
L1708376-21	FB-032017	WATER	STATEN ISLAND, NY	03/20/17 15:05	03/20/17
L1708376-22	TRIP BLANK	WATER	STATEN ISLAND, NY	03/17/17 00:00	03/20/17

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

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

Please contact Client Services at 800-624-9220 with any questions.

Project Name: SITE1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708376
Report Date: 03/27/17

Case Narrative (continued)

Report Submission

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

Volatile Organics

L1708376-01 through -05 and -12 through -22: The pH of the sample was less than two. It should be noted that 2-Chloroethylvinyl ether breaks down under acidic conditions.

Semivolatile Organics

The WG986851-2 LCS recovery, associated with L1708376-01 through -05 and -12 through -21, is below the acceptance criteria for benzidine (5%); however, it has been identified as a "difficult" analyte. The results of the associated samples are reported.

Total Metals

L1708376-19: The sample has elevated detection limits for thallium due to the dilution required by matrix interferences encountered during analysis.

Dissolved Metals

L1708376-05, -18 and -19: The sample has elevated detection limits for lead and thalium due to the dilution required by the high concentrations of target and non-target elements.

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

Authorized Signature:

 Cristin Walker

Title: Technical Director/Representative

Date: 03/27/17

ORGANICS

VOLATILES

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-01
Client ID: SW-1
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 03/22/17 10:28
Analyst: PK

Date Collected: 03/20/17 12:35
Date Received: 03/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
2-Chloroethylvinyl ether	ND		ug/l	10	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-01

Date Collected: 03/20/17 12:35

Client ID: SW-1

Date Received: 03/20/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Acrolein	ND		ug/l	5.0	0.44	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	103		70-130

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-02
Client ID: SW-2
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 03/22/17 11:02
Analyst: PK

Date Collected: 03/20/17 12:10
Date Received: 03/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
2-Chloroethylvinyl ether	ND		ug/l	10	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-02

Date Collected: 03/20/17 12:10

Client ID: SW-2

Date Received: 03/20/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS - Westborough Lab

1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Acrolein	ND		ug/l	5.0	0.44	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	102		70-130

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-03
Client ID: SW-3
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 03/22/17 11:37
Analyst: PK

Date Collected: 03/20/17 11:55
Date Received: 03/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
2-Chloroethylvinyl ether	ND		ug/l	10	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-03

Date Collected: 03/20/17 11:55

Client ID: SW-3

Date Received: 03/20/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS - Westborough Lab

1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Acrolein	ND		ug/l	5.0	0.44	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	102		70-130

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-04
Client ID: SW-4
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 03/22/17 12:11
Analyst: PK

Date Collected: 03/20/17 11:40
Date Received: 03/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS - Westborough Lab

Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
2-Chloroethylvinyl ether	ND		ug/l	10	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-04

Date Collected: 03/20/17 11:40

Client ID: SW-4

Date Received: 03/20/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS - Westborough Lab

1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Acrolein	ND		ug/l	5.0	0.44	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	104		70-130

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-05
Client ID: SW-5
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 03/22/17 12:44
Analyst: PK

Date Collected: 03/20/17 10:40
Date Received: 03/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
2-Chloroethylvinyl ether	ND		ug/l	10	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-05

Date Collected: 03/20/17 10:40

Client ID: SW-5

Date Received: 03/20/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Acrolein	ND		ug/l	5.0	0.44	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	103		70-130

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-06
Client ID: SW-6
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 03/22/17 10:44
Analyst: PK

Date Collected: 03/20/17 10:05
Date Received: 03/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS - Westborough Lab						
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Toluene	ND		ug/l	2.5	0.70	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	89		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	95		70-130

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-07
Client ID: SW-7
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 03/22/17 11:20
Analyst: PK

Date Collected: 03/20/17 09:50
Date Received: 03/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS - Westborough Lab						
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Toluene	ND		ug/l	2.5	0.70	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	90		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	83		70-130
Dibromofluoromethane	93		70-130

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-08 D
 Client ID: PRW-7A
 Sample Location: STATEN ISLAND, NY
 Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 03/22/17 11:53
 Analyst: PK

Date Collected: 03/20/17 10:17
 Date Received: 03/20/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS - Westborough Lab						
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Toluene	350		ug/l	12	3.5	5
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	85		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	92		70-130

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-09 D
Client ID: PRW-7B
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 03/22/17 12:27
Analyst: PK

Date Collected: 03/20/17 11:32
Date Received: 03/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS - Westborough Lab						
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Toluene	22000		ug/l	1200	350	500
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	86		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	85		70-130
Dibromofluoromethane	94		70-130

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-10
Client ID: PRW-7C
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 03/22/17 13:00
Analyst: PK

Date Collected: 03/20/17 12:47
Date Received: 03/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS - Westborough Lab						
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Toluene	22		ug/l	2.5	0.70	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	90		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	81		70-130
Dibromofluoromethane	96		70-130

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-11 D
Client ID: PRW-7D
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 03/22/17 13:33
Analyst: PK

Date Collected: 03/20/17 14:23
Date Received: 03/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS - Westborough Lab						
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Toluene	1100		ug/l	25	7.0	10
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	86		70-130
Dibromofluoromethane	100		70-130

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-12
Client ID: PRW-09
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 03/22/17 13:17
Analyst: PK

Date Collected: 03/20/17 10:41
Date Received: 03/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
2-Chloroethylvinyl ether	ND		ug/l	10	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-12

Date Collected: 03/20/17 10:41

Client ID: PRW-09

Date Received: 03/20/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Acrolein	ND		ug/l	5.0	0.44	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	103		70-130

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-13
Client ID: PRW-05
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 03/22/17 13:51
Analyst: PK

Date Collected: 03/20/17 12:16
Date Received: 03/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
2-Chloroethylvinyl ether	ND		ug/l	10	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-13

Date Collected: 03/20/17 12:16

Client ID: PRW-05

Date Received: 03/20/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Acrolein	ND		ug/l	5.0	0.44	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	102		70-130

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-14
Client ID: PRW-03
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 03/22/17 14:24
Analyst: PK

Date Collected: 03/20/17 14:01
Date Received: 03/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
2-Chloroethylvinyl ether	ND		ug/l	10	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-14

Date Collected: 03/20/17 14:01

Client ID: PRW-03

Date Received: 03/20/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS - Westborough Lab

1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Acrolein	ND		ug/l	5.0	0.44	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	106		70-130

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-15
Client ID: PRW-01
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 03/22/17 14:57
Analyst: PK

Date Collected: 03/20/17 14:21
Date Received: 03/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
2-Chloroethylvinyl ether	ND		ug/l	10	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-15

Date Collected: 03/20/17 14:21

Client ID: PRW-01

Date Received: 03/20/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS - Westborough Lab

1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Acrolein	ND		ug/l	5.0	0.44	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	105		70-130

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-16
Client ID: PRW-12
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 03/22/17 15:31
Analyst: PK

Date Collected: 03/20/17 15:56
Date Received: 03/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
2-Chloroethylvinyl ether	ND		ug/l	10	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	0.37	J	ug/l	0.50	0.16	1
Toluene	4.7		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-16

Date Collected: 03/20/17 15:56

Client ID: PRW-12

Date Received: 03/20/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Acrolein	ND		ug/l	5.0	0.44	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	99		70-130

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-17
Client ID: PRW-06
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 03/22/17 16:04
Analyst: PK

Date Collected: 03/20/17 14:16
Date Received: 03/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
2-Chloroethylvinyl ether	ND		ug/l	10	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-17

Date Collected: 03/20/17 14:16

Client ID: PRW-06

Date Received: 03/20/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Acrolein	ND		ug/l	5.0	0.44	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	102		70-130

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-18
Client ID: PRW-11
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 03/22/17 13:54
Analyst: NL

Date Collected: 03/20/17 15:51
Date Received: 03/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
2-Chloroethylvinyl ether	ND		ug/l	10	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-18

Date Collected: 03/20/17 15:51

Client ID: PRW-11

Date Received: 03/20/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Acrolein	ND		ug/l	5.0	0.44	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	105		70-130

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-19
Client ID: DUP-1
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 03/22/17 14:27
Analyst: NL

Date Collected: 03/20/17 00:00
Date Received: 03/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
2-Chloroethylvinyl ether	ND		ug/l	10	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-19

Date Collected: 03/20/17 00:00

Client ID: DUP-1

Date Received: 03/20/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Acrolein	ND		ug/l	5.0	0.44	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	106		70-130

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-20
Client ID: DUP-2
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 03/22/17 14:59
Analyst: NL

Date Collected: 03/20/17 00:00
Date Received: 03/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
2-Chloroethylvinyl ether	ND		ug/l	10	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-20

Date Collected: 03/20/17 00:00

Client ID: DUP-2

Date Received: 03/20/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Acrolein	ND		ug/l	5.0	0.44	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	106		70-130

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-21
Client ID: FB-032017
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 03/22/17 12:50
Analyst: NL

Date Collected: 03/20/17 15:05
Date Received: 03/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
2-Chloroethylvinyl ether	ND		ug/l	10	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-21

Date Collected: 03/20/17 15:05

Client ID: FB-032017

Date Received: 03/20/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS - Westborough Lab

1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Acrolein	ND		ug/l	5.0	0.44	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	105		70-130

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-22
Client ID: TRIP BLANK
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 03/22/17 13:22
Analyst: NL

Date Collected: 03/17/17 00:00
Date Received: 03/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
2-Chloroethylvinyl ether	ND		ug/l	10	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-22

Date Collected: 03/17/17 00:00

Client ID: TRIP BLANK

Date Received: 03/20/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Acrolein	ND		ug/l	5.0	0.44	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	102		70-130

Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708376

Project Number: Not Specified

Report Date: 03/27/17

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
 Analytical Date: 03/22/17 06:17
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 06-11 Batch: WG987374-5					
Toluene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	91		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	87		70-130
Dibromofluoromethane	98		70-130

Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708376

Project Number: Not Specified

Report Date: 03/27/17

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 03/22/17 06:00
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05,12-17 Batch: WG987396-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
2-Chloroethylvinyl ether	ND		ug/l	10	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708376

Project Number: Not Specified

Report Date: 03/27/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 03/22/17 06:00
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05,12-17 Batch: WG987396-5					
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Acrolein	ND		ug/l	5.0	0.44

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	107		70-130

Project Name: SITE1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708376
Report Date: 03/27/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 03/22/17 11:46
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 18-22 Batch: WG987430-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
2-Chloroethylvinyl ether	ND		ug/l	10	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708376

Project Number: Not Specified

Report Date: 03/27/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 03/22/17 11:46
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 18-22 Batch: WG987430-5					
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Acrolein	ND		ug/l	5.0	0.44

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	100		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708376

Project Number: Not Specified

Report Date: 03/27/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06-11 Batch: WG987374-3 WG987374-4								
Toluene	110		110		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	91		95		70-130
Toluene-d8	104		100		70-130
4-Bromofluorobenzene	101		101		70-130
Dibromofluoromethane	95		99		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708376

Project Number: Not Specified

Report Date: 03/27/17

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05,12-17 Batch: WG987396-3 WG987396-4								
Methylene chloride	100		100		70-130	0		20
1,1-Dichloroethane	120		110		70-130	9		20
Chloroform	110		110		70-130	0		20
2-Chloroethylvinyl ether	75		88		70-130	16		20
Carbon tetrachloride	99		99		63-132	0		20
1,2-Dichloropropane	100		110		70-130	10		20
Dibromochloromethane	90		88		63-130	2		20
1,1,2-Trichloroethane	100		100		70-130	0		20
Tetrachloroethene	100		100		70-130	0		20
Chlorobenzene	100		97		75-130	3		20
1,2-Dichloroethane	100		100		70-130	0		20
1,1,1-Trichloroethane	100		100		67-130	0		20
Bromodichloromethane	93		97		67-130	4		20
trans-1,3-Dichloropropene	88		87		70-130	1		20
cis-1,3-Dichloropropene	92		91		70-130	1		20
Bromoform	83		85		54-136	2		20
1,1,1,2-Tetrachloroethane	99		95		67-130	4		20
Benzene	110		100		70-130	10		20
Toluene	110		100		70-130	10		20
Ethylbenzene	99		96		70-130	3		20
Chloromethane	110		110		64-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708376

Project Number: Not Specified

Report Date: 03/27/17

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05,12-17 Batch: WG987396-3 WG987396-4								
Bromomethane	120		120		39-139	0		20
Vinyl chloride	120		110		55-140	9		20
Chloroethane	120		120		55-138	0		20
1,1-Dichloroethene	100		100		61-145	0		20
trans-1,2-Dichloroethene	110		110		70-130	0		20
Trichloroethene	100		100		70-130	0		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	97		94		70-130	3		20
1,4-Dichlorobenzene	99		98		70-130	1		20
Acrylonitrile	110		100		70-130	10		20
Acrolein	94		100		40-160	6		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	92		91		70-130
Toluene-d8	100		98		70-130
4-Bromofluorobenzene	98		99		70-130
Dibromofluoromethane	102		105		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708376

Project Number: Not Specified

Report Date: 03/27/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 18-22 Batch: WG987430-3 WG987430-4								
Methylene chloride	96		95		70-130	1		20
1,1-Dichloroethane	99		94		70-130	5		20
Chloroform	100		97		70-130	3		20
2-Chloroethylvinyl ether	24	Q	30	Q	70-130	22	Q	20
Carbon tetrachloride	110		100		63-132	10		20
1,2-Dichloropropane	88		87		70-130	1		20
Dibromochloromethane	110		100		63-130	10		20
1,1,2-Trichloroethane	99		96		70-130	3		20
Tetrachloroethene	100		94		70-130	6		20
Chlorobenzene	98		96		75-130	2		20
1,2-Dichloroethane	100		99		70-130	1		20
1,1,1-Trichloroethane	100		94		67-130	6		20
Bromodichloromethane	100		97		67-130	3		20
trans-1,3-Dichloropropene	95		94		70-130	1		20
cis-1,3-Dichloropropene	91		90		70-130	1		20
Bromoform	110		110		54-136	0		20
1,1,1,2-Tetrachloroethane	89		96		67-130	8		20
Benzene	92		90		70-130	2		20
Toluene	99		96		70-130	3		20
Ethylbenzene	100		97		70-130	3		20
Chloromethane	87		88		64-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708376

Project Number: Not Specified

Report Date: 03/27/17

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 18-22 Batch: WG987430-3 WG987430-4								
Bromomethane	140	Q	140	Q	39-139	0		20
Vinyl chloride	98		92		55-140	6		20
Chloroethane	110		110		55-138	0		20
1,1-Dichloroethene	96		90		61-145	6		20
trans-1,2-Dichloroethene	97		92		70-130	5		20
Trichloroethene	95		93		70-130	2		20
1,2-Dichlorobenzene	93		98		70-130	5		20
1,3-Dichlorobenzene	94		100		70-130	6		20
1,4-Dichlorobenzene	97		100		70-130	3		20
Acrylonitrile	87		88		70-130	1		20
Acrolein	100		120		40-160	18		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	103		100		70-130
Toluene-d8	101		100		70-130
4-Bromofluorobenzene	101		101		70-130
Dibromofluoromethane	105		101		70-130

SEMIVOLATILES

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-01
Client ID: SW-1
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 03/22/17 22:21
Analyst: ALS

Date Collected: 03/20/17 12:35
Date Received: 03/20/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 03/21/17 06:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzidine	ND		ug/l	20	8.1	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.66	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1
Azobenzene	ND		ug/l	2.0	0.75	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	5.0	0.60	1
Nitrobenzene	ND		ug/l	2.0	0.75	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	0.91	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1
Diethyl phthalate	ND		ug/l	5.0	0.63	1
Dimethyl phthalate	ND		ug/l	5.0	0.65	1
n-Nitrosodimethylamine	ND		ug/l	2.0	0.67	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1
2-Chlorophenol	ND		ug/l	2.0	0.63	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.77	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.6	1
2-Nitrophenol	ND		ug/l	10	1.5	1
4-Nitrophenol	ND		ug/l	10	1.8	1

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-01

Date Collected: 03/20/17 12:35

Client ID: SW-1

Date Received: 03/20/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

2,4-Dinitrophenol	ND		ug/l	20	5.5	1
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1	1
Phenol	ND		ug/l	5.0	1.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	41		21-120
Phenol-d6	26		10-120
Nitrobenzene-d5	63		23-120
2-Fluorobiphenyl	69		15-120
2,4,6-Tribromophenol	79		10-120
4-Terphenyl-d14	72		41-149

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-01
 Client ID: SW-1
 Sample Location: STATEN ISLAND, NY
 Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 03/21/17 21:19
 Analyst: KL

Date Collected: 03/20/17 12:35
 Date Received: 03/20/17
 Field Prep: Not Specified
 Extraction Method: EPA 3510C
 Extraction Date: 03/21/17 06:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	0.16	J	ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	ND		ug/l	0.20	0.04	1
Benzo(a)anthracene	0.08	J	ug/l	0.20	0.02	1
Benzo(a)pyrene	0.08	J	ug/l	0.20	0.04	1
Benzo(b)fluoranthene	0.16	J	ug/l	0.20	0.02	1
Benzo(k)fluoranthene	0.08	J	ug/l	0.20	0.04	1
Chrysene	0.12	J	ug/l	0.20	0.04	1
Acenaphthylene	ND		ug/l	0.20	0.04	1
Anthracene	ND		ug/l	0.20	0.04	1
Benzo(ghi)perylene	0.07	J	ug/l	0.20	0.04	1
Fluorene	ND		ug/l	0.20	0.04	1
Phenanthrene	0.03	J	ug/l	0.20	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.04	1
Indeno(1,2,3-cd)pyrene	0.07	J	ug/l	0.20	0.04	1
Pyrene	0.16	J	ug/l	0.20	0.04	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	35		21-120
Phenol-d6	24		10-120
Nitrobenzene-d5	62		23-120
2-Fluorobiphenyl	66		15-120
2,4,6-Tribromophenol	75		10-120
4-Terphenyl-d14	70		41-149

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-02
Client ID: SW-2
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 03/22/17 22:46
Analyst: ALS

Date Collected: 03/20/17 12:10
Date Received: 03/20/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 03/21/17 06:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzidine	ND		ug/l	20	8.1	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.66	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1
Azobenzene	ND		ug/l	2.0	0.75	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	5.0	0.60	1
Nitrobenzene	ND		ug/l	2.0	0.75	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1
Bis(2-ethylhexyl)phthalate	1.7	J	ug/l	3.0	0.91	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1
Diethyl phthalate	ND		ug/l	5.0	0.63	1
Dimethyl phthalate	ND		ug/l	5.0	0.65	1
n-Nitrosodimethylamine	ND		ug/l	2.0	0.67	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1
2-Chlorophenol	ND		ug/l	2.0	0.63	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.77	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.6	1
2-Nitrophenol	ND		ug/l	10	1.5	1
4-Nitrophenol	ND		ug/l	10	1.8	1

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-02

Date Collected: 03/20/17 12:10

Client ID: SW-2

Date Received: 03/20/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

2,4-Dinitrophenol	ND		ug/l	20	5.5	1
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1	1
Phenol	ND		ug/l	5.0	1.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	48		21-120
Phenol-d6	32		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	75		15-120
2,4,6-Tribromophenol	87		10-120
4-Terphenyl-d14	76		41-149

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-02
Client ID: SW-2
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 03/21/17 18:47
Analyst: KL

Date Collected: 03/20/17 12:10
Date Received: 03/20/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 03/21/17 06:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	0.32		ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	ND		ug/l	0.20	0.04	1
Benzo(a)anthracene	0.22		ug/l	0.20	0.02	1
Benzo(a)pyrene	0.23		ug/l	0.20	0.04	1
Benzo(b)fluoranthene	0.39		ug/l	0.20	0.02	1
Benzo(k)fluoranthene	0.13	J	ug/l	0.20	0.04	1
Chrysene	0.23		ug/l	0.20	0.04	1
Acenaphthylene	0.09	J	ug/l	0.20	0.04	1
Anthracene	0.12	J	ug/l	0.20	0.04	1
Benzo(ghi)perylene	0.15	J	ug/l	0.20	0.04	1
Fluorene	ND		ug/l	0.20	0.04	1
Phenanthrene	0.10	J	ug/l	0.20	0.02	1
Dibenzo(a,h)anthracene	0.04	J	ug/l	0.20	0.04	1
Indeno(1,2,3-cd)pyrene	0.13	J	ug/l	0.20	0.04	1
Pyrene	0.33		ug/l	0.20	0.04	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	41		21-120
Phenol-d6	31		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	96		10-120
4-Terphenyl-d14	68		41-149

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-03
 Client ID: SW-3
 Sample Location: STATEN ISLAND, NY
 Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 03/22/17 23:11
 Analyst: ALS

Date Collected: 03/20/17 11:55
 Date Received: 03/20/17
 Field Prep: Not Specified
 Extraction Method: EPA 3510C
 Extraction Date: 03/21/17 06:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzidine	ND		ug/l	20	8.1	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.66	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1
Azobenzene	ND		ug/l	2.0	0.75	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	5.0	0.60	1
Nitrobenzene	ND		ug/l	2.0	0.75	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1
Bis(2-ethylhexyl)phthalate	1.6	J	ug/l	3.0	0.91	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1
Diethyl phthalate	ND		ug/l	5.0	0.63	1
Dimethyl phthalate	ND		ug/l	5.0	0.65	1
n-Nitrosodimethylamine	ND		ug/l	2.0	0.67	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1
2-Chlorophenol	ND		ug/l	2.0	0.63	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.77	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.6	1
2-Nitrophenol	ND		ug/l	10	1.5	1
4-Nitrophenol	ND		ug/l	10	1.8	1

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-03

Date Collected: 03/20/17 11:55

Client ID: SW-3

Date Received: 03/20/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

2,4-Dinitrophenol	ND		ug/l	20	5.5	1
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1	1
Phenol	ND		ug/l	5.0	1.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	48		21-120
Phenol-d6	33		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	69		15-120
2,4,6-Tribromophenol	91		10-120
4-Terphenyl-d14	85		41-149

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-03
 Client ID: SW-3
 Sample Location: STATEN ISLAND, NY
 Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 03/21/17 21:51
 Analyst: KL

Date Collected: 03/20/17 11:55
 Date Received: 03/20/17
 Field Prep: Not Specified
 Extraction Method: EPA 3510C
 Extraction Date: 03/21/17 06:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.86		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	0.08	J	ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	ND		ug/l	0.20	0.04	1
Benzo(a)anthracene	0.03	J	ug/l	0.20	0.02	1
Benzo(a)pyrene	ND		ug/l	0.20	0.04	1
Benzo(b)fluoranthene	0.05	J	ug/l	0.20	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.04	1
Chrysene	0.04	J	ug/l	0.20	0.04	1
Acenaphthylene	ND		ug/l	0.20	0.04	1
Anthracene	ND		ug/l	0.20	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.20	0.04	1
Fluorene	ND		ug/l	0.20	0.04	1
Phenanthrene	0.07	J	ug/l	0.20	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.20	0.04	1
Pyrene	0.07	J	ug/l	0.20	0.04	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	40		21-120
Phenol-d6	28		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	72		15-120
2,4,6-Tribromophenol	84		10-120
4-Terphenyl-d14	79		41-149

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-04
Client ID: SW-4
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 03/22/17 23:37
Analyst: ALS

Date Collected: 03/20/17 11:40
Date Received: 03/20/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 03/21/17 06:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzidine	ND		ug/l	20	8.1	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.66	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1
Azobenzene	ND		ug/l	2.0	0.75	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	5.0	0.60	1
Nitrobenzene	ND		ug/l	2.0	0.75	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1
Bis(2-ethylhexyl)phthalate	1.7	J	ug/l	3.0	0.91	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1
Diethyl phthalate	ND		ug/l	5.0	0.63	1
Dimethyl phthalate	ND		ug/l	5.0	0.65	1
n-Nitrosodimethylamine	ND		ug/l	2.0	0.67	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1
2-Chlorophenol	ND		ug/l	2.0	0.63	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.77	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.6	1
2-Nitrophenol	ND		ug/l	10	1.5	1
4-Nitrophenol	ND		ug/l	10	1.8	1

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-04

Date Collected: 03/20/17 11:40

Client ID: SW-4

Date Received: 03/20/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

2,4-Dinitrophenol	ND		ug/l	20	5.5	1
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1	1
Phenol	ND		ug/l	5.0	1.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	40		21-120
Phenol-d6	29		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	68		15-120
2,4,6-Tribromophenol	75		10-120
4-Terphenyl-d14	79		41-149

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-04
Client ID: SW-4
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 03/21/17 20:48
Analyst: KL

Date Collected: 03/20/17 11:40
Date Received: 03/20/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 03/21/17 06:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.09	J	ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	ND		ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	ND		ug/l	0.20	0.04	1
Benzo(a)anthracene	ND		ug/l	0.20	0.02	1
Benzo(a)pyrene	ND		ug/l	0.20	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.20	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.04	1
Chrysene	ND		ug/l	0.20	0.04	1
Acenaphthylene	ND		ug/l	0.20	0.04	1
Anthracene	ND		ug/l	0.20	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.20	0.04	1
Fluorene	ND		ug/l	0.20	0.04	1
Phenanthrene	ND		ug/l	0.20	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.20	0.04	1
Pyrene	ND		ug/l	0.20	0.04	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	34		21-120
Phenol-d6	25		10-120
Nitrobenzene-d5	62		23-120
2-Fluorobiphenyl	65		15-120
2,4,6-Tribromophenol	69		10-120
4-Terphenyl-d14	70		41-149

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-05
Client ID: SW-5
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 03/23/17 00:02
Analyst: ALS

Date Collected: 03/20/17 10:40
Date Received: 03/20/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 03/21/17 06:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzidine	ND		ug/l	20	8.1	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.66	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1
Azobenzene	ND		ug/l	2.0	0.75	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	5.0	0.60	1
Nitrobenzene	ND		ug/l	2.0	0.75	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1
Bis(2-ethylhexyl)phthalate	1.9	J	ug/l	3.0	0.91	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1
Diethyl phthalate	ND		ug/l	5.0	0.63	1
Dimethyl phthalate	ND		ug/l	5.0	0.65	1
n-Nitrosodimethylamine	ND		ug/l	2.0	0.67	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1
2-Chlorophenol	ND		ug/l	2.0	0.63	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.77	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.6	1
2-Nitrophenol	ND		ug/l	10	1.5	1
4-Nitrophenol	ND		ug/l	10	1.8	1

