New Jersey Department of Environmental Protection
Site Remediation Program

Report Certifications for RCRA GPRA 2020, CERCLA, and Federal Facility Sites

These certifications are to be used for reports submitted for RCRA GPRA 2020, CERCLA, and Federal Facility Sites. The Department has developed guidance for report certifications for RCRA GPRA 2020, CERCLA, and Federal Facility Sites under traditional oversight. The "Person Responsible for Conducting the Remediation Information and Certification" is required to be submitted with each report. For those sites that are required or opt to use a Licensed Site Remediation Professional (LSRP) the report must also be certified by the LSRP using the "Licensed Site Remediation Professional Information and Statement". For additional guidance regarding the requirement for LSRPs at RCRA GPRA 2020, CERCLA and Federal Facility Sites see http://www.nj.gov/dep/srp/srra/training/matrix/quick_ref/rcra_cercla_fed_facility_sites.pdf.

Document:

- "Parcel 57 Round 3 Letter Work Plan Addendum, Fort Monmouth, New Jersey" (28 August 2017)

PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for Conducting the Remediation: William R. Colvin
Representative First Name: William Representative Last Name: Colvin
Title: Fort Monmouth BRAC Environmental Coordinator (BEC)
Phone Number: (732) 380-7064 Ext: Fax:
Mailing Address: P.O. Box 148
City/Town: Oceanport State: NJ Zip Code: 07757
Email Address: william.r.colvin18.civ@mail.mil

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: William R Colvin Date: 28 August 2017

Name/Title: William R. Colvin, PMP, CHMM, PG
BRAC Environmental Coordinator

Completed form should be sent to:

Mr. Ashish Joshi
New Jersey Department of Environmental Protection
Division of Remediation Management & Response
Bureau of Northern Field Operations
7 Ridgedale Avenue (2nd Floor)
Cedar Knolls, New Jersey 07927-1112

DEPARTMENT OF THE ARMY

OFFICE OF ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT
U.S. ARMY FORT MONMOUTH
P.O. 148
OCEANPORT, NEW JERSEY 07757

28 August 2017

Mr. Ashish Joshi
New Jersey Department of Environmental Protection
Division of Remediation Management & Response
Northern Bureau of Field Operations
7 Ridgedale Avenue (2nd Floor)
Cedar Knolls, New Jersey 07927-1112

SUBJECT: Parcel 57 Round 3 Letter Work Plan Addendum
Fort Monmouth, New Jersey
PI G000000032

Dear Mr. Joshi:

The purpose of the subject addendum is to supplement previous work performed by the Army at Parcel 57 including: soil sampling in 2010; groundwater sampling in 2011; and soil and groundwater sampling in 2015 (Round 1) and 2016 (Round 2). The Round 3 investigation is planned to determine the horizontal and vertical extent of polynuclear aromatic hydrocarbons (PAHs) that exceed the New Jersey Department of Environmental Protection (NJDEP) Residential Direct Contact Soil Remediation Standard (RDCSRS).

The location of Parcel 57 is shown on **Figure 1**. Background on Parcel 57 (history, current and projected land use, descriptions of investigations performed prior to 2015, and historical data) are provided in **Reference 1**. A summary of the soil and groundwater samples collected in Round 1 and 2, and previous sampling conducted by the Army in 2010 and 2011, is provided in **Table 1;** all sample locations are shown on **Figure 2**. Boring logs for Round 2 are provided in **Attachment 1.** Round 1 boring logs were provided in the Work Plan for Round 2 (**Reference 2**).

In addition to the nine soil samples collected from seven borings analyzed for PAHs in 2010, a total of 71 samples (including three field duplicates) from 27 soil borings were analyzed for PAHs in 2015 and 2016. Target PAH analytes included benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd) pyrene. The 2010, 2015, and 2016 PAH analytical results were compared to NJDEP criteria (**Table 2)**. Locations with exceedances of the NJDEP RDCSRS are shown on **Figure 3**.

Concentrations of the following PAHs exceeded their current NJDEP RDCSRS in at least one of the 80 soil samples collected in 2010, 2015, and 2016: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene. All PAH exceedances of the RDCSRS were found in samples collected between 0.0 to 5.5 feet below the base of the asphalt pavement and underlying granular base material.

As shown on **Figure 3**, the vertical extent of PAHs has been determined with the exception of the northern portion of Parcel 57, where one PAH concentration (0.27 mg/kg for benzo[a]anthracene at PAR-57-SS-20-5.0-5.5) slightly exceeded the current NJDEP RDCSRS (0.2 mg/kg). Therefore, additional soil sampling for PAHs is warranted for vertical delineation. **Figure 3** also shows that the horizontal extent of PAHs has not been determined to the northeast where PAHs in soil extend into adjoining Parcel 66 and to the parcel boundary to the southwest where PAHs in soil extend into adjoining Parcel 55. Therefore, additional soil sampling with analysis for PAHs is planned to be performed for horizontal delineation.

Field Investigation Plan

Proposed Round 3 sampling is summarized in **Table 3**. As shown on **Figure 4,** a total of nine soil borings are planned to delineate the horizontal and vertical extent of PAHs in soils. The field team will note fill material as well as the presence of materials other than soil (e.g., coal, asphalt, debris, fill material, pavement thickness, etc.).

Each soil boring will have a shallow soil sample collected from 0 to 0.5 feet below ground surface (ft bgs), or below the bottom of concrete, asphalt, or base course material if present. Soil samples will also be collected from 3.5 to 4.0 ft bgs, and 7.5 to 8.0 ft bgs, which is a similar approach as that for the Round 1 and Round 2 investigations Total boring depth and specific sample intervals may be adjusted in the field to better characterize the soils within and below fill material, if encountered. Soil samples will be analyzed for the five PAHs that exceeded RDCSRSs in previous samples (benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, dibenz[a,h]anthracene, and indeno[1,2,3-cd]pyrene only) by Method 8270 using selective ion monitoring (SIM) mode.

PAH concentrations in samples collected in Rounds 1 and 2 at borings PAR-57-SS-20, PAR-57-SS-23, and PAR-57-SS-32 exceeded the NJDEP RDCSRS but the horizontal extent at these locations was not determined (**Figure 3**). Vertical delineation was achieved at each of these borings except PAR-57-SS-20; therefore, additional sampling for PAHs is proposed at 7.5 to 8.0 feet below ground surface at new boring PAR-57-SB-45 (**Figure 4**). To delineate horizontally, primary samples (to be analyzed first) from borings PAR-57-SB-46, PAR-57-SB-48, and PAR-57-SB-51 will be sampled at the locations shown on **Figure 4**, with samples to be collected: a) at the surface (0 to 0.5 ft below the concrete/asphalt and subbase); b) at 3.5 to 4.0 ft bgs; and c) at 7.5 to 8.0 ft bgs. Soil samples for potential contingency analyses will be collected at the same time as primary samples from step-out borings PAR-57-SB-47, PAR-57-SB-49, PAR-57-SB-50, PAR-57-SB-52, and PAR-57-SB-53. These contingency samples will be extracted and held by the laboratory until the results of the primary samples are reviewed. If the primary sample results exceed RDCSRS, then the contingency samples will also be analyzed for PAHs to provide horizontal and vertical delineation, as needed. A summary of the proposed sampling and analyses is presented in **Table 3**.

The results of the 2010, 2015, 2016, and 2017 investigations will be presented in a Remedial Investigation (RI) Report for Parcel 57.

Thank you for reviewing this work plan addendum. We look forward to your comments and approval prior to implementing this plan (currently scheduled to begin on 2 October 2017). Our

technical Point of Contact is Kent Friesen who you may contact directly at 732-383-7201; kent.friesen@parsons.com. I can be reached at732-380-7064; william.r.colvin18.civ@mail.mil.

Sincerely,

William R. Colvin, PMP, CHMM, PG
BRAC Environmental Coordinator

Attachments:

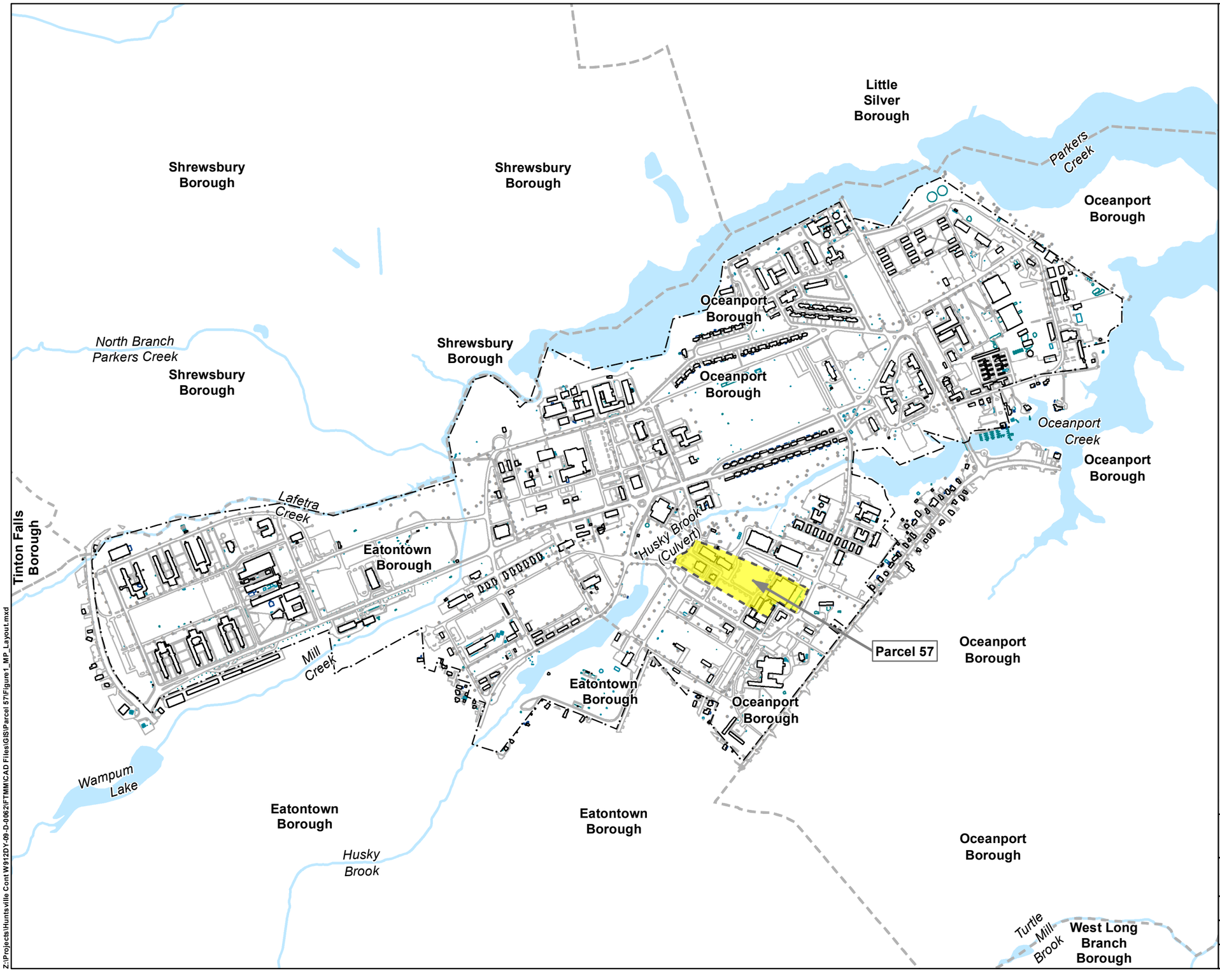
Figure 1 – Parcel 57 Location
Figure 2 – Site Layout and Sampling Locations
Figure 3 – Comparison of 2010, 2015, and 2016 soil results for PAHs to NJDEP Direct Contact Standards
Figure 4 – Proposed Round 3 Sampling Locations for Parcel 57
Table 1 – ECP Phase II Site Investigation Sample and Analytical Summary
Table 2 – Detected Soil Sampling Results - Comparison to New Jersey Direct Contact Criteria
Table 3 – Proposed Round 3 Sampling Summary for Parcel 57
Attachment 1 – Parcel 57 Round 2 Boring Logs

cc: Ashish Joshi, NJDEP (2 hard copies and email)
William Colvin (1 hard copy and e-mail)
Joseph Pearson, Calibre (e-mail)
James Moore, USACE (e-mail)
Jim Kelly, USACE (e-mail)
Cris Grill, Parsons (e-mail)

References Cited

1. Parsons, 2015. *Environmental Condition of Property Supplemental Phase II Site Investigation Work Plan for Parcels 28, 38, 39, 49, 57, 61, and 69, Fort Monmouth, Oceanport, Monmouth County, New Jersey*. Final Revision 1. November.
2. Parsons, 2016. *ECP Parcel 57 Round 2 Work Plan Addendum, Fort Monmouth, Oceanport, Monmouth County, New Jersey*. Final. March.
3. New Jersey Department of Environmental Protection (NJDEP), 2005. *NJDEP Field Sampling Procedures Manual*. August.

Figure 1
Parcel 57 Location



LEGEND:

- Parcel Boundary
- Municipal Boundary
- Installation Boundary
- Surface Water Feature

N

1 inch = 1,000 feet

0 500 1,000 2,000 Feet

Source: FTMM Supplied CAD, 2013; U.S. Army BRAC, 2008; ESRI Data and Maps 2011; USGS NHD, 2012.

