

Appendix G

Draft Notice in Lieu of Deed Notice

Return Address:
Dorothy Laguzza, Esq.,
K&L Gates LLP
One Newark Center, Tenth Floor
Newark, NJ 07102-5285

NOTICE IN LIEU OF DEED NOTICE

THIS DOCUMENT SHALL BE DISTRIBUTED TO THE ENTITIES
IDENTIFIED IN ACCORDANCE WITH N.J.A.C. 7:26C-7.2(b)2.

Prepared by: _____
[Signature]

[Print name below signature]

This Notice in Lieu of Deed Notice is made as of the _____ day of _____, _____, by the City of Jersey City, New Jersey, 280 Grove Street, Jersey City, New Jersey 07302 (“Owner”).

1. THE PROPERTY. The City of Jersey City is the owner in fee simple of certain real property designated as Carteret Avenue. This Notice in Lieu of Deed Notice is for the portion of Carteret Avenue between Garfield Avenue and Pacific Avenue on the tax map of the City of Jersey City, Hudson County (the “Property”). The New Jersey Department of Environmental Protection (“NJDEP”) Program Interest Number (“Preferred ID”) for the contaminated site, part of which includes the Property, is G000005480. The Property is more particularly described in Exhibit A, which is attached hereto and made a part hereof.

2. REMEDIATION.

i. NJDEP has approved this Notice in Lieu of Deed Notice as an institutional control for the Property, which is part of the remediation of the Property. The Property is subject to a Partial Consent Judgment Concerning PPG Sites entered into by NJDEP, the Owner and PPG and approved by the Superior Court of New Jersey on June 26, 2009 (Superior Court of New Jersey, Chancery Division-Hudson County, Docket No. C-77-05 (“Consent Judgment”). Pursuant to the Consent Judgment, PPG has responsibility for remediation of all hazardous substances having emanated from Hudson County Chromate (HCC) Site 114 in accordance with the Consent Judgment.

ii. N.J.A.C. 7:26C-7 requires the Owner, among other persons, to obtain a soil remedial action permit for the soil remedial action at the Property. That permit will contain the monitoring, maintenance and biennial certification requirements that apply to the Property.

3. SOIL CONTAMINATION. PPG is responsible for remediation of the Property to address Chromate Chemical Production Waste (“CCPW”). PPG has remediated contaminated soil at the Property, such that soil contamination remains at certain areas of the Property that contains contaminants in concentrations that do not allow for the unrestricted use of the Property. Such soil contamination is described, including the type, concentration, and specific location of such

contamination, and the existing engineering controls on the site are described, in Exhibit B, which is attached hereto and made a part hereof. As a result, there is a statutory requirement for this Notice in Lieu of Deed Notice and engineering controls in accordance with N.J.S.A. 58:10B-13. Attainment of the NJDEP soil criterion of 20 milligrams per kilogram (“mg/kg”) for hexavalent chromium remaining in soil within Restricted Areas A-1 and A-2 following remedial excavation was achieved using compliance averaging. Since attainment was achieved through the use of compliance averaging for non-residential use, a notice in lieu of deed notice must be established, in accordance with N.J.S.A 58:10B-13 to prevent residential use in the future.

4. CONSIDERATION. In accordance with the remedial action for the site that includes the Property, and in consideration of the terms and conditions of that remedial action, and other good and valuable consideration, the Owner has agreed to subject the Property to certain statutory and regulatory requirements that impose restrictions upon the use of the Property, to restrict certain uses of the Property, and to provide notice to subsequent owners, lessors, lessees and operators of the Property of the restrictions and the monitoring, maintenance, and biennial certification requirements outlined in this Notice in Lieu of Deed Notice and required by law, as set forth herein.

5A. RESTRICTED AREAS. Due to the presence of soil contamination remaining that does not allow for unrestricted use and due to the use of compliance averaging that does not allow for unrestricted use, the Owner has agreed, as part of the remedial action for the Property, to restrict the use of certain parts of the Property (the “Restricted Areas”); a narrative description of these restrictions is provided in Exhibit C, which is attached hereto and made a part hereof. The Owner has also agreed to maintain a list of these restrictions for referral by government officials and other interested parties. This list of restrictions is available for review at the Jersey City Division of Engineering, Traffic, and Transportation office or the Jersey City Municipal Utilities Authority (“JCMUA”) office.