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-05

Date Collected: 03/20/17 10:40

Client ID: SW-5

Date Received: 03/20/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

2,4-Dinitrophenol	ND		ug/l	20	5.5	1
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1	1
Phenol	ND		ug/l	5.0	1.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	37		21-120
Phenol-d6	27		10-120
Nitrobenzene-d5	66		23-120
2-Fluorobiphenyl	63		15-120
2,4,6-Tribromophenol	83		10-120
4-Terphenyl-d14	71		41-149

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-05
Client ID: SW-5
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 03/21/17 18:23
Analyst: KL

Date Collected: 03/20/17 10:40
Date Received: 03/20/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 03/21/17 06:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.08	J	ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	0.18	J	ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	0.04	J	ug/l	0.20	0.04	1
Benzo(a)anthracene	0.09	J	ug/l	0.20	0.02	1
Benzo(a)pyrene	0.11	J	ug/l	0.20	0.04	1
Benzo(b)fluoranthene	0.19	J	ug/l	0.20	0.02	1
Benzo(k)fluoranthene	0.07	J	ug/l	0.20	0.04	1
Chrysene	0.10	J	ug/l	0.20	0.04	1
Acenaphthylene	0.04	J	ug/l	0.20	0.04	1
Anthracene	0.06	J	ug/l	0.20	0.04	1
Benzo(ghi)perylene	0.08	J	ug/l	0.20	0.04	1
Fluorene	ND		ug/l	0.20	0.04	1
Phenanthrene	0.06	J	ug/l	0.20	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.04	1
Indeno(1,2,3-cd)pyrene	0.07	J	ug/l	0.20	0.04	1
Pyrene	0.19	J	ug/l	0.20	0.04	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	35		21-120
Phenol-d6	28		10-120
Nitrobenzene-d5	60		23-120
2-Fluorobiphenyl	66		15-120
2,4,6-Tribromophenol	100		10-120
4-Terphenyl-d14	63		41-149

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-12
Client ID: PRW-09
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 03/23/17 00:28
Analyst: ALS

Date Collected: 03/20/17 10:41
Date Received: 03/20/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 03/21/17 06:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzidine	ND		ug/l	20	8.1	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.66	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1
Azobenzene	ND		ug/l	2.0	0.75	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	5.0	0.60	1
Nitrobenzene	ND		ug/l	2.0	0.75	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	0.91	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1
Diethyl phthalate	ND		ug/l	5.0	0.63	1
Dimethyl phthalate	ND		ug/l	5.0	0.65	1
n-Nitrosodimethylamine	ND		ug/l	2.0	0.67	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1
2-Chlorophenol	ND		ug/l	2.0	0.63	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.77	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.6	1
2-Nitrophenol	ND		ug/l	10	1.5	1
4-Nitrophenol	ND		ug/l	10	1.8	1

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-12

Date Collected: 03/20/17 10:41

Client ID: PRW-09

Date Received: 03/20/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

2,4-Dinitrophenol	ND		ug/l	20	5.5	1
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1	1
Phenol	ND		ug/l	5.0	1.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	44		21-120
Phenol-d6	30		10-120
Nitrobenzene-d5	77		23-120
2-Fluorobiphenyl	75		15-120
2,4,6-Tribromophenol	88		10-120
4-Terphenyl-d14	82		41-149

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-12
Client ID: PRW-09
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 03/21/17 17:40
Analyst: KL

Date Collected: 03/20/17 10:41
Date Received: 03/20/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 03/21/17 06:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	ND		ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	0.10	J	ug/l	0.20	0.04	1
Benzo(a)anthracene	ND		ug/l	0.20	0.02	1
Benzo(a)pyrene	ND		ug/l	0.20	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.20	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.04	1
Chrysene	ND		ug/l	0.20	0.04	1
Acenaphthylene	ND		ug/l	0.20	0.04	1
Anthracene	0.04	J	ug/l	0.20	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.20	0.04	1
Fluorene	ND		ug/l	0.20	0.04	1
Phenanthrene	ND		ug/l	0.20	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.20	0.04	1
Pyrene	ND		ug/l	0.20	0.04	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	37		21-120
Phenol-d6	25		10-120
Nitrobenzene-d5	64		23-120
2-Fluorobiphenyl	68		15-120
2,4,6-Tribromophenol	77		10-120
4-Terphenyl-d14	74		41-149

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-13
Client ID: PRW-05
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 03/24/17 17:21
Analyst: ALS

Date Collected: 03/20/17 12:16
Date Received: 03/20/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 03/21/17 06:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzidine	ND		ug/l	20	8.1	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.66	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1
Azobenzene	ND		ug/l	2.0	0.75	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	5.0	0.60	1
Nitrobenzene	ND		ug/l	2.0	0.75	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1
Bis(2-ethylhexyl)phthalate	1.6	J	ug/l	3.0	0.91	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1
Diethyl phthalate	ND		ug/l	5.0	0.63	1
Dimethyl phthalate	ND		ug/l	5.0	0.65	1
n-Nitrosodimethylamine	ND		ug/l	2.0	0.67	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1
2-Chlorophenol	ND		ug/l	2.0	0.63	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.77	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.6	1
2-Nitrophenol	ND		ug/l	10	1.5	1
4-Nitrophenol	ND		ug/l	10	1.8	1

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-13

Date Collected: 03/20/17 12:16

Client ID: PRW-05

Date Received: 03/20/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

2,4-Dinitrophenol	ND		ug/l	20	5.5	1
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1	1
Phenol	ND		ug/l	5.0	1.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	44		21-120
Phenol-d6	31		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	76		15-120
2,4,6-Tribromophenol	87		10-120
4-Terphenyl-d14	79		41-149

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-13
Client ID: PRW-05
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 03/21/17 18:11
Analyst: KL

Date Collected: 03/20/17 12:16
Date Received: 03/20/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 03/21/17 06:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	ND		ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	ND		ug/l	0.20	0.04	1
Benzo(a)anthracene	ND		ug/l	0.20	0.02	1
Benzo(a)pyrene	ND		ug/l	0.20	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.20	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.04	1
Chrysene	ND		ug/l	0.20	0.04	1
Acenaphthylene	ND		ug/l	0.20	0.04	1
Anthracene	ND		ug/l	0.20	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.20	0.04	1
Fluorene	ND		ug/l	0.20	0.04	1
Phenanthrene	ND		ug/l	0.20	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.20	0.04	1
Pyrene	ND		ug/l	0.20	0.04	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	34		21-120
Phenol-d6	25		10-120
Nitrobenzene-d5	63		23-120
2-Fluorobiphenyl	63		15-120
2,4,6-Tribromophenol	68		10-120
4-Terphenyl-d14	67		41-149

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-14
Client ID: PRW-03
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 03/24/17 17:48
Analyst: ALS

Date Collected: 03/20/17 14:01
Date Received: 03/20/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 03/21/17 06:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzidine	ND		ug/l	20	8.1	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.66	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1
Azobenzene	ND		ug/l	2.0	0.75	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	5.0	0.60	1
Nitrobenzene	ND		ug/l	2.0	0.75	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1
Bis(2-ethylhexyl)phthalate	1.7	J	ug/l	3.0	0.91	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1
Diethyl phthalate	ND		ug/l	5.0	0.63	1
Dimethyl phthalate	ND		ug/l	5.0	0.65	1
n-Nitrosodimethylamine	ND		ug/l	2.0	0.67	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1
2-Chlorophenol	ND		ug/l	2.0	0.63	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.77	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.6	1
2-Nitrophenol	ND		ug/l	10	1.5	1
4-Nitrophenol	ND		ug/l	10	1.8	1

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-14

Date Collected: 03/20/17 14:01

Client ID: PRW-03

Date Received: 03/20/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

2,4-Dinitrophenol	ND		ug/l	20	5.5	1
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1	1
Phenol	ND		ug/l	5.0	1.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	50		21-120
Phenol-d6	34		10-120
Nitrobenzene-d5	93		23-120
2-Fluorobiphenyl	89		15-120
2,4,6-Tribromophenol	102		10-120
4-Terphenyl-d14	93		41-149

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-14
Client ID: PRW-03
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 03/21/17 18:43
Analyst: KL

Date Collected: 03/20/17 14:01
Date Received: 03/20/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 03/21/17 06:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	ND		ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	ND		ug/l	0.20	0.04	1
Benzo(a)anthracene	ND		ug/l	0.20	0.02	1
Benzo(a)pyrene	ND		ug/l	0.20	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.20	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.04	1
Chrysene	ND		ug/l	0.20	0.04	1
Acenaphthylene	ND		ug/l	0.20	0.04	1
Anthracene	0.06	J	ug/l	0.20	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.20	0.04	1
Fluorene	ND		ug/l	0.20	0.04	1
Phenanthrene	ND		ug/l	0.20	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.20	0.04	1
Pyrene	ND		ug/l	0.20	0.04	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	37		21-120
Phenol-d6	27		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	64		15-120
2,4,6-Tribromophenol	79		10-120
4-Terphenyl-d14	76		41-149

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-15
Client ID: PRW-01
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 03/24/17 19:07
Analyst: ALS

Date Collected: 03/20/17 14:21
Date Received: 03/20/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 03/21/17 06:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzidine	ND		ug/l	20	8.1	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.66	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1
Azobenzene	ND		ug/l	2.0	0.75	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	5.0	0.60	1
Nitrobenzene	ND		ug/l	2.0	0.75	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1
Bis(2-ethylhexyl)phthalate	2.0	J	ug/l	3.0	0.91	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1
Diethyl phthalate	ND		ug/l	5.0	0.63	1
Dimethyl phthalate	ND		ug/l	5.0	0.65	1
n-Nitrosodimethylamine	ND		ug/l	2.0	0.67	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1
2-Chlorophenol	ND		ug/l	2.0	0.63	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.77	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.6	1
2-Nitrophenol	ND		ug/l	10	1.5	1
4-Nitrophenol	ND		ug/l	10	1.8	1

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-15

Date Collected: 03/20/17 14:21

Client ID: PRW-01

Date Received: 03/20/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

2,4-Dinitrophenol	ND		ug/l	20	5.5	1
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1	1
Phenol	ND		ug/l	5.0	1.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	48		21-120
Phenol-d6	32		10-120
Nitrobenzene-d5	87		23-120
2-Fluorobiphenyl	82		15-120
2,4,6-Tribromophenol	98		10-120
4-Terphenyl-d14	83		41-149

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-15
Client ID: PRW-01
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 03/21/17 22:22
Analyst: KL

Date Collected: 03/20/17 14:21
Date Received: 03/20/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 03/21/17 06:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.62		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	0.12	J	ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	0.10	J	ug/l	0.20	0.04	1
Benzo(a)anthracene	0.09	J	ug/l	0.20	0.02	1
Benzo(a)pyrene	0.06	J	ug/l	0.20	0.04	1
Benzo(b)fluoranthene	0.05	J	ug/l	0.20	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.04	1
Chrysene	0.16	J	ug/l	0.20	0.04	1
Acenaphthylene	0.10	J	ug/l	0.20	0.04	1
Anthracene	0.22		ug/l	0.20	0.04	1
Benzo(ghi)perylene	0.06	J	ug/l	0.20	0.04	1
Fluorene	0.16	J	ug/l	0.20	0.04	1
Phenanthrene	0.06	J	ug/l	0.20	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.20	0.04	1
Pyrene	0.45		ug/l	0.20	0.04	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	39		21-120
Phenol-d6	26		10-120
Nitrobenzene-d5	67		23-120
2-Fluorobiphenyl	69		15-120
2,4,6-Tribromophenol	87		10-120
4-Terphenyl-d14	73		41-149

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-16
Client ID: PRW-12
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 03/23/17 02:09
Analyst: ALS

Date Collected: 03/20/17 15:56
Date Received: 03/20/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 03/21/17 06:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzidine	ND		ug/l	20	8.1	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.66	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1
Azobenzene	ND		ug/l	2.0	0.75	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	5.0	0.60	1
Nitrobenzene	ND		ug/l	2.0	0.75	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	0.91	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1
Diethyl phthalate	ND		ug/l	5.0	0.63	1
Dimethyl phthalate	ND		ug/l	5.0	0.65	1
n-Nitrosodimethylamine	ND		ug/l	2.0	0.67	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1
2-Chlorophenol	ND		ug/l	2.0	0.63	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.77	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.6	1
2-Nitrophenol	ND		ug/l	10	1.5	1
4-Nitrophenol	ND		ug/l	10	1.8	1

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-16

Date Collected: 03/20/17 15:56

Client ID: PRW-12

Date Received: 03/20/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

2,4-Dinitrophenol	ND		ug/l	20	5.5	1
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1	1
Phenol	ND		ug/l	5.0	1.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	50		21-120
Phenol-d6	33		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	76		15-120
2,4,6-Tribromophenol	89		10-120
4-Terphenyl-d14	79		41-149

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-16
 Client ID: PRW-12
 Sample Location: STATEN ISLAND, NY
 Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 03/21/17 17:34
 Analyst: KL

Date Collected: 03/20/17 15:56
 Date Received: 03/20/17
 Field Prep: Not Specified
 Extraction Method: EPA 3510C
 Extraction Date: 03/21/17 06:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.57		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	0.13	J	ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	1.4		ug/l	0.20	0.04	1
Benzo(a)anthracene	ND		ug/l	0.20	0.02	1
Benzo(a)pyrene	ND		ug/l	0.20	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.20	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.04	1
Chrysene	ND		ug/l	0.20	0.04	1
Acenaphthylene	0.05	J	ug/l	0.20	0.04	1
Anthracene	0.15	J	ug/l	0.20	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.20	0.04	1
Fluorene	0.28		ug/l	0.20	0.04	1
Phenanthrene	0.40		ug/l	0.20	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.20	0.04	1
Pyrene	0.12	J	ug/l	0.20	0.04	1
Pentachlorophenol	0.39	J	ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	41		21-120
Phenol-d6	30		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	72		15-120
2,4,6-Tribromophenol	101		10-120
4-Terphenyl-d14	69		41-149

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-17
Client ID: PRW-06
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 03/23/17 02:34
Analyst: ALS

Date Collected: 03/20/17 14:16
Date Received: 03/20/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 03/21/17 06:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzidine	ND		ug/l	20	8.1	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.66	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1
Azobenzene	ND		ug/l	2.0	0.75	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	5.0	0.60	1
Nitrobenzene	ND		ug/l	2.0	0.75	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1
Bis(2-ethylhexyl)phthalate	1.9	J	ug/l	3.0	0.91	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1
Diethyl phthalate	ND		ug/l	5.0	0.63	1
Dimethyl phthalate	ND		ug/l	5.0	0.65	1
n-Nitrosodimethylamine	ND		ug/l	2.0	0.67	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1
2-Chlorophenol	ND		ug/l	2.0	0.63	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.77	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.6	1
2-Nitrophenol	ND		ug/l	10	1.5	1
4-Nitrophenol	ND		ug/l	10	1.8	1

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-17

Date Collected: 03/20/17 14:16

Client ID: PRW-06

Date Received: 03/20/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

2,4-Dinitrophenol	ND		ug/l	20	5.5	1
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1	1
Phenol	ND		ug/l	5.0	1.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	43		21-120
Phenol-d6	30		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	64		15-120
2,4,6-Tribromophenol	77		10-120
4-Terphenyl-d14	73		41-149

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-17
Client ID: PRW-06
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 03/21/17 20:16
Analyst: KL

Date Collected: 03/20/17 14:16
Date Received: 03/20/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 03/21/17 06:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	0.05	J	ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	ND		ug/l	0.20	0.04	1
Benzo(a)anthracene	0.03	J	ug/l	0.20	0.02	1
Benzo(a)pyrene	ND		ug/l	0.20	0.04	1
Benzo(b)fluoranthene	0.06	J	ug/l	0.20	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.04	1
Chrysene	0.05	J	ug/l	0.20	0.04	1
Acenaphthylene	ND		ug/l	0.20	0.04	1
Anthracene	ND		ug/l	0.20	0.04	1
Benzo(ghi)perylene	0.06	J	ug/l	0.20	0.04	1
Fluorene	ND		ug/l	0.20	0.04	1
Phenanthrene	0.03	J	ug/l	0.20	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.04	1
Indeno(1,2,3-cd)pyrene	0.05	J	ug/l	0.20	0.04	1
Pyrene	0.06	J	ug/l	0.20	0.04	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	38		21-120
Phenol-d6	26		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	67		15-120
2,4,6-Tribromophenol	77		10-120
4-Terphenyl-d14	73		41-149

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-18
Client ID: PRW-11
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 03/24/17 18:15
Analyst: ALS

Date Collected: 03/20/17 15:51
Date Received: 03/20/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 03/21/17 06:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzidine	ND		ug/l	20	8.1	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.66	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1
Azobenzene	ND		ug/l	2.0	0.75	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	5.0	0.60	1
Nitrobenzene	ND		ug/l	2.0	0.75	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1
Bis(2-ethylhexyl)phthalate	1.7	J	ug/l	3.0	0.91	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1
Diethyl phthalate	ND		ug/l	5.0	0.63	1
Dimethyl phthalate	ND		ug/l	5.0	0.65	1
n-Nitrosodimethylamine	ND		ug/l	2.0	0.67	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1
2-Chlorophenol	ND		ug/l	2.0	0.63	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.77	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.6	1
2-Nitrophenol	ND		ug/l	10	1.5	1
4-Nitrophenol	ND		ug/l	10	1.8	1

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-18

Date Collected: 03/20/17 15:51

Client ID: PRW-11

Date Received: 03/20/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

2,4-Dinitrophenol	ND		ug/l	20	5.5	1
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1	1
Phenol	ND		ug/l	5.0	1.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		21-120
Phenol-d6	37		10-120
Nitrobenzene-d5	88		23-120
2-Fluorobiphenyl	84		15-120
2,4,6-Tribromophenol	94		10-120
4-Terphenyl-d14	90		41-149

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-18
Client ID: PRW-11
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 03/21/17 19:14
Analyst: KL

Date Collected: 03/20/17 15:51
Date Received: 03/20/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 03/21/17 06:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	ND		ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	ND		ug/l	0.20	0.04	1
Benzo(a)anthracene	0.03	J	ug/l	0.20	0.02	1
Benzo(a)pyrene	ND		ug/l	0.20	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.20	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.04	1
Chrysene	ND		ug/l	0.20	0.04	1
Acenaphthylene	ND		ug/l	0.20	0.04	1
Anthracene	ND		ug/l	0.20	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.20	0.04	1
Fluorene	ND		ug/l	0.20	0.04	1
Phenanthrene	ND		ug/l	0.20	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.20	0.04	1
Pyrene	ND		ug/l	0.20	0.04	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	39		21-120
Phenol-d6	30		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	75		15-120
2,4,6-Tribromophenol	75		10-120
4-Terphenyl-d14	85		41-149

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-19
Client ID: DUP-1
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 03/24/17 19:33
Analyst: ALS

Date Collected: 03/20/17 00:00
Date Received: 03/20/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 03/21/17 08:16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzidine	ND		ug/l	20	8.1	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.66	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1
Azobenzene	ND		ug/l	2.0	0.75	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	5.0	0.60	1
Nitrobenzene	ND		ug/l	2.0	0.75	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1
Bis(2-ethylhexyl)phthalate	2.0	J	ug/l	3.0	0.91	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1
Diethyl phthalate	ND		ug/l	5.0	0.63	1
Dimethyl phthalate	ND		ug/l	5.0	0.65	1
n-Nitrosodimethylamine	ND		ug/l	2.0	0.67	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1
2-Chlorophenol	ND		ug/l	2.0	0.63	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.77	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.6	1
2-Nitrophenol	ND		ug/l	10	1.5	1
4-Nitrophenol	ND		ug/l	10	1.8	1

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-19

Date Collected: 03/20/17 00:00

Client ID: DUP-1

Date Received: 03/20/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

2,4-Dinitrophenol	ND		ug/l	20	5.5	1
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1	1
Phenol	ND		ug/l	5.0	1.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	58		21-120
Phenol-d6	42		10-120
Nitrobenzene-d5	94		23-120
2-Fluorobiphenyl	89		15-120
2,4,6-Tribromophenol	103		10-120
4-Terphenyl-d14	90		41-149

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-19
Client ID: DUP-1
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 03/21/17 17:58
Analyst: KL

Date Collected: 03/20/17 00:00
Date Received: 03/20/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 03/21/17 08:16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.10	J	ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	0.07	J	ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	ND		ug/l	0.20	0.04	1
Benzo(a)anthracene	0.04	J	ug/l	0.20	0.02	1
Benzo(a)pyrene	ND		ug/l	0.20	0.04	1
Benzo(b)fluoranthene	0.07	J	ug/l	0.20	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.04	1
Chrysene	ND		ug/l	0.20	0.04	1
Acenaphthylene	ND		ug/l	0.20	0.04	1
Anthracene	ND		ug/l	0.20	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.20	0.04	1
Fluorene	ND		ug/l	0.20	0.04	1
Phenanthrene	0.04	J	ug/l	0.20	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.20	0.04	1
Pyrene	0.08	J	ug/l	0.20	0.04	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	49		21-120
Phenol-d6	39		10-120
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	80		15-120
2,4,6-Tribromophenol	104		10-120
4-Terphenyl-d14	73		41-149

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-20
Client ID: DUP-2
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 03/24/17 18:41
Analyst: ALS

Date Collected: 03/20/17 00:00
Date Received: 03/20/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 03/21/17 08:16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzidine	ND		ug/l	20	8.1	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.66	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1
Azobenzene	ND		ug/l	2.0	0.75	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	5.0	0.60	1
Nitrobenzene	ND		ug/l	2.0	0.75	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1
Bis(2-ethylhexyl)phthalate	1.6	J	ug/l	3.0	0.91	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1
Diethyl phthalate	ND		ug/l	5.0	0.63	1
Dimethyl phthalate	ND		ug/l	5.0	0.65	1
n-Nitrosodimethylamine	ND		ug/l	2.0	0.67	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1
2-Chlorophenol	ND		ug/l	2.0	0.63	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.77	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.6	1
2-Nitrophenol	ND		ug/l	10	1.5	1
4-Nitrophenol	ND		ug/l	10	1.8	1

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-20

Date Collected: 03/20/17 00:00

Client ID: DUP-2

Date Received: 03/20/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

2,4-Dinitrophenol	ND		ug/l	20	5.5	1
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1	1
Phenol	ND		ug/l	5.0	1.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	54		21-120
Phenol-d6	38		10-120
Nitrobenzene-d5	94		23-120
2-Fluorobiphenyl	91		15-120
2,4,6-Tribromophenol	98		10-120
4-Terphenyl-d14	91		41-149

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-20
Client ID: DUP-2
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 03/21/17 19:45
Analyst: KL

Date Collected: 03/20/17 00:00
Date Received: 03/20/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 03/21/17 08:16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	ND		ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	ND		ug/l	0.20	0.04	1
Benzo(a)anthracene	ND		ug/l	0.20	0.02	1
Benzo(a)pyrene	ND		ug/l	0.20	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.20	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.04	1
Chrysene	ND		ug/l	0.20	0.04	1
Acenaphthylene	ND		ug/l	0.20	0.04	1
Anthracene	ND		ug/l	0.20	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.20	0.04	1
Fluorene	ND		ug/l	0.20	0.04	1
Phenanthrene	ND		ug/l	0.20	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.20	0.04	1
Pyrene	ND		ug/l	0.20	0.04	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	42		21-120
Phenol-d6	30		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	74		15-120
2,4,6-Tribromophenol	84		10-120
4-Terphenyl-d14	80		41-149

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-21
Client ID: FB-032017
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 03/23/17 04:15
Analyst: ALS

Date Collected: 03/20/17 15:05
Date Received: 03/20/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 03/21/17 08:16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzidine	ND		ug/l	20	8.1	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.66	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1
Azobenzene	ND		ug/l	2.0	0.75	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	5.0	0.60	1
Nitrobenzene	ND		ug/l	2.0	0.75	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	0.91	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1
Di-n-butylphthalate	2.4	J	ug/l	5.0	0.69	1
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1
Diethyl phthalate	ND		ug/l	5.0	0.63	1
Dimethyl phthalate	ND		ug/l	5.0	0.65	1
n-Nitrosodimethylamine	ND		ug/l	2.0	0.67	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1
2-Chlorophenol	ND		ug/l	2.0	0.63	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.77	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.6	1
2-Nitrophenol	ND		ug/l	10	1.5	1
4-Nitrophenol	ND		ug/l	10	1.8	1

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-21

Date Collected: 03/20/17 15:05

Client ID: FB-032017

Date Received: 03/20/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

2,4-Dinitrophenol	ND		ug/l	20	5.5	1
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1	1
Phenol	ND		ug/l	5.0	1.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	45		21-120
Phenol-d6	30		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	80		10-120
4-Terphenyl-d14	68		41-149

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-21
Client ID: FB-032017
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 03/21/17 17:08
Analyst: KL

Date Collected: 03/20/17 15:05
Date Received: 03/20/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 03/21/17 08:16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	ND		ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	ND		ug/l	0.20	0.04	1
Benzo(a)anthracene	ND		ug/l	0.20	0.02	1
Benzo(a)pyrene	ND		ug/l	0.20	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.20	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.04	1
Chrysene	ND		ug/l	0.20	0.04	1
Acenaphthylene	ND		ug/l	0.20	0.04	1
Anthracene	ND		ug/l	0.20	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.20	0.04	1
Fluorene	ND		ug/l	0.20	0.04	1
Phenanthrene	ND		ug/l	0.20	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.20	0.04	1
Pyrene	ND		ug/l	0.20	0.04	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	35		21-120
Phenol-d6	24		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	65		15-120
2,4,6-Tribromophenol	63		10-120
4-Terphenyl-d14	62		41-149

Project Name: SITE1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708376
Report Date: 03/27/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 03/22/17 01:32
Analyst: RC

Extraction Method: EPA 3510C
Extraction Date: 03/21/17 06:37

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05,12-21 Batch: WG986851-1					
Benzidine	ND		ug/l	20	8.1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.66
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1
Azobenzene	ND		ug/l	2.0	0.75
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63
Hexachlorocyclopentadiene	ND		ug/l	20	7.8
Isophorone	ND		ug/l	5.0	0.60
Nitrobenzene	ND		ug/l	2.0	0.75
NDPA/DPA	ND		ug/l	2.0	0.64
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	0.91
Butyl benzyl phthalate	ND		ug/l	5.0	1.3
Di-n-butylphthalate	ND		ug/l	5.0	0.69
Di-n-octylphthalate	ND		ug/l	5.0	1.1
Diethyl phthalate	ND		ug/l	5.0	0.63
Dimethyl phthalate	ND		ug/l	5.0	0.65
n-Nitrosodimethylamine	ND		ug/l	2.0	0.67
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68
p-Chloro-m-cresol	ND		ug/l	2.0	0.62
2-Chlorophenol	ND		ug/l	2.0	0.63
2,4-Dichlorophenol	ND		ug/l	5.0	0.77
2,4-Dimethylphenol	ND		ug/l	5.0	1.6
2-Nitrophenol	ND		ug/l	10	1.5