PARSONS 401 Diamond Drive NW, Huntsville AL	**Fort Monmouth** **New Jersey**

PARCEL 57 LOCATION

CREATED BY: RR	REVIEWED BY: RF
DATE: MAY. 2017	FIGURE NUMBER: FIGURE 1
PROJECT NUMBER: 748810-01000	FILE: Figure1_MP_Layout.mxd

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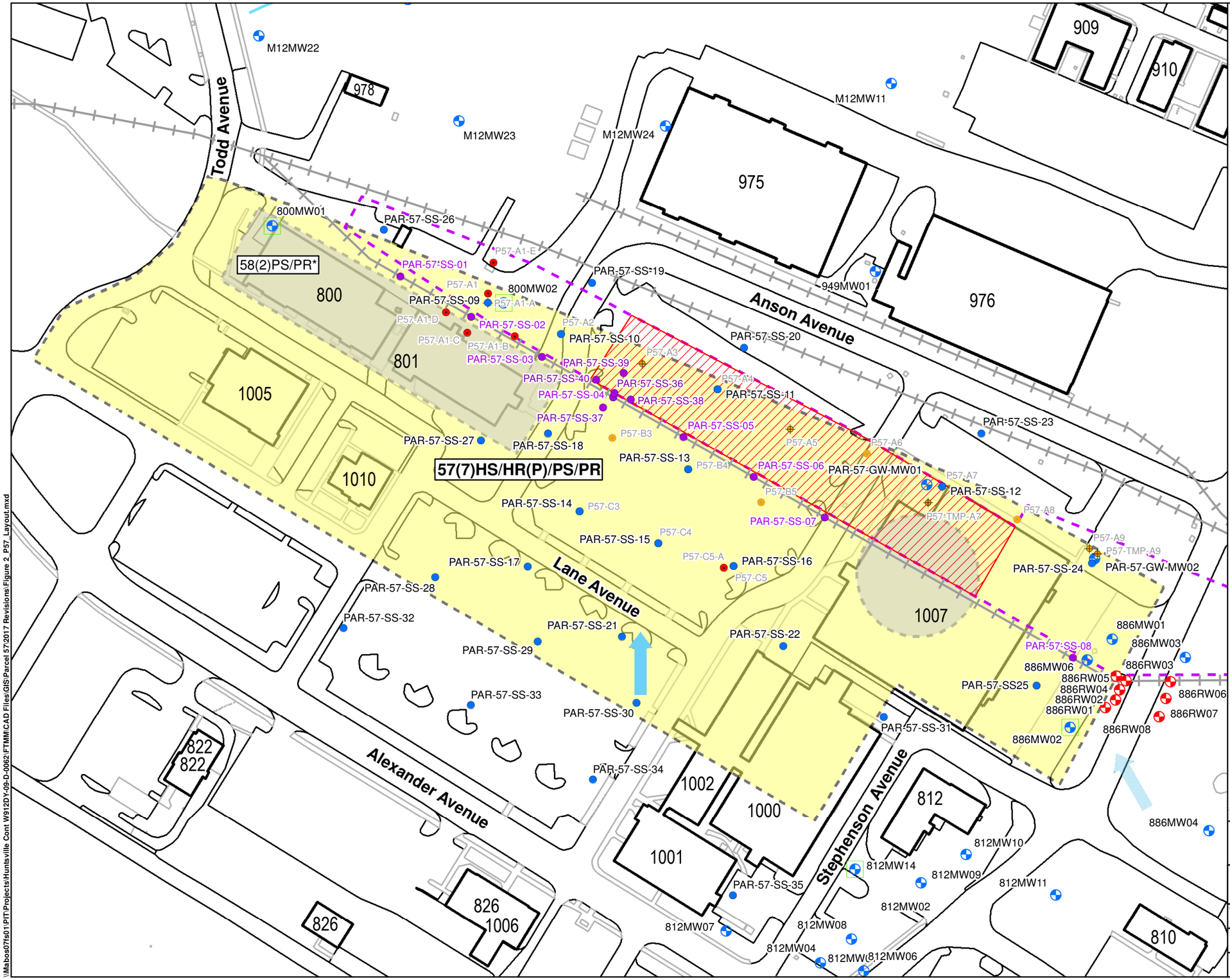
Figure 2
Site Layout and Sampling Locations



LEGEND:

- Soil Boring for PCB Analysis
- Soil Boring for PAH Analysis
- Historical Soil Sample Location (2007)
- Historical Soil Sample and Temporary 2" Monitoring Well Location (2007)
- Soil Sample Location (2010) for PAH
- Groundwater Sample for Metal Analysis
- Shallow Monitoring Well (various dates)
- Recovery Well
- Approximate Location of Former Railroad Track (based on 1962 FTMM plan figure)
- Parcel 57 Boundary
- Approximate Extent of Former Coal Storage Area
- Former Concrete Coal Storage Pad
- Generalized Groundwater Flow Direction

Sample locations are approximate and are subject to change based on field conditions.

BRAC Parcel Label Definitions

8(2)PS
- Contaminant Description
  - HS – Hazardous Substance Storage
  - HR – Hazardous Substance Release
  - PS – Petroleum Storage
  - PR – Petroleum Release
  - (P) – Possible Release or Disposal
- Category Number
- Parcel Number

N

1 inch = 120 feet

0 60 120 240 Feet

Source: FTMM Supplied CAD, 2013; U.S. Army BRAC, 2008.

PARSONS
401 Diamond Drive NW,
Huntsville AL

Fort Monmouth
New Jersey

PARCEL 57 SITE LAYOUT AND SAMPLING LOCATIONS

CREATED BY:	REVIEWED BY:
RR	RF
DATE:	FIGURE NUMBER:
AUG. 2017	FIGURE 2
PROJECT NUMBER:	FILE:
748810-06018	Figure 2_P57_Layout.mxd

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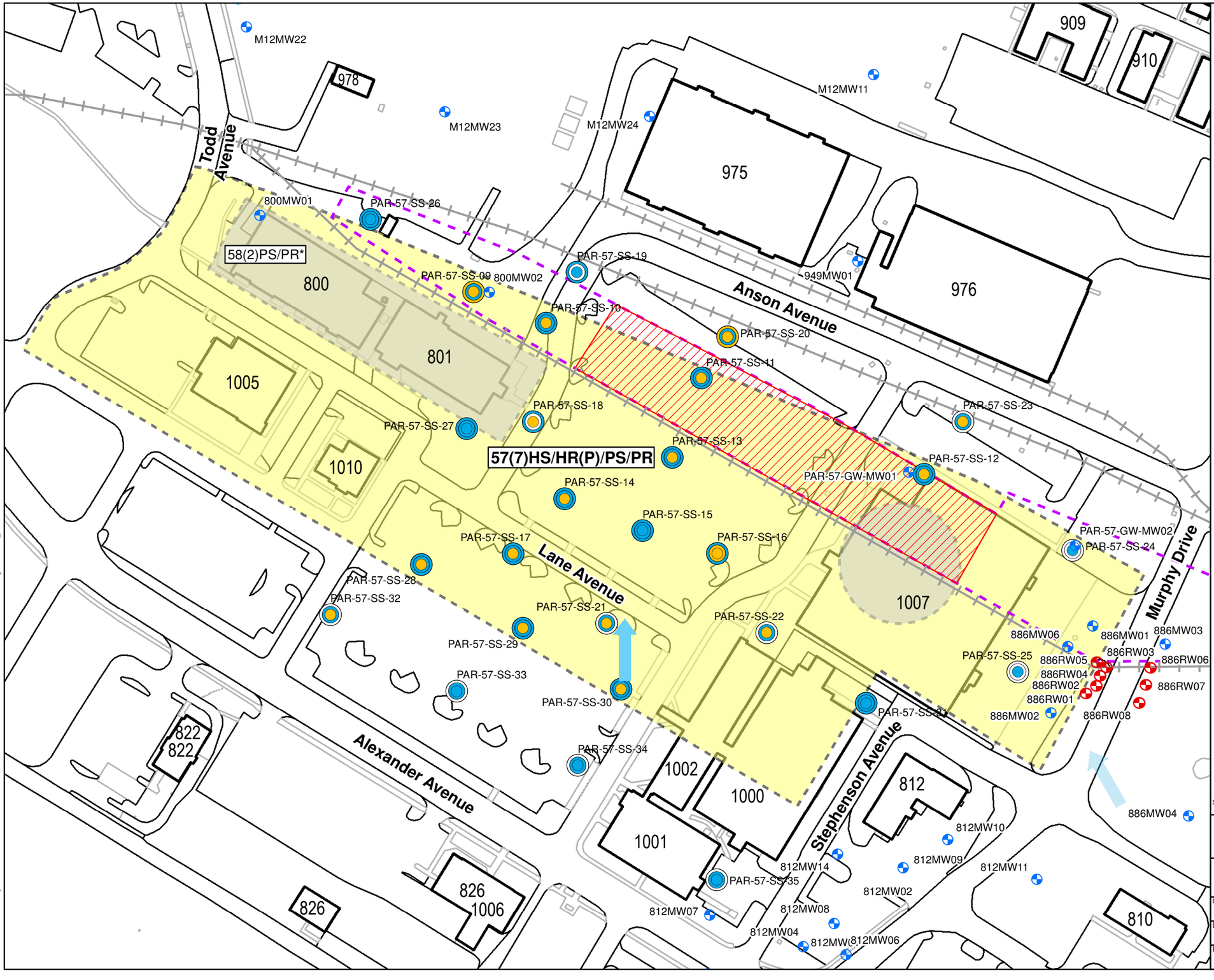
Figure 3
Comparison of 2010, 2015, and 2016 soil results for PAHs to NJDEP Direct Contact Standards



LEGEND:

- Shallow Monitoring Well
- Recovery Well
- Parcel 57 Boundary
- Approximate Location of Former Railroad Track (based on 1962 FTMM plan figure)
- Approximate Extent of Former Coal Storage Area
- Concrete Coal Storage Pad (removed)
- Generalized Groundwater Flow Direction
- Not analyzed for PAHs
- PAHs not detected or detected below RDCSRS
- PAHs exceeded RDCSRS
- PAHs exceeded both RDCSRS and NRDCSRS
- Water Table (approx. 5-7.5 ft. bgs)
- Intermediate (approx. 2-3.5 ft. bgs)
- Shallow (approx. 0-1 ft. bgs)

NOTES:

RDCSRS = Residential Direct Contact Soil Remediation Standard

NRDCSRS = Non-Residential Direct Contact Soil Remediation Standard

bgs = Below Ground Surface
NE = No Exceedance
-- = Not Sampled
All results are in milligrams per kilogram.

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  - PS – Petroleum Storage
  - PR – Petroleum Release
  - (P) – Possible Release or Disposal
- Category Number
- Parcel Number

N

1 inch = 120 feet

0 60 120 240 Feet

Source: FTMM Supplied CAD, 2013; U.S. Army BRAC, 2008.

PARSONS 401 Diamond Drive NW, Huntsville AL	Fort Monmouth New Jersey

COMPARISON OF 2010, 2015, AND 2016 SOIL RESULTS FOR PAHs TO NJDEP DIRECT CONTACT STANDARDS

CREATED BY:	REVIEWED BY:
RR	SS
DATE:	FIGURE NUMBER:
AUG. 2017	FIGURE 3
PROJECT NUMBER:	FILE:
748810-06018	Figure 3 P57_PAHs.mxd

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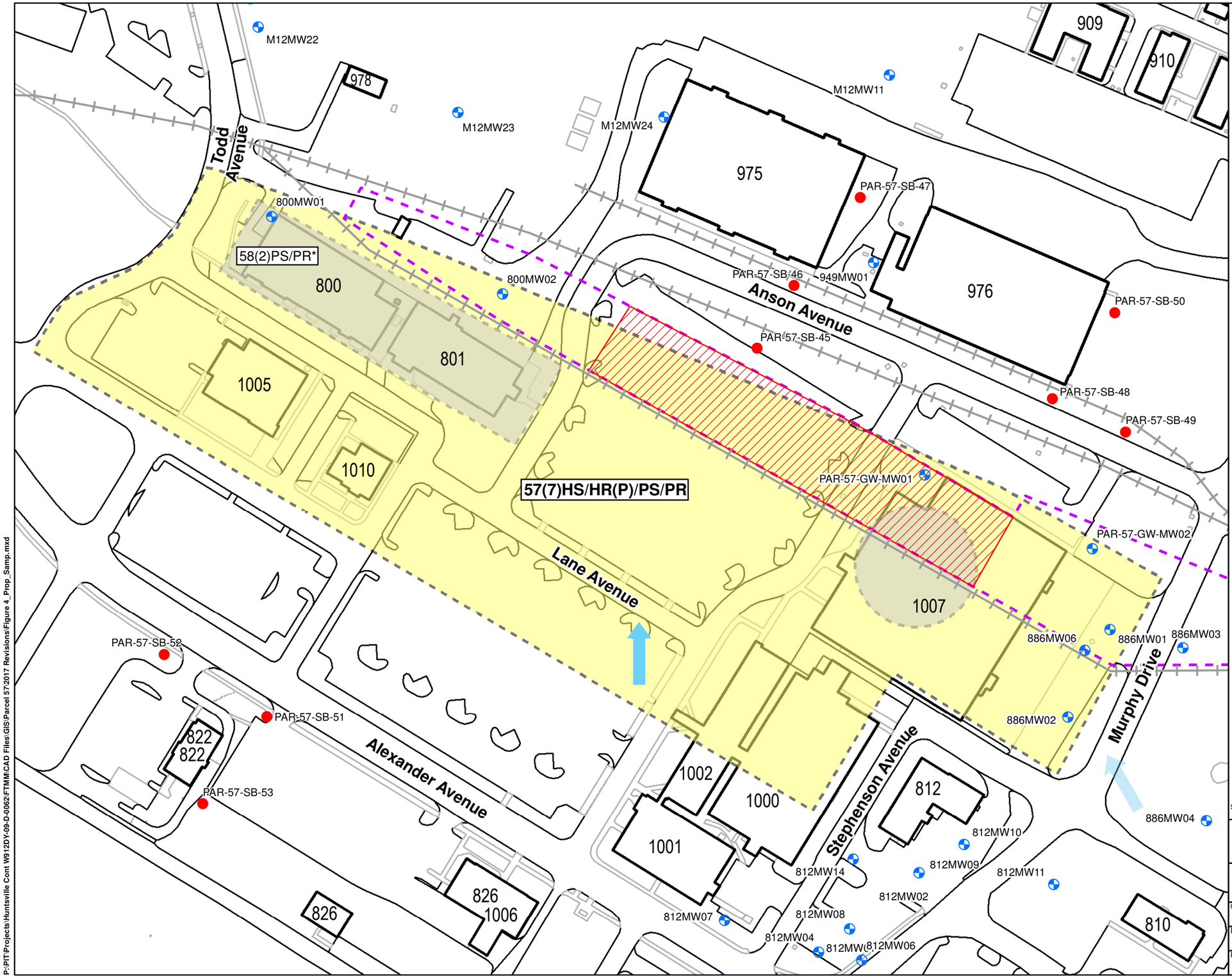
Figure 4
Proposed Round 3 Sampling Locations for Parcel 57



LEGEND:

- Proposed Samling Location
- Shallow Monitoring Well
- Parcel 57 Boundary
- Approximate Location of Former Railroad Track (based on 1962 FTMM plan figure)
- Approximate Extent of Former Coal Storage Area
- Concrete Coal Storage Pad (removed)
- Generalized Groundwater Flow Direction

BRAC Parcel Label Definitions

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- Contaminant Description: HS – Hazardous Substance Storage; HR – Hazardous Substance Release; PS – Petroleum Storage; PR – Petroleum Release; (P) – Possible Release or Disposal
- Category Number
- Parcel Number

N

1 inch = 120 feet

0 60 120 240 Feet

Source: FTMM Supplied CAD, 2013; U.S. Army BRAC, 2008.