5B. RESTRICTED LAND USES. The following statutory land use restrictions apply to the Restricted Areas:

- i. The Brownfield and Contaminated Site Remediation Act, N.J.S.A. 58:10B-12.g(10), prohibits the conversion of a contaminated site, remediated to non-residential soil remediation standards that require the maintenance of engineering or institutional controls, to a child care facility, or public, private, or charter school without the Department’s prior written approval, unless a presumptive remedy is implemented; and
- ii. The Brownfield and Contaminated Site Remediation Act, N.J.S.A. 58:10B-12.g(12), prohibits the conversion of a landfill, with gas venting systems and or leachate collection systems, to a single family residence or a child care facility.

5C. ENGINEERING CONTROLS. Due to the presence of soil contamination that does not allow for unrestricted use, the Owner has also agreed, as part of the remedial action for the Property, to the placement of certain engineering controls on the Property; a narrative description of these engineering controls is provided in Exhibit C.

5D. UTILITY COORDINATION MANUAL. A Utility Coordination Manual has been prepared for use by the owner, lessee, and/or operators for the protection of workers who may be potentially exposed to chromium-impacted soils or groundwater in conjunction with utility or other ground intrusive work on the Property; the Utility Coordination Manual identifies health and safety requirements for the protection of personnel and contractors who may perform ground intrusive activities (e.g., digging, drilling, excavation) that may disturb existing engineering controls and informs workers of potential hazards associated with chromium-impacted media. Owner shall make the Utility Coordination Manual available to operators, tenants, contractors, and/or utility workers intending to conduct invasive work within the Restricted Areas to prevent unauthorized disturbance of engineering controls and potential exposure to contaminants. The Jersey City Division of Engineering, Traffic, and Transportation, JCMUA and/or PPG will make the Utility Coordination Manual available to owners/operators, tenants, contractors, and/or utility workers in the event that the JCMUA and/or PPG are notified of invasive work by owners/operators, tenants, contractors and/or utility workers. The PPG Utility Coordination Manual that addresses the identification, notification, and coordination of work between PPG and the JCMUA related to the utilities located within the restricted area is attached to this Notice in Lieu of Deed Notice.

6A. CHANGE IN OWNERSHIP AND REZONING.

i. The Owner and the subsequent owners, lessors, and lessees, shall cause all leases, grants, and other written transfers of an interest in the Restricted Areas to contain a provision expressly requiring all holders thereof to take the Property subject to the restrictions contained herein and to comply with all, and not to violate any of the conditions of this Notice in Lieu of Deed Notice. Nothing contained in this Paragraph shall be construed as limiting any obligation of any person to provide any notice required by any law, regulation, or order of any governmental authority.

ii. The Owner and the subsequent owners shall provide written notice to NJDEP on a form provided by NJDEP and available at www.nj.gov/srp/forms within 30 calendar days after the effective date of any conveyance, grant, gift, or other transfer, in whole or in part, of the Owner's or subsequent owner's interest in the Restricted Area.

iii. The Owner and the subsequent owners shall provide written notice to the Department, on a form available from the Department at www.nj.gov/srp/forms, within thirty (30) calendar days after the owner's petition for or filing of any document initiating a rezoning of the Property to residential.

6B. SUCCESSORS AND ASSIGNS. This Notice in Lieu of Deed Notice shall be binding upon Owner and upon Owner's successors and assigns, and subsequent owners, lessors, lessees and operators while each is an owner, lessor, lessee, or operator of the Property.