Project Name: SITE1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708376
Report Date: 03/27/17

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 03/22/17 01:32
Analyst: RC

Extraction Method: EPA 3510C
Extraction Date: 03/21/17 06:37

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05,12-21 Batch: WG986851-1					
4-Nitrophenol	ND		ug/l	10	1.8
2,4-Dinitrophenol	ND		ug/l	20	5.5
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1
Phenol	ND		ug/l	5.0	1.9

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	51		21-120
Phenol-d6	34		10-120
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	76		15-120
2,4,6-Tribromophenol	94		10-120
4-Terphenyl-d14	78		41-149

Project Name: SITE1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708376
Report Date: 03/27/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 03/21/17 15:33
Analyst: KL

Extraction Method: EPA 3510C
Extraction Date: 03/21/17 06:37

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-05,12-21 Batch: WG986854-1					
Acenaphthene	ND		ug/l	0.10	0.04
2-Chloronaphthalene	ND		ug/l	0.20	0.04
Fluoranthene	ND		ug/l	0.20	0.04
Hexachlorobutadiene	ND		ug/l	0.50	0.04
Naphthalene	ND		ug/l	0.20	0.04
Benzo(a)anthracene	ND		ug/l	0.20	0.02
Benzo(a)pyrene	ND		ug/l	0.20	0.04
Benzo(b)fluoranthene	ND		ug/l	0.20	0.02
Benzo(k)fluoranthene	ND		ug/l	0.20	0.04
Chrysene	ND		ug/l	0.20	0.04
Acenaphthylene	ND		ug/l	0.20	0.04
Anthracene	ND		ug/l	0.20	0.04
Benzo(ghi)perylene	ND		ug/l	0.20	0.04
Fluorene	ND		ug/l	0.20	0.04
Phenanthrene	0.02	J	ug/l	0.20	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.04
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.20	0.04
Pyrene	ND		ug/l	0.20	0.04
Pentachlorophenol	ND		ug/l	0.80	0.22
Hexachlorobenzene	ND		ug/l	0.80	0.03
Hexachloroethane	ND		ug/l	0.80	0.03

Project Name: SITE1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708376
Report Date: 03/27/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 03/21/17 15:33
Analyst: KL

Extraction Method: EPA 3510C
Extraction Date: 03/21/17 06:37

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-05,12-21 Batch: WG986854-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	39		21-120
Phenol-d6	28		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	73		15-120
2,4,6-Tribromophenol	69		10-120
4-Terphenyl-d14	65		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708376

Project Number: Not Specified

Report Date: 03/27/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05,12-21 Batch: WG986851-2 WG986851-3								
Benzidine	5	Q	34		10-75	147	Q	30
1,2,4-Trichlorobenzene	73		73		39-98	0		30
Bis(2-chloroethyl)ether	72		75		40-140	4		30
3,3'-Dichlorobenzidine	74		63		40-140	16		30
2,4-Dinitrotoluene	87		92		48-143	6		30
2,6-Dinitrotoluene	91		95		40-140	4		30
Azobenzene	82		87		40-140	6		30
4-Chlorophenyl phenyl ether	81		87		40-140	7		30
4-Bromophenyl phenyl ether	90		95		40-140	5		30
Bis(2-chloroisopropyl)ether	68		71		40-140	4		30
Bis(2-chloroethoxy)methane	78		83		40-140	6		30
Hexachlorocyclopentadiene	69		70		40-140	1		30
Isophorone	82		85		40-140	4		30
Nitrobenzene	76		80		40-140	5		30
NDPA/DPA	85		90		40-140	6		30
n-Nitrosodi-n-propylamine	80		83		29-132	4		30
Bis(2-ethylhexyl)phthalate	84		91		40-140	8		30
Butyl benzyl phthalate	76		81		40-140	6		30
Di-n-butylphthalate	83		90		40-140	8		30
Di-n-octylphthalate	87		92		40-140	6		30
Diethyl phthalate	84		90		40-140	7		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708376

Project Number: Not Specified

Report Date: 03/27/17

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05,12-21 Batch: WG986851-2 WG986851-3								
Dimethyl phthalate	88		92		40-140	4		30
n-Nitrosodimethylamine	44		45		22-74	2		30
2,4,6-Trichlorophenol	90		95		30-130	5		30
p-Chloro-m-cresol	87		92		23-97	6		30
2-Chlorophenol	76		80		27-123	5		30
2,4-Dichlorophenol	87		92		30-130	6		30
2,4-Dimethylphenol	81		90		30-130	11		30
2-Nitrophenol	83		88		30-130	6		30
4-Nitrophenol	62		66		10-80	6		30
2,4-Dinitrophenol	72		77		20-130	7		30
4,6-Dinitro-o-cresol	93		98		20-164	5		30
Phenol	35		36		12-110	3		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
2-Fluorophenol	52		54		21-120
Phenol-d6	37		37		10-120
Nitrobenzene-d5	76		80		23-120
2-Fluorobiphenyl	78		83		15-120
2,4,6-Tribromophenol	94		101		10-120
4-Terphenyl-d14	73		89		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708376

Project Number: Not Specified

Report Date: 03/27/17

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-05,12-21 Batch: WG986854-2 WG986854-3								
Acenaphthene	62		68		37-111	9		40
2-Chloronaphthalene	69		72		40-140	4		40
Fluoranthene	63		70		40-140	11		40
Hexachlorobutadiene	62		71		40-140	14		40
Naphthalene	62		68		40-140	9		40
Benzo(a)anthracene	62		68		40-140	9		40
Benzo(a)pyrene	63		72		40-140	13		40
Benzo(b)fluoranthene	79		67		40-140	16		40
Benzo(k)fluoranthene	66		76		40-140	14		40
Chrysene	65		77		40-140	17		40
Acenaphthylene	72		76		40-140	5		40
Anthracene	65		72		40-140	10		40
Benzo(ghi)perylene	63		78		40-140	21		40
Fluorene	64		65		40-140	2		40
Phenanthrene	61		68		40-140	11		40
Dibenzo(a,h)anthracene	64		80		40-140	22		40
Indeno(1,2,3-cd)pyrene	64		78		40-140	20		40
Pyrene	62		68		26-127	9		40
Pentachlorophenol	58		65		9-103	11		40
Hexachlorobenzene	63		68		40-140	8		40
Hexachloroethane	59		64		40-140	8		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708376

Project Number: Not Specified

Report Date: 03/27/17

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-05,12-21 Batch: WG986854-2 WG986854-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	37		41		21-120
Phenol-d6	28		29		10-120
Nitrobenzene-d5	62		68		23-120
2-Fluorobiphenyl	68		70		15-120
2,4,6-Tribromophenol	69		76		10-120
4-Terphenyl-d14	68		71		41-149

METALS

Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708376

Project Number: Not Specified

Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708376-01

Date Collected: 03/20/17 12:35

Client ID: SW-1

Date Received: 03/20/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	0.00198	J	mg/l	0.00400	0.00042	1	03/21/17 18:51	03/22/17 10:45	EPA 3005A	1,6020A	BV
Arsenic, Total	0.00938		mg/l	0.00050	0.00016	1	03/21/17 18:51	03/22/17 10:45	EPA 3005A	1,6020A	BV
Barium, Total	0.1352		mg/l	0.00050	0.00017	1	03/21/17 18:51	03/22/17 10:45	EPA 3005A	1,6020A	BV
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	03/21/17 18:51	03/22/17 10:45	EPA 3005A	1,6020A	BV
Cadmium, Total	0.00024		mg/l	0.00020	0.00005	1	03/21/17 18:51	03/22/17 10:45	EPA 3005A	1,6020A	BV
Chromium, Total	0.00207		mg/l	0.00100	0.00017	1	03/21/17 18:51	03/22/17 10:45	EPA 3005A	1,6020A	BV
Copper, Total	0.02342		mg/l	0.00100	0.00038	1	03/21/17 18:51	03/22/17 10:45	EPA 3005A	1,6020A	BV
Lead, Total	0.02829		mg/l	0.00100	0.00034	1	03/21/17 18:51	03/22/17 10:45	EPA 3005A	1,6020A	BV
Mercury, Total	ND		mg/l	0.00020	0.00006	1	03/21/17 11:38	03/21/17 21:20	EPA 7470A	1,7470A	EA
Nickel, Total	0.00724		mg/l	0.00200	0.00055	1	03/21/17 18:51	03/22/17 10:45	EPA 3005A	1,6020A	BV
Selenium, Total	ND		mg/l	0.00500	0.00173	1	03/21/17 18:51	03/22/17 10:45	EPA 3005A	1,6020A	BV
Silver, Total	ND		mg/l	0.00040	0.00016	1	03/21/17 18:51	03/22/17 10:45	EPA 3005A	1,6020A	BV
Thallium, Total	ND		mg/l	0.00050	0.00014	1	03/21/17 18:51	03/22/17 10:45	EPA 3005A	1,6020A	BV
Zinc, Total	0.1098		mg/l	0.01000	0.00341	1	03/21/17 18:51	03/22/17 10:45	EPA 3005A	1,6020A	BV
Dissolved Metals - Mansfield Lab											
Antimony, Dissolved	0.00152	J	mg/l	0.00400	0.00042	1	03/22/17 14:50	03/23/17 09:20	EPA 3005A	1,6020A	AM
Arsenic, Dissolved	0.00072		mg/l	0.00050	0.00016	1	03/22/17 14:50	03/23/17 09:20	EPA 3005A	1,6020A	AM
Barium, Dissolved	0.09076		mg/l	0.00050	0.00017	1	03/22/17 14:50	03/23/17 09:20	EPA 3005A	1,6020A	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	03/22/17 14:50	03/23/17 09:20	EPA 3005A	1,6020A	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	03/22/17 14:50	03/23/17 09:20	EPA 3005A	1,6020A	AM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	03/22/17 14:50	03/23/17 09:20	EPA 3005A	1,6020A	AM
Copper, Dissolved	0.00270		mg/l	0.00100	0.00038	1	03/22/17 14:50	03/23/17 09:20	EPA 3005A	1,6020A	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	03/22/17 14:50	03/23/17 09:20	EPA 3005A	1,6020A	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	03/23/17 10:06	03/23/17 18:22	EPA 7470A	1,7470A	EA
Nickel, Dissolved	0.00253		mg/l	0.00200	0.00055	1	03/22/17 14:50	03/23/17 09:20	EPA 3005A	1,6020A	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	03/22/17 14:50	03/23/17 09:20	EPA 3005A	1,6020A	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	03/22/17 14:50	03/23/17 09:20	EPA 3005A	1,6020A	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	03/22/17 14:50	03/23/17 09:20	EPA 3005A	1,6020A	AM
Zinc, Dissolved	0.00808	J	mg/l	0.01000	0.00341	1	03/22/17 14:50	03/23/17 09:20	EPA 3005A	1,6020A	AM



Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708376

Project Number: Not Specified

Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708376-02
 Client ID: SW-2
 Sample Location: STATEN ISLAND, NY
 Matrix: Water

Date Collected: 03/20/17 12:10
 Date Received: 03/20/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	0.00173	J	mg/l	0.00400	0.00042	1	03/21/17 18:51	03/22/17 11:08	EPA 3005A	1,6020A	BV
Arsenic, Total	0.01522		mg/l	0.00050	0.00016	1	03/21/17 18:51	03/22/17 11:08	EPA 3005A	1,6020A	BV
Barium, Total	0.1862		mg/l	0.00050	0.00017	1	03/21/17 18:51	03/22/17 11:08	EPA 3005A	1,6020A	BV
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	03/21/17 18:51	03/22/17 11:08	EPA 3005A	1,6020A	BV
Cadmium, Total	0.00037		mg/l	0.00020	0.00005	1	03/21/17 18:51	03/22/17 11:08	EPA 3005A	1,6020A	BV
Chromium, Total	0.00522		mg/l	0.00100	0.00017	1	03/21/17 18:51	03/22/17 11:08	EPA 3005A	1,6020A	BV
Copper, Total	0.03494		mg/l	0.00100	0.00038	1	03/21/17 18:51	03/22/17 11:08	EPA 3005A	1,6020A	BV
Lead, Total	0.04578		mg/l	0.00100	0.00034	1	03/21/17 18:51	03/22/17 11:08	EPA 3005A	1,6020A	BV
Mercury, Total	ND		mg/l	0.00020	0.00006	1	03/21/17 11:38	03/21/17 21:25	EPA 7470A	1,7470A	EA
Nickel, Total	0.00896		mg/l	0.00200	0.00055	1	03/21/17 18:51	03/22/17 11:08	EPA 3005A	1,6020A	BV
Selenium, Total	ND		mg/l	0.00500	0.00173	1	03/21/17 18:51	03/22/17 11:08	EPA 3005A	1,6020A	BV
Silver, Total	ND		mg/l	0.00040	0.00016	1	03/21/17 18:51	03/22/17 11:08	EPA 3005A	1,6020A	BV
Thallium, Total	ND		mg/l	0.00050	0.00014	1	03/21/17 18:51	03/22/17 11:08	EPA 3005A	1,6020A	BV
Zinc, Total	0.1670		mg/l	0.01000	0.00341	1	03/21/17 18:51	03/22/17 11:08	EPA 3005A	1,6020A	BV
Dissolved Metals - Mansfield Lab											
Antimony, Dissolved	0.00104	J	mg/l	0.00400	0.00042	1	03/22/17 14:50	03/23/17 09:27	EPA 3005A	1,6020A	AM
Arsenic, Dissolved	0.00058		mg/l	0.00050	0.00016	1	03/22/17 14:50	03/23/17 09:27	EPA 3005A	1,6020A	AM
Barium, Dissolved	0.09158		mg/l	0.00050	0.00017	1	03/22/17 14:50	03/23/17 09:27	EPA 3005A	1,6020A	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	03/22/17 14:50	03/23/17 09:27	EPA 3005A	1,6020A	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	03/22/17 14:50	03/23/17 09:27	EPA 3005A	1,6020A	AM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	03/22/17 14:50	03/23/17 09:27	EPA 3005A	1,6020A	AM
Copper, Dissolved	0.00219		mg/l	0.00100	0.00038	1	03/22/17 14:50	03/23/17 09:27	EPA 3005A	1,6020A	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	03/22/17 14:50	03/23/17 09:27	EPA 3005A	1,6020A	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	03/23/17 10:06	03/23/17 18:17	EPA 7470A	1,7470A	EA
Nickel, Dissolved	0.00236		mg/l	0.00200	0.00055	1	03/22/17 14:50	03/23/17 09:27	EPA 3005A	1,6020A	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	03/22/17 14:50	03/23/17 09:27	EPA 3005A	1,6020A	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	03/22/17 14:50	03/23/17 09:27	EPA 3005A	1,6020A	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	03/22/17 14:50	03/23/17 09:27	EPA 3005A	1,6020A	AM
Zinc, Dissolved	0.00746	J	mg/l	0.01000	0.00341	1	03/22/17 14:50	03/23/17 09:27	EPA 3005A	1,6020A	AM



Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708376

Project Number: Not Specified

Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708376-03
 Client ID: SW-3
 Sample Location: STATEN ISLAND, NY
 Matrix: Water

Date Collected: 03/20/17 11:55
 Date Received: 03/20/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	0.00244	J	mg/l	0.00400	0.00042	1	03/21/17 18:51	03/22/17 11:13	EPA 3005A	1,6020A	BV
Arsenic, Total	0.00612		mg/l	0.00050	0.00016	1	03/21/17 18:51	03/22/17 11:13	EPA 3005A	1,6020A	BV
Barium, Total	0.1031		mg/l	0.00050	0.00017	1	03/21/17 18:51	03/22/17 11:13	EPA 3005A	1,6020A	BV
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	03/21/17 18:51	03/22/17 11:13	EPA 3005A	1,6020A	BV
Cadmium, Total	0.00021		mg/l	0.00020	0.00005	1	03/21/17 18:51	03/22/17 11:13	EPA 3005A	1,6020A	BV
Chromium, Total	0.00226		mg/l	0.00100	0.00017	1	03/21/17 18:51	03/22/17 11:13	EPA 3005A	1,6020A	BV
Copper, Total	0.01135		mg/l	0.00100	0.00038	1	03/21/17 18:51	03/22/17 11:13	EPA 3005A	1,6020A	BV
Lead, Total	0.01242		mg/l	0.00100	0.00034	1	03/21/17 18:51	03/22/17 11:13	EPA 3005A	1,6020A	BV
Mercury, Total	ND		mg/l	0.00020	0.00006	1	03/21/17 11:38	03/21/17 21:31	EPA 7470A	1,7470A	EA
Nickel, Total	0.00446		mg/l	0.00200	0.00055	1	03/21/17 18:51	03/22/17 11:13	EPA 3005A	1,6020A	BV
Selenium, Total	ND		mg/l	0.00500	0.00173	1	03/21/17 18:51	03/22/17 11:13	EPA 3005A	1,6020A	BV
Silver, Total	ND		mg/l	0.00040	0.00016	1	03/21/17 18:51	03/22/17 11:13	EPA 3005A	1,6020A	BV
Thallium, Total	ND		mg/l	0.00050	0.00014	1	03/21/17 18:51	03/22/17 11:13	EPA 3005A	1,6020A	BV
Zinc, Total	0.1049		mg/l	0.01000	0.00341	1	03/21/17 18:51	03/22/17 11:13	EPA 3005A	1,6020A	BV
Dissolved Metals - Mansfield Lab											
Antimony, Dissolved	0.00109	J	mg/l	0.00400	0.00042	1	03/22/17 14:50	03/23/17 09:30	EPA 3005A	1,6020A	AM
Arsenic, Dissolved	0.00095		mg/l	0.00050	0.00016	1	03/22/17 14:50	03/23/17 09:30	EPA 3005A	1,6020A	AM
Barium, Dissolved	0.09834		mg/l	0.00050	0.00017	1	03/22/17 14:50	03/23/17 09:30	EPA 3005A	1,6020A	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	03/22/17 14:50	03/23/17 09:30	EPA 3005A	1,6020A	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	03/22/17 14:50	03/23/17 09:30	EPA 3005A	1,6020A	AM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	03/22/17 14:50	03/23/17 09:30	EPA 3005A	1,6020A	AM
Copper, Dissolved	0.00119		mg/l	0.00100	0.00038	1	03/22/17 14:50	03/23/17 09:30	EPA 3005A	1,6020A	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	03/22/17 14:50	03/23/17 09:30	EPA 3005A	1,6020A	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	03/23/17 10:06	03/23/17 18:24	EPA 7470A	1,7470A	EA
Nickel, Dissolved	0.00366		mg/l	0.00200	0.00055	1	03/22/17 14:50	03/23/17 09:30	EPA 3005A	1,6020A	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	03/22/17 14:50	03/23/17 09:30	EPA 3005A	1,6020A	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	03/22/17 14:50	03/23/17 09:30	EPA 3005A	1,6020A	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	03/22/17 14:50	03/23/17 09:30	EPA 3005A	1,6020A	AM
Zinc, Dissolved	0.04989		mg/l	0.01000	0.00341	1	03/22/17 14:50	03/23/17 09:30	EPA 3005A	1,6020A	AM



Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708376

Project Number: Not Specified

Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708376-04
 Client ID: SW-4
 Sample Location: STATEN ISLAND, NY
 Matrix: Water

Date Collected: 03/20/17 11:40
 Date Received: 03/20/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	0.00342	J	mg/l	0.00400	0.00042	1	03/21/17 18:51	03/22/17 11:36	EPA 3005A	1,6020A	BV
Arsenic, Total	0.00440		mg/l	0.00050	0.00016	1	03/21/17 18:51	03/22/17 11:36	EPA 3005A	1,6020A	BV
Barium, Total	0.08085		mg/l	0.00050	0.00017	1	03/21/17 18:51	03/22/17 11:36	EPA 3005A	1,6020A	BV
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	03/21/17 18:51	03/22/17 11:36	EPA 3005A	1,6020A	BV
Cadmium, Total	0.00014	J	mg/l	0.00020	0.00005	1	03/21/17 18:51	03/22/17 11:36	EPA 3005A	1,6020A	BV
Chromium, Total	0.00165		mg/l	0.00100	0.00017	1	03/21/17 18:51	03/22/17 11:36	EPA 3005A	1,6020A	BV
Copper, Total	0.00670		mg/l	0.00100	0.00038	1	03/21/17 18:51	03/22/17 11:36	EPA 3005A	1,6020A	BV
Lead, Total	0.00704		mg/l	0.00100	0.00034	1	03/21/17 18:51	03/22/17 11:36	EPA 3005A	1,6020A	BV
Mercury, Total	ND		mg/l	0.00020	0.00006	1	03/21/17 11:38	03/21/17 21:33	EPA 7470A	1,7470A	EA
Nickel, Total	0.00388		mg/l	0.00200	0.00055	1	03/21/17 18:51	03/22/17 11:36	EPA 3005A	1,6020A	BV
Selenium, Total	ND		mg/l	0.00500	0.00173	1	03/21/17 18:51	03/22/17 11:36	EPA 3005A	1,6020A	BV
Silver, Total	ND		mg/l	0.00040	0.00016	1	03/21/17 18:51	03/22/17 11:36	EPA 3005A	1,6020A	BV
Thallium, Total	ND		mg/l	0.00050	0.00014	1	03/21/17 18:51	03/22/17 11:36	EPA 3005A	1,6020A	BV
Zinc, Total	0.07143		mg/l	0.01000	0.00341	1	03/21/17 18:51	03/22/17 11:36	EPA 3005A	1,6020A	BV
Dissolved Metals - Mansfield Lab											
Antimony, Dissolved	0.00208	J	mg/l	0.00400	0.00042	1	03/22/17 14:50	03/23/17 09:42	EPA 3005A	1,6020A	AM
Arsenic, Dissolved	0.00146		mg/l	0.00050	0.00016	1	03/22/17 14:50	03/23/17 09:42	EPA 3005A	1,6020A	AM
Barium, Dissolved	0.07620		mg/l	0.00050	0.00017	1	03/22/17 14:50	03/23/17 09:42	EPA 3005A	1,6020A	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	03/22/17 14:50	03/23/17 09:42	EPA 3005A	1,6020A	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	03/22/17 14:50	03/23/17 09:42	EPA 3005A	1,6020A	AM
Chromium, Dissolved	0.00032	J	mg/l	0.00100	0.00017	1	03/22/17 14:50	03/23/17 09:42	EPA 3005A	1,6020A	AM
Copper, Dissolved	0.00176		mg/l	0.00100	0.00038	1	03/22/17 14:50	03/23/17 09:42	EPA 3005A	1,6020A	AM
Lead, Dissolved	0.00048	J	mg/l	0.00100	0.00034	1	03/22/17 14:50	03/23/17 09:42	EPA 3005A	1,6020A	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	03/23/17 10:06	03/23/17 18:26	EPA 7470A	1,7470A	EA
Nickel, Dissolved	0.00350		mg/l	0.00200	0.00055	1	03/22/17 14:50	03/23/17 09:42	EPA 3005A	1,6020A	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	03/22/17 14:50	03/23/17 09:42	EPA 3005A	1,6020A	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	03/22/17 14:50	03/23/17 09:42	EPA 3005A	1,6020A	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	03/22/17 14:50	03/23/17 09:42	EPA 3005A	1,6020A	AM
Zinc, Dissolved	0.03102		mg/l	0.01000	0.00341	1	03/22/17 14:50	03/23/17 09:42	EPA 3005A	1,6020A	AM



Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708376

Project Number: Not Specified

Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708376-05
 Client ID: SW-5
 Sample Location: STATEN ISLAND, NY
 Matrix: Water

Date Collected: 03/20/17 10:40
 Date Received: 03/20/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	0.00262	J	mg/l	0.00400	0.00042	1	03/21/17 18:51	03/22/17 11:40	EPA 3005A	1,6020A	BV
Arsenic, Total	0.00543		mg/l	0.00050	0.00016	1	03/21/17 18:51	03/22/17 11:40	EPA 3005A	1,6020A	BV
Barium, Total	0.06622		mg/l	0.00050	0.00017	1	03/21/17 18:51	03/22/17 11:40	EPA 3005A	1,6020A	BV
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	03/21/17 18:51	03/22/17 11:40	EPA 3005A	1,6020A	BV
Cadmium, Total	0.00019	J	mg/l	0.00020	0.00005	1	03/21/17 18:51	03/22/17 11:40	EPA 3005A	1,6020A	BV
Chromium, Total	0.00411		mg/l	0.00100	0.00017	1	03/21/17 18:51	03/22/17 11:40	EPA 3005A	1,6020A	BV
Copper, Total	0.00914		mg/l	0.00100	0.00038	1	03/21/17 18:51	03/22/17 11:40	EPA 3005A	1,6020A	BV
Lead, Total	0.01534		mg/l	0.00100	0.00034	1	03/21/17 18:51	03/22/17 11:40	EPA 3005A	1,6020A	BV
Mercury, Total	0.00011	J	mg/l	0.00020	0.00006	1	03/21/17 11:38	03/21/17 21:35	EPA 7470A	1,7470A	EA
Nickel, Total	0.00446		mg/l	0.00200	0.00055	1	03/21/17 18:51	03/22/17 11:40	EPA 3005A	1,6020A	BV
Selenium, Total	ND		mg/l	0.00500	0.00173	1	03/21/17 18:51	03/22/17 11:40	EPA 3005A	1,6020A	BV
Silver, Total	ND		mg/l	0.00040	0.00016	1	03/21/17 18:51	03/22/17 11:40	EPA 3005A	1,6020A	BV
Thallium, Total	ND		mg/l	0.00050	0.00014	1	03/21/17 18:51	03/22/17 11:40	EPA 3005A	1,6020A	BV
Zinc, Total	0.07334		mg/l	0.01000	0.00341	1	03/21/17 18:51	03/22/17 11:40	EPA 3005A	1,6020A	BV
Dissolved Metals - Mansfield Lab											
Antimony, Dissolved	0.00113	J	mg/l	0.00400	0.00042	1	03/22/17 14:50	03/23/17 09:45	EPA 3005A	1,6020A	AM
Arsenic, Dissolved	0.00154		mg/l	0.00050	0.00016	1	03/22/17 14:50	03/23/17 09:45	EPA 3005A	1,6020A	AM
Barium, Dissolved	0.06070		mg/l	0.00250	0.00086	5	03/22/17 14:50	03/23/17 10:46	EPA 3005A	1,6020A	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	03/22/17 14:50	03/23/17 09:45	EPA 3005A	1,6020A	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	03/22/17 14:50	03/23/17 09:45	EPA 3005A	1,6020A	AM
Chromium, Dissolved	0.00032	J	mg/l	0.00100	0.00017	1	03/22/17 14:50	03/23/17 09:45	EPA 3005A	1,6020A	AM
Copper, Dissolved	0.00081	J	mg/l	0.00100	0.00038	1	03/22/17 14:50	03/23/17 09:45	EPA 3005A	1,6020A	AM
Lead, Dissolved	ND		mg/l	0.00500	0.00171	5	03/22/17 14:50	03/23/17 10:46	EPA 3005A	1,6020A	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	03/23/17 10:06	03/23/17 18:27	EPA 7470A	1,7470A	EA
Nickel, Dissolved	0.00323		mg/l	0.00200	0.00055	1	03/22/17 14:50	03/23/17 09:45	EPA 3005A	1,6020A	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	03/22/17 14:50	03/23/17 09:45	EPA 3005A	1,6020A	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	03/22/17 14:50	03/23/17 09:45	EPA 3005A	1,6020A	AM
Thallium, Dissolved	ND		mg/l	0.00250	0.00071	5	03/22/17 14:50	03/23/17 10:46	EPA 3005A	1,6020A	AM
Zinc, Dissolved	0.01683		mg/l	0.01000	0.00341	1	03/22/17 14:50	03/23/17 09:45	EPA 3005A	1,6020A	AM



Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708376

Project Number: Not Specified

Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708376-08

Date Collected: 03/20/17 10:17

Client ID: PRW-7A

Date Received: 03/20/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Magnesium, Total	0.281		mg/l	0.0700	0.0242	1	03/21/17 18:51	03/22/17 11:45	EPA 3005A	1,6020A	BV



Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-09

Date Collected: 03/20/17 11:32

Client ID: PRW-7B

Date Received: 03/20/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Magnesium, Total	29.4		mg/l	0.0700	0.0242	1	03/21/17 18:51	03/22/17 11:49	EPA 3005A	1,6020A	BV



Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-10

Date Collected: 03/20/17 12:47

Client ID: PRW-7C

Date Received: 03/20/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Magnesium, Total	12.4		mg/l	0.0700	0.0242	1	03/21/17 18:51	03/22/17 11:54	EPA 3005A	1,6020A	BV



Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**SAMPLE RESULTS**

Lab ID: L1708376-11

Date Collected: 03/20/17 14:23

Client ID: PRW-7D

Date Received: 03/20/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Magnesium, Total	39.5		mg/l	0.0700	0.0242	1	03/21/17 18:51	03/22/17 11:59	EPA 3005A	1,6020A	BV



Project Name: SITE1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708376
Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708376-12
 Client ID: PRW-09
 Sample Location: STATEN ISLAND, NY
 Matrix: Water

Date Collected: 03/20/17 10:41
 Date Received: 03/20/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	0.00060	J	mg/l	0.00400	0.00042	1	03/21/17 18:51	03/22/17 13:52	EPA 3005A	1,6020A	AM
Arsenic, Total	0.02502		mg/l	0.00050	0.00016	1	03/21/17 18:51	03/22/17 13:52	EPA 3005A	1,6020A	AM
Barium, Total	0.00469		mg/l	0.00050	0.00017	1	03/21/17 18:51	03/22/17 13:52	EPA 3005A	1,6020A	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	03/21/17 18:51	03/22/17 13:52	EPA 3005A	1,6020A	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	03/21/17 18:51	03/22/17 13:52	EPA 3005A	1,6020A	AM
Chromium, Total	0.00052	J	mg/l	0.00100	0.00017	1	03/21/17 18:51	03/22/17 13:52	EPA 3005A	1,6020A	AM
Copper, Total	0.00499		mg/l	0.00100	0.00038	1	03/21/17 18:51	03/22/17 13:52	EPA 3005A	1,6020A	AM
Lead, Total	0.00101		mg/l	0.00100	0.00034	1	03/21/17 18:51	03/22/17 13:52	EPA 3005A	1,6020A	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	03/21/17 11:38	03/21/17 21:37	EPA 7470A	1,7470A	EA
Nickel, Total	0.00089	J	mg/l	0.00200	0.00055	1	03/21/17 18:51	03/22/17 13:52	EPA 3005A	1,6020A	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	03/21/17 18:51	03/22/17 13:52	EPA 3005A	1,6020A	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	03/21/17 18:51	03/22/17 13:52	EPA 3005A	1,6020A	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	03/21/17 18:51	03/22/17 13:52	EPA 3005A	1,6020A	AM
Zinc, Total	0.00352	J	mg/l	0.01000	0.00341	1	03/21/17 18:51	03/22/17 13:52	EPA 3005A	1,6020A	AM
Dissolved Metals - Mansfield Lab											
Antimony, Dissolved	ND		mg/l	0.00400	0.00042	1	03/22/17 14:50	03/23/17 09:49	EPA 3005A	1,6020A	AM
Arsenic, Dissolved	0.02413		mg/l	0.00050	0.00016	1	03/22/17 14:50	03/23/17 09:49	EPA 3005A	1,6020A	AM
Barium, Dissolved	0.00139		mg/l	0.00050	0.00017	1	03/22/17 14:50	03/23/17 09:49	EPA 3005A	1,6020A	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	03/22/17 14:50	03/23/17 09:49	EPA 3005A	1,6020A	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	03/22/17 14:50	03/23/17 09:49	EPA 3005A	1,6020A	AM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	03/22/17 14:50	03/23/17 09:49	EPA 3005A	1,6020A	AM
Copper, Dissolved	0.00158		mg/l	0.00100	0.00038	1	03/22/17 14:50	03/23/17 09:49	EPA 3005A	1,6020A	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	03/22/17 14:50	03/23/17 09:49	EPA 3005A	1,6020A	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	03/23/17 10:06	03/23/17 18:33	EPA 7470A	1,7470A	EA
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	03/22/17 14:50	03/23/17 09:49	EPA 3005A	1,6020A	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	03/22/17 14:50	03/23/17 09:49	EPA 3005A	1,6020A	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	03/22/17 14:50	03/23/17 09:49	EPA 3005A	1,6020A	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	03/22/17 14:50	03/23/17 09:49	EPA 3005A	1,6020A	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	03/22/17 14:50	03/23/17 09:49	EPA 3005A	1,6020A	AM



Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708376

Project Number: Not Specified

Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708376-13
 Client ID: PRW-05
 Sample Location: STATEN ISLAND, NY
 Matrix: Water

Date Collected: 03/20/17 12:16
 Date Received: 03/20/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	0.00102	J	mg/l	0.00400	0.00042	1	03/21/17 18:51	03/22/17 12:08	EPA 3005A	1,6020A	BV
Arsenic, Total	0.02156		mg/l	0.00050	0.00016	1	03/21/17 18:51	03/22/17 12:08	EPA 3005A	1,6020A	BV
Barium, Total	0.03635		mg/l	0.00050	0.00017	1	03/21/17 18:51	03/22/17 12:08	EPA 3005A	1,6020A	BV
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	03/21/17 18:51	03/22/17 12:08	EPA 3005A	1,6020A	BV
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	03/21/17 18:51	03/22/17 12:08	EPA 3005A	1,6020A	BV
Chromium, Total	0.00148		mg/l	0.00100	0.00017	1	03/21/17 18:51	03/22/17 12:08	EPA 3005A	1,6020A	BV
Copper, Total	0.01398		mg/l	0.00100	0.00038	1	03/21/17 18:51	03/22/17 12:08	EPA 3005A	1,6020A	BV
Lead, Total	0.00184		mg/l	0.00100	0.00034	1	03/21/17 18:51	03/22/17 12:08	EPA 3005A	1,6020A	BV
Mercury, Total	ND		mg/l	0.00020	0.00006	1	03/21/17 11:38	03/21/17 21:38	EPA 7470A	1,7470A	EA
Nickel, Total	0.01036		mg/l	0.00200	0.00055	1	03/21/17 18:51	03/22/17 12:08	EPA 3005A	1,6020A	BV
Selenium, Total	ND		mg/l	0.00500	0.00173	1	03/21/17 18:51	03/22/17 12:08	EPA 3005A	1,6020A	BV
Silver, Total	ND		mg/l	0.00040	0.00016	1	03/21/17 18:51	03/22/17 12:08	EPA 3005A	1,6020A	BV
Thallium, Total	ND		mg/l	0.00050	0.00014	1	03/21/17 18:51	03/22/17 12:08	EPA 3005A	1,6020A	BV
Zinc, Total	0.02241		mg/l	0.01000	0.00341	1	03/21/17 18:51	03/22/17 12:08	EPA 3005A	1,6020A	BV
Dissolved Metals - Mansfield Lab											
Antimony, Dissolved	0.00107	J	mg/l	0.00400	0.00042	1	03/22/17 14:50	03/23/17 09:52	EPA 3005A	1,6020A	AM
Arsenic, Dissolved	0.00544		mg/l	0.00050	0.00016	1	03/22/17 14:50	03/23/17 09:52	EPA 3005A	1,6020A	AM
Barium, Dissolved	0.02811		mg/l	0.00050	0.00017	1	03/22/17 14:50	03/23/17 09:52	EPA 3005A	1,6020A	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	03/22/17 14:50	03/23/17 09:52	EPA 3005A	1,6020A	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	03/22/17 14:50	03/23/17 09:52	EPA 3005A	1,6020A	AM
Chromium, Dissolved	0.00024	J	mg/l	0.00100	0.00017	1	03/22/17 14:50	03/23/17 09:52	EPA 3005A	1,6020A	AM
Copper, Dissolved	0.00242		mg/l	0.00100	0.00038	1	03/22/17 14:50	03/23/17 09:52	EPA 3005A	1,6020A	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	03/22/17 14:50	03/23/17 09:52	EPA 3005A	1,6020A	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	03/23/17 10:06	03/23/17 18:34	EPA 7470A	1,7470A	EA
Nickel, Dissolved	0.00809		mg/l	0.00200	0.00055	1	03/22/17 14:50	03/23/17 09:52	EPA 3005A	1,6020A	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	03/22/17 14:50	03/23/17 09:52	EPA 3005A	1,6020A	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	03/22/17 14:50	03/23/17 09:52	EPA 3005A	1,6020A	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	03/22/17 14:50	03/23/17 09:52	EPA 3005A	1,6020A	AM
Zinc, Dissolved	0.01183		mg/l	0.01000	0.00341	1	03/22/17 14:50	03/23/17 09:52	EPA 3005A	1,6020A	AM



Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708376

Project Number: Not Specified

Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708376-14
 Client ID: PRW-03
 Sample Location: STATEN ISLAND, NY
 Matrix: Water

Date Collected: 03/20/17 14:01
 Date Received: 03/20/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	0.00046	J	mg/l	0.00400	0.00042	1	03/21/17 18:51	03/22/17 12:12	EPA 3005A	1,6020A	BV
Arsenic, Total	0.01045		mg/l	0.00050	0.00016	1	03/21/17 18:51	03/22/17 12:12	EPA 3005A	1,6020A	BV
Barium, Total	0.03824		mg/l	0.00050	0.00017	1	03/21/17 18:51	03/22/17 12:12	EPA 3005A	1,6020A	BV
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	03/21/17 18:51	03/22/17 12:12	EPA 3005A	1,6020A	BV
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	03/21/17 18:51	03/22/17 12:12	EPA 3005A	1,6020A	BV
Chromium, Total	0.00040	J	mg/l	0.00100	0.00017	1	03/21/17 18:51	03/22/17 12:12	EPA 3005A	1,6020A	BV
Copper, Total	0.00094	J	mg/l	0.00100	0.00038	1	03/21/17 18:51	03/22/17 12:12	EPA 3005A	1,6020A	BV
Lead, Total	0.00045	J	mg/l	0.00100	0.00034	1	03/21/17 18:51	03/22/17 12:12	EPA 3005A	1,6020A	BV
Mercury, Total	ND		mg/l	0.00020	0.00006	1	03/21/17 11:38	03/21/17 21:40	EPA 7470A	1,7470A	EA
Nickel, Total	0.00215		mg/l	0.00200	0.00055	1	03/21/17 18:51	03/22/17 12:12	EPA 3005A	1,6020A	BV
Selenium, Total	ND		mg/l	0.00500	0.00173	1	03/21/17 18:51	03/22/17 12:12	EPA 3005A	1,6020A	BV
Silver, Total	ND		mg/l	0.00040	0.00016	1	03/21/17 18:51	03/22/17 12:12	EPA 3005A	1,6020A	BV
Thallium, Total	ND		mg/l	0.00050	0.00014	1	03/21/17 18:51	03/22/17 12:12	EPA 3005A	1,6020A	BV
Zinc, Total	0.00410	J	mg/l	0.01000	0.00341	1	03/21/17 18:51	03/22/17 12:12	EPA 3005A	1,6020A	BV
Dissolved Metals - Mansfield Lab											
Antimony, Dissolved	0.00052	J	mg/l	0.00400	0.00042	1	03/22/17 14:50	03/23/17 09:55	EPA 3005A	1,6020A	AM
Arsenic, Dissolved	0.00665		mg/l	0.00050	0.00016	1	03/22/17 14:50	03/23/17 09:55	EPA 3005A	1,6020A	AM
Barium, Dissolved	0.03382		mg/l	0.00050	0.00017	1	03/22/17 14:50	03/23/17 09:55	EPA 3005A	1,6020A	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	03/22/17 14:50	03/23/17 09:55	EPA 3005A	1,6020A	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	03/22/17 14:50	03/23/17 09:55	EPA 3005A	1,6020A	AM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	03/22/17 14:50	03/23/17 09:55	EPA 3005A	1,6020A	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	03/22/17 14:50	03/23/17 09:55	EPA 3005A	1,6020A	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	03/22/17 14:50	03/23/17 09:55	EPA 3005A	1,6020A	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	03/23/17 10:06	03/23/17 18:36	EPA 7470A	1,7470A	EA
Nickel, Dissolved	0.00220		mg/l	0.00200	0.00055	1	03/22/17 14:50	03/23/17 09:55	EPA 3005A	1,6020A	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	03/22/17 14:50	03/23/17 09:55	EPA 3005A	1,6020A	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	03/22/17 14:50	03/23/17 09:55	EPA 3005A	1,6020A	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	03/22/17 14:50	03/23/17 09:55	EPA 3005A	1,6020A	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	03/22/17 14:50	03/23/17 09:55	EPA 3005A	1,6020A	AM



Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708376

Project Number: Not Specified

Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708376-15
 Client ID: PRW-01
 Sample Location: STATEN ISLAND, NY
 Matrix: Water

Date Collected: 03/20/17 14:21
 Date Received: 03/20/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	0.00093	J	mg/l	0.00400	0.00042	1	03/21/17 18:51	03/22/17 12:17	EPA 3005A	1,6020A	BV
Arsenic, Total	0.00660		mg/l	0.00050	0.00016	1	03/21/17 18:51	03/22/17 12:17	EPA 3005A	1,6020A	BV
Barium, Total	0.03903		mg/l	0.00050	0.00017	1	03/21/17 18:51	03/22/17 12:17	EPA 3005A	1,6020A	BV
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	03/21/17 18:51	03/22/17 12:17	EPA 3005A	1,6020A	BV
Cadmium, Total	0.00015	J	mg/l	0.00020	0.00005	1	03/21/17 18:51	03/22/17 12:17	EPA 3005A	1,6020A	BV
Chromium, Total	0.01330		mg/l	0.00100	0.00017	1	03/21/17 18:51	03/22/17 12:17	EPA 3005A	1,6020A	BV
Copper, Total	0.03673		mg/l	0.00100	0.00038	1	03/21/17 18:51	03/22/17 12:17	EPA 3005A	1,6020A	BV
Lead, Total	0.01398		mg/l	0.00100	0.00034	1	03/21/17 18:51	03/22/17 12:17	EPA 3005A	1,6020A	BV
Mercury, Total	ND		mg/l	0.00020	0.00006	1	03/21/17 11:38	03/21/17 21:42	EPA 7470A	1,7470A	EA
Nickel, Total	0.00785		mg/l	0.00200	0.00055	1	03/21/17 18:51	03/22/17 12:17	EPA 3005A	1,6020A	BV
Selenium, Total	ND		mg/l	0.00500	0.00173	1	03/21/17 18:51	03/22/17 12:17	EPA 3005A	1,6020A	BV
Silver, Total	ND		mg/l	0.00040	0.00016	1	03/21/17 18:51	03/22/17 12:17	EPA 3005A	1,6020A	BV
Thallium, Total	ND		mg/l	0.00050	0.00014	1	03/21/17 18:51	03/22/17 12:17	EPA 3005A	1,6020A	BV
Zinc, Total	0.1588		mg/l	0.01000	0.00341	1	03/21/17 18:51	03/22/17 12:17	EPA 3005A	1,6020A	BV
Dissolved Metals - Mansfield Lab											
Antimony, Dissolved	0.00106	J	mg/l	0.00400	0.00042	1	03/22/17 14:50	03/23/17 10:26	EPA 3005A	1,6020A	AM
Arsenic, Dissolved	0.00215		mg/l	0.00050	0.00016	1	03/22/17 14:50	03/23/17 10:26	EPA 3005A	1,6020A	AM
Barium, Dissolved	0.00919		mg/l	0.00050	0.00017	1	03/22/17 14:50	03/23/17 10:26	EPA 3005A	1,6020A	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	03/22/17 14:50	03/23/17 10:26	EPA 3005A	1,6020A	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	03/22/17 14:50	03/23/17 10:26	EPA 3005A	1,6020A	AM
Chromium, Dissolved	0.00037	J	mg/l	0.00100	0.00017	1	03/22/17 14:50	03/23/17 10:26	EPA 3005A	1,6020A	AM
Copper, Dissolved	0.00143		mg/l	0.00100	0.00038	1	03/22/17 14:50	03/23/17 10:26	EPA 3005A	1,6020A	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	03/22/17 14:50	03/23/17 10:26	EPA 3005A	1,6020A	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	03/23/17 10:06	03/23/17 18:38	EPA 7470A	1,7470A	EA
Nickel, Dissolved	0.00113	J	mg/l	0.00200	0.00055	1	03/22/17 14:50	03/23/17 10:26	EPA 3005A	1,6020A	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	03/22/17 14:50	03/23/17 10:26	EPA 3005A	1,6020A	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	03/22/17 14:50	03/23/17 10:26	EPA 3005A	1,6020A	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	03/22/17 14:50	03/23/17 10:26	EPA 3005A	1,6020A	AM
Zinc, Dissolved	0.00668	J	mg/l	0.01000	0.00341	1	03/22/17 14:50	03/23/17 10:26	EPA 3005A	1,6020A	AM



Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708376

Project Number: Not Specified

Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708376-16
 Client ID: PRW-12
 Sample Location: STATEN ISLAND, NY
 Matrix: Water

Date Collected: 03/20/17 15:56
 Date Received: 03/20/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	0.00127	J	mg/l	0.00400	0.00042	1	03/21/17 18:51	03/22/17 13:55	EPA 3005A	1,6020A	AM
Arsenic, Total	0.00850		mg/l	0.00050	0.00016	1	03/21/17 18:51	03/22/17 13:55	EPA 3005A	1,6020A	AM
Barium, Total	0.1144		mg/l	0.00050	0.00017	1	03/21/17 18:51	03/22/17 13:55	EPA 3005A	1,6020A	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	03/21/17 18:51	03/22/17 13:55	EPA 3005A	1,6020A	AM
Cadmium, Total	0.00006	J	mg/l	0.00020	0.00005	1	03/21/17 18:51	03/22/17 13:55	EPA 3005A	1,6020A	AM
Chromium, Total	0.00181		mg/l	0.00100	0.00017	1	03/21/17 18:51	03/22/17 13:55	EPA 3005A	1,6020A	AM
Copper, Total	0.00638		mg/l	0.00100	0.00038	1	03/21/17 18:51	03/22/17 13:55	EPA 3005A	1,6020A	AM
Lead, Total	0.00310		mg/l	0.00100	0.00034	1	03/21/17 18:51	03/22/17 13:55	EPA 3005A	1,6020A	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	03/21/17 11:38	03/21/17 21:44	EPA 7470A	1,7470A	EA
Nickel, Total	0.04253		mg/l	0.00200	0.00055	1	03/21/17 18:51	03/22/17 13:55	EPA 3005A	1,6020A	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	03/21/17 18:51	03/22/17 13:55	EPA 3005A	1,6020A	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	03/21/17 18:51	03/22/17 13:55	EPA 3005A	1,6020A	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	03/21/17 18:51	03/22/17 13:55	EPA 3005A	1,6020A	AM
Zinc, Total	0.06087		mg/l	0.01000	0.00341	1	03/21/17 18:51	03/22/17 13:55	EPA 3005A	1,6020A	AM
Dissolved Metals - Mansfield Lab											
Antimony, Dissolved	0.00131	J	mg/l	0.00400	0.00042	1	03/22/17 14:50	03/23/17 10:29	EPA 3005A	1,6020A	AM
Arsenic, Dissolved	0.00786		mg/l	0.00050	0.00016	1	03/22/17 14:50	03/23/17 10:29	EPA 3005A	1,6020A	AM
Barium, Dissolved	0.1056		mg/l	0.00050	0.00017	1	03/22/17 14:50	03/23/17 10:29	EPA 3005A	1,6020A	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	03/22/17 14:50	03/23/17 10:29	EPA 3005A	1,6020A	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	03/22/17 14:50	03/23/17 10:29	EPA 3005A	1,6020A	AM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	03/22/17 14:50	03/23/17 10:29	EPA 3005A	1,6020A	AM
Copper, Dissolved	0.00103		mg/l	0.00100	0.00038	1	03/22/17 14:50	03/23/17 10:29	EPA 3005A	1,6020A	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	03/22/17 14:50	03/23/17 10:29	EPA 3005A	1,6020A	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	03/23/17 10:06	03/23/17 18:40	EPA 7470A	1,7470A	EA
Nickel, Dissolved	0.03896		mg/l	0.00200	0.00055	1	03/22/17 14:50	03/23/17 10:29	EPA 3005A	1,6020A	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	03/22/17 14:50	03/23/17 10:29	EPA 3005A	1,6020A	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	03/22/17 14:50	03/23/17 10:29	EPA 3005A	1,6020A	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	03/22/17 14:50	03/23/17 10:29	EPA 3005A	1,6020A	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	03/22/17 14:50	03/23/17 10:29	EPA 3005A	1,6020A	AM



Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708376

Project Number: Not Specified

Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708376-17
 Client ID: PRW-06
 Sample Location: STATEN ISLAND, NY
 Matrix: Water

Date Collected: 03/20/17 14:16
 Date Received: 03/20/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	0.00190	J	mg/l	0.00400	0.00042	1	03/21/17 18:51	03/22/17 13:59	EPA 3005A	1,6020A	AM
Arsenic, Total	0.01244		mg/l	0.00050	0.00016	1	03/21/17 18:51	03/22/17 13:59	EPA 3005A	1,6020A	AM
Barium, Total	0.05366		mg/l	0.00050	0.00017	1	03/21/17 18:51	03/22/17 13:59	EPA 3005A	1,6020A	AM
Beryllium, Total	0.00015	J	mg/l	0.00050	0.00010	1	03/21/17 18:51	03/22/17 13:59	EPA 3005A	1,6020A	AM
Cadmium, Total	0.00021		mg/l	0.00020	0.00005	1	03/21/17 18:51	03/22/17 13:59	EPA 3005A	1,6020A	AM
Chromium, Total	0.02186		mg/l	0.00100	0.00017	1	03/21/17 18:51	03/22/17 13:59	EPA 3005A	1,6020A	AM
Copper, Total	0.07027		mg/l	0.00100	0.00038	1	03/21/17 18:51	03/22/17 13:59	EPA 3005A	1,6020A	AM
Lead, Total	0.03574		mg/l	0.00100	0.00034	1	03/21/17 18:51	03/22/17 13:59	EPA 3005A	1,6020A	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	03/21/17 11:38	03/21/17 21:46	EPA 7470A	1,7470A	EA
Nickel, Total	0.08458		mg/l	0.00200	0.00055	1	03/21/17 18:51	03/22/17 13:59	EPA 3005A	1,6020A	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	03/21/17 18:51	03/22/17 13:59	EPA 3005A	1,6020A	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	03/21/17 18:51	03/22/17 13:59	EPA 3005A	1,6020A	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	03/21/17 18:51	03/22/17 13:59	EPA 3005A	1,6020A	AM
Zinc, Total	0.1664		mg/l	0.01000	0.00341	1	03/21/17 18:51	03/22/17 13:59	EPA 3005A	1,6020A	AM
Dissolved Metals - Mansfield Lab											
Antimony, Dissolved	0.00160	J	mg/l	0.00400	0.00042	1	03/22/17 14:50	03/23/17 10:32	EPA 3005A	1,6020A	AM
Arsenic, Dissolved	0.00088		mg/l	0.00050	0.00016	1	03/22/17 14:50	03/23/17 10:32	EPA 3005A	1,6020A	AM
Barium, Dissolved	0.02549		mg/l	0.00050	0.00017	1	03/22/17 14:50	03/23/17 10:32	EPA 3005A	1,6020A	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	03/22/17 14:50	03/23/17 10:32	EPA 3005A	1,6020A	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	03/22/17 14:50	03/23/17 10:32	EPA 3005A	1,6020A	AM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	03/22/17 14:50	03/23/17 10:32	EPA 3005A	1,6020A	AM
Copper, Dissolved	0.00092	J	mg/l	0.00100	0.00038	1	03/22/17 14:50	03/23/17 10:32	EPA 3005A	1,6020A	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	03/22/17 14:50	03/23/17 10:32	EPA 3005A	1,6020A	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	03/23/17 10:06	03/23/17 18:41	EPA 7470A	1,7470A	EA
Nickel, Dissolved	0.04134		mg/l	0.00200	0.00055	1	03/22/17 14:50	03/23/17 10:32	EPA 3005A	1,6020A	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	03/22/17 14:50	03/23/17 10:32	EPA 3005A	1,6020A	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	03/22/17 14:50	03/23/17 10:32	EPA 3005A	1,6020A	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	03/22/17 14:50	03/23/17 10:32	EPA 3005A	1,6020A	AM
Zinc, Dissolved	0.01114		mg/l	0.01000	0.00341	1	03/22/17 14:50	03/23/17 10:32	EPA 3005A	1,6020A	AM



Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708376

Project Number: Not Specified

Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708376-18
 Client ID: PRW-11
 Sample Location: STATEN ISLAND, NY
 Matrix: Water