PARSONS 401 Diamond Drive NW, Huntsville AL	**Fort Monmouth New Jersey**

PROPOSED ROUND 3 SAMPLING LOCATIONS FOR PARCEL 57

CREATED BY: RR	REVIEWED BY: JC
DATE: AUG. 2017	FIGURE NUMBER: FIGURE 4
PROJECT NUMBER: 748810-06018	FILE: Figure 4_Prop_Samp.mxd

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Table 1
ECP Phase II Site Investigation Sample and Analytical Summary

TABLE 1
ECP PHASE II SITE INVESTIGATION SAMPLE AND ANALYTICAL SUMMARY
ECP PARCEL 57 ROUND 3 WORK PLAN ADDENDUM
FORT MONMOUTH, NEW JERSEY

Media	Type	Sample Identification	Sample Type	Sample Date	Sample Depth Top	Sample Depth Bottom	VO+ TICs	SVO+ TICs	Total Metals	Dissolved Metals	PAHs	PCBs
2010-2011 Sampling (U.S. Army)												
Soil	Geoprobe	P57-SS-A1-1.0-1.5	Primary Sample	01-Feb-10	1	1.5	--	--	--	--	X	--
Soil	Geoprobe	P57-SS-A1-1.5-2.0	Primary Sample	01-Feb-10	1.5	2	--	--	--	--	X	--
Soil	Geoprobe	P57-SS-C5-1.0-1.5	Primary Sample	01-Feb-10	1	1.5	--	--	--	--	X	--
Soil	Geoprobe	P57-SS-C5-1.5-2.0	Primary Sample	01-Feb-10	1.5	2	--	--	--	--	X	--
Soil	Geoprobe	P57-SS-A1-A-6.5-7.0	Primary Sample	22-Nov-10	6.5	7	--	X	--	--	--	--
Soil	Geoprobe	P57-SS-A1-B-6.5-7.0	Primary Sample	22-Nov-10	6.5	7	--	X	--	--	--	--
Soil	Geoprobe	P57-SS-A1-C-8.0-8.5	Primary Sample	22-Nov-10	8	8.5	--	X	--	--	--	--
Soil	Geoprobe	P57-SS-A1-D-6.0-6.5	Primary Sample	22-Nov-10	6	6.5	--	X	--	--	--	--
Soil	Geoprobe	P57-SS-A1-E-5.5-6.0	Primary Sample	22-Nov-10	5.5	6	--	X	--	--	--	--
Groundwater	Temporary Well	PAR57-GW-57-TMP-A-5	Primary Sample	02-Apr-10	NA	NA	--	--	X(1)	X(1)	--	--
Groundwater	Temporary Well	PAR57-GW-57-TMP-A-7	Primary Sample	11-Mar-10	NA	NA	--	--	X(1)	X(1)	--	--
Groundwater	Temporary Well	PAR57-GW-57-TMP-A-9	Primary Sample	10-Mar-10	NA	NA	--	--	X(2)	X(2)	--	--
Groundwater	Monitoring Well	PAR57-GW-800MW02	Primary Sample	04-Feb-11	5	20	X	X	X	--	--	--
Groundwater	Monitoring Well	PAR57-GW-800MW02-Dup	Duplicate of PAR-57-GW-800MW02	04-Feb-11	5	20	X	X	X	--	--	--
2015 ECP Phase II Sampling (Parsons)												
Soil	Geoprobe	FTMM-57-SS01-0.5-1.0	Primary Sample	18-Sep-15	0.5	1	--	--	--	--	--	X
Soil	Geoprobe	FTMM-57-SS02-1.3-1.8	Primary Sample	18-Sep-15	1.3	1.8	--	--	--	--	--	X
Soil	Geoprobe	FTMM-57-SS03-0.5-1.0	Primary Sample	18-Sep-15	0.5	1	--	--	--	--	--	X
Soil	Geoprobe	FTMM-57-SS04-1.0-1.5	Primary Sample	18-Sep-15	1	1.5	--	--	--	--	--	X
Soil	Geoprobe	FTMM-57-SS04-2.0-2.5	Primary Sample	18-Sep-15	2	2.5	--	--	--	--	--	X
Soil	Geoprobe	FTMM-57-SS04-3.0-3.5	Primary Sample	18-Sep-15	3	3.5	--	--	--	--	--	X
Soil	Geoprobe	FTMM-57-SS05-0.5-1.0	Primary Sample	18-Sep-15	0.5	1	--	--	--	--	--	X
Soil	Geoprobe	FTMM-57-SS06-0.5-1.0	Primary Sample	18-Sep-15	0.5	1	--	--	--	--	--	X
Soil	Geoprobe	FTMM-57-SS07-0.5-1.0	Primary Sample	18-Sep-15	0.5	1	--	--	--	--	--	X
Soil	Geoprobe	FTMM-57-SS08-0.9-1.4	Primary Sample	21-Sep-15	0.9	1.4	--	--	--	--	--	X
Soil	Geoprobe	FTMM-57-SS09-0.5-1.0	Primary Sample	01-Oct-15	0.5	1	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS09-2.0-2.5	Primary Sample	01-Oct-15	2	2.5	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS09-5.5-6.0	Primary Sample	01-Oct-15	5.5	6	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS10-0.0-0.5	Primary Sample	01-Oct-15	0	0.5	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS09-5.5-6.0	Primary Sample	01-Oct-15	5.5	6	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS10-0.0-0.5	Primary Sample	01-Oct-15	0	0.5	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS10-3.0-3.5	Primary Sample	01-Oct-15	3	3.5	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS10-7.0-7.5	Primary Sample	01-Oct-15	7	7.5	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS11-0.0-0.5	Primary Sample	01-Oct-15	0	0.5	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS111-3.0-3.5	Duplicate of FTMM-57-SS11-3.0-3.5	01-Oct-15	3	3.5	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS112-0.0-0.5	Duplicate of FTMM-57-SS12-0.0-0.5	01-Oct-15	0	0.5	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS11-3.0-3.5	Primary Sample	01-Oct-15	3	3.5	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS11-7.0-7.5	Primary Sample	01-Oct-15	7	7.5	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS12-0.0-0.5	Primary Sample	01-Oct-15	0	0.5	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS12-3.0-3.5	Primary Sample	01-Oct-15	3	3.5	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS12-7.0-7.5	Primary Sample	01-Oct-15	7	7.5	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS13-0.0-0.5	Primary Sample	01-Oct-15	0	0.5	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS13-3.0-3.5	Primary Sample	01-Oct-15	3	3.5	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS13-6.5-7.0	Primary Sample	01-Oct-15	6.5	7	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS14-0.0-0.5	Primary Sample	01-Oct-15	0	0.5	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS14-3.0-3.5	Primary Sample	01-Oct-15	3	3.5	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS14-5.0-5.5	Primary Sample	01-Oct-15	5	5.5	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS15-0.0-0.5	Primary Sample	01-Oct-15	0	0.5	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS15-3.0-3.5	Primary Sample	01-Oct-15	3	3.5	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS15-5.5-6.0	Primary Sample	01-Oct-15	5.5	6	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS16-0.0-0.5	Primary Sample	01-Oct-15	0	0.5	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS16-1.5-2.0	Primary Sample	01-Oct-15	1.5	2	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS16-6.0-6.5	Primary Sample	01-Oct-15	6	6.5	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS17-0.0-0.5	Primary Sample	01-Oct-15	0	0.5	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS17-3.0-3.5	Primary Sample	01-Oct-15	3	3.5	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS17-5.5-6.0	Primary Sample	01-Oct-15	5.5	6	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS18-0.0-0.5	Primary Sample	01-Oct-15	0	0.5	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS18-5.0-5.5	Primary Sample	01-Oct-15	5	5.5	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS19-0.0-0.5	Primary Sample	01-Oct-15	0	0.5	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS19-5.5-6.0	Primary Sample	01-Oct-15	5.5	6	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS20-0.0-0.5	Primary Sample	01-Oct-15	0	0.5	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS20-3.0-3.5	Primary Sample	01-Oct-15	3	3.5	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS20-5.0-5.5	Primary Sample	01-Oct-15	5	5.5	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS21-0.0-0.5	Primary Sample	02-Oct-15	0	0.5	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS21-3.0-3.5	Primary Sample	02-Oct-15	3	3.5	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS22-0.0-0.5	Primary Sample	02-Oct-15	0	0.5	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS22-3.0-3.5	Primary Sample	02-Oct-15	3	3.5	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS23-0.0-0.5	Primary Sample	02-Oct-15	0	0.5	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS23-3.0-3.5	Primary Sample	02-Oct-15	3	3.5	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS24-0.0-0.5	Primary Sample	02-Oct-15	0	0.5	--	--	--	--	X(3)	--
Soil	Geoprobe	FTMM-57-SS25-0.0-0.5	Primary Sample	02-Oct-15	0	0.5	--	--	--	--	X(3)	--
Groundwater	Monitoring Well / LFPS	PAR57-GW-MW01-15.1	Primary Sample	23-Nov-15	pump tubing set at 15.1		--	--	X	--	--	--
Groundwater	Monitoring Well / LFPS	PAR57-GW-MW01-15.1 DISSOLVED	Primary Sample	23-Nov-15	pump tubing set at 15.1		--	--	--	X	--	--
Groundwater	Monitoring Well / LFPS	PAR57-GW-MW101-15.1	Duplicate of PAR57-GW-MW01-15.1	23-Nov-15	pump tubing set at 15.1		--	--	X	--	--	--
Groundwater	Monitoring Well / LFPS	PAR57-GW-MW101-15.1 DISSOLVED	Duplicate of PAR57-GW-MW01-15.1 DISSOLVED	23-Nov-15	pump tubing set at 15.1		--	--	--	X	--	--
Groundwater	Monitoring Well / LFPS	PAR57-GW-MW02-15.25	Primary Sample	24-Nov-15	pump tubing set at 15.25		--	--	X	--	--	--
Groundwater	Monitoring Well / LFPS	PAR57-GW-MW02-15.25 DISSOLVED	Primary Sample	24-Nov-15	pump tubing set at 15.25		--	--	--	X	--	--
Groundwater	Monitoring Well / LFPS	PAR57-GW-MW02-20.25	Primary Sample	24-Nov-15	pump tubing set at 20.25		--	--	X	--	--	--
Groundwater	Monitoring Well / LFPS	PAR57-GW-MW02-20.25 DISSOLVED	Primary Sample	24-Nov-15	pump tubing set at 20.25		--	--	--	X	--	--
2016 ECP Phase II Sampling (Parsons)												
Soil	Geoprobe	PAR-57-SB-26-0.5-1	Primary Sample	22-Apr-16	0.5	1	--	--	--	--	X(4)	--
Soil	Geoprobe	PAR-57-SB-26-3.5-4	Primary Sample	22-Apr-16	3.5	4	--	--	--	--	X(4)	--
Soil	Geoprobe	PAR-57-SB-126-3.5-4	Duplicate of PAR-57-SB-26-3.5-4	22-Apr-16	3.5	4	--	--	--	--	X(4)	--
Soil	Geoprobe	PAR-57-SB-26-7.5-8	Primary Sample	22-Apr-16	7.5	8	--	--	--	--	X(4)	--
Soil	Geoprobe	PAR-57-SB-27-0-0.5	Primary Sample	22-Apr-16	0.5	1	--	--	--	--	X(4)	--
Soil	Geoprobe	PAR-57-SB-27-3.5-4	Primary Sample	22-Apr-16	3.5	4	--	--	--	--	X(4)	--
Soil	Geoprobe	PAR-57-SB-27-7.5-8	Primary Sample	22-Apr-16	7.5	8	--	--	--	--	X(4)	--
Soil	Geoprobe	PAR-57-SB-28-0.5-1	Primary Sample	22-Apr-16	0.5	1	--	--	--	--	X(4)	--
Soil	Geoprobe	PAR-57-SB-28-3.5-4	Primary Sample	22-Apr-16	3.5	4	--	--	--	--	X(4)	--

TABLE 1
ECP PHASE II SITE INVESTIGATION SAMPLE AND ANALYTICAL SUMMARY
ECP PARCEL 57 ROUND 3 WORK PLAN ADDENDUM
FORT MONMOUTH, NEW JERSEY