7A. ALTERATIONS, IMPROVEMENTS, AND DISTURBANCES.

i. The Owner, specifically, the Jersey City Division of Engineering, Traffic, and Transportation, and all subsequent owners, lessors, and lessees shall notify any person, including, without limitation, tenants, employees of tenants, and contractors, intending to conduct invasive work or excavate within the Restricted Areas, of the nature and location of contamination in the Restricted Areas, and, of the precautions necessary to minimize potential human exposure to contaminants.

ii. Except as provided in Paragraph 7B, below, no person shall make, or allow to be made, any alteration, improvement, or disturbance in, to, or about the Property which disturbs any engineering control at the Property without first retaining a licensed site remediation professional. Nothing herein shall constitute a waiver of the obligation of any person to comply with all applicable laws and regulations including, without limitation, the applicable rules of the Occupational Safety and Health Administration.

iii. A soil remedial action permit modification is required for any permanent alteration, improvement, or disturbance and the owner, lessor, lessee or operator shall submit the following within 30 days after the occurrence of the permanent alteration, improvement, or disturbance:

(A) A Remedial Action Workplan or Linear Construction Project notification and Final Report Form, whichever is applicable;

(B) A Remedial Action Report and Termination of a Notice in Lieu of Deed Notice Form; and

(C) A revised recorded Notice in Lieu of Deed Notice with revised Exhibits, and Remedial Action Permit Modification or Remedial Action Permit Termination form and Remedial Action Report.

iv. No owner, lessor, lessee or operator shall be required to obtain a Remedial Action Permit Modification for any temporary alteration, improvement, or disturbance, provided that the site is restored to the condition described in the Exhibits to this Notice in Lieu of Deed Notice, and the owner, lessee, or operator complies with the following:

(A) Restores any disturbance of an engineering control to pre-disturbance conditions within 60 calendar days after the initiation of the alteration, improvement or disturbance;

(B) Ensures that all applicable worker health and safety laws and regulations are followed during the alteration, improvement, or disturbance, and during the restoration;

(C) Ensures that human exposure to contamination in excess of the remediation standards does not occur; and

(D) Describes, in the next biennial certification, the nature of the temporary alteration, improvement, or disturbance, the dates and duration of the temporary alteration, improvement, or disturbance, the name of key individuals and their affiliations conducting the temporary alteration, improvement, or disturbance, and the notice the Owner gave to those persons prior to the disturbance.

7B. EMERGENCIES. In the event of an emergency that presents, or may present, an unacceptable risk to the public health and safety, or to the environment, or an immediate environmental concern, see N.J.S.A. 58:10C-2, any person may temporarily breach an engineering control provided that that person complies with each of the following:

i. Immediately notifies NJDEP of the emergency, by calling the DEP Hotline at 1-877-WARNDEP or 1-877-927-6337;

ii. Hires a Licensed Site Remediation Professional (unless the Restricted Areas includes an unregulated heating oil tank) to respond to the emergency;

iii. Limits both the actual disturbance and the time needed for the disturbance to the minimum reasonably necessary to adequately respond to the emergency;

iv. Implements all measures necessary to limit actual or potential, present or future risk of exposure to humans or the environment to the contamination;

v. Notifies NJDEP when the emergency or immediate environmental concern has ended by calling the DEP Hotline at 1-877-WARNDEP or 1-877-927-6337; and

vi. Restores the engineering control to the pre-emergency conditions as soon as possible; and

vii. Submits to NJDEP within 60 calendar days after completion of the restoration of the engineering control, a report including: (a) the nature and likely cause of the emergency; (b) the measures that have been taken to mitigate the effects of the emergency on human health and the environment; (c) the measures completed or implemented to restore the engineering control; and (d) any changes to the engineering control or site operation and maintenance plan to prevent reoccurrence of such conditions in the future.

8. TERMINATION OF NOTICE IN LIEU OF DEED NOTICE.

i. This Notice in Lieu of Deed Notice may be terminated only upon recording a NJDEP-approved Termination of a Notice in Lieu of Deed Notice, available at N.J.A.C. 7:26C Appendix C, with the Affected Parties as identified in N.J.A.C. 7:26C-7.2(b)2, expressly terminating this Notice in Lieu of Deed Notice.

ii. Within 30 calendar days after recording a NJDEP-approved Termination of a Notice in Lieu of Deed Notice, the owner of the property should apply to NJDEP for termination of the soil remedial action permit pursuant to N.J.A.C. 7:26C-7.