Date Collected: 03/20/17 15:51
 Date Received: 03/20/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	0.00059	J	mg/l	0.00400	0.00042	1	03/21/17 18:51	03/22/17 14:02	EPA 3005A	1,6020A	AM
Arsenic, Total	0.00314		mg/l	0.00050	0.00016	1	03/21/17 18:51	03/22/17 14:02	EPA 3005A	1,6020A	AM
Barium, Total	0.3711		mg/l	0.00050	0.00017	1	03/21/17 18:51	03/22/17 14:02	EPA 3005A	1,6020A	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	03/21/17 18:51	03/22/17 14:02	EPA 3005A	1,6020A	AM
Cadmium, Total	0.00019	J	mg/l	0.00020	0.00005	1	03/21/17 18:51	03/22/17 14:02	EPA 3005A	1,6020A	AM
Chromium, Total	0.00118		mg/l	0.00100	0.00017	1	03/21/17 18:51	03/22/17 14:02	EPA 3005A	1,6020A	AM
Copper, Total	0.00307		mg/l	0.00100	0.00038	1	03/21/17 18:51	03/22/17 14:02	EPA 3005A	1,6020A	AM
Lead, Total	0.00092	J	mg/l	0.00100	0.00034	1	03/21/17 18:51	03/22/17 14:02	EPA 3005A	1,6020A	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	03/21/17 11:38	03/21/17 21:48	EPA 7470A	1,7470A	EA
Nickel, Total	0.00236		mg/l	0.00200	0.00055	1	03/21/17 18:51	03/22/17 14:02	EPA 3005A	1,6020A	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	03/21/17 18:51	03/22/17 14:02	EPA 3005A	1,6020A	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	03/21/17 18:51	03/22/17 14:02	EPA 3005A	1,6020A	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	03/21/17 18:51	03/22/17 14:02	EPA 3005A	1,6020A	AM
Zinc, Total	0.01650		mg/l	0.01000	0.00341	1	03/21/17 18:51	03/22/17 14:02	EPA 3005A	1,6020A	AM
Dissolved Metals - Mansfield Lab											
Antimony, Dissolved	0.00058	J	mg/l	0.00400	0.00042	1	03/22/17 14:50	03/23/17 10:36	EPA 3005A	1,6020A	AM
Arsenic, Dissolved	0.00101		mg/l	0.00050	0.00016	1	03/22/17 14:50	03/23/17 10:36	EPA 3005A	1,6020A	AM
Barium, Dissolved	0.3918		mg/l	0.00250	0.00086	5	03/22/17 14:50	03/23/17 12:04	EPA 3005A	1,6020A	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	03/22/17 14:50	03/23/17 10:36	EPA 3005A	1,6020A	AM
Cadmium, Dissolved	0.00020		mg/l	0.00020	0.00005	1	03/22/17 14:50	03/23/17 10:36	EPA 3005A	1,6020A	AM
Chromium, Dissolved	0.00027	J	mg/l	0.00100	0.00017	1	03/22/17 14:50	03/23/17 10:36	EPA 3005A	1,6020A	AM
Copper, Dissolved	0.00150		mg/l	0.00100	0.00038	1	03/22/17 14:50	03/23/17 10:36	EPA 3005A	1,6020A	AM
Lead, Dissolved	ND		mg/l	0.00500	0.00171	5	03/22/17 14:50	03/23/17 12:04	EPA 3005A	1,6020A	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	03/23/17 10:06	03/23/17 18:43	EPA 7470A	1,7470A	EA
Nickel, Dissolved	0.00148	J	mg/l	0.00200	0.00055	1	03/22/17 14:50	03/23/17 10:36	EPA 3005A	1,6020A	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	03/22/17 14:50	03/23/17 10:36	EPA 3005A	1,6020A	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	03/22/17 14:50	03/23/17 10:36	EPA 3005A	1,6020A	AM
Thallium, Dissolved	ND		mg/l	0.00250	0.00071	5	03/22/17 14:50	03/23/17 12:04	EPA 3005A	1,6020A	AM
Zinc, Dissolved	0.00794	J	mg/l	0.01000	0.00341	1	03/22/17 14:50	03/23/17 10:36	EPA 3005A	1,6020A	AM



Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708376

Project Number: Not Specified

Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708376-19
 Client ID: DUP-1
 Sample Location: STATEN ISLAND, NY
 Matrix: Water

Date Collected: 03/20/17 00:00
 Date Received: 03/20/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	0.00078	J	mg/l	0.00400	0.00042	1	03/21/17 18:51	03/22/17 14:05	EPA 3005A	1,6020A	AM
Arsenic, Total	0.00418		mg/l	0.00050	0.00016	1	03/21/17 18:51	03/22/17 14:05	EPA 3005A	1,6020A	AM
Barium, Total	0.07649		mg/l	0.00250	0.00086	5	03/21/17 18:51	03/22/17 15:05	EPA 3005A	1,6020A	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	03/21/17 18:51	03/22/17 14:05	EPA 3005A	1,6020A	AM
Cadmium, Total	0.00029		mg/l	0.00020	0.00005	1	03/21/17 18:51	03/22/17 14:05	EPA 3005A	1,6020A	AM
Chromium, Total	0.01013		mg/l	0.00100	0.00017	1	03/21/17 18:51	03/22/17 14:05	EPA 3005A	1,6020A	AM
Copper, Total	0.02386		mg/l	0.00100	0.00038	1	03/21/17 18:51	03/22/17 14:05	EPA 3005A	1,6020A	AM
Lead, Total	0.02920		mg/l	0.00500	0.00171	5	03/21/17 18:51	03/22/17 15:05	EPA 3005A	1,6020A	AM
Mercury, Total	0.00015	J	mg/l	0.00020	0.00006	1	03/21/17 11:38	03/21/17 21:53	EPA 7470A	1,7470A	EA
Nickel, Total	0.00881		mg/l	0.00200	0.00055	1	03/21/17 18:51	03/22/17 14:05	EPA 3005A	1,6020A	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	03/21/17 18:51	03/22/17 14:05	EPA 3005A	1,6020A	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	03/21/17 18:51	03/22/17 14:05	EPA 3005A	1,6020A	AM
Thallium, Total	ND		mg/l	0.00250	0.00071	5	03/21/17 18:51	03/22/17 15:05	EPA 3005A	1,6020A	AM
Zinc, Total	0.1108		mg/l	0.01000	0.00341	1	03/21/17 18:51	03/22/17 14:05	EPA 3005A	1,6020A	AM
Dissolved Metals - Mansfield Lab											
Antimony, Dissolved	0.00080	J	mg/l	0.00400	0.00042	1	03/22/17 14:50	03/23/17 10:39	EPA 3005A	1,6020A	AM
Arsenic, Dissolved	0.00138		mg/l	0.00050	0.00016	1	03/22/17 14:50	03/23/17 10:39	EPA 3005A	1,6020A	AM
Barium, Dissolved	0.06102		mg/l	0.00250	0.00086	5	03/22/17 14:50	03/23/17 12:07	EPA 3005A	1,6020A	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	03/22/17 14:50	03/23/17 10:39	EPA 3005A	1,6020A	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	03/22/17 14:50	03/23/17 10:39	EPA 3005A	1,6020A	AM
Chromium, Dissolved	0.00035	J	mg/l	0.00100	0.00017	1	03/22/17 14:50	03/23/17 10:39	EPA 3005A	1,6020A	AM
Copper, Dissolved	0.00057	J	mg/l	0.00100	0.00038	1	03/22/17 14:50	03/23/17 10:39	EPA 3005A	1,6020A	AM
Lead, Dissolved	ND		mg/l	0.00500	0.00171	5	03/22/17 14:50	03/23/17 12:07	EPA 3005A	1,6020A	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	03/23/17 10:06	03/23/17 18:45	EPA 7470A	1,7470A	EA
Nickel, Dissolved	0.00299		mg/l	0.00200	0.00055	1	03/22/17 14:50	03/23/17 10:39	EPA 3005A	1,6020A	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	03/22/17 14:50	03/23/17 10:39	EPA 3005A	1,6020A	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	03/22/17 14:50	03/23/17 10:39	EPA 3005A	1,6020A	AM
Thallium, Dissolved	ND		mg/l	0.00250	0.00071	5	03/22/17 14:50	03/23/17 12:07	EPA 3005A	1,6020A	AM
Zinc, Dissolved	0.01601		mg/l	0.01000	0.00341	1	03/22/17 14:50	03/23/17 10:39	EPA 3005A	1,6020A	AM



Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708376

Project Number: Not Specified

Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708376-20
 Client ID: DUP-2
 Sample Location: STATEN ISLAND, NY
 Matrix: Water

Date Collected: 03/20/17 00:00
 Date Received: 03/20/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	0.00110	J	mg/l	0.00400	0.00042	1	03/21/17 18:51	03/22/17 14:09	EPA 3005A	1,6020A	AM
Arsenic, Total	0.00511		mg/l	0.00050	0.00016	1	03/21/17 18:51	03/22/17 14:09	EPA 3005A	1,6020A	AM
Barium, Total	0.1182		mg/l	0.00050	0.00017	1	03/21/17 18:51	03/22/17 14:09	EPA 3005A	1,6020A	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	03/21/17 18:51	03/22/17 14:09	EPA 3005A	1,6020A	AM
Cadmium, Total	0.00011	J	mg/l	0.00020	0.00005	1	03/21/17 18:51	03/22/17 14:09	EPA 3005A	1,6020A	AM
Chromium, Total	0.00137		mg/l	0.00100	0.00017	1	03/21/17 18:51	03/22/17 14:09	EPA 3005A	1,6020A	AM
Copper, Total	0.01133		mg/l	0.00100	0.00038	1	03/21/17 18:51	03/22/17 14:09	EPA 3005A	1,6020A	AM
Lead, Total	0.01358		mg/l	0.00100	0.00034	1	03/21/17 18:51	03/22/17 14:09	EPA 3005A	1,6020A	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	03/21/17 11:38	03/21/17 21:55	EPA 7470A	1,7470A	EA
Nickel, Total	0.00495		mg/l	0.00200	0.00055	1	03/21/17 18:51	03/22/17 14:09	EPA 3005A	1,6020A	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	03/21/17 18:51	03/22/17 14:09	EPA 3005A	1,6020A	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	03/21/17 18:51	03/22/17 14:09	EPA 3005A	1,6020A	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	03/21/17 18:51	03/22/17 14:09	EPA 3005A	1,6020A	AM
Zinc, Total	0.05478		mg/l	0.01000	0.00341	1	03/21/17 18:51	03/22/17 14:09	EPA 3005A	1,6020A	AM
Dissolved Metals - Mansfield Lab											
Antimony, Dissolved	0.00086	J	mg/l	0.00400	0.00042	1	03/22/17 14:50	03/23/17 10:42	EPA 3005A	1,6020A	AM
Arsenic, Dissolved	0.00075		mg/l	0.00050	0.00016	1	03/22/17 14:50	03/23/17 10:42	EPA 3005A	1,6020A	AM
Barium, Dissolved	0.09566		mg/l	0.00050	0.00017	1	03/22/17 14:50	03/23/17 10:42	EPA 3005A	1,6020A	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	03/22/17 14:50	03/23/17 10:42	EPA 3005A	1,6020A	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	03/22/17 14:50	03/23/17 10:42	EPA 3005A	1,6020A	AM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	03/22/17 14:50	03/23/17 10:42	EPA 3005A	1,6020A	AM
Copper, Dissolved	0.00237		mg/l	0.00100	0.00038	1	03/22/17 14:50	03/23/17 10:42	EPA 3005A	1,6020A	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	03/22/17 14:50	03/23/17 10:42	EPA 3005A	1,6020A	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	03/23/17 10:06	03/23/17 18:46	EPA 7470A	1,7470A	EA
Nickel, Dissolved	0.00220		mg/l	0.00200	0.00055	1	03/22/17 14:50	03/23/17 10:42	EPA 3005A	1,6020A	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	03/22/17 14:50	03/23/17 10:42	EPA 3005A	1,6020A	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	03/22/17 14:50	03/23/17 10:42	EPA 3005A	1,6020A	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	03/22/17 14:50	03/23/17 10:42	EPA 3005A	1,6020A	AM
Zinc, Dissolved	0.00649	J	mg/l	0.01000	0.00341	1	03/22/17 14:50	03/23/17 10:42	EPA 3005A	1,6020A	AM



Project Name: SITE1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708376
Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708376-21
 Client ID: FB-032017
 Sample Location: STATEN ISLAND, NY
 Matrix: Water

Date Collected: 03/20/17 15:05
 Date Received: 03/20/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	ND		mg/l	0.00400	0.00042	1	03/21/17 18:51	03/22/17 10:35	EPA 3005A	1,6020A	BV
Arsenic, Total	0.00040	J	mg/l	0.00050	0.00016	1	03/21/17 18:51	03/22/17 10:35	EPA 3005A	1,6020A	BV
Barium, Total	ND		mg/l	0.00050	0.00017	1	03/21/17 18:51	03/22/17 10:35	EPA 3005A	1,6020A	BV
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	03/21/17 18:51	03/22/17 10:35	EPA 3005A	1,6020A	BV
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	03/21/17 18:51	03/22/17 10:35	EPA 3005A	1,6020A	BV
Chromium, Total	ND		mg/l	0.00100	0.00017	1	03/21/17 18:51	03/22/17 10:35	EPA 3005A	1,6020A	BV
Copper, Total	ND		mg/l	0.00100	0.00038	1	03/21/17 18:51	03/22/17 10:35	EPA 3005A	1,6020A	BV
Lead, Total	ND		mg/l	0.00100	0.00034	1	03/21/17 18:51	03/22/17 10:35	EPA 3005A	1,6020A	BV
Mercury, Total	ND		mg/l	0.00020	0.00006	1	03/21/17 11:38	03/21/17 21:57	EPA 7470A	1,7470A	EA
Nickel, Total	ND		mg/l	0.00200	0.00055	1	03/21/17 18:51	03/22/17 10:35	EPA 3005A	1,6020A	BV
Selenium, Total	ND		mg/l	0.00500	0.00173	1	03/21/17 18:51	03/22/17 10:35	EPA 3005A	1,6020A	BV
Silver, Total	ND		mg/l	0.00040	0.00016	1	03/21/17 18:51	03/22/17 10:35	EPA 3005A	1,6020A	BV
Thallium, Total	ND		mg/l	0.00050	0.00014	1	03/21/17 18:51	03/22/17 10:35	EPA 3005A	1,6020A	BV
Zinc, Total	ND		mg/l	0.01000	0.00341	1	03/21/17 18:51	03/22/17 10:35	EPA 3005A	1,6020A	BV
Dissolved Metals - Mansfield Lab											
Antimony, Dissolved	0.00118	J	mg/l	0.00400	0.00042	1	03/22/17 14:50	03/23/17 10:22	EPA 3005A	1,6020A	AM
Arsenic, Dissolved	ND		mg/l	0.00050	0.00016	1	03/22/17 14:50	03/23/17 10:22	EPA 3005A	1,6020A	AM
Barium, Dissolved	ND		mg/l	0.00050	0.00017	1	03/22/17 14:50	03/23/17 10:22	EPA 3005A	1,6020A	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	03/22/17 14:50	03/23/17 10:22	EPA 3005A	1,6020A	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	03/22/17 14:50	03/23/17 10:22	EPA 3005A	1,6020A	AM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	03/22/17 14:50	03/23/17 10:22	EPA 3005A	1,6020A	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	03/22/17 14:50	03/23/17 10:22	EPA 3005A	1,6020A	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	03/22/17 14:50	03/23/17 10:22	EPA 3005A	1,6020A	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	03/23/17 10:06	03/23/17 18:48	EPA 7470A	1,7470A	EA
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	03/22/17 14:50	03/23/17 10:22	EPA 3005A	1,6020A	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	03/22/17 14:50	03/23/17 10:22	EPA 3005A	1,6020A	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	03/22/17 14:50	03/23/17 10:22	EPA 3005A	1,6020A	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	03/22/17 14:50	03/23/17 10:22	EPA 3005A	1,6020A	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	03/22/17 14:50	03/23/17 10:22	EPA 3005A	1,6020A	AM



Project Name: SITE1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708376
Report Date: 03/27/17

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-05,12-21 Batch: WG986950-1									
Mercury, Total	ND	mg/l	0.00020	0.00006	1	03/21/17 11:38	03/21/17 21:16	1,7470A	EA

Prep Information

Digestion Method: EPA 7470A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-05,08-21 Batch: WG987073-1									
Antimony, Total	ND	mg/l	0.00400	0.00042	1	03/21/17 18:51	03/22/17 10:30	1,6020A	BV
Arsenic, Total	0.00034 J	mg/l	0.00050	0.00016	1	03/21/17 18:51	03/22/17 10:30	1,6020A	BV
Barium, Total	ND	mg/l	0.00050	0.00017	1	03/21/17 18:51	03/22/17 10:30	1,6020A	BV
Beryllium, Total	ND	mg/l	0.00050	0.00010	1	03/21/17 18:51	03/22/17 10:30	1,6020A	BV
Cadmium, Total	ND	mg/l	0.00020	0.00005	1	03/21/17 18:51	03/22/17 10:30	1,6020A	BV
Chromium, Total	ND	mg/l	0.00100	0.00017	1	03/21/17 18:51	03/22/17 10:30	1,6020A	BV
Copper, Total	ND	mg/l	0.00100	0.00038	1	03/21/17 18:51	03/22/17 10:30	1,6020A	BV
Lead, Total	ND	mg/l	0.00100	0.00034	1	03/21/17 18:51	03/22/17 10:30	1,6020A	BV
Magnesium, Total	ND	mg/l	0.0700	0.0242	1	03/21/17 18:51	03/22/17 10:30	1,6020A	BV
Nickel, Total	ND	mg/l	0.00200	0.00055	1	03/21/17 18:51	03/22/17 10:30	1,6020A	BV
Selenium, Total	ND	mg/l	0.00500	0.00173	1	03/21/17 18:51	03/22/17 10:30	1,6020A	BV
Silver, Total	ND	mg/l	0.00040	0.00016	1	03/21/17 18:51	03/22/17 10:30	1,6020A	BV
Thallium, Total	ND	mg/l	0.00050	0.00014	1	03/21/17 18:51	03/22/17 10:30	1,6020A	BV
Zinc, Total	ND	mg/l	0.01000	0.00341	1	03/21/17 18:51	03/22/17 10:30	1,6020A	BV

Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-05,12-21 Batch: WG987313-1									
Antimony, Dissolved	0.00132 J	mg/l	0.00400	0.00042	1	03/22/17 14:50	03/23/17 09:00	1,6020A	AM
Arsenic, Dissolved	ND	mg/l	0.00050	0.00016	1	03/22/17 14:50	03/23/17 09:00	1,6020A	AM
Barium, Dissolved	ND	mg/l	0.00050	0.00017	1	03/22/17 14:50	03/23/17 09:00	1,6020A	AM



Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708376

Project Number: Not Specified

Report Date: 03/27/17

Method Blank Analysis Batch Quality Control

Beryllium, Dissolved	ND	mg/l	0.00050	0.00010	1	03/22/17 14:50	03/23/17 09:00	1,6020A	AM
Cadmium, Dissolved	ND	mg/l	0.00020	0.00005	1	03/22/17 14:50	03/23/17 09:00	1,6020A	AM
Chromium, Dissolved	ND	mg/l	0.00100	0.00017	1	03/22/17 14:50	03/23/17 09:00	1,6020A	AM
Copper, Dissolved	ND	mg/l	0.00100	0.00038	1	03/22/17 14:50	03/23/17 09:00	1,6020A	AM
Lead, Dissolved	ND	mg/l	0.00100	0.00034	1	03/22/17 14:50	03/23/17 09:00	1,6020A	AM
Nickel, Dissolved	ND	mg/l	0.00200	0.00055	1	03/22/17 14:50	03/23/17 09:00	1,6020A	AM
Selenium, Dissolved	ND	mg/l	0.00500	0.00173	1	03/22/17 14:50	03/23/17 09:00	1,6020A	AM
Silver, Dissolved	ND	mg/l	0.00040	0.00016	1	03/22/17 14:50	03/23/17 09:00	1,6020A	AM
Thallium, Dissolved	ND	mg/l	0.00050	0.00014	1	03/22/17 14:50	03/23/17 09:00	1,6020A	AM
Zinc, Dissolved	ND	mg/l	0.01000	0.00341	1	03/22/17 14:50	03/23/17 09:00	1,6020A	AM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-05,12-21 Batch: WG987562-1										
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	03/23/17 10:06	03/23/17 18:14	1,7470A	EA

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis

Batch Quality Control

Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708376

Project Number: Not Specified

Report Date: 03/27/17

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Total Metals - Mansfield Lab Associated sample(s): 01-05,12-21 Batch: WG986950-2								
Mercury, Total	104		-		80-120	-		
Total Metals - Mansfield Lab Associated sample(s): 01-05,08-21 Batch: WG987073-2								
Antimony, Total	100		-		80-120	-		
Arsenic, Total	106		-		80-120	-		
Barium, Total	102		-		80-120	-		
Beryllium, Total	99		-		80-120	-		
Cadmium, Total	109		-		80-120	-		
Chromium, Total	102		-		80-120	-		
Copper, Total	106		-		80-120	-		
Lead, Total	107		-		80-120	-		
Magnesium, Total	106		-		80-120	-		
Nickel, Total	106		-		80-120	-		
Selenium, Total	108		-		80-120	-		
Silver, Total	102		-		80-120	-		
Thallium, Total	108		-		80-120	-		
Zinc, Total	106		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Project Number: Not Specified

Lab Number: L1708376

Report Date: 03/27/17

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-05,12-21 Batch: WG987313-2					
Antimony, Dissolved	94	-	80-120	-	
Arsenic, Dissolved	102	-	80-120	-	
Barium, Dissolved	97	-	80-120	-	
Beryllium, Dissolved	100	-	80-120	-	
Cadmium, Dissolved	105	-	80-120	-	
Chromium, Dissolved	102	-	80-120	-	
Copper, Dissolved	104	-	80-120	-	
Lead, Dissolved	95	-	80-120	-	
Nickel, Dissolved	104	-	80-120	-	
Selenium, Dissolved	98	-	80-120	-	
Silver, Dissolved	98	-	80-120	-	
Thallium, Dissolved	98	-	80-120	-	
Zinc, Dissolved	104	-	80-120	-	
Dissolved Metals - Mansfield Lab Associated sample(s): 01-05,12-21 Batch: WG987562-2					
Mercury, Dissolved	87	-	80-120	-	

Matrix Spike Analysis Batch Quality Control

Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708376

Project Number: Not Specified

Report Date: 03/27/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05,12-21 QC Batch ID: WG986950-3 QC Sample: L1708376-01 Client ID: SW-1												
Mercury, Total	ND	0.005	0.00486	97	-	-	-	-	75-125	-	-	20
Total Metals - Mansfield Lab Associated sample(s): 01-05,08-21 QC Batch ID: WG987073-3 QC Sample: L1708376-01 Client ID: SW-1												
Antimony, Total	0.00198J	0.5	0.5210	104	-	-	-	-	75-125	-	-	20
Arsenic, Total	0.00938	0.12	0.1376	107	-	-	-	-	75-125	-	-	20
Barium, Total	0.1352	2	2.183	102	-	-	-	-	75-125	-	-	20
Beryllium, Total	ND	0.05	0.05345	107	-	-	-	-	75-125	-	-	20
Cadmium, Total	0.00024	0.051	0.05851	114	-	-	-	-	75-125	-	-	20
Chromium, Total	0.00207	0.2	0.2041	101	-	-	-	-	75-125	-	-	20
Copper, Total	0.02342	0.25	0.2880	106	-	-	-	-	75-125	-	-	20
Lead, Total	0.02829	0.51	0.5717	106	-	-	-	-	75-125	-	-	20
Magnesium, Total	11.4	10	23.4	120	-	-	-	-	75-125	-	-	20
Nickel, Total	0.00724	0.5	0.5222	103	-	-	-	-	75-125	-	-	20
Selenium, Total	ND	0.12	0.132	110	-	-	-	-	75-125	-	-	20
Silver, Total	ND	0.05	0.05051	101	-	-	-	-	75-125	-	-	20
Thallium, Total	ND	0.12	0.1272	106	-	-	-	-	75-125	-	-	20
Zinc, Total	0.1098	0.5	0.6594	110	-	-	-	-	75-125	-	-	20

Matrix Spike Analysis Batch Quality Control

Project Name: SITE1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708376
Report Date: 03/27/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-05,12-21 QC Batch ID: WG987313-3 QC Sample: L1708376-01 Client ID: SW-1									
Antimony, Dissolved	0.00152J	0.5	0.5630	113	-	-	75-125	-	20
Arsenic, Dissolved	0.00072	0.12	0.1294	107	-	-	75-125	-	20
Barium, Dissolved	0.09076	2	2.121	102	-	-	75-125	-	20
Beryllium, Dissolved	ND	0.05	0.05104	102	-	-	75-125	-	20
Cadmium, Dissolved	ND	0.051	0.05608	110	-	-	75-125	-	20
Chromium, Dissolved	ND	0.2	0.2019	101	-	-	75-125	-	20
Copper, Dissolved	0.00270	0.25	0.2665	106	-	-	75-125	-	20
Lead, Dissolved	ND	0.51	0.5135	101	-	-	75-125	-	20
Nickel, Dissolved	0.00253	0.5	0.5230	104	-	-	75-125	-	20
Selenium, Dissolved	ND	0.12	0.126	105	-	-	75-125	-	20
Silver, Dissolved	ND	0.05	0.04934	99	-	-	75-125	-	20
Thallium, Dissolved	ND	0.12	0.1234	103	-	-	75-125	-	20
Zinc, Dissolved	0.00808J	0.5	0.5327	106	-	-	75-125	-	20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-05,12-21 QC Batch ID: WG987562-3 QC Sample: L1708376-02 Client ID: SW-2									
Mercury, Dissolved	ND	0.005	0.00476	95	-	-	75-125	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Project Number: Not Specified

Lab Number: L1708376

Report Date: 03/27/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05,12-21 QC Batch ID: WG986950-4 QC Sample: L1708376-01 Client ID: SW-1						
Mercury, Total	ND	ND	mg/l	NC		20
Total Metals - Mansfield Lab Associated sample(s): 01-05,08-21 QC Batch ID: WG987073-4 QC Sample: L1708376-01 Client ID: SW-1						
Antimony, Total	0.00198J	0.00150J	mg/l	NC		20
Arsenic, Total	0.00938	0.00935	mg/l	0		20
Barium, Total	0.1352	0.1428	mg/l	5		20
Beryllium, Total	ND	ND	mg/l	NC		20
Cadmium, Total	0.00024	0.00027	mg/l	13		20
Chromium, Total	0.00207	0.00188	mg/l	10		20
Copper, Total	0.02342	0.02327	mg/l	1		20
Lead, Total	0.02829	0.02954	mg/l	4		20
Nickel, Total	0.00724	0.00712	mg/l	2		20
Selenium, Total	ND	ND	mg/l	NC		20
Silver, Total	ND	ND	mg/l	NC		20
Thallium, Total	ND	ND	mg/l	NC		20
Zinc, Total	0.1098	0.1150	mg/l	5		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Project Number: Not Specified