Media	Type	Sample Identification	Sample Type	Sample Date	Sample Depth Top	Sample Depth Bottom	VO+ TICs	SVO+ TICs	Total Metals	Dissolved Metals	PAHs	PCBs
Soil	Geoprobe	PAR-57-SB-28-7.5-8	Primary Sample	22-Apr-16	7.5	8	--	--	--	--	X(4)	--
Soil	Geoprobe	PAR-57-SB-29-0.5-1	Primary Sample	22-Apr-16	0.5	1	--	--	--	--	X(4)	--
Soil	Geoprobe	PAR-57-SB-29-3.5-4	Primary Sample	22-Apr-16	3.5	4	--	--	--	--	X(4)	--
Soil	Geoprobe	PAR-57-SB-29-7.5-8	Primary Sample	22-Apr-16	7.5	8	--	--	--	--	X(4)	--
Soil	Geoprobe	PAR-57-SB-30-0.5-1	Primary Sample	22-Apr-16	0.5	1	--	--	--	--	X(4)	--
Soil	Geoprobe	PAR-57-SB-30-3.5-4	Primary Sample	22-Apr-16	3.5	4	--	--	--	--	X(4)	--
Soil	Geoprobe	PAR-57-SB-30-7.5-8	Primary Sample	22-Apr-16	7.5	8	--	--	--	--	X(4)	--
Soil	Geoprobe	PAR-57-SB-31-0.5-1	Primary Sample	22-Apr-16	0.5	1	--	--	--	--	X(4)	--
Soil	Geoprobe	PAR-57-SB-31-3.5-4	Primary Sample	22-Apr-16	3.5	4	--	--	--	--	X(4)	--
Soil	Geoprobe	PAR-57-SB-31-7.5-8	Primary Sample	22-Apr-16	7.5	8	--	--	--	--	X(4)	--
Soil	Geoprobe	PAR-57-SB-32-0.5-1	Primary Sample	22-Apr-16	0.5	1	--	--	--	--	X(4)	--
Soil	Geoprobe	PAR-57-SB-32-3.5-4	Primary Sample	22-Apr-16	3.5	4	--	--	--	--	X(4)	--
Soil	Geoprobe	PAR-57-SB-33-0.5-1	Primary Sample	22-Apr-16	0.5	1	--	--	--	--	X(4)	--
Soil	Geoprobe	PAR-57-SB-33-3.5-4	Primary Sample	22-Apr-16	3.5	4	--	--	--	--	X(4)	--
Soil	Geoprobe	PAR-57-SB-34-0.5-1	Primary Sample	22-Apr-16	0.5	1	--	--	--	--	X(4)	--
Soil	Geoprobe	PAR-57-SB-34-3.5-4	Primary Sample	22-Apr-16	3.5	4	--	--	--	--	X(4)	--
Soil	Geoprobe	PAR-57-SB-35-0.5-1	Primary Sample	22-Apr-16	0.5	1	--	--	--	--	X(4)	--
Soil	Geoprobe	PAR-57-SB-35-3.5-4	Primary Sample	22-Apr-16	3.5	4	--	--	--	--	X(4)	--
Soil	Geoprobe	PAR-57-SB-36-4.5-5	Primary Sample	21-Apr-16	4.5	5	--	--	--	--	--	X(5)
Soil	Geoprobe	PAR-57-SB-37-0.5-1	Primary Sample	21-Apr-16	0.5	1	--	--	--	--	--	X(5)
Soil	Geoprobe	PAR-57-SB-37-2.5-3	Primary Sample	21-Apr-16	2.5	3	--	--	--	--	--	X(5)
Soil	Geoprobe	PAR-57-SB-137-2.5-3	Duplicate of PAR-57-SB-37-2.5-3	21-Apr-16	2.5	3	--	--	--	--	--	X(5)
Soil	Geoprobe	PAR-57-SB-37-4.5-5	Primary Sample	21-Apr-16	4.5	5	--	--	--	--	--	X(5)
Soil	Geoprobe	PAR-57-SB-38-0.5-1	Primary Sample	21-Apr-16	0.5	1	--	--	--	--	--	X(5)
Soil	Geoprobe	PAR-57-SB-38-2.5-3	Primary Sample	21-Apr-16	2.5	3	--	--	--	--	--	X(5)
Soil	Geoprobe	PAR-57-SB-38-4.5-5	Primary Sample	21-Apr-16	4.5	5	--	--	--	--	--	X(5)
Soil	Geoprobe	PAR-57-SB-39-0.5-1	Primary Sample	21-Apr-16	0.5	1	--	--	--	--	--	X(5)
Soil	Geoprobe	PAR-57-SB-39-2.5-3	Primary Sample	21-Apr-16	2.5	3	--	--	--	--	--	X(5)
Soil	Geoprobe	PAR-57-SB-39-4.5-5	Primary Sample	21-Apr-16	4.5	5	--	--	--	--	--	X(5)
Soil	Geoprobe	PAR-57-SB-40-0.5-1	Primary Sample	21-Apr-16	0.5	1	--	--	--	--	--	X(5)
Soil	Geoprobe	PAR-57-SB-40-2.5-3	Primary Sample	21-Apr-16	2.5	3	--	--	--	--	--	X(5)
Soil	Geoprobe	PAR-57-SB-140-2.5-3	Duplicate of PAR-57-SB-40-2.5-3	21-Apr-16	2.5	3	--	--	--	--	--	X(5)
Soil	Geoprobe	PAR-57-SB-40-4.5-5	Primary Sample	21-Apr-16	4.5	5	--	--	--	--	--	X(5)
Groundwater	Monitoring Well / LFPS	800MW01-10.06	Primary Sample	23-May-16	pump tubing set at 10.06		--	--	X	--	--	--
Groundwater	Monitoring Well / LFPS	800MW01-10.06 DISSOLVED	Primary Sample	23-May-16	pump tubing set at 10.06		--	--	--	X	--	--
Groundwater	Monitoring Well / LFPS	800MW101-10.06	Duplicate of 800MW01-10.06	23-May-16	pump tubing set at 10.06		--	--	X	--	--	--
Groundwater	Monitoring Well / LFPS	800MW101-10.06 DISSOLVED	Duplicate of 800MW01-10.06 DISSOLVED	23-May-16	pump tubing set at 10.06		--	--	--	X	--	--
Groundwater	Monitoring Well / LFPS	800MW02-6.9	Primary Sample	23-May-16	pump tubing set at 6.9		--	--	X	--	--	--
Groundwater	Monitoring Well / LFPS	800MW02-6.9 DISSOLVED	Primary Sample	23-May-16	pump tubing set at 6.9		--	--	--	X	--	--
Groundwater	Monitoring Well / LFPS	800MW02-11.9	Primary Sample	23-May-16	pump tubing set at 11.9		--	--	X	--	--	--
Groundwater	Monitoring Well / LFPS	800MW02-11.9 DISSOLVED	Primary Sample	23-May-16	pump tubing set at 11.9		--	--	--	X	--	--
Groundwater	Monitoring Well / LFPS	800MW02-16.9	Primary Sample	23-May-16	pump tubing set at 16.9		--	--	X	--	--	--
Groundwater	Monitoring Well / LFPS	800MW02-16.9 DISSOLVED	Primary Sample	23-May-16	pump tubing set at 16.9		--	--	--	X	--	--
Groundwater	Monitoring Well / LFPS	812MW14-10.27	Primary Sample	24-May-16	pump tubing set at 10.27		--	--	X	--	--	--
Groundwater	Monitoring Well / LFPS	812-MW114-10.27	Duplicate of 812MW14-10.27	24-May-16	pump tubing set at 10.27		--	--	X	--	--	--
Groundwater	Monitoring Well / LFPS	812MW14-10.27 DISSOLVED	Primary Sample	24-May-16	pump tubing set at 10.27		--	--	--	X	--	--
Groundwater	Monitoring Well / LFPS	866MW02-14.35	Primary Sample	24-May-16	pump tubing set at 14.35		--	--	X	--	--	--
Groundwater	Monitoring Well / LFPS	866MW02-14.35 DISSOLVED	Primary Sample	24-May-16	pump tubing set at 14.35		--	--	--	X	--	--
Groundwater	Monitoring Well / LFPS	86MW02-9.35	Primary Sample	24-May-16	pump tubing set at 9.35		--	--	X	--	--	--
Groundwater	Monitoring Well / LFPS	86MW02-9.35 DISSOLVED	Primary Sample	24-May-16	pump tubing set at 9.35		--	--	--	X	--	--
Groundwater	Monitoring Well / LFPS	PAR-57-GW-MW01-12.5	Primary Sample	23-May-16	pump tubing set at 12.5		--	--	X	--	--	--
Groundwater	Monitoring Well / LFPS	PAR-57-GW-MW01-12.5 DISSOLVED	Primary Sample	23-May-16	pump tubing set at 12.5		--	--	--	X	--	--
Groundwater	Monitoring Well / LFPS	PAR-57-GW-MW01-17.5	Primary Sample	24-May-16	pump tubing set at 17.5		--	--	X	--	--	--
Groundwater	Monitoring Well / LFPS	PAR-57-GW-MW01-17.5 DISSOLVED	Primary Sample	24-May-16	pump tubing set at 17.5		--	--	--	X	--	--
Groundwater	Monitoring Well / LFPS	PAR-57-GW-MW02-15.8	Primary Sample	24-May-16	pump tubing set at 15.8		--	--	X	--	--	--
Groundwater	Monitoring Well / LFPS	PAR-57-GW-MW02-15.8 DISSOLVED	Primary Sample	24-May-16	pump tubing set at 15.8		--	--	--	X	--	--
Groundwater	Monitoring Well / LFPS	PAR-57-GW-MW02-20.8	Primary Sample	24-May-16	pump tubing set at 20.8		--	--	X	--	--	--
Groundwater	Monitoring Well / LFPS	PAR-57-GW-MW02-20.8 DISSSOLVED	Primary Sample	24-May-16	pump tubing set at 20.8		--	--	--	X	--	--

Notes:
1) X(1) Analyzed for Beryllium and Lead only
2) X(2) Analyzed for Beryllium, Cadmium, Chromium, Cobalt and Lead only
3) X(3) Analyzed for Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Dibenz(a,h)anthracene, Indeno(1,2,3-cd)pyrene only
4) X(4) Analyzed for Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Dibenz(a,h)anthracene, Indeno(1,2,3-cd)pyrene only
5) X(5) Analyzed for Aroclor-1254 and Aroclor-1260 only
6) VO+TICs = volatile organics + tentatively identified compounds, SVO = semivolatile organics, PAHs = polycyclic aromatic hydrocarbons, PCBs = polychlorinated biphenyls
7) 2015 and 2016 soil sample depths are in feet below bottom of asphalt and asphalt base material
8) 2010 soil sample depths are in feet below ground surface
9) Groundwater sample depths, where known, are in feet below top of casing
10) LFPS = low flow purge and sample method

Table 2
Detected Soil Sampling Results - Comparison to New Jersey Direct Contact Criteria

TABLE 2
DETECTED SOIL SAMPLING RESULTS - COMPARISON TO NEW JERSEY DIRECT CONTACT CRITERIA
ECP PARCEL 57 ROUND 3 WORK PLAN ADDENDUM
FORT MONMOUTH, NEW JERSEY

Loc ID	NJ Residential Direct Contact SRS	NJ Non-Residential Direct Contact SRS	NJ Impact to GW Soil Screening Level	P57-C5		P57-A1-A		
Sample ID				P57-SS-C5-1.0-1.5	P57-SS-C5-1.5-2.0	P57-SS-A1-1.0-1.5	P57-SS-A1-1.5-2.0	P57-SS-A1-A-6.5-7.0
Sample Date				2/1/2010	2/1/2010	2/1/2010	2/1/2010	11/22/2010
Semivolatile Organic Compounds (mg/kg)								
2-Methylnaphthalene	230	2,400	8	< 0.57	< 0.54	**1.45**	< 0.54	< 0.62
Benzo(a)anthracene	0.6	2	0.8	< 0.57	< 0.54	**0.72**	< 0.54	< 0.62
Benzo(a)pyrene	0.2	0.2	0.2	< 0.57	< 0.54	**0.77**	< 0.54	< 0.62
Benzo(b)fluoranthene	0.6	2	2	< 0.57	< 0.54	**1.54**	< 0.54	< 0.62
Benzo(k)fluoranthene	6	23	25	< 0.57	< 0.54	NA J	< 0.54	< 0.62
Chrysene	62	230	80	< 0.57	< 0.54	**0.95**	< 0.54	< 0.62
Dibenz(a,h)anthracene	0.2	0.2	0.8	< 0.57	< 0.54	< 0.55	< 0.54	< 0.62
Fluoranthene	2,300	24,000	1,300	< 0.57	< 0.54	**1.16**	< 0.54	< 0.62
Fluorene	2,300	24,000	170	< 0.57	< 0.54	**0.55**	< 0.54	< 0.62
Indeno(1,2,3-cd)pyrene	0.6	2	7	< 0.57	< 0.54	NA J	< 0.54	< 0.62
Naphthalene	6	17	25	< 0.57	< 0.54	**0.99**	< 0.54	< 0.62
Phenanthrene	NLE	300,000	NLE	< 0.57	**0.49 J**	**0.9**	< 0.54	< 0.62
Pyrene	1,700	18,000	840	< 0.57	**0.83**	**1.37**	< 0.54	< 0.62

TABLE 2
DETECTED SOIL SAMPLING RESULTS - COMPARISON TO NEW JERSEY DIRECT CONTACT CRITERIA
ECP PARCEL 57 ROUND 3 WORK PLAN ADDENDUM
FORT MONMOUTH, NEW JERSEY

Loc ID	NJ Residential Direct Contact SRS	NJ Non-Residential Direct Contact SRS	NJ Impact to GW Soil Screening Level	P57-A1-B	P57-A1-C	P57-A1-D	P57-A1-E	PAR-57-SS-01
Sample ID				P57-SS-A1-B-6.5-7.0	P57-SS-A1-C-8.0-8.5	P57-SS-A1-D-6.0-6.5	P57-SS-A1-E-5.5-6.0	FTMM-57-SS-01-0.5-1.0
Sample Date				11/22/2010	11/22/2010	11/22/2010	11/22/2010	9/18/2015
Semivolatile Organic Compounds (mg/kg)								
2-Methylnaphthalene	230	2,400	8	< 0.62	< 0.65	< 0.63	< 0.65	NA
Benzo(a)anthracene	0.6	2	0.8	< 0.62	< 0.65	< 0.63	< 0.65	NA
Benzo(a)pyrene	0.2	0.2	0.2	< 0.62	< 0.65	< 0.63	< 0.65	NA
Benzo(b)fluoranthene	0.6	2	2	< 0.62	< 0.65	< 0.63	< 0.65	NA
Benzo(k)fluoranthene	6	23	25	< 0.62	< 0.65	< 0.63	< 0.65	NA
Chrysene	62	230	80	< 0.62	< 0.65	< 0.63	< 0.65	NA
Dibenz(a,h)anthracene	0.2	0.2	0.8	< 0.62	< 0.65	< 0.63	< 0.65	NA
Fluoranthene	2,300	24,000	1,300	< 0.62	< 0.65	< 0.63	< 0.65	NA
Fluorene	2,300	24,000	170	< 0.62	< 0.65	< 0.63	< 0.65	NA
Indeno(1,2,3-cd)pyrene	0.6	2	7	< 0.62	< 0.65	< 0.63	< 0.65	NA
Naphthalene	6	17	25	< 0.62	< 0.65	< 0.63	< 0.65	NA
Phenanthrene	NLE	300,000	NLE	< 0.62	< 0.65	< 0.63	< 0.65	NA
Pyrene	1,700	18,000	840	< 0.62	< 0.65	< 0.63	< 0.65	NA

TABLE 2
DETECTED SOIL SAMPLING RESULTS - COMPARISON TO NEW JERSEY DIRECT CONTACT CRITERIA
ECP PARCEL 57 ROUND 3 WORK PLAN ADDENDUM
FORT MONMOUTH, NEW JERSEY

Loc ID	NJ Residential Direct Contact SRS	NJ Non-Residential Direct Contact SRS	NJ Impact to GW Soil Screening Level	PAR-57-SS-02	PAR-57-SS-03	PAR-57-SS-04		
Sample ID				FTMM-57-SS-02-1.3-1.8	FTMM-57-SS-03-0.5-1.0	FTMM-57-SS-04-1.0-1.5	FTMM-57-SS-04-2.0-2.5	FTMM-57-SS-04-3.0-3.5
Sample Date				9/18/2015	9/18/2015	9/18/2015	9/18/2015	9/18/2015
Semivolatile Organic Compounds (mg/kg)								
2-Methylnaphthalene	230	2,400	8	NA	NA	NA	NA	NA
Benzo(a)anthracene	0.6	2	0.8	NA	NA	NA	NA	NA
Benzo(a)pyrene	0.2	0.2	0.2	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	0.6	2	2	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	6	23	25	NA	NA	NA	NA	NA
Chrysene	62	230	80	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	0.2	0.2	0.8	NA	NA	NA	NA	NA
Fluoranthene	2,300	24,000	1,300	NA	NA	NA	NA	NA
Fluorene	2,300	24,000	170	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.6	2	7	NA	NA	NA	NA	NA
Naphthalene	6	17	25	NA	NA	NA	NA	NA
Phenanthrene	NLE	300,000	NLE	NA	NA	NA	NA	NA
Pyrene	1,700	18,000	840	NA	NA	NA	NA	NA