9. ACCESS. The Owner, and the subsequent owners, lessors, lessees, and operators agree to allow NJDEP, its agents and representatives access to the Property to inspect and evaluate the continued protectiveness of the remedial action that includes this Notice in Lieu of Deed Notice and to conduct additional remediation to ensure the protection of the public health and safety and of the environment if the subsequent owners, lessors, lessees, and operators, during their ownership, tenancy, or operation, and the Owner fail to conduct such remediation pursuant to this Notice in Lieu of Deed Notice as required by law. The Owner, and the subsequent owners, lessors, and lessees, shall also cause all leases, subleases, grants, and other written transfers of an interest in the Restricted Areas to contain a provision expressly requiring that all holders thereof provide such access to NJDEP.

10. ENFORCEMENT OF VIOLATIONS.

i. This Notice in Lieu of Deed Notice itself is not intended to create any interest in real estate in favor of NJDEP, nor to create a lien against the Property, but merely is intended to provide notice of certain conditions and restrictions on the Property and to reflect the regulatory and statutory obligations imposed as a conditional remedial action for this site.

ii. The restrictions provided herein may be enforceable solely by NJDEP against any person who violates this Notice in Lieu of Deed Notice. To enforce violations of this Notice in Lieu of Deed Notice, NJDEP may initiate one or more enforcement actions pursuant to N.J.S.A. 58:10-23.11, and N.J.S.A. 58:10C, and require additional remediation and assess damages pursuant to N.J.S.A. 58:10-23.11, and N.J.S.A. 58:10C.

11. SEVERABILITY. If any court of competent jurisdiction determines that any provision of this Notice in Lieu of Deed Notice requires modification, such provision shall be deemed to have been modified automatically to conform to such requirements. If a court of competent jurisdiction determines that any provision of this Notice in Lieu of Deed Notice is invalid or unenforceable and the provision is of such a nature that it cannot be modified, the provision shall be deemed deleted from this instrument as though the provision had never been included herein. In either case, the remaining provisions of this Notice in Lieu of Deed Notice shall remain in full force and effect.

12A. EXHIBIT A. Exhibit A includes the following maps of the Property and the vicinity:

i. Exhibit A-1: Vicinity Map - A map that identifies by name the roads, and other important geographical features in the vicinity of the Property (for example, USGS Quad map, Hagstrom County Maps);

ii. Exhibit A-2: Metes and Bounds Description - A tax map of lots and blocks as wells as metes and bounds description of the restricted area within the Property, including references to tax lot and block numbers for the properties adjacent to the Property and distances from nearby intersections;

iii. Exhibit A-3: Property Map - A scaled map of the Property, scaled at one inch to 200 feet or less, and if more than one map is submitted, the maps shall be presented as overlays, keyed to a base map; and the Property Map shall include diagrams of major surface topographical features such as buildings, roads, and parking lots.

12B. EXHIBIT B. Exhibit B includes the following descriptions of the Restricted Areas:

i. Exhibit B-1: Restricted Area Map - A separate map for each restricted area that includes:

(A) As-built diagrams of each engineering control, including caps, fences, slurry walls, (and, if any) ground water monitoring wells, extent of the ground water classification exception area, pumping and treatment systems that may be required as part of a ground water engineering control in addition to the Notice in Lieu of Deed Notice;

(B) As-built diagrams of any buildings, roads, parking lots and other structures that function as engineering controls; and

(C) Designation of all soil and all upland sediment sample locations within the restricted areas that exceed any soil standard that are keyed into one of the tables described in the following paragraph.

ii. Exhibit B-2: Restricted Area Data Table - A separate table for each restricted area that includes either (A) or (B) through (F):

(A) Only for historic fill extending over the entire site or a portion of the site and for which analytical data are limited or do not exist, a narrative that states that historic fill is present at the site, a description of the fill material (e.g., ash, cinders, brick, dredge material), and a statement that such material may include, but is not limited to, contaminants such as PAHs and metals;

(B) Sample location designation from the Restricted Area map (Exhibit B-1);

(C) Sample elevation based upon mean sea level;

(D) Name and chemical abstract service registry number of each contaminant with a concentration that exceeds the unrestricted use standard;

(E) The restricted and unrestricted use standards for each contaminant in the table; and

(F) The remaining concentration of each contaminant at each sample location at each elevation.