Lab Number: L1708376

Report Date: 03/27/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-05,12-21 QC Batch ID: WG987313-4 QC Sample: L1708376-01 Client ID: SW-1					
Antimony, Dissolved	0.00152J	0.00186J	mg/l	NC	20
Arsenic, Dissolved	0.00072	0.00083	mg/l	14	20
Barium, Dissolved	0.09076	0.08989	mg/l	1	20
Beryllium, Dissolved	ND	ND	mg/l	NC	20
Cadmium, Dissolved	ND	ND	mg/l	NC	20
Chromium, Dissolved	ND	0.00019J	mg/l	NC	20
Copper, Dissolved	0.00270	0.00279	mg/l	3	20
Lead, Dissolved	ND	ND	mg/l	NC	20
Nickel, Dissolved	0.00253	0.00256	mg/l	1	20
Selenium, Dissolved	ND	ND	mg/l	NC	20
Silver, Dissolved	ND	ND	mg/l	NC	20
Thallium, Dissolved	ND	ND	mg/l	NC	20
Zinc, Dissolved	0.00808J	0.00773J	mg/l	NC	20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-05,12-21 QC Batch ID: WG987562-4 QC Sample: L1708376-02 Client ID: SW-2					
Mercury, Dissolved	ND	ND	mg/l	NC	20

INORGANICS & MISCELLANEOUS

Project Name: SITE1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708376
Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708376-01
Client ID: SW-1
Sample Location: STATEN ISLAND, NY
Matrix: Water

Date Collected: 03/20/17 12:35
Date Received: 03/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.005		mg/l	0.005	0.001	1	03/21/17 12:20	03/21/17 15:10	1,9010C/9012B	JO



Project Name: SITE1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708376
Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708376-02
Client ID: SW-2
Sample Location: STATEN ISLAND, NY
Matrix: Water

Date Collected: 03/20/17 12:10
Date Received: 03/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.010		mg/l	0.005	0.001	1	03/21/17 12:20	03/21/17 15:11	1,9010C/9012B	JO



Project Name: SITE1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708376
Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708376-03
Client ID: SW-3
Sample Location: STATEN ISLAND, NY
Matrix: Water

Date Collected: 03/20/17 11:55
Date Received: 03/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.010		mg/l	0.005	0.001	1	03/21/17 12:20	03/21/17 15:12	1,9010C/9012B	JO



Project Name: SITE1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708376
Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708376-04
Client ID: SW-4
Sample Location: STATEN ISLAND, NY
Matrix: Water

Date Collected: 03/20/17 11:40
Date Received: 03/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.004	J	mg/l	0.005	0.001	1	03/21/17 12:20	03/21/17 15:14	1,9010C/9012B	JO



Project Name: SITE1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708376
Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708376-05
Client ID: SW-5
Sample Location: STATEN ISLAND, NY
Matrix: Water

Date Collected: 03/20/17 10:40
Date Received: 03/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.008		mg/l	0.005	0.001	1	03/21/17 12:20	03/21/17 15:15	1,9010C/9012B	JO



Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708376

Project Number: Not Specified

Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708376-08
 Client ID: PRW-7A
 Sample Location: STATEN ISLAND, NY
 Matrix: Water

Date Collected: 03/20/17 10:17
 Date Received: 03/20/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Alkalinity, Total	745.		mg CaCO3/L	5.00	NA	2.5	-	03/21/17 11:21	121,2320B	BR
Nitrogen, Total Kjeldahl	41.3		mg/l	3.00	0.660	10	03/21/17 09:35	03/21/17 23:07	121,4500NH3-H	AT
Sulfate	59.		mg/l	25	3.4	2.5	03/21/17 15:24	03/21/17 15:24	1,9038	BR
Total Organic Carbon	171.		mg/l	20.0	4.56	40	-	03/21/17 11:09	121,5310C	SD



Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708376

Project Number: Not Specified

Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708376-09
 Client ID: PRW-7B
 Sample Location: STATEN ISLAND, NY
 Matrix: Water

Date Collected: 03/20/17 11:32
 Date Received: 03/20/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Alkalinity, Total	601.		mg CaCO3/L	4.00	NA	2	-	03/21/17 11:21	121,2320B	BR
Nitrogen, Total Kjeldahl	2.99		mg/l	0.300	0.066	1	03/21/17 09:35	03/21/17 23:11	121,4500NH3-H	AT
Sulfate	ND		mg/l	10	1.4	1	03/21/17 15:24	03/21/17 15:24	1,9038	BR
Total Organic Carbon	22.6		mg/l	10.0	2.28	20	-	03/21/17 11:09	121,5310C	SD



Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708376

Project Number: Not Specified

Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708376-10
 Client ID: PRW-7C
 Sample Location: STATEN ISLAND, NY
 Matrix: Water

Date Collected: 03/20/17 12:47
 Date Received: 03/20/17
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Alkalinity, Total	134.		mg CaCO3/L	2.00	NA	1	-	03/21/17 11:21	121,2320B	BR
Nitrogen, Total Kjeldahl	3.02		mg/l	0.300	0.066	1	03/21/17 09:35	03/21/17 23:01	121,4500NH3-H	AT
Sulfate	190		mg/l	50	6.8	5	03/21/17 15:24	03/21/17 15:24	1,9038	BR
Total Organic Carbon	20.5		mg/l	10.0	2.28	20	-	03/21/17 11:09	121,5310C	SD



Project Name: SITE1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708376
Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708376-11
Client ID: PRW-7D
Sample Location: STATEN ISLAND, NY
Matrix: Water

Date Collected: 03/20/17 14:23
Date Received: 03/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Alkalinity, Total	564.		mg CaCO3/L	2.00	NA	1	-	03/21/17 11:21	121,2320B	BR
Nitrogen, Total Kjeldahl	11.8		mg/l	0.300	0.066	1	03/21/17 09:35	03/21/17 23:02	121,4500NH3-H	AT
Sulfate	39.		mg/l	10	1.4	1	03/21/17 15:24	03/21/17 15:24	1,9038	BR
Total Organic Carbon	8.17		mg/l	5.00	1.14	10	-	03/21/17 11:09	121,5310C	SD



Project Name: SITE1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708376
Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708376-12
Client ID: PRW-09
Sample Location: STATEN ISLAND, NY
Matrix: Water

Date Collected: 03/20/17 10:41
Date Received: 03/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.005		mg/l	0.005	0.001	1	03/21/17 12:20	03/21/17 15:16	1,9010C/9012B	JO



Project Name: SITE1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708376
Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708376-13
Client ID: PRW-05
Sample Location: STATEN ISLAND, NY
Matrix: Water

Date Collected: 03/20/17 12:16
Date Received: 03/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.015		mg/l	0.005	0.001	1	03/21/17 12:20	03/21/17 15:16	1,9010C/9012B	JO



Project Name: SITE1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708376
Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708376-14
Client ID: PRW-03
Sample Location: STATEN ISLAND, NY
Matrix: Water

Date Collected: 03/20/17 14:01
Date Received: 03/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.021		mg/l	0.005	0.001	1	03/21/17 12:20	03/21/17 15:17	1,9010C/9012B	JO



Project Name: SITE1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708376
Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708376-15
Client ID: PRW-01
Sample Location: STATEN ISLAND, NY
Matrix: Water

Date Collected: 03/20/17 14:21
Date Received: 03/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.005		mg/l	0.005	0.001	1	03/21/17 12:20	03/21/17 15:19	1,9010C/9012B	JO



Project Name: SITE1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708376
Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708376-16
Client ID: PRW-12
Sample Location: STATEN ISLAND, NY
Matrix: Water

Date Collected: 03/20/17 15:56
Date Received: 03/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.014		mg/l	0.005	0.001	1	03/21/17 12:20	03/21/17 15:23	1,9010C/9012B	JO



Project Name: SITE1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708376
Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708376-17
Client ID: PRW-06
Sample Location: STATEN ISLAND, NY
Matrix: Water

Date Collected: 03/20/17 14:16
Date Received: 03/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.002	J	mg/l	0.005	0.001	1	03/21/17 12:20	03/21/17 15:24	1,9010C/9012B	JO



Project Name: SITE1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708376
Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708376-18
Client ID: PRW-11
Sample Location: STATEN ISLAND, NY
Matrix: Water

Date Collected: 03/20/17 15:51
Date Received: 03/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.069		mg/l	0.005	0.001	1	03/21/17 12:20	03/21/17 15:25	1,9010C/9012B	JO



Project Name: SITE1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708376
Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708376-19
Client ID: DUP-1
Sample Location: STATEN ISLAND, NY
Matrix: Water

Date Collected: 03/20/17 00:00
Date Received: 03/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.005		mg/l	0.005	0.001	1	03/21/17 12:20	03/21/17 15:26	1,9010C/9012B	JO



Project Name: SITE1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708376
Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708376-20
Client ID: DUP-2
Sample Location: STATEN ISLAND, NY
Matrix: Water

Date Collected: 03/20/17 00:00
Date Received: 03/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.003	J	mg/l	0.005	0.001	1	03/21/17 12:20	03/21/17 15:26	1,9010C/9012B	JO



Project Name: SITE1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708376
Report Date: 03/27/17

SAMPLE RESULTS

Lab ID: L1708376-21
Client ID: FB-032017
Sample Location: STATEN ISLAND, NY
Matrix: Water

Date Collected: 03/20/17 15:05
Date Received: 03/20/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	03/21/17 12:20	03/21/17 15:27	1,9010C/9012B	JO



Project Name: SITE1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708376
Report Date: 03/27/17

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 08-11 Batch: WG986876-1										
Nitrogen, Total Kjeldahl	0.185	J	mg/l	0.300	0.022	1	03/21/17 09:35	03/21/17 22:48	121,4500NH3-H	AT
General Chemistry - Westborough Lab for sample(s): 01-05,12-14 Batch: WG986926-1										
Cyanide, Total	ND		mg/l	0.005	0.001	1	03/21/17 12:20	03/21/17 15:05	1,9010C/9012B	JO
General Chemistry - Westborough Lab for sample(s): 15-21 Batch: WG986927-1										
Cyanide, Total	ND		mg/l	0.005	0.001	1	03/21/17 12:20	03/21/17 15:06	1,9010C/9012B	JO
General Chemistry - Westborough Lab for sample(s): 08-11 Batch: WG986932-1										
Sulfate	1.4	J	mg/l	10	1.4	1	03/21/17 15:24	03/21/17 15:24	1,9038	BR
General Chemistry - Westborough Lab for sample(s): 08-11 Batch: WG986934-1										
Alkalinity, Total	ND		mg CaCO3/L	2.00	NA	1	-	03/21/17 11:21	121,2320B	BR
General Chemistry - Westborough Lab for sample(s): 08-11 Batch: WG987015-1										
Total Organic Carbon	ND		mg/l	0.500	0.114	1	-	03/21/17 11:09	121,5310C	SD

Lab Control Sample Analysis

Batch Quality Control

Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708376

Project Number: Not Specified

Report Date: 03/27/17

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
General Chemistry - Westborough Lab Associated sample(s): 08-11 Batch: WG986876-2								
Nitrogen, Total Kjeldahl	94		-		78-122	-		
General Chemistry - Westborough Lab Associated sample(s): 01-05,12-14 Batch: WG986926-2 WG986926-3								
Cyanide, Total	104		104		85-115	0		20
General Chemistry - Westborough Lab Associated sample(s): 15-21 Batch: WG986927-2 WG986927-3								
Cyanide, Total	102		104		85-115	2		20
General Chemistry - Westborough Lab Associated sample(s): 08-11 Batch: WG986932-2								
Sulfate	95		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 08-11 Batch: WG986934-2								
Alkalinity, Total	103		-		90-110	-		10
General Chemistry - Westborough Lab Associated sample(s): 08-11 Batch: WG987015-2								
Total Organic Carbon	94		-		90-110	-		

Matrix Spike Analysis Batch Quality Control

Project Name: SITE1-2_SPM_2017 (PORT IVORY)
Project Number: Not Specified

Lab Number: L1708376
Report Date: 03/27/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 08-11 QC Batch ID: WG986876-4 QC Sample: L1708298-01 Client ID: MS Sample												
Nitrogen, Total Kjeldahl	0.384	8	7.35	87	-	-	-	-	77-111	-	-	24
General Chemistry - Westborough Lab Associated sample(s): 01-05,12-14 QC Batch ID: WG986926-4 WG986926-5 QC Sample: L1708376-14 Client ID: PRW-03												
Cyanide, Total	0.021	0.2	0.210	94	-	0.211	95	-	80-120	0	-	20
General Chemistry - Westborough Lab Associated sample(s): 15-21 QC Batch ID: WG986927-4 WG986927-5 QC Sample: L1708376-15 Client ID: PRW-01												
Cyanide, Total	0.005	0.2	0.196	95	-	0.200	97	-	80-120	2	-	20
General Chemistry - Westborough Lab Associated sample(s): 08-11 QC Batch ID: WG986932-4 QC Sample: L1708209-01 Client ID: MS Sample												
Sulfate	9.4J	20	33	165	Q	-	-	-	55-147	-	-	14
General Chemistry - Westborough Lab Associated sample(s): 08-11 QC Batch ID: WG986934-4 QC Sample: L1708347-02 Client ID: MS Sample												
Alkalinity, Total	42.5	100	146	104	-	-	-	-	86-116	-	-	10
General Chemistry - Westborough Lab Associated sample(s): 08-11 QC Batch ID: WG987015-3 QC Sample: L1708134-01 Client ID: MS Sample												
Total Organic Carbon	25.7	40	66.0	101	-	-	-	-	80-120	-	-	20



Lab Duplicate Analysis

Batch Quality Control

Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Project Number: Not Specified

Lab Number: L1708376

Report Date: 03/27/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 08-11 QC Batch ID: WG986876-3 QC Sample: L1708298-01 Client ID: DUP Sample						
Nitrogen, Total Kjeldahl	0.384	0.270J	mg/l	NC		24
General Chemistry - Westborough Lab Associated sample(s): 08-11 QC Batch ID: WG986932-3 QC Sample: L1708209-01 Client ID: DUP Sample						
Sulfate	9.4J	9.6J	mg/l	NC		14
General Chemistry - Westborough Lab Associated sample(s): 08-11 QC Batch ID: WG986934-3 QC Sample: L1708347-01 Client ID: DUP Sample						
Alkalinity, Total	41.6	41.7	mg CaCO3/L	0		10
General Chemistry - Westborough Lab Associated sample(s): 08-11 QC Batch ID: WG987015-4 QC Sample: L1708134-01 Client ID: DUP Sample						
Total Organic Carbon	25.7	26.2	mg/l	2		20

Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**Sample Receipt and Container Information**

Were project specific reporting limits specified? YES

Cooler Information Custody Seal**Cooler**

A	Absent
D	Absent
B	Absent
C	Absent
E	Absent
F	Absent
G	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1708376-01A	Vial HCl preserved	E	N/A	3.0	Y	Absent	NYTCL-8260(14)
L1708376-01B	Vial HCl preserved	E	N/A	3.0	Y	Absent	NYTCL-8260(14)
L1708376-01C	Vial HCl preserved	E	N/A	3.0	Y	Absent	NYTCL-8260(14)
L1708376-01D	Plastic 250ml unpreserved	E	8	3.0	Y	Absent	-
L1708376-01E	Plastic 250ml HNO3 preserved	E	<2	3.0	Y	Absent	BA-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180),HG-T(28)
L1708376-01F	Plastic 250ml NaOH preserved	E	>12	3.0	Y	Absent	TCN-9010(14)
L1708376-01G	Amber 1000ml unpreserved	E	8	3.0	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708376-01H	Amber 1000ml unpreserved	E	8	3.0	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708376-01X	Plastic 120ml HNO3 preserved Fil	E	<2	3.0	Y	Absent	CU-6020S(180),SE-6020S(180),BE-6020S(180),ZN-6020S(180),CR-6020S(180),BA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),CD-6020S(180),HG-S(28)
L1708376-02A	Vial HCl preserved	D	N/A	4.0	Y	Absent	NYTCL-8260(14)
L1708376-02B	Vial HCl preserved	D	N/A	4.0	Y	Absent	NYTCL-8260(14)
L1708376-02C	Vial HCl preserved	D	N/A	4.0	Y	Absent	NYTCL-8260(14)
L1708376-02D	Plastic 250ml unpreserved	D	8	4.0	Y	Absent	-

*Values in parentheses indicate holding time in days

Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Project Number: Not Specified

Lab Number: L1708376

Report Date: 03/27/17

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1708376-02E	Plastic 250ml HNO3 preserved	D	<2	4.0	Y	Absent	BA-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180),HG-T(28)
L1708376-02F	Plastic 250ml NaOH preserved	D	>12	4.0	Y	Absent	TCN-9010(14)
L1708376-02G	Amber 1000ml unpreserved	D	8	4.0	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708376-02H	Amber 1000ml unpreserved	D	8	4.0	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708376-02X	Plastic 120ml HNO3 preserved Fil	D	<2	4.0	Y	Absent	CU-6020S(180),SE-6020S(180),BE-6020S(180),ZN-6020S(180),CR-6020S(180),BA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),CD-6020S(180),HG-S(28)
L1708376-03A	Vial HCl preserved	D	N/A	4.0	Y	Absent	NYTCL-8260(14)
L1708376-03B	Vial HCl preserved	D	N/A	4.0	Y	Absent	NYTCL-8260(14)
L1708376-03C	Vial HCl preserved	D	N/A	4.0	Y	Absent	NYTCL-8260(14)
L1708376-03D	Plastic 250ml unpreserved	D	8	4.0	Y	Absent	-
L1708376-03E	Plastic 250ml HNO3 preserved	D	<2	4.0	Y	Absent	BA-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180),HG-T(28)
L1708376-03F	Plastic 250ml NaOH preserved	D	>12	4.0	Y	Absent	TCN-9010(14)
L1708376-03G	Amber 1000ml unpreserved	D	8	4.0	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708376-03H	Amber 1000ml unpreserved	D	8	4.0	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708376-03X	Plastic 120ml HNO3 preserved Fil	D	<2	4.0	Y	Absent	CU-6020S(180),SE-6020S(180),BE-6020S(180),ZN-6020S(180),CR-6020S(180),BA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),CD-6020S(180),HG-S(28)
L1708376-04A	Vial HCl preserved	D	N/A	4.0	Y	Absent	NYTCL-8260(14)
L1708376-04B	Vial HCl preserved	D	N/A	4.0	Y	Absent	NYTCL-8260(14)
L1708376-04C	Vial HCl preserved	D	N/A	4.0	Y	Absent	NYTCL-8260(14)
L1708376-04D	Plastic 250ml unpreserved	D	8	4.0	Y	Absent	-

*Values in parentheses indicate holding time in days



Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Project Number: Not Specified

Lab Number: L1708376

Report Date: 03/27/17

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1708376-04E	Plastic 250ml HNO3 preserved	D	<2	4.0	Y	Absent	BA-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180),HG-T(28)
L1708376-04F	Plastic 250ml NaOH preserved	D	>12	4.0	Y	Absent	TCN-9010(14)
L1708376-04G	Amber 1000ml unpreserved	D	8	4.0	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708376-04H	Amber 1000ml unpreserved	D	8	4.0	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708376-04X	Plastic 120ml HNO3 preserved Fil	D	<2	4.0	Y	Absent	CU-6020S(180),SE-6020S(180),BE-6020S(180),ZN-6020S(180),CR-6020S(180),BA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),CD-6020S(180),HG-S(28)
L1708376-05A	Vial HCl preserved	G	N/A	3.6	Y	Absent	NYTCL-8260(14)
L1708376-05B	Vial HCl preserved	G	N/A	3.6	Y	Absent	NYTCL-8260(14)
L1708376-05C	Vial HCl preserved	G	N/A	3.6	Y	Absent	NYTCL-8260(14)
L1708376-05D	Plastic 250ml unpreserved	G	8	3.6	Y	Absent	-
L1708376-05E	Plastic 250ml HNO3 preserved	G	<2	3.6	Y	Absent	BA-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180),HG-T(28)
L1708376-05F	Plastic 250ml NaOH preserved	G	>12	3.6	Y	Absent	TCN-9010(14)
L1708376-05G	Amber 1000ml unpreserved	G	8	3.6	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708376-05H	Amber 1000ml unpreserved	G	8	3.6	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708376-05X	Plastic 120ml HNO3 preserved Fil	G	<2	3.6	Y	Absent	CU-6020S(180),SE-6020S(180),BE-6020S(180),ZN-6020S(180),CR-6020S(180),BA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),CD-6020S(180),HG-S(28)
L1708376-06A	Vial HCl preserved	G	N/A	3.6	Y	Absent	NYTCL-8260(14)
L1708376-06B	Vial HCl preserved	G	N/A	3.6	Y	Absent	NYTCL-8260(14)
L1708376-06C	Vial HCl preserved	G	N/A	3.6	Y	Absent	NYTCL-8260(14)
L1708376-07A	Vial HCl preserved	G	N/A	3.6	Y	Absent	NYTCL-8260(14)
L1708376-07B	Vial HCl preserved	G	N/A	3.6	Y	Absent	NYTCL-8260(14)

*Values in parentheses indicate holding time in days



Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708376

Project Number: Not Specified

Report Date: 03/27/17

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1708376-07C	Vial HCl preserved	G	N/A	3.6	Y	Absent	NYTCL-8260(14)
L1708376-08A	Vial HCl preserved	A	N/A	4.6	Y	Absent	NYTCL-8260(14)
L1708376-08B	Vial HCl preserved	A	N/A	4.6	Y	Absent	NYTCL-8260(14)
L1708376-08C	Vial HCl preserved	A	N/A	4.6	Y	Absent	NYTCL-8260(14)
L1708376-08D	Vial H2SO4 preserved	A	N/A	4.6	Y	Absent	TOC-5310(28)
L1708376-08E	Vial H2SO4 preserved	A	N/A	4.6	Y	Absent	TOC-5310(28)
L1708376-08F	Plastic 250ml HNO3 preserved	A	<2	4.6	Y	Absent	MG-6020T(180)
L1708376-08G	Plastic 250ml H2SO4 preserved	A	<2	4.6	Y	Absent	TKN-4500(28)
L1708376-08H	Plastic 120ml unpreserved	A	>12	4.6	Y	Absent	SO4-9038(28)
L1708376-08I	Plastic 120ml unpreserved w/No H	A	N/A	4.6	Y	Absent	ALK-T-2320(14)
L1708376-09A	Vial HCl preserved	A	N/A	4.6	Y	Absent	NYTCL-8260(14)
L1708376-09B	Vial HCl preserved	A	N/A	4.6	Y	Absent	NYTCL-8260(14)
L1708376-09C	Vial HCl preserved	A	N/A	4.6	Y	Absent	NYTCL-8260(14)
L1708376-09D	Vial H2SO4 preserved	A	N/A	4.6	Y	Absent	TOC-5310(28)
L1708376-09E	Vial H2SO4 preserved	A	N/A	4.6	Y	Absent	TOC-5310(28)
L1708376-09F	Plastic 250ml HNO3 preserved	A	<2	4.6	Y	Absent	MG-6020T(180)
L1708376-09G	Plastic 250ml H2SO4 preserved	A	<2	4.6	Y	Absent	TKN-4500(28)
L1708376-09H	Plastic 120ml unpreserved	A	7	4.6	Y	Absent	SO4-9038(28)
L1708376-09I	Plastic 120ml unpreserved w/No H	A	N/A	4.6	Y	Absent	ALK-T-2320(14)
L1708376-10A	Vial HCl preserved	A	N/A	4.6	Y	Absent	NYTCL-8260(14)
L1708376-10B	Vial HCl preserved	A	N/A	4.6	Y	Absent	NYTCL-8260(14)
L1708376-10C	Vial HCl preserved	A	N/A	4.6	Y	Absent	NYTCL-8260(14)
L1708376-10D	Vial H2SO4 preserved	A	N/A	4.6	Y	Absent	TOC-5310(28)
L1708376-10E	Vial H2SO4 preserved	A	N/A	4.6	Y	Absent	TOC-5310(28)
L1708376-10F	Plastic 250ml HNO3 preserved	A	<2	4.6	Y	Absent	MG-6020T(180)
L1708376-10G	Plastic 250ml H2SO4 preserved	A	<2	4.6	Y	Absent	TKN-4500(28)
L1708376-10H	Plastic 120ml unpreserved	A	9	4.6	Y	Absent	SO4-9038(28)
L1708376-10I	Plastic 120ml unpreserved w/No H	A	N/A	4.6	Y	Absent	ALK-T-2320(14)
L1708376-11A	Vial HCl preserved	A	N/A	4.6	Y	Absent	NYTCL-8260(14)
L1708376-11B	Vial HCl preserved	A	N/A	4.6	Y	Absent	NYTCL-8260(14)
L1708376-11C	Vial HCl preserved	A	N/A	4.6	Y	Absent	NYTCL-8260(14)
L1708376-11D	Vial H2SO4 preserved	A	N/A	4.6	Y	Absent	TOC-5310(28)
L1708376-11E	Vial H2SO4 preserved	A	N/A	4.6	Y	Absent	TOC-5310(28)
L1708376-11F	Plastic 250ml HNO3 preserved	A	<2	4.6	Y	Absent	MG-6020T(180)
L1708376-11G	Plastic 250ml H2SO4 preserved	A	<2	4.6	Y	Absent	TKN-4500(28)
L1708376-11H	Plastic 120ml unpreserved	A	8	4.6	Y	Absent	SO4-9038(28)

*Values in parentheses indicate holding time in days



Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Project Number: Not Specified