TABLE 2
DETECTED SOIL SAMPLING RESULTS - COMPARISON TO NEW JERSEY DIRECT CONTACT CRITERIA
ECP PARCEL 57 ROUND 3 WORK PLAN ADDENDUM
FORT MONMOUTH, NEW JERSEY

Loc ID	NJ Residential Direct Contact SRS	NJ Non-Residential Direct Contact SRS	NJ Impact to GW Soil Screening Level	PAR-57-SS-05	PAR-57-SS-06	PAR-57-SS-07	PAR-57-SS-08	PAR-57-SS-09
Sample ID				FTMM-57-SS-05-0.5-1.0	FTMM-57-SS-06-0.5-1.0	FTMM-57-SS-07-0.5-1.0	FTMM-57-SS-08-0.9-1.4	FTMM-57-SS-09-0.5-1.0
Sample Date				9/18/2015	9/18/2015	9/18/2015	9/21/2015	10/1/2015
Semivolatile Organic Compounds (mg/kg)								
2-Methylnaphthalene	230	2,400	8	NA	NA	NA	NA	NA
Benzo(a)anthracene	0.6	2	0.8	NA	NA	NA	NA	**0.77 J**
Benzo(a)pyrene	0.2	0.2	0.2	NA	NA	NA	NA	**0.88**
Benzo(b)fluoranthene	0.6	2	2	NA	NA	NA	NA	**1.2 J**
Benzo(k)fluoranthene	6	23	25	NA	NA	NA	NA	**0.35 J**
Chrysene	62	230	80	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	0.2	0.2	0.8	NA	NA	NA	NA	**0.29 J**
Fluoranthene	2,300	24,000	1,300	NA	NA	NA	NA	NA
Fluorene	2,300	24,000	170	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.6	2	7	NA	NA	NA	NA	**0.57 J**
Naphthalene	6	17	25	NA	NA	NA	NA	NA
Phenanthrene	NLE	300,000	NLE	NA	NA	NA	NA	NA
Pyrene	1,700	18,000	840	NA	NA	NA	NA	NA

TABLE 2
DETECTED SOIL SAMPLING RESULTS - COMPARISON TO NEW JERSEY DIRECT CONTACT CRITERIA
ECP PARCEL 57 ROUND 3 WORK PLAN ADDENDUM
FORT MONMOUTH, NEW JERSEY

Loc ID	NJ Residential Direct Contact SRS	NJ Non-Residential Direct Contact SRS	NJ Impact to GW Soil Screening Level	PAR-57-SS-09		PAR-57-SS-10		
Sample ID				FTMM-57-SS-09-2.0-2.5	FTMM-57-SS-09-5.5-6.0	FTMM-57-SS-10-0.0-0.5	FTMM-57-SS-10-3.0-3.5	FTMM-57-SS-10-7.0-7.5
Sample Date				10/1/2015	10/1/2015	10/1/2015	10/1/2015	10/1/2015
Semivolatile Organic Compounds (mg/kg)								
2-Methylnaphthalene	230	2,400	8	NA	NA	NA	NA	NA
Benzo(a)anthracene	0.6	2	0.8	**0.0023 J**	**10**	**0.27**	**0.0053 J**	< 0.0044
Benzo(a)pyrene	0.2	0.2	0.2	**0.0031 J**	**8**	**0.27**	**0.0049 J**	< 0.0044
Benzo(b)fluoranthene	0.6	2	2	**0.0039 J**	**11**	**0.39**	**0.0058 J**	< 0.0044
Benzo(k)fluoranthene	6	23	25	< 0.0038	**3.3**	**0.12**	**0.0031 J**	< 0.0044
Chrysene	62	230	80	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	0.2	0.2	0.8	< 0.0038	**1.8**	**0.075**	< 0.0044	< 0.0044
Fluoranthene	2,300	24,000	1,300	NA	NA	NA	NA	NA
Fluorene	2,300	24,000	170	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.6	2	7	< 0.0038	**4.5**	**0.2**	**0.0031 J**	< 0.0044
Naphthalene	6	17	25	NA	NA	NA	NA	NA
Phenanthrene	NLE	300,000	NLE	NA	NA	NA	NA	NA
Pyrene	1,700	18,000	840	NA	NA	NA	NA	NA

TABLE 2
DETECTED SOIL SAMPLING RESULTS - COMPARISON TO NEW JERSEY DIRECT CONTACT CRITERIA
ECP PARCEL 57 ROUND 3 WORK PLAN ADDENDUM
FORT MONMOUTH, NEW JERSEY

Loc ID	NJ Residential Direct Contact SRS	NJ Non-Residential Direct Contact SRS	NJ Impact to GW Soil Screening Level	PAR-57-SS-11 (SS-111 is a field duplicate of SS-11)				PAR-57-SS-12
Sample ID				FTMM-57-SS-11-0.0-0.5	FTMM-57-SS-11-3.0-3.5	FTMM-57-SS-111-3.0-3.5	FTMM-57-SS-11-7.0-7.5	FTMM-57-SS-12-0.0-0.5
Sample Date				10/1/2015	10/1/2015	10/1/2015	10/1/2015	10/1/2015
Semivolatile Organic Compounds (mg/kg)								
2-Methylnaphthalene	230	2,400	8	NA	NA	NA	NA	NA
Benzo(a)anthracene	0.6	2	0.8	**0.25 J**	**0.01**	**0.015**	**0.0035 J**	**4.7 J**
Benzo(a)pyrene	0.2	0.2	0.2	**0.21 J**	**0.012**	**0.015**	**0.0039 J**	**3.7 J**
Benzo(b)fluoranthene	0.6	2	2	**0.27 J**	**0.016**	**0.019**	**0.0048 J**	**4.5 J**
Benzo(k)fluoranthene	6	23	25	**0.11 J**	**0.005 J**	**0.0042 J**	< 0.0043	**2 J**
Chrysene	62	230	80	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	0.2	0.2	0.8	**0.056 J**	< 0.0038	< 0.0038	< 0.0043	**0.85 J**
Fluoranthene	2,300	24,000	1,300	NA	NA	NA	NA	NA
Fluorene	2,300	24,000	170	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.6	2	7	**0.14 J**	**0.005 J**	**0.011**	**0.0026 J**	**2.3 J**
Naphthalene	6	17	25	NA	NA	NA	NA	NA
Phenanthrene	NLE	300,000	NLE	NA	NA	NA	NA	NA
Pyrene	1,700	18,000	840	NA	NA	NA	NA	NA

TABLE 2
DETECTED SOIL SAMPLING RESULTS - COMPARISON TO NEW JERSEY DIRECT CONTACT CRITERIA
ECP PARCEL 57 ROUND 3 WORK PLAN ADDENDUM
FORT MONMOUTH, NEW JERSEY

Loc ID	NJ Residential Direct Contact SRS	NJ Non-Residential Direct Contact SRS	NJ Impact to GW Soil Screening Level	PAR-57-SS-12 (SS-112 is a field duplicate of SS-12)			PAR-57-SS-13	
Sample ID				FTMM-57-SS-112-0.0-0.5	FTMM-57-SS-12-3.0-3.5	FTMM-57-SS-12-7.0-7.5	FTMM-57-SS-13-0.0-0.5	FTMM-57-SS-13-3.0-3.5
Sample Date				10/1/2015	10/1/2015	10/1/2015	10/1/2015	10/1/2015
Semivolatile Organic Compounds (mg/kg)								
2-Methylnaphthalene	230	2,400	8	NA	NA	NA	NA	NA
Benzo(a)anthracene	0.6	2	0.8	**0.24 J**	**0.043**	**0.026**	**0.98**	< 0.0039
Benzo(a)pyrene	0.2	0.2	0.2	**0.26 J**	**0.039**	**0.02**	**0.89**	< 0.0039
Benzo(b)fluoranthene	0.6	2	2	**0.37 J**	**0.054**	**0.026**	**1.2**	< 0.0039
Benzo(k)fluoranthene	6	23	25	**0.11 J**	**0.024**	**0.011**	**0.31**	< 0.0039
Chrysene	62	230	80	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	0.2	0.2	0.8	**0.046 J**	**0.01**	< 0.0039	**0.17**	< 0.0039
Fluoranthene	2,300	24,000	1,300	NA	NA	NA	NA	NA
Fluorene	2,300	24,000	170	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.6	2	7	**0.16 J**	**0.023**	**0.0093**	**0.52**	< 0.0039
Naphthalene	6	17	25	NA	NA	NA	NA	NA
Phenanthrene	NLE	300,000	NLE	NA	NA	NA	NA	NA
Pyrene	1,700	18,000	840	NA	NA	NA	NA	NA

TABLE 2
DETECTED SOIL SAMPLING RESULTS - COMPARISON TO NEW JERSEY DIRECT CONTACT CRITERIA
ECP PARCEL 57 ROUND 3 WORK PLAN ADDENDUM
FORT MONMOUTH, NEW JERSEY

Loc ID	NJ Residential Direct Contact SRS	NJ Non-Residential Direct Contact SRS	NJ Impact to GW Soil Screening Level	PAR-57-SS-13	PAR-57-SS-14			PAR-57-SS-15
Sample ID				FTMM-57-SS-13-6.5-7.0	FTMM-57-SS-14-0.0-0.5	FTMM-57-SS-14-3.0-3.5	FTMM-57-SS-14-5.0-5.5	FTMM-57-SS-15-0.0-0.5
Sample Date				10/1/2015	10/1/2015	10/1/2015	10/1/2015	10/1/2015
Semivolatile Organic Compounds (mg/kg)								
2-Methylnaphthalene	230	2,400	8	NA	NA	NA	NA	NA
Benzo(a)anthracene	0.6	2	0.8	< 0.0041	**1.2**	**0.035**	< 0.0037	**0.066**
Benzo(a)pyrene	0.2	0.2	0.2	< 0.0041	**0.97**	**0.035**	< 0.0037	**0.077**
Benzo(b)fluoranthene	0.6	2	2	< 0.0041	**1.4**	**0.041**	< 0.0037	**0.092**
Benzo(k)fluoranthene	6	23	25	< 0.0041	**0.48**	**0.014**	< 0.0037	**0.019**
Chrysene	62	230	80	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	0.2	0.2	0.8	< 0.0041	**0.19**	**0.012**	< 0.0037	**0.021**
Fluoranthene	2,300	24,000	1,300	NA	NA	NA	NA	NA
Fluorene	2,300	24,000	170	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.6	2	7	< 0.0041	**0.51**	**0.023**	< 0.0037	**0.047**
Naphthalene	6	17	25	NA	NA	NA	NA	NA
Phenanthrene	NLE	300,000	NLE	NA	NA	NA	NA	NA
Pyrene	1,700	18,000	840	NA	NA	NA	NA	NA

TABLE 2
DETECTED SOIL SAMPLING RESULTS - COMPARISON TO NEW JERSEY DIRECT CONTACT CRITERIA
ECP PARCEL 57 ROUND 3 WORK PLAN ADDENDUM
FORT MONMOUTH, NEW JERSEY

Loc ID	NJ Residential Direct Contact SRS	NJ Non-Residential Direct Contact SRS	NJ Impact to GW Soil Screening Level	PAR-57-SS-15		PAR-57-SS-16		
Sample ID				FTMM-57-SS-15-3.0-3.5	FTMM-57-SS-15-5.5-6.0	FTMM-57-SS-16-0.0-0.5	FTMM-57-SS-16-1.5-2.0	FTMM-57-SS-16-6.0-6.5
Sample Date				10/1/2015	10/1/2015	10/1/2015	10/1/2015	10/1/2015
Semivolatile Organic Compounds (mg/kg)								
2-Methylnaphthalene	230	2,400	8	NA	NA	NA	NA	NA
Benzo(a)anthracene	0.6	2	0.8	< 0.0039	**0.034**	**0.81**	**0.2**	< 0.0039
Benzo(a)pyrene	0.2	0.2	0.2	< 0.0039	**0.031**	**0.66**	**0.22**	< 0.0039
Benzo(b)fluoranthene	0.6	2	2	< 0.0039	**0.038**	**1.1**	**0.39**	< 0.0039
Benzo(k)fluoranthene	6	23	25	< 0.0039	**0.016**	**0.28**	< 0.035	< 0.0039
Chrysene	62	230	80	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	0.2	0.2	0.8	< 0.0039	< 0.0036	< 0.038	< 0.035	< 0.0039
Fluoranthene	2,300	24,000	1,300	NA	NA	NA	NA	NA
Fluorene	2,300	24,000	170	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.6	2	7	< 0.0039	**0.023**	**0.44**	< 0.035	< 0.0039
Naphthalene	6	17	25	NA	NA	NA	NA	NA
Phenanthrene	NLE	300,000	NLE	NA	NA	NA	NA	NA
Pyrene	1,700	18,000	840	NA	NA	NA	NA	NA

TABLE 2
DETECTED SOIL SAMPLING RESULTS - COMPARISON TO NEW JERSEY DIRECT CONTACT CRITERIA
ECP PARCEL 57 ROUND 3 WORK PLAN ADDENDUM
FORT MONMOUTH, NEW JERSEY

Loc ID	NJ Residential Direct Contact SRS	NJ Non-Residential Direct Contact SRS	NJ Impact to GW Soil Screening Level	PAR-57-SS-17			PAR-57-SS-18	
Sample ID				FTMM-57-SS-17-0.0-0.5	FTMM-57-SS-17-3.0-3.5	FTMM-57-SS-17-5.5-6.0	FTMM-57-SS-18-0.0-0.5	FTMM-57-SS-18-5.0-5.5
Sample Date				10/1/2015	10/1/2015	10/1/2015	10/1/2015	10/1/2015
Semivolatile Organic Compounds (mg/kg)								
2-Methylnaphthalene	230	2,400	8	NA	NA	NA	NA	NA
Benzo(a)anthracene	0.6	2	0.8	**4.3**	< 0.004	**0.0027 J**	**3.7**	**0.037**
Benzo(a)pyrene	0.2	0.2	0.2	**4.8**	< 0.004	**0.0023 J**	**2.3**	**0.035**
Benzo(b)fluoranthene	0.6	2	2	**6.1**	< 0.004	< 0.0038	**3.8**	**0.049**
Benzo(k)fluoranthene	6	23	25	**2.2**	< 0.004	**0.0046 J**	**1.1**	**0.013**
Chrysene	62	230	80	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	0.2	0.2	0.8	**1.2**	< 0.004	< 0.0038	**0.4**	**0.0068 J**
Fluoranthene	2,300	24,000	1,300	NA	NA	NA	NA	NA
Fluorene	2,300	24,000	170	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.6	2	7	**2.5**	< 0.004	< 0.0038	**1.1**	**0.025**
Naphthalene	6	17	25	NA	NA	NA	NA	NA
Phenanthrene	NLE	300,000	NLE	NA	NA	NA	NA	NA
Pyrene	1,700	18,000	840	NA	NA	NA	NA	NA