Lab Number: L1708376

Report Date: 03/27/17

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1708376-11I	Plastic 120ml unpreserved w/No H	A	N/A	4.6	Y	Absent	ALK-T-2320(14)
L1708376-12A	Vial HCl preserved	B	N/A	2.8	Y	Absent	NYTCL-8260(14)
L1708376-12B	Vial HCl preserved	B	N/A	2.8	Y	Absent	NYTCL-8260(14)
L1708376-12C	Vial HCl preserved	B	N/A	2.8	Y	Absent	NYTCL-8260(14)
L1708376-12D	Plastic 250ml unpreserved	B	8	2.8	Y	Absent	-
L1708376-12E	Plastic 250ml HNO3 preserved	B	<2	2.8	Y	Absent	BA-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180),HG-T(28)
L1708376-12F	Plastic 250ml NaOH preserved	B	>12	2.8	Y	Absent	TCN-9010(14)
L1708376-12G	Amber 1000ml unpreserved	B	8	2.8	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708376-12H	Amber 1000ml unpreserved	B	8	2.8	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708376-12X	Plastic 120ml HNO3 preserved Fil	B	<2	2.8	Y	Absent	CU-6020S(180),SE-6020S(180),BE-6020S(180),ZN-6020S(180),CR-6020S(180),BA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),CD-6020S(180),HG-S(28)
L1708376-13A	Vial HCl preserved	B	N/A	2.8	Y	Absent	NYTCL-8260(14)
L1708376-13B	Vial HCl preserved	B	N/A	2.8	Y	Absent	NYTCL-8260(14)
L1708376-13C	Vial HCl preserved	B	N/A	2.8	Y	Absent	NYTCL-8260(14)
L1708376-13D	Plastic 250ml unpreserved	B	8	2.8	Y	Absent	-
L1708376-13E	Plastic 250ml HNO3 preserved	B	<2	2.8	Y	Absent	BA-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180),HG-T(28)
L1708376-13F	Plastic 250ml NaOH preserved	B	>12	2.8	Y	Absent	TCN-9010(14)
L1708376-13G	Amber 1000ml unpreserved	B	8	2.8	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708376-13H	Amber 1000ml unpreserved	B	8	2.8	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708376-13X	Plastic 120ml HNO3 preserved Fil	B	<2	2.8	Y	Absent	CU-6020S(180),SE-6020S(180),BE-6020S(180),ZN-6020S(180),CR-6020S(180),BA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),CD-6020S(180),HG-S(28)

*Values in parentheses indicate holding time in days



Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Project Number: Not Specified

Lab Number: L1708376

Report Date: 03/27/17

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1708376-14A	Vial HCl preserved	B	N/A	2.8	Y	Absent	NYTCL-8260(14)
L1708376-14B	Vial HCl preserved	B	N/A	2.8	Y	Absent	NYTCL-8260(14)
L1708376-14C	Vial HCl preserved	B	N/A	2.8	Y	Absent	NYTCL-8260(14)
L1708376-14D	Plastic 250ml unpreserved	B	8	2.8	Y	Absent	-
L1708376-14E	Plastic 250ml HNO3 preserved	B	<2	2.8	Y	Absent	BA-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180),HG-T(28)
L1708376-14F	Plastic 250ml NaOH preserved	B	>12	2.8	Y	Absent	TCN-9010(14)
L1708376-14G	Amber 1000ml unpreserved	B	8	2.8	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708376-14H	Amber 1000ml unpreserved	B	8	2.8	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708376-14X	Plastic 120ml HNO3 preserved Fil	B	<2	2.8	Y	Absent	CU-6020S(180),SE-6020S(180),BE-6020S(180),ZN-6020S(180),CR-6020S(180),BA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),CD-6020S(180),HG-S(28)
L1708376-15A	Vial HCl preserved	C	N/A	4.1	Y	Absent	NYTCL-8260(14)
L1708376-15B	Vial HCl preserved	C	N/A	4.1	Y	Absent	NYTCL-8260(14)
L1708376-15C	Vial HCl preserved	C	N/A	4.1	Y	Absent	NYTCL-8260(14)
L1708376-15D	Plastic 250ml unpreserved	C	8	4.1	Y	Absent	-
L1708376-15E	Plastic 250ml HNO3 preserved	C	<2	4.1	Y	Absent	BA-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180),HG-T(28)
L1708376-15F	Plastic 250ml NaOH preserved	C	>12	4.1	Y	Absent	TCN-9010(14)
L1708376-15G	Amber 1000ml unpreserved	C	8	4.1	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708376-15H	Amber 1000ml unpreserved	C	8	4.1	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708376-15X	Plastic 120ml HNO3 preserved Fil	C	<2	4.1	Y	Absent	CU-6020S(180),SE-6020S(180),BE-6020S(180),ZN-6020S(180),CR-6020S(180),BA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),CD-6020S(180),HG-S(28)
L1708376-16A	Vial HCl preserved	C	N/A	4.1	Y	Absent	NYTCL-8260(14)

*Values in parentheses indicate holding time in days



Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Project Number: Not Specified

Lab Number: L1708376

Report Date: 03/27/17

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1708376-16B	Vial HCl preserved	C	N/A	4.1	Y	Absent	NYTCL-8260(14)
L1708376-16C	Vial HCl preserved	C	N/A	4.1	Y	Absent	NYTCL-8260(14)
L1708376-16D	Plastic 250ml unpreserved	C	11	4.1	Y	Absent	-
L1708376-16E	Plastic 250ml HNO3 preserved	C	<2	4.1	Y	Absent	BA-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180),HG-T(28)
L1708376-16F	Plastic 250ml NaOH preserved	C	>12	4.1	Y	Absent	TCN-9010(14)
L1708376-16G	Amber 1000ml unpreserved	C	11	4.1	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708376-16H	Amber 1000ml unpreserved	C	11	4.1	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708376-16X	Plastic 120ml HNO3 preserved Fil	C	<2	4.1	Y	Absent	CU-6020S(180),SE-6020S(180),BE-6020S(180),ZN-6020S(180),CR-6020S(180),BA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),CD-6020S(180),HG-S(28)
L1708376-17A	Vial HCl preserved	C	N/A	4.1	Y	Absent	NYTCL-8260(14)
L1708376-17B	Vial HCl preserved	C	N/A	4.1	Y	Absent	NYTCL-8260(14)
L1708376-17C	Vial HCl preserved	C	7	4.1	Y	Absent	NYTCL-8260(14)
L1708376-17D	Plastic 250ml unpreserved	C	4	4.1	Y	Absent	-
L1708376-17E	Plastic 250ml HNO3 preserved	C	<2	4.1	Y	Absent	BA-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180),HG-T(28)
L1708376-17F	Plastic 250ml NaOH preserved	C	>12	4.1	Y	Absent	TCN-9010(14)
L1708376-17G	Amber 1000ml unpreserved	C	7	4.1	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708376-17H	Amber 1000ml unpreserved	C	7	4.1	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708376-17X	Plastic 120ml HNO3 preserved Fil	C	<2	4.1	Y	Absent	CU-6020S(180),SE-6020S(180),BE-6020S(180),ZN-6020S(180),CR-6020S(180),BA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),CD-6020S(180),HG-S(28)
L1708376-18A	Vial HCl preserved	G	N/A	3.6	Y	Absent	NYTCL-8260(14)
L1708376-18B	Vial HCl preserved	G	N/A	3.6	Y	Absent	NYTCL-8260(14)

*Values in parentheses indicate holding time in days



Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Project Number: Not Specified

Lab Number: L1708376

Report Date: 03/27/17

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1708376-18C	Vial HCl preserved	G	N/A	3.6	Y	Absent	NYTCL-8260(14)
L1708376-18D	Plastic 250ml unpreserved	G	8	3.6	Y	Absent	-
L1708376-18E	Plastic 250ml HNO3 preserved	G	<2	3.6	Y	Absent	BA-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180),HG-T(28)
L1708376-18F	Plastic 250ml NaOH preserved	G	>12	3.6	Y	Absent	TCN-9010(14)
L1708376-18G	Amber 1000ml unpreserved	G	8	3.6	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708376-18H	Amber 1000ml unpreserved	G	8	3.6	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708376-18X	Plastic 120ml HNO3 preserved Fil	G	<2	3.6	Y	Absent	CU-6020S(180),SE-6020S(180),BE-6020S(180),ZN-6020S(180),CR-6020S(180),BA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),CD-6020S(180),HG-S(28)
L1708376-19A	Vial HCl preserved	G	N/A	3.6	Y	Absent	NYTCL-8260(14)
L1708376-19B	Vial HCl preserved	G	N/A	3.6	Y	Absent	NYTCL-8260(14)
L1708376-19C	Vial HCl preserved	G	N/A	3.6	Y	Absent	NYTCL-8260(14)
L1708376-19D	Plastic 250ml unpreserved	G	8	3.6	Y	Absent	-
L1708376-19E	Plastic 250ml HNO3 preserved	G	<2	3.6	Y	Absent	BA-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180),HG-T(28)
L1708376-19F	Plastic 250ml NaOH preserved	G	>12	3.6	Y	Absent	TCN-9010(14)
L1708376-19G	Amber 1000ml unpreserved	G	8	3.6	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708376-19H	Amber 1000ml unpreserved	G	8	3.6	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708376-19X	Plastic 120ml HNO3 preserved Fil	G	<2	3.6	Y	Absent	CU-6020S(180),SE-6020S(180),BE-6020S(180),ZN-6020S(180),CR-6020S(180),BA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),CD-6020S(180),HG-S(28)
L1708376-20A	Vial HCl preserved	E	N/A	3.0	Y	Absent	NYTCL-8260(14)
L1708376-20B	Vial HCl preserved	E	N/A	3.0	Y	Absent	NYTCL-8260(14)
L1708376-20C	Vial HCl preserved	E	N/A	3.0	Y	Absent	NYTCL-8260(14)

*Values in parentheses indicate holding time in days



Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Project Number: Not Specified

Lab Number: L1708376

Report Date: 03/27/17

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1708376-20D	Plastic 250ml unpreserved	E	8	3.0	Y	Absent	-
L1708376-20E	Plastic 250ml HNO3 preserved	E	<2	3.0	Y	Absent	BA-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180),HG-T(28)
L1708376-20F	Plastic 250ml NaOH preserved	E	>12	3.0	Y	Absent	TCN-9010(14)
L1708376-20G	Amber 1000ml unpreserved	E	8	3.0	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708376-20H	Amber 1000ml unpreserved	E	8	3.0	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708376-20X	Plastic 120ml HNO3 preserved Fil	E	<2	3.0	Y	Absent	CU-6020S(180),SE-6020S(180),BE-6020S(180),ZN-6020S(180),CR-6020S(180),BA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),CD-6020S(180),HG-S(28)
L1708376-21A	Vial HCl preserved	F	N/A	5.3	Y	Absent	NYTCL-8260(14)
L1708376-21B	Vial HCl preserved	F	N/A	5.3	Y	Absent	NYTCL-8260(14)
L1708376-21C	Vial HCl preserved	F	N/A	5.3	Y	Absent	NYTCL-8260(14)
L1708376-21D	Vial H2SO4 preserved	F	N/A	5.3	Y	Absent	HOLD-WETCHEM(0)
L1708376-21E	Vial H2SO4 preserved	F	N/A	5.3	Y	Absent	HOLD-WETCHEM(0)
L1708376-21F	Plastic 250ml HNO3 preserved	F	<2	5.3	Y	Absent	BA-6020T(180),SE-6020T(180),TL-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180),HG-T(28)
L1708376-21G	Plastic 250ml unpreserved	F	8	5.3	Y	Absent	-
L1708376-21H	Plastic 250ml NaOH preserved	F	>12	5.3	Y	Absent	TCN-9010(14)
L1708376-21I	Plastic 120ml unpreserved	F	8	5.3	Y	Absent	HOLD-WETCHEM()
L1708376-21J	Plastic 120ml unpreserved w/No H	F	N/A	5.3	Y	Absent	HOLD-WETCHEM()
L1708376-21K	Plastic 250ml H2SO4 preserved	F	<2	5.3	Y	Absent	HOLD-WETCHEM(0)
L1708376-21L	Amber 1000ml unpreserved	F	8	5.3	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1708376-21M	Amber 1000ml unpreserved	F	8	5.3	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)

*Values in parentheses indicate holding time in days



Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Project Number:** Not Specified**Lab Number:** L1708376**Report Date:** 03/27/17**Container Information**

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1708376-21X	Plastic 120ml HNO3 preserved Fil	F	<2	5.3	Y	Absent	CU-6020S(180),SE-6020S(180),BE-6020S(180),ZN-6020S(180),CR-6020S(180),BA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),CD-6020S(180),HG-S(28)
L1708376-22A	Vial HCl preserved	F	N/A	5.3	Y	Absent	NYTCL-8260(14)
L1708376-22B	Vial HCl preserved	F	N/A	5.3	Y	Absent	NYTCL-8260(14)
L1708376-22C	Vial HCl preserved	F	N/A	5.3	Y	Absent	NYTCL-8260(14)

*Values in parentheses indicate holding time in days



Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708376

Project Number: Not Specified

Report Date: 03/27/17

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the

Report Format: DU Report with 'J' Qualifiers



Project Name: SITE1-2_SPM_2017 (PORT IVORY)**Lab Number:** L1708376**Project Number:** Not Specified**Report Date:** 03/27/17**Data Qualifiers**

- reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
 - D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
 - E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
 - G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
 - H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
 - I** - The lower value for the two columns has been reported due to obvious interference.
 - M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
 - NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
 - P** - The RPD between the results for the two columns exceeds the method-specified criteria.
 - Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
 - R** - Analytical results are from sample re-analysis.
 - RE** - Analytical results are from sample re-extraction.
 - S** - Analytical results are from modified screening analysis.
 - J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
 - ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers



Project Name: SITE1-2_SPM_2017 (PORT IVORY)

Lab Number: L1708376

Project Number: Not Specified

Report Date: 03/27/17

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 300: DW: Bromide

EPA 6860: NPW and SCM: Perchlorate

EPA 9010: NPW and SCM: Amenable Cyanide Distillation

EPA 9012B: NPW: Total Cyanide

EPA 9050A: NPW: Specific Conductance

SM3500: NPW: Ferrous Iron

SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO₂, NO₃.

SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility

SM 2540D: TSS

EPA 3005A NPW

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B**

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH, EPA 350.1: Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **SM4500NO3-F, EPA 353.2:** Nitrate-N, **EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.**

EPA 624: Volatile Halocarbons & Aromatics,

EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E.**

Mansfield Facility:

Drinking Water

EPA 200.7: Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. **EPA 200.8:** Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. **EPA 245.1 Hg.**

Non-Potable Water


EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.


EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 NEW YORK CHAIN OF CUSTODY Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page 1 of 2	Date Rec'd In Lab 3/20/17	ALPHA Job # 1208376														
	Project Information Project Name: Site1-2_SPM_2017 (Port Ivory) Project Location: Staten Island, NY Charge Code: _____ (Use Project name as Project #) <input type="checkbox"/>	Deliverables <input type="checkbox"/> ASP-A <input type="checkbox"/> ASP-B <input type="checkbox"/> EQUIS (1 File) <input type="checkbox"/> EQUIS (4 File) <input type="checkbox"/> Other	Billing Information <input type="checkbox"/> Same as Client Info PO# _____															
Client Information Client: Port Authority of NY & NJ Address: Four World Trade Center 150 Greenwich Street - 20th Floor New York, New York 10007 Phone: 212-435-6106 Email: aaaltieri@panynj.gov	Regulatory Requirement <input type="checkbox"/> NY TOGS NY Part 375 <input type="checkbox"/> AWQ Standards NY CP-51 <input type="checkbox"/> NY Restricted Use Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge	Site Information Is this site impacted by Petroleum? Yes <input type="checkbox"/> Petroleum Product: _____																
Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: _____ Rush (only if pre approved) <input type="checkbox"/> # of Days: _____	These samples have been previously analyzed by Alpha <input type="checkbox"/>																	
For EPH, selection is REQUIRED: <input type="checkbox"/> Category 1 <input type="checkbox"/> Category 2	For VOC, selection is REQUIRED: <input type="checkbox"/> 1,4-Dioxane <input type="checkbox"/> 8011	Other project specific requirements/comments: NYSDEC ASP Category B data deliverables will be provided by the laboratory for the groundwater sample collected from PRW-7E only																
ANALYSIS		Sample Filtration <input type="checkbox"/> Done <input checked="" type="checkbox"/> Lab to do Preservation <input checked="" type="checkbox"/> Lab to do (Please Specify below)																
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Toluene	Magnesium	Total Alkalinity	TKN	TOC	Sulfate	PPVOC (8260)	PP SVOC	Total PP Metals	Dissolved PP Metals	Cyanide	o t a l B o t t l e	
C8376-01	SW-1	3/20/17	1235	SW	RD							X	X	X	X	X		8
-02	SW-2	3/20/17	1210	SW	RD							X	X	X	X	X		8
-03	SW-3	3/20/17	1155	SW	RD							X	X	X	X	X		8
-04	SW-4	3/20/17	1140	SW	RD							X	X	X	X	X		8
-05	SW-5	3/20/17	1040	SW	RD							X	X	X	X	X		8
-06	SW-6	3/20/17	1005	SW	RD	X												3
-07	SW-7	3/20/17	950	SW	RD	X												3
-08	PRW-7A	3/20/17	1017	GW	CB	X	X	X	X	X	X							9
-09	PRW-7B	3/20/17	1132	GW	CB	X	X	X	X	X	X							9
-10	PRW-7C	3/20/17	1247	GW	CB	X	X	X	X	X	X							9
-11	PRW-7D	3/20/17	1423	GW	CB	X	X	X	X	X	X							9
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other	Container Code P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle	Westboro: Certification No: MA935 Mansfield: Certification No: MA015	Container Type V P P P V P V A P P P Preservative B C O D D A B A C A E			Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS.												
Relinquished By: <i>[Signature]</i>		Date/Time: 3/20/17		Received By: <i>[Signature]</i>		Date/Time: 3/20/17 18:50												
Relinquished By: <i>[Signature]</i>		Date/Time: 3/20/17 21:20		Received By: <i>[Signature]</i>		Date/Time: 3-20-17 21:28												
Relinquished By: <i>[Signature]</i>		Date/Time: 3-21-17 01:00		Received By: <i>[Signature]</i>		Date/Time: 3/20/17 01:00												
Form No: 01-14 (rev. 30-Sept-2013)																		

 NEW YORK CHAIN OF CUSTODY Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page 2 of 2	Date Rec'd in Lab 3/21/17	ALPHA Job # L17C8376							
	Project Information Project Name: Site1-2_SPM_2017 (Port Ivory) Project Location: Staten Island, NY Charge Code: _____ (Use Project name as Project #) <input type="checkbox"/>		Deliverables <input type="checkbox"/> ASP-A <input type="checkbox"/> ASP-B <input type="checkbox"/> EQUIS (1 File) <input type="checkbox"/> EQUIS (4 File) <input type="checkbox"/> Other		Billing Information <input type="checkbox"/> Same as Client Info PO # _____						
Client Information Client: Port Authority of NY & NJ Address: Four World Trade Center 150 Greenwich Street - 20th Floor New York, New York 10007 Phone: 212-435-6106 Email: aaaltieri@panyni.gov		Regulatory Requirement <input type="checkbox"/> NY TOGS NY Part 375 <input type="checkbox"/> AWQ Standards NY CP-51 <input type="checkbox"/> NY Restricted Use Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		Site Information Is this site impacted by Petroleum? Yes <input type="checkbox"/> Petroleum Product: _____							
Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: _____ Rush (only if pre approved) <input type="checkbox"/> # of Days: _____		ANALYSIS									
These samples have been previously analyzed by Alpha <input type="checkbox"/>		For EPH, selection is REQUIRED: <input type="checkbox"/> Category 1 <input type="checkbox"/> Category 2		For VOC, selection is REQUIRED: <input type="checkbox"/> 1,4-Dioxane <input type="checkbox"/> 8011		Other project specific requirements/comments: NYSDEC ASP Category B data deliverables will be provided by the laboratory for the groundwater sample collected from PRW-7E only		Sample Filtration <input type="checkbox"/> Done <input checked="" type="checkbox"/> Lab to do Preservation <input checked="" type="checkbox"/> Lab to do (Please Specify below)		o t a l B o t t l e	
ALPHA Lab ID (Lab Use Only)		Sample ID		Collection Date Time		Sample Matrix Sampler's Initials		Toluene Magnesium Total Alkalinity TKN TOC Sulfate PPVOC (8260) PP SVOC Total PP Metals Dissolved PP Metals Cyanide			Sample Specific Comments
8376-12		PRW-09		3/20/17 1041		GW ZM		X X X X X		8	
-13		PRW-05		3/20/17 1216		GW ZM		X X X X X		8	
-14		PRW-03		3/20/17 1401		GW ZM		X X X X X		8	
-15		PRW-01		3/20/17 1421		GW MS		X X X X X		8	
-16		PRW-12		3/20/17 1550		GW MS		X X X X X		8	
-17		PRW-06		3/20/17 1416		GW RD		X X X X X		8	
-18		PRW-11		3/20/17 1551		GW RD		X X X X X		8	
-19		DUP-1		3/20/17 —		SW RD		X X X X X		8	
-20		DUP-2		3/20/17 —		SW RD		X X X X X		8	
-21		FB-032017		3/20/17 1505		AQ MS		X X X X X		8	
-22		TRIP BLANK		3/17/17 —		AQ LAB		X		2	
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type V P P P V P V A P P P		Preservative B C O D D A B A C A E		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS.	
Relinquished By: <i>[Signature]</i>		Date/Time: 3/20/17		Received By: <i>[Signature]</i>		Date/Time: 3/20/17 18:50		Relinquished By: <i>[Signature]</i>		Date/Time: 3-20-17 21:20	
Relinquished By: <i>[Signature]</i>		Date/Time: 3-21-17 01:00		Received By: <i>[Signature]</i>		Date/Time: 3/24/17 01:00		Relinquished By: <i>[Signature]</i>		Date/Time: _____	



ANALYTICAL REPORT

Lab Number:	L1711785
Client:	Port Authority of New York/New Jersey Materials Engineering-Chemical/Env Lab 241 Erie Street-Room 210 Jersey City, NJ 07310
ATTN:	Matthew McCardle
Phone:	(201) 216-2960
Project Name:	SITE1-2_SPM_2017(PORT IVORY)
Project Number:	Not Specified
Report Date:	04/20/17

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

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

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



Project Name: SITE1-2_SPM_2017(PORT IVORY)
Project Number: Not Specified

Lab Number: L1711785
Report Date: 04/20/17

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1711785-01	TRIP BLANK	WATER	STATEN ISLAND, NY	04/12/17 00:00	04/13/17
L1711785-02	FIELD BLANK	WATER	STATEN ISLAND, NY	04/12/17 08:20	04/13/17
L1711785-03	PRW-7E	WATER	STATEN ISLAND, NY	04/12/17 09:16	04/13/17

Project Name: SITE1-2_SPM_2017(PORT IVORY)
Project Number: Not Specified

Lab Number: L1711785
Report Date: 04/20/17

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

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

Please contact Client Services at 800-624-9220 with any questions.

Project Name: SITE1-2_SPM_2017(PORT IVORY)
Project Number: Not Specified

Lab Number: L1711785
Report Date: 04/20/17

Case Narrative (continued)

Report Submission

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

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

Authorized Signature:

 Melissa Cripps

Title: Technical Director/Representative

Date: 04/20/17

ORGANICS

VOLATILES

Project Name: SITE1-2_SPM_2017(PORT IVORY)**Lab Number:** L1711785**Project Number:** Not Specified**Report Date:** 04/20/17**SAMPLE RESULTS**

Lab ID: L1711785-01
Client ID: TRIP BLANK
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 04/20/17 09:58
Analyst: MM

Date Collected: 04/12/17 00:00
Date Received: 04/13/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS - Westborough Lab						
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Toluene	ND		ug/l	2.5	0.70	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	105		70-130

Project Name: SITE1-2_SPM_2017(PORT IVORY)**Lab Number:** L1711785**Project Number:** Not Specified**Report Date:** 04/20/17**SAMPLE RESULTS**

Lab ID: L1711785-02
Client ID: FIELD BLANK
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 04/20/17 10:13
Analyst: MM

Date Collected: 04/12/17 08:20
Date Received: 04/13/17
Field Prep: Not Specified

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

Volatile Organics by GC/MS - Westborough Lab						
--	--	--	--	--	--	--

Toluene	ND		ug/l	2.5	0.70	1
---------	----	--	------	-----	------	---

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	89		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	77		70-130
Dibromofluoromethane	97		70-130

Project Name: SITE1-2_SPM_2017(PORT IVORY)**Lab Number:** L1711785**Project Number:** Not Specified**Report Date:** 04/20/17**SAMPLE RESULTS**

Lab ID: L1711785-03
Client ID: PRW-7E
Sample Location: STATEN ISLAND, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 04/20/17 12:14
Analyst: NL

Date Collected: 04/12/17 09:16
Date Received: 04/13/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS - Westborough Lab						
--	--	--	--	--	--	--

Toluene	ND		ug/l	2.5	0.70	1
---------	----	--	------	-----	------	---

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	98		70-130

Project Name: SITE1-2_SPM_2017(PORT IVORY)

Lab Number: L1711785

Project Number: Not Specified

Report Date: 04/20/17

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
 Analytical Date: 04/20/17 06:04
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG996028-5					
Toluene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	111		70-130

Project Name: SITE1-2_SPM_2017(PORT IVORY)

Lab Number: L1711785

Project Number: Not Specified

Report Date: 04/20/17

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
 Analytical Date: 04/20/17 10:04
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03 Batch: WG996056-5					
Toluene	ND		ug/l	2.5	0.70

Tentatively Identified Compounds

No Tentatively Identified Compounds ND ug/l

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	102		70-130

Project Name: SITE1-2_SPM_2017(PORT IVORY)

Lab Number: L1711785

Project Number: Not Specified

Report Date: 04/20/17

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
 Analytical Date: 04/20/17 06:20
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG996111-5					
Toluene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	79		70-130
Dibromofluoromethane	95		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: SITE1-2_SPM_2017(PORT IVORY)

Lab Number: L1711785

Project Number: Not Specified

Report Date: 04/20/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG996028-3 WG996028-4								
Toluene	100		94		70-130	6		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	113		103		70-130
Toluene-d8	95		98		70-130
4-Bromofluorobenzene	85		88		70-130
Dibromofluoromethane	107		109		70-130

Lab Control Sample Analysis Batch Quality Control

Project Name: SITE1-2_SPM_2017(PORT IVORY)
Project Number: Not Specified

Lab Number: L1711785
Report Date: 04/20/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG996056-3 WG996056-4								
Toluene	100		100		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	97		94		70-130
Toluene-d8	101		99		70-130
4-Bromofluorobenzene	100		99		70-130
Dibromofluoromethane	103		103		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: SITE1-2_SPM_2017(PORT IVORY)

Lab Number: L1711785

Project Number: Not Specified

Report Date: 04/20/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG996111-3 WG996111-4								
Toluene	96		100		70-130	4		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	111		103		70-130
Toluene-d8	93		101		70-130
4-Bromofluorobenzene	92		79		70-130
Dibromofluoromethane	113		100		70-130

METALS

Project Name: SITE1-2_SPM_2017(PORT IVORY)**Lab Number:** L1711785**Project Number:** Not Specified**Report Date:** 04/20/17**SAMPLE RESULTS**