TABLE 2
DETECTED SOIL SAMPLING RESULTS - COMPARISON TO NEW JERSEY DIRECT CONTACT CRITERIA
ECP PARCEL 57 ROUND 3 WORK PLAN ADDENDUM
FORT MONMOUTH, NEW JERSEY

Loc ID	NJ Residential Direct Contact SRS	NJ Non-Residential Direct Contact SRS	NJ Impact to GW Soil Screening Level	PAR-57-SS-19		PAR-57-SS-20		
Sample ID				FTMM-57-SS-19-0.0-0.5	FTMM-57-SS-19-5.5-6.0	FTMM-57-SS-20-0.0-0.5	FTMM-57-SS-20-3.0-3.5	FTMM-57-SS-20-5.0-5.5
Sample Date				10/1/2015	10/1/2015	10/1/2015	10/1/2015	10/1/2015
Semivolatile Organic Compounds (mg/kg)								
2-Methylnaphthalene	230	2,400	8	NA	NA	NA	NA	NA
Benzo(a)anthracene	0.6	2	0.8	< 0.18	< 0.0045	**0.27**	**0.023**	**0.51**
Benzo(a)pyrene	0.2	0.2	0.2	< 0.18	< 0.0045	**0.3**	**0.013**	**0.27**
Benzo(b)fluoranthene	0.6	2	2	< 0.18	< 0.0045	**0.44**	**0.02**	**0.4**
Benzo(k)fluoranthene	6	23	25	< 0.18	< 0.0045	**0.12**	**0.013**	**0.17**
Chrysene	62	230	80	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	0.2	0.2	0.8	< 0.18	< 0.0045	**0.079**	< 0.0039	< 0.039
Fluoranthene	2,300	24,000	1,300	NA	NA	NA	NA	NA
Fluorene	2,300	24,000	170	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.6	2	7	< 0.18	< 0.0045	**0.2**	**0.011**	**0.21**
Naphthalene	6	17	25	NA	NA	NA	NA	NA
Phenanthrene	NLE	300,000	NLE	NA	NA	NA	NA	NA
Pyrene	1,700	18,000	840	NA	NA	NA	NA	NA

TABLE 2
DETECTED SOIL SAMPLING RESULTS - COMPARISON TO NEW JERSEY DIRECT CONTACT CRITERIA
ECP PARCEL 57 ROUND 3 WORK PLAN ADDENDUM
FORT MONMOUTH, NEW JERSEY

Loc ID	NJ Residential Direct Contact SRS	NJ Non-Residential Direct Contact SRS	NJ Impact to GW Soil Screening Level	PAR-57-SS-21		PAR-57-SS-22		PAR-57-SS-23
Sample ID				FTMM-57-SS-21-0.0-0.5	FTMM-57-SS-21-3.0-3.5	FTMM-57-SS-22-0.0-0.5	FTMM-57-SS-22-3.0-3.5	FTMM-57-SS-23-0.0-0.5
Sample Date				10/2/2015	10/2/2015	10/2/2015	10/2/2015	10/2/2015
Semivolatile Organic Compounds (mg/kg)								
2-Methylnaphthalene	230	2,400	8	NA	NA	NA	NA	NA
Benzo(a)anthracene	0.6	2	0.8	**7.8**	**0.15**	**0.32**	**0.033**	**0.21**
Benzo(a)pyrene	0.2	0.2	0.2	**8.2**	**0.15**	**0.39**	**0.035**	**0.28**
Benzo(b)fluoranthene	0.6	2	2	**11**	**0.2**	**0.53**	**0.048**	**0.4**
Benzo(k)fluoranthene	6	23	25	**3.2**	**0.061**	**0.17**	**0.015**	**0.12**
Chrysene	62	230	80	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	0.2	0.2	0.8	**2.3**	**0.039**	**0.1**	**0.0086**	**0.07**
Fluoranthene	2,300	24,000	1,300	NA	NA	NA	NA	NA
Fluorene	2,300	24,000	170	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.6	2	7	**6**	**0.098**	**0.38**	**0.025**	**0.24**
Naphthalene	6	17	25	NA	NA	NA	NA	NA
Phenanthrene	NLE	300,000	NLE	NA	NA	NA	NA	NA
Pyrene	1,700	18,000	840	NA	NA	NA	NA	NA

TABLE 2
DETECTED SOIL SAMPLING RESULTS - COMPARISON TO NEW JERSEY DIRECT CONTACT CRITERIA
ECP PARCEL 57 ROUND 3 WORK PLAN ADDENDUM
FORT MONMOUTH, NEW JERSEY

Loc ID	NJ Residential Direct Contact SRS	NJ Non-Residential Direct Contact SRS	NJ Impact to GW Soil Screening Level	PAR-57-SS-23	PAR-57-SS-24	PAR-57-SS-25	PAR-57-SS-26	
Sample ID				FTMM-57-SS-23-3.0-3.5	FTMM-57-SS-24-0.0-0.5	FTMM-57-SS-25-0.0-0.5	PAR-57-SB-26-0.5-1	PAR-57-SB-26-3.5-4
Sample Date				10/2/2015	10/2/2015	10/2/2015	4/22/2016	4/22/2016
Semivolatile Organic Compounds (mg/kg)								
2-Methylnaphthalene	230	2,400	8	NA	NA	NA	NA	NA
Benzo(a)anthracene	0.6	2	0.8	**0.06**	**0.1**	**0.0076**	**0.12**	< 0.0079
Benzo(a)pyrene	0.2	0.2	0.2	**0.059**	**0.1**	**0.0076**	**0.12**	< 0.0079
Benzo(b)fluoranthene	0.6	2	2	**0.085**	**0.16**	**0.0087**	**0.15**	< 0.0079
Benzo(k)fluoranthene	6	23	25	**0.037**	**0.061**	**0.0018 J**	NA	NA
Chrysene	62	230	80	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	0.2	0.2	0.8	**0.014**	**0.022**	< 0.0036	**0.024**	< 0.0079
Fluoranthene	2,300	24,000	1,300	NA	NA	NA	NA	NA
Fluorene	2,300	24,000	170	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.6	2	7	**0.037**	**0.072**	**0.0047 J**	**0.099**	< 0.0079
Naphthalene	6	17	25	NA	NA	NA	NA	NA
Phenanthrene	NLE	300,000	NLE	NA	NA	NA	NA	NA
Pyrene	1,700	18,000	840	NA	NA	NA	NA	NA

TABLE 2
DETECTED SOIL SAMPLING RESULTS - COMPARISON TO NEW JERSEY DIRECT CONTACT CRITERIA
ECP PARCEL 57 ROUND 3 WORK PLAN ADDENDUM
FORT MONMOUTH, NEW JERSEY

Loc ID	NJ Residential Direct Contact SRS	NJ Non-Residential Direct Contact SRS	NJ Impact to GW Soil Screening Level	PAR-57-SS-26		PAR-57-SS-27			PAR-57-SS-28
Sample ID				PAR-57-SB-126-3.5-4	PAR-57-SB-26-7.5-8	PAR-57-SB-27-0-0.5	PAR-57-SB-27-3.5-4	PAR-57-SB-27-7.5-8	PAR-57-SB-28-0.5-1
Sample Date				4/22/2016	4/22/2016	4/22/2016	4/22/2016	4/22/2016	4/22/2016
Semivolatile Organic Compounds (mg/kg)									
2-Methylnaphthalene	230	2,400	8	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	0.6	2	0.8	**0.0035 J**	**0.0041 J**	**0.12**	< 0.0079	< 0.0077	**0.4**
Benzo(a)pyrene	0.2	0.2	0.2	< 0.0084	**0.0021 J**	**0.17**	< 0.0079	< 0.0077	**0.32**
Benzo(b)fluoranthene	0.6	2	2	< 0.0084	**0.0031 J**	**0.2**	< 0.0079	< 0.0077	**0.28**
Benzo(k)fluoranthene	6	23	25	NA	NA	NA	NA	NA	NA
Chrysene	62	230	80	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	0.2	0.2	0.8	< 0.0084	< 0.0079	**0.027**	< 0.0079	< 0.0077	**0.057**
Fluoranthene	2,300	24,000	1,300	NA	NA	NA	NA	NA	NA
Fluorene	2,300	24,000	170	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.6	2	7	< 0.0084	< 0.0079	**0.12**	< 0.0079	< 0.0077	**0.16**
Naphthalene	6	17	25	NA	NA	NA	NA	NA	NA
Phenanthrene	NLE	300,000	NLE	NA	NA	NA	NA	NA	NA
Pyrene	1,700	18,000	840	NA	NA	NA	NA	NA	NA

TABLE 2
DETECTED SOIL SAMPLING RESULTS - COMPARISON TO NEW JERSEY DIRECT CONTACT CRITERIA
ECP PARCEL 57 ROUND 3 WORK PLAN ADDENDUM
FORT MONMOUTH, NEW JERSEY

Loc ID	NJ Residential Direct Contact SRS	NJ Non-Residential Direct Contact SRS	NJ Impact to GW Soil Screening Level	PAR-57-SS-28		PAR-57-SS-29			PAR-57-SS-30
Sample ID				PAR-57-SB-28-3.5-4	PAR-57-SB-28-7.5-8	PAR-57-SB-29-0.5-1	PAR-57-SB-29-3.5-4	PAR-57-SB-29-7.5-8	PAR-57-SB-30-0.5-1
Sample Date				4/22/2016	4/22/2016	4/22/2016	4/22/2016	4/22/2016	4/22/2016
Semivolatile Organic Compounds (mg/kg)									
2-Methylnaphthalene	230	2,400	8	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	0.6	2	0.8	**0.0032 J**	< 0.0084	**1.6**	**0.0073 J**	**0.0025 J**	**0.3**
Benzo(a)pyrene	0.2	0.2	0.2	< 0.0085	< 0.0084	**1.2**	**0.005 J**	< 0.0083	**0.32**
Benzo(b)fluoranthene	0.6	2	2	< 0.0085	< 0.0084	**1.1**	**0.0038 J**	< 0.0083	**0.43**
Benzo(k)fluoranthene	6	23	25	NA	NA	NA	NA	NA	NA
Chrysene	62	230	80	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	0.2	0.2	0.8	< 0.0085	< 0.0084	**0.21**	< 0.0079	< 0.0083	**0.057**
Fluoranthene	2,300	24,000	1,300	NA	NA	NA	NA	NA	NA
Fluorene	2,300	24,000	170	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.6	2	7	< 0.0085	< 0.0084	**0.67**	**0.0023 J**	< 0.0083	**0.19**
Naphthalene	6	17	25	NA	NA	NA	NA	NA	NA
Phenanthrene	NLE	300,000	NLE	NA	NA	NA	NA	NA	NA
Pyrene	1,700	18,000	840	NA	NA	NA	NA	NA	NA

TABLE 2
DETECTED SOIL SAMPLING RESULTS - COMPARISON TO NEW JERSEY DIRECT CONTACT CRITERIA
ECP PARCEL 57 ROUND 3 WORK PLAN ADDENDUM
FORT MONMOUTH, NEW JERSEY

Loc ID	NJ Residential Direct Contact SRS	NJ Non-Residential Direct Contact SRS	NJ Impact to GW Soil Screening Level	PAR-57-SS-30		PAR-57-SS-31			PAR-57-SS-32
Sample ID				PAR-57-SB-30-3.5-4	PAR-57-SB-30-7.5-8	PAR-57-SB-31-0.5-1	PAR-57-SB-31-3.5-4	PAR-57-SB-31-7.5-8	PAR-57-SB-32-0.5-1
Sample Date				4/22/2016	4/22/2016	4/22/2016	4/22/2016	4/22/2016	4/22/2016
Semivolatile Organic Compounds (mg/kg)									
2-Methylnaphthalene	230	2,400	8	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	0.6	2	0.8	< 0.0079	**0.0027 J**	**0.035**	**0.052**	**0.0026 J**	**0.25**
Benzo(a)pyrene	0.2	0.2	0.2	< 0.0079	**0.003 J**	**0.061**	**0.07**	< 0.0078	**0.27**
Benzo(b)fluoranthene	0.6	2	2	< 0.0079	< 0.0073	**0.053**	**0.062**	< 0.0078	**0.34**
Benzo(k)fluoranthene	6	23	25	NA	NA	NA	NA	NA	NA
Chrysene	62	230	80	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	0.2	0.2	0.8	< 0.0079	< 0.0073	**0.014**	**0.018**	< 0.0078	**0.035**
Fluoranthene	2,300	24,000	1,300	NA	NA	NA	NA	NA	NA
Fluorene	2,300	24,000	170	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.6	2	7	< 0.0079	**0.0033 J**	**0.047**	**0.056**	< 0.0078	**0.21**
Naphthalene	6	17	25	NA	NA	NA	NA	NA	NA
Phenanthrene	NLE	300,000	NLE	NA	NA	NA	NA	NA	NA
Pyrene	1,700	18,000	840	NA	NA	NA	NA	NA	NA

TABLE 2
DETECTED SOIL SAMPLING RESULTS - COMPARISON TO NEW JERSEY
DIRECT CONTACT CRITERIA
ECP PARCEL 57 ROUND 3 WORK PLAN ADDENDUM
FORT MONMOUTH, NEW JERSEY

Loc ID	NJ Residential Direct Contact SRS	NJ Non-Residential Direct Contact SRS	NJ Impact to GW Soil Screening Level	PAR-57-SS-32	PAR-57-SS-33		PAR-57-SS-34		PAR-57-SS-35
Sample ID				PAR-57-SB-32-3.5-4	PAR-57-SB-33-0.5-1	PAR-57-SB-33-3.5-4	PAR-57-SB-34-0.5-1	PAR-57-SB-34-3.5-4	PAR-57-SB-35-0.5-1
Sample Date				4/22/2016	4/22/2016	4/22/2016	4/22/2016	4/22/2016	4/22/2016
Semivolatile Organic Compounds (mg/kg)									
2-Methylnaphthalene	230	2,400	8	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	0.6	2	0.8	**0.0035 J**	**0.009**	< 0.0083	**0.0033 J**	< 0.0077	< 0.0076
Benzo(a)pyrene	0.2	0.2	0.2	< 0.0077	**0.013**	< 0.0083	< 0.0082	< 0.0077	< 0.0076
Benzo(b)fluoranthene	0.6	2	2	< 0.0077	**0.014**	< 0.0083	< 0.0082	< 0.0077	< 0.0076
Benzo(k)fluoranthene	6	23	25	NA	NA	NA	NA	NA	NA
Chrysene	62	230	80	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	0.2	0.2	0.8	< 0.0077	**0.0026 J**	< 0.0083	< 0.0082	< 0.0077	< 0.0076
Fluoranthene	2,300	24,000	1,300	NA	NA	NA	NA	NA	NA
Fluorene	2,300	24,000	170	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	0.6	2	7	< 0.0077	**0.0098**	< 0.0083	< 0.0082	< 0.0077	< 0.0076
Naphthalene	6	17	25	NA	NA	NA	NA	NA	NA
Phenanthrene	NLE	300,000	NLE	NA	NA	NA	NA	NA	NA
Pyrene	1,700	18,000	840	NA	NA	NA	NA	NA	NA