Lab ID: L1711785-03

Date Collected: 04/12/17 09:16

Client ID: PRW-7E

Date Received: 04/13/17

Sample Location: STATEN ISLAND, NY

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Magnesium, Total	0.390		mg/l	0.0700	0.0242	1	04/17/17 11:20	04/19/17 13:16	EPA 3005A	1,6020A	BV



Project Name: SITE1-2_SPM_2017(PORT IVORY)

Lab Number: L1711785

Project Number: Not Specified

Report Date: 04/20/17

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 03 Batch: WG994867-1									
Magnesium, Total	ND	mg/l	0.0700	0.0242	1	04/17/17 11:20	04/19/17 12:09	1,6020A	BV

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: SITE1-2_SPM_2017(PORT IVORY)

Lab Number: L1711785

Project Number: Not Specified

Report Date: 04/20/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 03 Batch: WG994867-2								
Magnesium, Total	100		-		80-120	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: SITE1-2_SPM_2017(PORT IVORY)

Lab Number: L1711785

Project Number: Not Specified

Report Date: 04/20/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 03 QC Batch ID: WG994867-3 WG994867-4 QC Sample: L1711713-02 Client ID: MS Sample												
Magnesium, Total	54.6	10	86.3	317	Q	86.5	319	Q	75-125	0		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: SITE1-2_SPM_2017(PORT IVORY)

Project Number: Not Specified

Lab Number: L1711785

Report Date: 04/20/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 03 QC Batch ID: WG994867-5 QC Sample: L1711713-06 Client ID: DUP Sample						
Magnesium, Total	45.7	48.2	mg/l	5		20

INORGANICS & MISCELLANEOUS

Project Name: SITE1-2_SPM_2017(PORT IVORY)
Project Number: Not Specified

Lab Number: L1711785
Report Date: 04/20/17

SAMPLE RESULTS

Lab ID: L1711785-03
Client ID: PRW-7E
Sample Location: STATEN ISLAND, NY
Matrix: Water

Date Collected: 04/12/17 09:16
Date Received: 04/13/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Alkalinity, Total	1480		mg CaCO3/L	5.00	NA	2.5	-	04/18/17 01:18	121,2320B	KA
Nitrogen, Total Kjeldahl	3.07		mg/l	0.300	0.066	1	04/17/17 15:16	04/17/17 20:36	121,4500NH3-H	AT
Sulfate	71.		mg/l	50	6.8	5	04/18/17 12:30	04/18/17 12:30	1,9038	AW
Total Organic Carbon	11.9		mg/l	2.50	0.570	5	-	04/17/17 07:47	121,5310C	DW



Project Name: SITE1-2_SPM_2017(PORT IVORY)

Lab Number: L1711785

Project Number: Not Specified

Report Date: 04/20/17

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 03 Batch: WG994776-1										
Total Organic Carbon	0.150	J	mg/l	0.500	0.114	1	-	04/17/17 07:47	121,5310C	DW
General Chemistry - Westborough Lab for sample(s): 03 Batch: WG994965-1										
Nitrogen, Total Kjeldahl	0.081	J	mg/l	0.300	0.022	1	04/17/17 15:16	04/17/17 20:31	121,4500NH3-H	AT
General Chemistry - Westborough Lab for sample(s): 03 Batch: WG995106-1										
Alkalinity, Total	ND		mg CaCO3/L	2.00	NA	1	-	04/18/17 01:18	121,2320B	KA
General Chemistry - Westborough Lab for sample(s): 03 Batch: WG995225-1										
Sulfate	1.4	J	mg/l	10	1.4	1	04/18/17 12:30	04/18/17 12:30	1,9038	AW

Lab Control Sample Analysis

Batch Quality Control

Project Name: SITE1-2_SPM_2017(PORT IVORY)

Project Number: Not Specified

Lab Number: L1711785

Report Date: 04/20/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 03 Batch: WG994776-2								
Total Organic Carbon	106		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 03 Batch: WG994965-2								
Nitrogen, Total Kjeldahl	100		-		78-122	-		
General Chemistry - Westborough Lab Associated sample(s): 03 Batch: WG995106-2								
Alkalinity, Total	107		-		90-110	-		10
General Chemistry - Westborough Lab Associated sample(s): 03 Batch: WG995225-2								
Sulfate	95		-		90-110	-		

Matrix Spike Analysis Batch Quality Control

Project Name: SITE1-2_SPM_2017(PORT IVORY)

Lab Number: L1711785

Project Number: Not Specified

Report Date: 04/20/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 03 QC Batch ID: WG994776-4 QC Sample: L1711723-02 Client ID: MS Sample												
Total Organic Carbon	70.6	160	229	99	-	-	-	-	80-120	-	-	20
General Chemistry - Westborough Lab Associated sample(s): 03 QC Batch ID: WG994965-4 QC Sample: L1711711-04 Client ID: MS Sample												
Nitrogen, Total Kjeldahl	0.071J	8	6.97	87	-	-	-	-	77-111	-	-	24
General Chemistry - Westborough Lab Associated sample(s): 03 QC Batch ID: WG995106-4 QC Sample: L1712023-03 Client ID: MS Sample												
Alkalinity, Total	85.6	100	184	98	-	-	-	-	86-116	-	-	10
General Chemistry - Westborough Lab Associated sample(s): 03 QC Batch ID: WG995225-4 QC Sample: L1711804-01 Client ID: MS Sample												
Sulfate	4.8J	20	27	135	-	-	-	-	55-147	-	-	14

Lab Duplicate Analysis

Batch Quality Control

Project Name: SITE1-2_SPM_2017(PORT IVORY)

Project Number: Not Specified

Lab Number: L1711785

Report Date: 04/20/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 03 QC Batch ID: WG994776-3 QC Sample: L1711723-02 Client ID: DUP Sample						
Total Organic Carbon	70.6	67.0	mg/l	5		20
General Chemistry - Westborough Lab Associated sample(s): 03 QC Batch ID: WG994965-3 QC Sample: L1711711-04 Client ID: DUP Sample						
Nitrogen, Total Kjeldahl	0.071J	0.081J	mg/l	NC		24
General Chemistry - Westborough Lab Associated sample(s): 03 QC Batch ID: WG995106-3 QC Sample: L1712023-03 Client ID: DUP Sample						
Alkalinity, Total	85.6	85.0	mg CaCO3/L	1		10
General Chemistry - Westborough Lab Associated sample(s): 03 QC Batch ID: WG995225-3 QC Sample: L1711804-01 Client ID: DUP Sample						
Sulfate	4.8J	5.2J	mg/l	NC		14

Project Name: SITE1-2_SPM_2017(PORT IVORY)**Lab Number:** L1711785**Project Number:** Not Specified**Report Date:** 04/20/17**Sample Receipt and Container Information**

Were project specific reporting limits specified? YES

Cooler Information Custody Seal**Cooler**

A Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1711785-01A	Vial HCl preserved	A	N/A	3.8	Y	Absent	NYTCL-8260(14)
L1711785-01B	Vial HCl preserved	A	N/A	3.8	Y	Absent	NYTCL-8260(14)
L1711785-02A	Vial HCl preserved	A	N/A	3.8	Y	Absent	NYTCL-8260(14)
L1711785-02B	Vial HCl preserved	A	N/A	3.8	Y	Absent	NYTCL-8260(14)
L1711785-02C	Vial HCl preserved	A	N/A	3.8	Y	Absent	NYTCL-8260(14)
L1711785-03A	Vial HCl preserved	A	N/A	3.8	Y	Absent	NYTCL-8260(14)
L1711785-03B	Vial HCl preserved	A	N/A	3.8	Y	Absent	NYTCL-8260(14)
L1711785-03C	Vial HCl preserved	A	N/A	3.8	Y	Absent	NYTCL-8260(14)
L1711785-03D	Vial H2SO4 preserved	A	N/A	3.8	Y	Absent	TOC-5310(28)
L1711785-03E	Vial H2SO4 preserved	A	N/A	3.8	Y	Absent	TOC-5310(28)
L1711785-03E1	Vial H2SO4 preserved	A	N/A	3.8	Y	Absent	TOC-5310(28)
L1711785-03F	Plastic 250ml HNO3 preserved	A	<2	3.8	Y	Absent	MG-6020T(180)
L1711785-03G	Plastic 250ml H2SO4 preserved	A	<2	3.8	Y	Absent	TKN-4500(28)
L1711785-03H	Plastic 120ml unpreserved	A	12	3.8	Y	Absent	SO4-9038(28)
L1711785-03I	Plastic 120ml unpreserved w/No H	A	N/A	3.8	Y	Absent	ALK-T-2320(14)

*Values in parentheses indicate holding time in days

Project Name: SITE1-2_SPM_2017(PORT IVORY)**Lab Number:** L1711785**Project Number:** Not Specified**Report Date:** 04/20/17

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the

Report Format: DU Report with 'J' Qualifiers



Project Name: SITE1-2_SPM_2017(PORT IVORY)**Lab Number:** L1711785**Project Number:** Not Specified**Report Date:** 04/20/17**Data Qualifiers**

- reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
 - D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
 - E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
 - G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
 - H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
 - I** - The lower value for the two columns has been reported due to obvious interference.
 - M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
 - NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
 - P** - The RPD between the results for the two columns exceeds the method-specified criteria.
 - Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
 - R** - Analytical results are from sample re-analysis.
 - RE** - Analytical results are from sample re-extraction.
 - S** - Analytical results are from modified screening analysis.
 - J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
 - ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers



Project Name: SITE1-2_SPM_2017(PORT IVORY)

Lab Number: L1711785

Project Number: Not Specified

Report Date: 04/20/17

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 300: DW: Bromide

EPA 6860: NPW and SCM: Perchlorate

EPA 9010: NPW and SCM: Amenable Cyanide Distillation

EPA 9012B: NPW: Total Cyanide

EPA 9050A: NPW: Specific Conductance

SM3500: NPW: Ferrous Iron

SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO₂, NO₃.

SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility

SM 2540D: TSS

EPA 3005A NPW

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B**

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH, EPA 350.1: Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **SM4500NO3-F, EPA 353.2:** Nitrate-N, **EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.**

EPA 624: Volatile Halocarbons & Aromatics,

EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E.**

Mansfield Facility:

Drinking Water

EPA 200.7: Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. **EPA 200.8:** Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. **EPA 245.1 Hg.**

Non-Potable Water


EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	NEW YORK CHAIN OF CUSTODY	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page <u>1</u> of <u>1</u>	Date Rec'd in Lab 4/14/17	ALPHA Job # C1711785		
		Project Information Project Name: <u>Site1-2_SPM_2017 (Port Ivory)</u> Project Location: <u>Staten Island, NY</u> Charge Code: _____ (Use Project name as Project #) <input type="checkbox"/>	Deliverables <input type="checkbox"/> ASP-A <input type="checkbox"/> ASP-B <input type="checkbox"/> EQulS (1 File) <input type="checkbox"/> EQulS (4 File) <input type="checkbox"/> Other	Billing Information <input type="checkbox"/> Same as Client Info PO# _____			
Client Information Client: <u>Port Authority of NY & NJ</u> Address: <u>Four World Trade Center</u> <u>150 Greenwich Street - 20th Floor</u> New York, New York 10007 Phone: <u>212-435-6106</u> Email: <u>aaltieri@panynj.gov</u>	Project Manager: <u>Angela Altieri</u> ALPHAQuote #: _____ Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: _____ Rush (only if pre approved) <input type="checkbox"/> # of Days: _____	Regulatory Requirement <input type="checkbox"/> NY TOGS NY Part 375 <input type="checkbox"/> AWQ Standards NY CP-51 <input type="checkbox"/> NY Restricted Use Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge	Site Information Is this site impacted by Petroleum? Yes <input type="checkbox"/> Petroleum Product: _____				
These samples have been previously analyzed by Alpha <input type="checkbox"/>		ANALYSIS		Sample Filtration <input type="checkbox"/> Done <input checked="" type="checkbox"/> Lab to do Preservation <input checked="" type="checkbox"/> Lab to do (Please Specify below)			
For EPH, selection is REQUIRED: <input type="checkbox"/> Category 1 <input type="checkbox"/> Category 2	For VOC, selection is REQUIRED: <input type="checkbox"/> 1,4-Dioxane <input type="checkbox"/> 8011	Other project specific requirements/comments: NYSDEC ASP Category B data deliverables will be provided by the laboratory for the groundwater sample collected from PRW-7E only		Toluene Magnesium Total Alkalinity TKN TOC Sulfate PPVOC (8260) PP SVOC Total PP Metals Dissolved PP Metals Cyanide	o t a l B o t t l e		
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date Time	Sample Matrix	Sampler's Initials	Container Type Preservative	V P P P V P V A P P P B C O D D A B A C A E	Sample Specific Comments
11785-01	Trip Blank	4/12/17 -	AQ	LAB	X	X	_____
02	Field Blank	4/13/17 820	AQ	TD	X	X	_____
03	PRW-7E	4/13/17 916	GW	ED	X X X X X X	X	_____
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other	Container Code P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle	Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S <u>TERMS & CONDITIONS.</u>			
Relinquished By: _____		Date/Time: <u>4/13/17 1746</u>	Received By: _____		Date/Time: <u>4/13/17 1746</u>		
_____		<u>4/13/17 1936</u>	_____		_____		
_____		<u>4/13/17 2236</u>	_____		<u>4-13-17 2300</u>		
_____		<u>4-14-17 0330</u>	_____		<u>4/14/17 03:30</u>		

**ATTACHMENT E – DATA
USABILITY SUMMARY REPORT**

Data Usability Summary Report

Site: Port Ivory, Staten Island, NY
Laboratory: Alpha Analytical, Westborough, MA
SDG No.: L1711785
Parameters: Toluene, Magnesium, Total Kjeldahl Nitrogen (TKN), Total Organic Carbon (TOC), Sulfate, and Alkalinity
Reviewer: Sue Milcan/TRC
Date: January 3, 2018

Samples Reviewed and Evaluation Summary

1 groundwater sample: PRW-7E

2 water quality control
(QC) samples: TRIP BLANK, FIELD BLANK

The above-listed groundwater and water QC samples were collected on April 12-13, 2017 and were analyzed for one or more of the following parameters:

- Toluene by SW-846 Method 8260C
- Magnesium (total) by SW-846 Methods 3005A/6020A
- TKN by Standard Method 4500NH3-H
- TOC by Standard Method 5310C
- Sulfate by SW-846 Method 9038
- Alkalinity by Standard Method 2320B

The data validation was performed in accordance with the following USEPA guidance, modified for the methodologies utilized:

- USEPA National Functional Guidelines for Organic/Inorganic Superfund Methods Data Review, January 2017

The data were evaluated based on the following parameters:

- * • Overall Evaluation of Data and Potential Usability Issues
- * • Data Completeness
- * • Holding Times and Sample Preservation
- * • Gas Chromatography/Mass Spectrometry (GC/MS) and Inductively Coupled Plasma-MS (ICP-MS) Tunes
- * • Initial and Continuing Calibrations
- * • Interference Check Sample (ICS) Results
- Blanks
- * • Surrogate Recoveries
- * • Internal Standards
- * • Laboratory Control Sample (LCS)/LCS Duplicate (LCSD) Results

- NA • Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
- NA • Laboratory Duplicate Results
- * • Sample Results and Reported Quantitation Limits (QLs)
- * • Target Compound Identification

- * - All criteria were met.
- NA - Not applicable or not associated with this sample set.

Overall Evaluation of Data and Potential Usability Issues

The data are valid as reported and may be used for decision-making purposes. There were no qualifications applied to the data as a result of either sampling or analytical error.

Data Completeness

The data package was a complete Level IV data deliverable package.

Holding Times and Sample Preservation

All holding times and sample preservation method criteria were met for the toluene, magnesium, TKN, TOC, sulfate, and alkalinity analyses.

GC/MS and ICP-MS Tunes

All criteria were met in the toluene and magnesium analyses.

Initial and Continuing Calibrations

All percent relative standard deviations (%RSDs), percent differences (%Ds), correlation coefficients (r^2), and/or relative response factors (RRFs) were within the method acceptance criteria in the initial calibration (IC) and continuing calibration (CC) standards associated with the samples in this data set for the toluene, magnesium, TKN, TOC, and sulfate analyses.

Interference Check Sample (ICS) Results

Magnesium was recovered within the acceptance limits in the 6020A analysis.

Blanks

All method blanks for the toluene, magnesium, and alkalinity analyses were free of contamination. Toluene was not detected in samples TRIP BLANK and FIELD BLANK.

The following table summarizes the contaminants detected in the TKN, TOC, and sulfate laboratory blanks, the associated sample, and any resulting validation actions.

Blank ID	Analyte	Blank Concentration	Validation Actions
WG994965-1BLANK	TKN	0.081 J mg/L	Qualification was not required since TKN, TOC, and sulfate concentrations in the associated sample were >10x the blank results.
WG994776-1BLANK	TOC	0.150 J mg/L	
WG995225-1BLANK	Sulfate	1.4 J mg/L	
Associated sample: PRW-7E			

Surrogate Recoveries

All criteria were met for project samples in the toluene analyses.

Internal Standards

All criteria were met in the toluene and magnesium analyses.

LCS/LCS Duplicate Results

The LCS and LCS/LCSD percent recoveries (%Rs) and/or relative percent differences (RPDs) were within the laboratory acceptance criteria in the toluene, magnesium, TKN, TOC, sulfate, and alkalinity analyses.

MS/MSD Results

MS/MSD analyses were not performed on project samples.

Laboratory Duplicate Results

Laboratory duplicate analyses were not performed on project samples.

Sample Results and Reported Quantitation Limits

Sample calculations for all parameters were spot-checked; there were no errors noted. The following table summarizes dilutions performed on samples in this data set; QLs were elevated accordingly.

Sample ID	Parameter	Dilution	Reason for Dilution
PRW-7E	TOC	5-fold	A 5-fold dilution was performed due to the concentration of the target analyte which would have exceeded the calibration range if analyzed undiluted.
	Sulfate		
	Alkalinity	2.5-fold	A 2.5-fold dilution was performed due to the concentration of the target analyte which would have exceeded the calibration range if analyzed undiluted.

Target Compound Identification

All criteria were met for the toluene analyses.

QUALIFIED FORM Is

Form 1 VOA

Client	: Port Authority of New York/New Jers	Lab Number	: L1711785
Project Name	: SITE1-2_SPM_2017(PORT IVORY)	Project Number	:
Lab ID	: L1711785-01	Date Collected	: 04/12/17 00:00
Client ID	: TRIP BLANK	Date Received	: 04/13/17
Sample Location	: STATEN ISLAND, NY	Date Analyzed	: 04/20/17 09:58
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: MM
Lab File ID	: VJ170420A21	Instrument ID	: JACK
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
108-88-3	Toluene	ND	2.5	0.70	U



Form 1 VOA

Client : Port Authority of New York/New Jers	Lab Number : L1711785
Project Name : SITE1-2_SPM_2017(PORT IVORY)	Project Number :
Lab ID : L1711785-02	Date Collected : 04/12/17 08:20
Client ID : FIELD BLANK	Date Received : 04/13/17
Sample Location : STATEN ISLAND, NY	Date Analyzed : 04/20/17 10:13
Sample Matrix : WATER	Dilution Factor : 1
Analytical Method : 1,8260C	Analyst : MM
Lab File ID : VJ170420A22	Instrument ID : JACK
Sample Amount : 10 ml	GC Column : RTX-502.2
Level : LOW	%Solids : N/A
Extract Volume (MeOH) : N/A	Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
108-88-3	Toluene	ND	2.5	0.70	U



Form 1 VOA

Client	: Port Authority of New York/New Jers	Lab Number	: L1711785
Project Name	: SITE1-2_SPM_2017(PORT IVORY)	Project Number	:
Lab ID	: L1711785-03	Date Collected	: 04/12/17 09:16
Client ID	: PRW-7E	Date Received	: 04/13/17
Sample Location	: STATEN ISLAND, NY	Date Analyzed	: 04/20/17 12:14
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260C	Analyst	: NL
Lab File ID	: VG170420A09	Instrument ID	: GONZO
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
108-88-3	Toluene	ND	2.5	0.70	U



Form 1 METALS

Client : Port Authority of New York/New Jers	Lab Number : L1711785
Project Name : SITE1-2_SPM_2017(PORT IVORY)	Project Number :
Lab ID : L1711785-03	Date Collected : 04/12/17 09:16
Client ID : PRW-7E	Date Received : 04/13/17
Sample Location : STATEN ISLAND, NY	Date Analyzed : 04/19/17 13:16
Sample Matrix : WATER	Dilution Factor : 1
Analytical Method : 1,6020A	Analyst : BV
Lab File ID : WG995487.pdf	Instrument ID : ICPMSQ2
Sample Amount : 50ml	%Solids : N/A
Digestion Method : EPA 3005A	Date Digested : 04/17/17

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7439-95-4	Magnesium, Total	0.390	0.0700	0.0242	



Form 1 WETCHEM

Client : Port Authority of New York/New Jers	Lab Number : L1711785
Project Name : SITE1-2_SPM_2017(PORT IVORY)	Project Number :
Lab ID : L1711785-03	Date Collected : 04/12/17 09:16
Client ID : PRW-7E	Date Received : 04/13/17
Sample Location : STATEN ISLAND, NY	Date Analyzed : 04/17/17 20:36
Sample Matrix : WATER	Dilution Factor : 1
Analytical Method : 121,4500NH3-H	Analyst : ATRAN
Lab File ID : N170417-r	Instrument ID : LACHAT
Sample Amount :	%Solids : N/A
Digestion Method :	Date Digested : 04/17/17

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
NONE	Nitrogen, Total Kjeldahl	3.07	0.300	0.066	



Form 1 WETCHEM

Client : Port Authority of New York/New Jers	Lab Number : L1711785
Project Name : SITE1-2_SPM_2017(PORT IVORY)	Project Number :
Lab ID : L1711785-03	Date Collected : 04/12/17 09:16
Client ID : PRW-7E	Date Received : 04/13/17
Sample Location : STATEN ISLAND, NY	Date Analyzed : 04/17/17 07:47
Sample Matrix : WATER	Dilution Factor : 5
Analytical Method : 121,5310C	Analyst : DW
Lab File ID : WG994776.csv	Instrument ID :
Sample Amount :	%Solids : N/A
Digestion Method :	Date Digested :

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
7440-44-0	Total Organic Carbon	11.9	2.50	0.570	



Form 1 WETCHEM

Client : Port Authority of New York/New Jers	Lab Number : L1711785
Project Name : SITE1-2_SPM_2017(PORT IVORY)	Project Number :
Lab ID : L1711785-03	Date Collected : 04/12/17 09:16
Client ID : PRW-7E	Date Received : 04/13/17
Sample Location : STATEN ISLAND, NY	Date Analyzed : 04/18/17 12:30
Sample Matrix : WATER	Dilution Factor : 5
Analytical Method : 1,9038	Analyst : AWS
Lab File ID : WG995225.csv	Instrument ID : SPEC 2
Sample Amount :	%Solids : N/A
Digestion Method :	Date Digested : 04/18/17

CAS NO.	Parameter	mg/l			Qualifier
		Results	RL	MDL	
14808-79-8	Sulfate	71.	50	6.8	



**Form 1
WETCHEM**

Client	: Port Authority of New York/New Jers	Lab Number	: L1711785
Project Name	: SITE1-2_SPM_2017(PORT IVORY)	Project Number	:
Lab ID	: L1711785-03	Date Collected	: 04/12/17 09:16
Client ID	: PRW-7E	Date Received	: 04/13/17
Sample Location	: STATEN ISLAND, NY	Date Analyzed	: 04/18/17 01:18
Sample Matrix	: WATER	Dilution Factor	: 2.5
Analytical Method	: 121,2320B	Analyst	: KAP
Lab File ID	: WG995106.csv	Instrument ID	:
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

CAS NO.	Parameter	mg CaCO3/L			Qualifier
		Results	RL	MDL	
471-34-1	Alkalinity, Total	1480	5.00	NA	



QC NONCONFORMANCE DOCUMENTATION

-not applicable to this SDG

FORMS



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form



	Site Details	Box 1
Site No. V00615		
Site Name Port Ivory Site (Former P & G) Site 1		
Site Address: 40 Western Avenue	Zip Code: 10303	
City/Town: Staten Island		
County: Richmond		
Site Acreage: 13.9 14.95		
Reporting Period: May 20, 2014 to January 22, 2015		
JANUARY 23, 2017 THROUGH JANUARY 22, 2018		
		YES NO
1. Is the information above correct?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		Box 2
		YES NO
6. Is the current site use consistent with the use(s) listed below? Commercial and Industrial	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Are all ICs/ECs in place and functioning as designed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.		
A Corrective Measures Work Plan must be submitted along with this form to address these issues.		
Signature of Owner, Remedial Party or Designated Representative		Date

SITE NO. V00615

Box 3

Description of Institutional Controls

Parcel

Owner

Institutional Control

1400-1 (a portion of)

Port Authority of New York and
New Jersey

Ground Water Use Restriction

The IC restricts disturbance of the cover and limits the use of groundwater at the site in perpetuity. To ensure that the EC and IC remain protective of human health and the environment, periodic groundwater and surface water monitoring and periodic inspections of the EC will be conducted. The periodic monitoring and inspections will continue until the NYSDEC notifies the Port Authority in writing that periodic monitoring is no longer required. Additionally, the SMP requires that the Port Authority take certain actions if the EC is disturbed during site improvement activities.

Description of Engineering Controls

Box 4

Parcel

Engineering Control

1400-1 (a portion of)

Cover System

The EC consists of at least one foot of crushed stone, concrete, or asphalt and covers the entire site.

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

- a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;
- b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES NO

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

- (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;
- (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;
- (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;
- (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and
- (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. V00674

Box 6

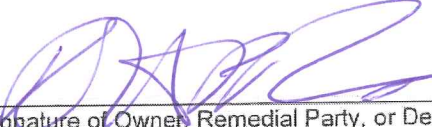
SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1, 2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

Robert Pruno at Four World Trade Center, NY, NY 10007
print name print business address

am certifying as owner representative (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.


Signature of Owner, Remedial Party, or Designated Representative
Rendering Certification

3/5/18
Date

Site 1

IC/EC CERTIFICATIONS

Box 7

Qualified Environmental Professional Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I LINDSAY O'HARA at TRC Engineers, Inc
1430 BROADWAY, 10th fl, New York, NY
print name print business address

am certifying as a Qualified Environmental Professional for the Port Authority of NY & NJ
(Owner or Remedial Party)

Lindsay O'Hara
Signature of Qualified Environmental Professional, for
the Owner or Remedial Party, Rendering Certification



3/8/18
Date

Stamp
(Required for PE)