TABLE 2
DETECTED SOIL SAMPLING RESULTS - COMPARISON TO NEW JERSEY DIRECT CONTACT CRITERIA
ECP PARCEL 57 ROUND 3 WORK PLAN ADDENDUM
FORT MONMOUTH, NEW JERSEY

Loc ID	NJ Residential Direct Contact SRS	NJ Non-Residential Direct Contact SRS	NJ Impact to GW Soil Screening Level	PAR-57-SS-35
Sample ID				PAR-57-SB-35-3.5-4
Sample Date				4/22/2016
Semivolatile Organic Compounds (mg/kg)				
2-Methylnaphthalene	230	2,400	8	NA
Benzo(a)anthracene	0.6	2	0.8	< 0.0079
Benzo(a)pyrene	0.2	0.2	0.2	< 0.0079
Benzo(b)fluoranthene	0.6	2	2	< 0.0079
Benzo(k)fluoranthene	6	23	25	NA
Chrysene	62	230	80	NA
Dibenz(a,h)anthracene	0.2	0.2	0.8	< 0.0079
Fluoranthene	2,300	24,000	1,300	NA
Fluorene	2,300	24,000	170	NA
Indeno(1,2,3-cd)pyrene	0.6	2	7	< 0.0079
Naphthalene	6	17	25	NA
Phenanthrene	NLE	300,000	NLE	NA
Pyrene	1,700	18,000	840	NA

TABLE 2
DETECTED SOIL SAMPLING RESULTS - COMPARISON TO NEW JERSEY DIRECT CONTACT CRITERIA
ECP PARCEL 57 ROUND 3 WORK PLAN ADDENDUM
FORT MONMOUTH, NEW JERSEY

Footnotes:
1) All historical data collected prior to 2013 are reported as provided by others
2) mg/kg = milligrams per kilogram
3) NLE = no limit established
4) NA = not analyzed
5) **BOLD** = detected result
6) Chemical result qualifiers are assigned by the laboratory and are evaluated and modified (if necessary) during the data validation.
7) J = estimated detected value due to a concentration below the reporting limit or due to discrepancies in meeting certain analyte-specific quality control criteria
8) < = non-detect, i.e. not detected at or above this value
9) Exceedances of one or more comparison criteria are highlighted as follows:

- Cell Shade indicates result is above the NJ Residential Direct Contact Soil Remediation Standard, and (in some cases), the NJ Impact to Ground Water Screening Level

- Cell Shade indicates result is above NJ Residential and Non-Residential Direct Contact Soil Remediation Standards, and (in some cases), the NJ Impact to Ground Water Screening Level

There are no NJDEP soil standards for individual PCB Aroclors, therefore the NJDEP standard for total PCBs was used for individual Aroclors
10) Comparison Criteria source documents and web addresses:
- The NJ Residential Direct Contact Soil Remediation Standard refers to the NJDEP's May 7, 2012 Remediation Standards
  http://www.nj.gov/dep/rules/rules/njac7_26d.pdf
- The NJ Non-Residential Direct Contact Soil Remediation Standard refers to the NJDEP's May 7, 2012 Remediation Standards.
  http://www.nj.gov/dep/rules/rules/njac7_26d.pdf
- The NJ Impact to GW Soil Screening Level criteria refers to the Development of Site Specific Impact to Ground Water Soil Remediation Standards - Nov 2013 revised
  http://www.nj.gov/dep/srp/guidance/rs/partition_equation.pdf

Table 3
Proposed Round 3 Sampling Summary for Parcel 57

TABLE 3
SAMPLING SUMMARY FOR PARCEL 57 ROUND 3 WORKPLAN ADDENDUM
FORT MONMOUTH, NEW JERSEY

Site	Location	Number of Borings	PAHs by Method 8270 SIM	Number of Primary Samples	Number of Contingency Samples	Rationale
Soil						
Parcel 57	Primary Borings on the northern portion of Parcel 57 (see Figure 4): 1 soil boring (PAR-57-SS-45), 1 sample.	1	1	1	0	Subsurface soil samples will be collected from 7.5 ft bgs at PAR-57-SS-45 to delineate PAHs vertically.
	Primary/Contingency borings located north of Parcel 57 (see Figure 4): 1 primary soil boring (PAR-57-SB-46) and 1 contingency soil boring (PAR-57-SB-47), 3 samples each.	2	6	3	3	Surface soil samples (0 to 6-inch interval below the asphalt and asphalt base material) will be collected from primary borings PAR-57-SB-46 taking care not to introduce asphalt and/or road base into the samples. In addition, soil will be collected from a 6 inch interval at approximately 3.5 feet bgs, and 7.5 feet bgs to evaluate the horizontal and vertical PAH extent. Samples from contingency boring PAR-57-SB-47 will be sent to the lab to be extracted and held pending the analysis of samples from soil boring PAR-57-SB-46.
	Primary borings located north and south of Parcel 57 (see Figure 4): 2 soil borings (PAR-57-SB-48 and PAR-57-SB-51), 3 samples each.	2	6	2	4	Surface soil samples (0 to 6-inch interval below the asphalt and asphalt base material) will be collected from primary borings PAR-57-SB-48 and PAR-57-SB-51 taking care not to introduce asphalt and/or road base into the samples. In addition, soil will be collected from a 6 inch interval at approximately 3.5 feet bgs, and 7.5 feet bgs to evaluate the horizontal and vertical PAH extent. Samples from the 3.5 and 7.5 feet bgs intervals will be sent to the lab to be extracted and held pending the analysis of primary samples.
	Contingency borings located north and south of Parcel 57 (see Figure 4): 4 soil borings (PAR-57-SB-49, PAR-57-SB-50, PAR-57-SB-52, and PAR-57-SB-53), 3 samples each.	4	12	0	12	Surface soil samples (0 to 6-inch interval below the asphalt and asphalt base material) will be collected from contingency boring PAR-57-SB-49, PAR-57-SB-50, PAR-57-SB-52, and PAR-57-SB-53 taking care not to introduce asphalt and/or road base into the samples. In addition, soil will be collected from a 6 inch interval at approximately 3.5 feet bgs, and 7.5 feet bgs to evaluate the horizontal and vertical PAH extent. Samples will be sent to the lab to be extracted and held pending the analysis of primary samples from soil borings PAR-57-SB-48 and PAR-57-SB-51
QA/QC samples (see SAP for additional details) [a/]						
Field Duplicates (5% Sampling Frequency per media)		NA	2	1	1	
Matrix Spike (5% Sampling Frequency per media)		NA	2	1	1	
Matrix Spike Duplicate (5% Sampling Frequency per media)		NA	2	1	1	
Trip Blank (1 per cooler of VOCs per media)		NA	0	0	0	
QA Split (5% per media)		NA	2	1	1	
Equipment Blank (5% Sampling Frequency per media)		NA	2	1	1	
TOTAL		**NA**	**35**	**11**	**24**	

Notes:

NA = not applicable.

[a/] QA/QC = quality assurance/quality control; SAP = Sampling and Analysis Plan. The requirement for QA/QC samples may be fulfilled with samples from other parcels.

Attachment 1
Parcel 57 Round 2 Boring Logs

PARSONS

Soil Boring Log

CLIENT: USACE
PROJECT NAME: FTMM - ECP
PROJECT LOCATION: FTMM Parcel
PROJECT NUMBER: 748810-

GROUNDWATER OBSERVATIONS
WATER LEVEL: ~3.5
DATE: 4/22/16
TIME: 0840
MEAS. FROM: BGS

INSPECTOR: CW
DRILLER: JB
WEATHER: 60°F clear
CONTRACTOR: East Coast Drilling, Inc. (ECDI)
RIG TYPE: Geoprobe(R) 7822DT
DATE/TIME START: 4/22/16 0830
DATE/TIME FINISH: 4/22/16 0840
WEIGHT OF HAMMER: N/A
DROP OF HAMMER: N/A
TYPE OF HAMMER: N/A

BORING/WELL ID: PAR-57-SB-2C
LOCATION DESCRIPTION: trail 57
LOCATION PLAN: Oceanport, New Jersey

DEPTH (feet)	SAMPLE I.D.	BLOWS per 6"	ADV/ REC.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL	STRATA	COMMENTS
0			60/58	0	0-6" Asphalt, millings, gravel		
	6.5-7				6"-40" moist, m. dense, grey-green mf SAND, some silt, trace f gravel	I	
1							
2					40"-58" saturated, m. dense, grey-green, MC SAND, little silt, trace f gravel		
3						II	
	3.5-4						
4							
5			58/58	0	0-35" SAA		
					35-44" grey/TAN, SAA		
6							
					44"-56" wet, light Brown/TAN, soft Clay, some f SAND	III	
7							
	7.5-8				56-58" wet, light Brown/TAN MC SAND		
8							
9							
10					end of boring		

Remarks:

Sample Types
S – Split-Spoon
U – Undisturbed Tube
C – Rock Core
A – Auger Cuttings

Consistency vs. Blowcount / Foot

Granular (Sand & Gravel)			Fine Grained (Silt & Clay)	
V. Loose: 0-4	Dense: 30-50		V. Soft: <2	Stiff: 8-15
Loose: 4-10	V. Dense: >50		Soft: 2-4	V. Stiff: 15-30
M. Dense: 10-30			M. Stiff: 4-8	Hard: > 30

and - 35-50%
some - 20-35%
little - 10-20%
trace - <10%
moisture, density, color, gradation

PARSONS

Page 1 of 1

Soil Boring Log

CLIENT: USACE
PROJECT NAME: FTMM - ECP
PROJECT LOCATION: FTMM Parcel
PROJECT NUMBER: 748810-

GROUNDWATER OBSERVATIONS
WATER LEVEL: ~5
DATE: 4/22/16
TIME:
MEAS. FROM:

INSPECTOR: CW
DRILLER: JB
WEATHER: 60°F
CONTRACTOR: East Coast Drilling, Inc. (ECDI)
RIG TYPE: Geoprobe(R) 7822DT
DATE/TIME START: 4/22/16
DATE/TIME FINISH: 4/22/16
WEIGHT OF HAMMER: N/A
DROP OF HAMMER: N/A
TYPE OF HAMMER: N/A

BORING/WELL ID: PAF-57-SB-27
LOCATION DESCRIPTION: Parcel 57
LOCATION PLAN: Oceanport, New Jersey

DEPTH (feet)	SAMPLE I.D.	BLOWS per 6"	ADV/ REC.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL	STRATA	COMMENTS
0905 0	0.0.5		60/60	0	0-8" Brown, MF SAND, some silt, trace f gravel		
	~~0.0.5~~					I	
1					8-34" Brown, MF SAND, some Rock frags, some F gravel little Brick		
2							
					34"-48" moist, light grey/light Brown mottled F SAND and clay.		
3						III	
0910	3.5-4				48-60 moist, light grey/light Brown mottled MF SAND, trace clay		
4							
5			48/60	0	0-36" saturated, light tan, MC SAND		
						III	
6					36"-50" saturated, orange, MC SAND, little silt		
7					50-60" Dark grey, f SAND and silt,		
0915	7.5-8						
8							
9							
0					end of boring		

Remarks:

Sample Types
S – Split-Spoon
U – Undisturbed Tube
C – Rock Core
A – Auger Cuttings

Consistency vs. Blowcount / Foot

Granular (Sand & Gravel)			Fine Grained (Silt & Clay)	
V. Loose: 0-4	Dense: 30-50		V. Soft: <2	Stiff: 8-15
Loose: 4-10	V. Dense: >50		Soft: 2-4	V. Stiff: 15-30
M. Dense: 10-30			M. Stiff: 4-8	Hard: > 30

and - 35-50%
some - 20-35%
little - 10-20%
trace - <10%
moisture, density, color, gradation

PARSONS

Page 1 of 1

Soil Boring Log

CLIENT: USACE
PROJECT NAME: FTMM - ECP
PROJECT LOCATION: FTMM Parcel
PROJECT NUMBER: 748810-

GROUNDWATER OBSERVATIONS
WATER LEVEL: nG
DATE: 4/22/16
TIME:
MEAS. FROM:

INSPECTOR: CW
DRILLER: JD
WEATHER: 70°F clear
CONTRACTOR: East Coast Drilling, Inc. (ECDI)
RIG TYPE: Geoprobe(R) 7822DT
DATE/TIME START: 4/21/16
DATE/TIME FINISH: 4/22/16
WEIGHT OF HAMMER: N/A
DROP OF HAMMER: N/A
TYPE OF HAMMER: N/A

BORING/WELL ID: PAR-57-SB-28
LOCATION DESCRIPTION: Parcel 57
LOCATION PLAN: Oceanport, New Jersey

DEPTH (feet)	SAMPLE I.D.	BLOWS per 6"	ADV/ REC.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL	STRATA	COMMENTS
0			60/60	0	0-5" Asphalt + millings		
0930	0.5-1				5"-26" Brown, mf SAND, some Rock frags, some f gravel, trace brick	I	
1							
2							
3					26"-60" moist, Brown/grey/orange Brown mf SAND, little silt		
0935	3.5-4					II	
4							
5			60/60	0	0-15" SAA		
6					15-24" Saturated, light Brown mC SAND, trace silt	III	
7					24"-36" Moist, light grey/light Brown/ Red. Brown, mottled f SAND, some clay		
0940	7.5-8						
8					36"-60" Wet, light brown/Red-Brown/ light orange mf SAND, little silt		
9							
10					end of boring		

Remarks:

Sample Types
S – Split-Spoon
U – Undisturbed Tube
C – Rock Core
A – Auger Cuttings

Consistency vs. Blowcount / Foot

Granular (Sand & Gravel)			Fine Grained (Silt & Clay)	
V. Loose: 0-4	Dense: 30-50		V. Soft: <2	Stiff: 8-15
Loose: 4-10	V. Dense: >50		Soft: 2-4	V. Stiff: 15-30
M. Dense: 10-30			M. Stiff: 4-8	Hard: > 30

and - 35-50%
some - 20-35%
little - 10-20%
trace - <10%
moisture, density, color, gradation

PARSONS

Page 1 of 1

Soil Boring Log

CLIENT: USACE
PROJECT NAME: FTMM - ECP
PROJECT LOCATION: FTMM Parcel
PROJECT NUMBER: 748810-

GROUNDWATER OBSERVATIONS
WATER LEVEL: ~6
DATE: 4/22/16
TIME:
MEAS. FROM:

INSPECTOR: CW
DRILLER: DB
WEATHER: 65°F clear
CONTRACTOR: East Coast Drilling, Inc. (ECDI)
RIG TYPE: Geoprobe(R) 7822DT
DATE/TIME START: 4/22/16
DATE/TIME FINISH: 4/22/16
WEIGHT OF HAMMER: N/A
DROP OF HAMMER: N/A
TYPE OF HAMMER: N/A

BORING/WELL ID: MR-57-SB-29
LOCATION DESCRIPTION: Parcel 57
LOCATION PLAN: Oceanport, New Jersey

	DEPTH (feet)	SAMPLE I.D.	BLOWS per 6"	ADV/ REC.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL	STRATA	COMMENTS
0955	0	0.5-1		60/60	0	0-6" Asphalt + millings		
						6-33" Brown, mF SAND, some f gravel, little Rock frags, trace silt	I	
	1							
	2					33-60" light Brown, TAN, mF SAND, little f gravel, moist		
	3						III	
1000		3.5-4						
	4							
	5			60/60	0	0-10" SAA		
						10"-25" ~~light~~ wet, light Brown, m.dense, mF SAND, trace f gravel	III	▽
	6							
	7					25"-36" wet, light TAN, m.dense f SAND, trace silt		
1005		7.5-8						
	8					36"-60" wet, light tan, loose mc SAND		
	9							
	0					end of boring		

Remarks:

Sample Types
S – Split-Spoon
U – Undisturbed Tube
C – Rock Core
A – Auger Cuttings

Consistency vs. Blowcount / Foot

Granular (Sand & Gravel)		Fine Grained (Silt & Clay)	
V. Loose: 0-4	Dense: 30-50	V. Soft: <2	Stiff: 8-15
Loose: 4-10	V. Dense: >50	Soft: 2-4	V. Stiff: 15-30
M. Dense: 10-30		M. Stiff: 4-6	Hard: > 30

and - 35-50%
some - 20-35%
little - 10-20%
trace - <10%
moisture, density, color, gradation

PARSONS

Soil Boring Log

CLIENT: USACE
PROJECT NAME: FTMM - ECP
PROJECT LOCATION: FTMM Parcel
PROJECT NUMBER: 748810-

GROUNDWATER OBSERVATIONS
WATER LEVEL: 7'
DATE: 4/22/16
TIME:
MEAS. FROM:

INSPECTOR: CW
DRILLER: JTB
WEATHER: 65°F
CONTRACTOR: East Coast Drilling, Inc. (ECDI)
RIG TYPE: Geoprobe(R) 7822DT
DATE/TIME START: 4/22/16
DATE/TIME FINISH: 4/22/16
WEIGHT OF HAMMER: N/A
DROP OF HAMMER: N/A
TYPE OF HAMMER: N/A

BORING/WELL ID: PR2-57-SB-30
LOCATION DESCRIPTION: Parcel 57
LOCATION PLAN: Oceanport, New Jersey

DEPTH (feet)	SAMPLE I.D.	BLOWS per 6"	ADV/ REC.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL	STRATA	COMMENTS
0			60/58	0	0-6" Asphalt + milling		
1135	0.5-1				6"-60" B. light Brown, mf SAND, some mf, sm gravel	I	
1							
2							
3						III	
1140	3.5-4						
4							
5			60/60	0	0-28" SAA, saturated @ 23"		
6					28-60" Wet, light Brown MC SAND, little f gravel.	III	SP
7							
1145	7.5-8						
8							
9							
10					end of boring		

Remarks:

Sample Types
S – Split-Spoon
U – Undisturbed Tube
C – Rock Core
A – Auger Cuttings

Consistency vs. Blowcount / Foot

Granular (Sand & Gravel)			Fine Grained (Silt & Clay)	
V. Loose: 0-4	Dense: 30-50		V. Soft: <2	Stiff: 8-15
Loose: 4-10	V. Dense: >50		Soft: 2-4	V. Stiff: 15-30
M. Dense: 10-30			M. Stiff: 4-8	Hard: > 30

and - 35-50%
some - 20-35%
little - 10-20%
trace - <10%
moisture, density, color, gradation

PARSONS

Page 1 of 1

Soil Boring Log

CLIENT: USACE
PROJECT NAME: FTMM - ECP
PROJECT LOCATION: FTMM Parcel
PROJECT NUMBER: 748810-

GROUNDWATER OBSERVATIONS
WATER LEVEL: ~3
DATE: 4/22/16
TIME:
MEAS. FROM:

INSPECTOR: CW
DRILLER: JB
WEATHER: 75°F
CONTRACTOR: East Coast Drilling, Inc. (ECDI)
RIG TYPE: Geoprobe(R) 7822DT
DATE/TIME START: 4/22/16
DATE/TIME FINISH: 4/22/16
WEIGHT OF HAMMER: N/A
DROP OF HAMMER: N/A
TYPE OF HAMMER: N/A

BORING/WELL ID: PAR-57-SB-01
LOCATION DESCRIPTION: Parcel 57
LOCATION PLAN: Oceanport, New Jersey

DEPTH (feet)	SAMPLE I.D.	BLOWS per 6"	ADV/ REC.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL	STRATA	COMMENTS
0				0	0-6" gravel	I	
1400	0.5-1				6-60" dark orange-light brown, MC SAND, trace silt, trace f gravel saturated @ 35"	III	▽
1							
2							
3							
1405	3.5-4						
4							
5				0	0-60" saturated, SAA	III	
6							
7							
1410	7.5-8						
8							
9							
10					end of boring		

Remarks:

Sample Types
S – Split-Spoon
U – Undisturbed Tube
C – Rock Core
A – Auger Cuttings

Consistency vs. Blowcount / Foot

Granular (Sand & Gravel)			Fine Grained (Silt & Clay)	
V. Loose: 0-4	Dense: 30-50		V. Soft: <2	Stiff: 8-15
Loose: 4-10	V. Dense: >50		Soft: 2-4	V. Stiff: 15-30
M. Dense: 10-30			M. Stiff: 4-8	Hard: > 30

and - 35-50%
some - 20-35%
little - 10-20%
trace - <10%
moisture, density, color, gradation

PARSONS

Page 1 of 1

Soil Boring Log

CLIENT: USACE
PROJECT NAME: FTMM - ECP
PROJECT LOCATION: FTMM Parcel
PROJECT NUMBER: 748810-

GROUNDWATER OBSERVATIONS
WATER LEVEL: —
DATE: 4/22/16
TIME:
MEAS. FROM:

INSPECTOR: CW
DRILLER: JB
WEATHER: 75°F
CONTRACTOR: East Coast Drilling, Inc. (ECDI)
RIG TYPE: Geoprobe(R) 7822DT
DATE/TIME START: 4/22/16
DATE/TIME FINISH: 4/22/16
WEIGHT OF HAMMER: N/A
DROP OF HAMMER: N/A
TYPE OF HAMMER: N/A

BORING/WELL ID: PAR-57-SB-32
LOCATION DESCRIPTION: Parcel 57
LOCATION PLAN: Oceanport, New Jersey

DEPTH (feet)	SAMPLE I.D.	BLOWS per 6"	ADV/ REC.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL	STRATA	COMMENTS
0				0	0-6" Asphalt + Millings		
1250	0.5-1				6-35" moist, M-Coarse, gray, mF SAND, some silt		
1					35"-60" moist, gray/Brown/orange-Brown MF SAND, trace fgravel	II	
2							
3							
1255	3.5-4						
4							
5				0	0-46" SAA, wet @ 28"		
6					46"-60" moist, orange/light gray mottled f SAND, some silt, trace clay	III	
7							
1300	7.5-8						
8							
9							
10					end of boring		

Remarks:

Sample Types
S – Split-Spoon
U – Undisturbed Tube
C – Rock Core
A – Auger Cuttings

Consistency vs. Blowcount / Foot

Granular (Sand & Gravel)		Fine Grained (Silt & Clay)	
V. Loose: 0-4	Dense: 30-50	V. Soft: <2	Stiff: 8-15
Loose: 4-10	V. Dense: >50	Soft: 2-4	V. Stiff: 15-30
M. Dense: 10-30		M. Stiff: 4-8	Hard: > 30

and - 35-50%
some - 20-35%
little - 10-20%
trace - <10%
moisture, density, color, gradation

PARSONS

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Soil Boring Log

CLIENT: USACE
PROJECT NAME: FTMM - ECP
PROJECT LOCATION: FTMM Parcel
PROJECT NUMBER: 748810-

GROUNDWATER OBSERVATIONS
WATER LEVEL: ~6
DATE: 4/22/16
TIME:
MEAS. FROM:

INSPECTOR: CW
DRILLER: JB
WEATHER: 65°F
CONTRACTOR: East Coast Drilling, Inc. (ECDI)
RIG TYPE: Geoprobe(R) 7822DT
DATE/TIME START: 4/22/16
DATE/TIME FINISH: 4/22/16
WEIGHT OF HAMMER: N/A
DROP OF HAMMER: N/A
TYPE OF HAMMER: N/A

BORING/WELL ID: PAR-57-SB-33
LOCATION DESCRIPTION:
LOCATION PLAN: Oceanport, New Jersey

DEPTH (feet)	SAMPLE I.D.	BLOWS per 6"	ADV/ REC.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL	STRATA	COMMENTS
0			60/60	0	0-6" Asphalt + Millings		
1100	0.5-1				6-30" Brown, M. Dense, Mst SAND, little F gravel trace silt	I	
1					30"-60" Moist, light Brown/light orange MC SAND, little silt		
2						III	
3							
1105	3.5-4						
4							
5			60/60	0	0-13" SAA		
					13-60" Saturated, light Brown/~~light~~ Brown, MC SAND, little mf gravel	III	▼
6							
7							
1110	7.5-8						
8							
9							
0					end of Boring		

Remarks:

Sample Types
S – Split-Spoon
U – Undisturbed Tube
C – Rock Core
A – Auger Cuttings

Consistency vs. Blowcount / Foot

Granular (Sand & Gravel)		Fine Grained (Silt & Clay)	
V. Loose: 0-4	Dense: 30-50	V. Soft: <2	Stiff: 8-15
Loose: 4-10	V. Dense: >50	Soft: 2-4	V. Stiff: 15-30
M. Dense: 10-30		M. Stiff: 4-8	Hard: > 30

and - 35-50%
some - 20-35%
little - 10-20%
trace - <10%
moisture, density, color, gradation

PARSONS

Page 1 of 1

Soil Boring Log

CLIENT: USACE
PROJECT NAME: FTMM - ECP
PROJECT LOCATION: FTMM Parcel
PROJECT NUMBER: 748810-

GROUNDWATER OBSERVATIONS
WATER LEVEL: ~6.5
DATE: 4/22/16
TIME:
MEAS. FROM:

INSPECTOR: CW
DRILLER: JB
WEATHER: Cool
CONTRACTOR: East Coast Drilling, Inc. (ECDI)
RIG TYPE: Geoprobe(R) 7822DT
DATE/TIME START: 4/22/16
DATE/TIME FINISH: 4/22/16
WEIGHT OF HAMMER: N/A
DROP OF HAMMER: N/A
TYPE OF HAMMER: N/A

BORING/WELL ID: PAR-57-SB-34
LOCATION DESCRIPTION: Parcel 57
LOCATION PLAN: Oceanport, New Jersey

DEPTH (feet)	SAMPLE I.D.	BLOWS per 6"	ADV/ REC.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL	STRATA	COMMENTS
0			60/60	0	0-6" Asphalt + millings		
1025	0.5-1				6"-25" Brown, Mf SAND, some Rock Frags, little silt	I	
1							
2					25-60" Brown-light orange, Mf SAND, little Rock FRAGS, little silt, little f gravel	III	
3							
1030	3.5-4						
4							
5			60/60	0	0-20" SAA		
6					20"-60" Wet, light Brown/Brown MC SAND, trace silt	III	▽
7							
1035	7.5-8						
8							
9							
10					end of boring		

Remarks:

Sample Types
S – Split-Spoon
U – Undisturbed Tube
C – Rock Core
A – Auger Cuttings

Consistency vs. Blowcount / Foot

Granular (Sand & Gravel)			Fine Grained (Silt & Clay)	
V. Loose: 0-4	Dense: 30-50		V. Soft: <2	Stiff: 8-15
Loose: 4-10	V. Dense: >50		Soft: 2-4	V. Stiff: 15-30
M. Dense: 10-30			M. Stiff: 4-8	Hard: > 30

and - 35-50%
some - 20-35%
little - 10-20%
trace - <10%
moisture, density, color, gradation

PARSONS

Page 1 of 1

Soil Boring Log

CLIENT: USACE
PROJECT NAME: FTMM - ECP
PROJECT LOCATION: FTMM Parcel
PROJECT NUMBER: 748810-

GROUNDWATER OBSERVATIONS
WATER LEVEL: ~5
DATE: 4/22/16
TIME:
MEAS. FROM:

INSPECTOR: LW
DRILLER: JB
WEATHER: 75°F
CONTRACTOR: East Coast Drilling, Inc. (ECDI)
RIG TYPE: Geoprobe(R) 7822DT
DATE/TIME START: 4/22/16
DATE/TIME FINISH: 4/22/16
WEIGHT OF HAMMER: N/A
DROP OF HAMMER: N/A
TYPE OF HAMMER: N/A

BORING/WELL ID: PAR-57-SB-35
LOCATION DESCRIPTION: Parcel 57
LOCATION PLAN: Oceanport, New Jersey

DEPTH (feet)	SAMPLE I.D.	BLOWS per 6"	ADV/ REC.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL	STRATA	COMMENTS
0				0	0-6"		
1330	0.5-1				6-60" moist, orange-Brown, MC SAND, trace silt	I	
1					~~60~~		
2						II	
3							
1315	3.5-4						
4							▼
5				0	0-30" Saturated, SAA		
					30-60" wet, grey/Brown, MC SAND, trace silt	III	
6							
7							
1310	7.5-8						
8							
9							
10					end of boring		

Remarks:

Sample Types
S – Split-Spoon
U – Undisturbed Tube
C – Rock Core
A – Auger Cuttings

Consistency vs. Blowcount / Foot

Granular (Sand & Gravel)			Fine Grained (Silt & Clay)	
V. Loose: 0-4	Dense: 30-50		V. Soft: <2	Stiff: 8-15
Loose: 4-10	V. Dense: >50		Soft: 2-4	V. Stiff: 15-30
M. Dense: 10-30			M. Stiff: 4-8	Hard: > 30

and - 35-50%
some - 20-35%
little - 10-20%
trace - <10%
moisture, density, color, gradation