12C. EXHIBIT C. Exhibit C includes narrative descriptions of the institutional controls and engineering controls as follows:

i. Exhibit C-1: Notice in Lieu of Deed Notice as Institutional Control: Exhibit C-1 includes a narrative description of the restriction and obligations of this Notice in Lieu of Deed Notice that are in addition to those described above, as follows:

(A) Description and estimated size in square feet of the Restricted Areas as described above;

(B) Description of the restrictions on the Property by operation of this Notice in Lieu of Deed Notice; and

(C) The objective of the restrictions.

ii. Exhibit C-2: Restricted Area B Engineering Control –High-Density Polyethylene (“HDPE”) Liner: Exhibit C-2 includes a narrative description of the HDPE Liner Engineering Control as follows:

(A) Description of the engineering control;

(B) The objective of the engineering control; and

(C) How the engineering control is intended to function.

13. SIGNATURES. IN WITNESS WHEREOF, Owner has executed this Deed Notice as of the date first written above.

ATTEST: City of Jersey City

_____ By _____

[Print name and title]

[Signature]

STATE OF New Jersey SS.:
COUNTY OF Hudson

I certify that on _____, 20__, _____, Business Administrator personally came before me, and this person acknowledged under oath, to my satisfaction, that:

(a) this person is the business administrator of the City of Jersey City, the City named in this document;

(b) this document was signed and delivered by the City as its voluntary act and was duly authorized;

(c) this person signed this proof to attest to the truth of these facts.

[Signature]

[Print name and title of attesting witness]

Signed and sworn before me on _____, 20__

_____, Notary Public

[Print name and title]

EXHIBIT A

Maps of the Property and Vicinity

Exhibit A-1: Vicinity Map

Exhibit A-2: Metes and Bounds Description

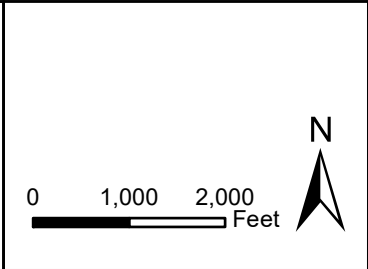
Exhibit A-3: Property Map



Legend

 Site Boundary

Notes:
 1. State Plane NAD83 Coordinates, U.S. Survey Feet
 2. USGS 7.5' Topographic Quadrangle - Jersey City NJ-NY. Esri ArcGIS map service, <http://services.arcgisonline.com/ArcGIS/services>



AECOM
 30 Knightsbridge Rd.
 Suite 520
 Piscataway, NJ 08854
 Phone: 732-564-3600

<p>Vicinity Map</p> <p>Carteret Avenue PPG Jersey City, Hudson County, New Jersey</p>			
Project No.: 60580814	Scale: 1:24,000	Date: 2/24/2021	Sheet: 1 of 1
EXHIBIT A-1			



Facilities Mapping Specialists
Environmental Site Mapping
Transportation and
Right-of-Way Surveys

Expert Witness Services
Aerial Base Mapping
Certified Drone Pilots
Hydrographic-Bathymetric Surveys

**DESCRIPTION OF A DEED NOTICE AREA LOCATED
ON A PORTION OF CARTERET AVENUE
IN JERSEY CITY, HUDSON COUNTY, NEW JERSEY**

BEGINNING at a point at the intersection of the northeasterly sideline of Carteret Avenue, a 60 feet wide right of way, with the southeasterly sideline of Garfield Avenue, a 60 feet wide right of way, said beginning point having a NAD83 New Jersey State Plane Coordinate of North: 683310.2 East: 610698.9 (US Survey Feet, measured December 2005); and runs thence

1. Along the southwesterly line of Lot 18 Block 21501, South 63 degrees 11 minutes 52 seconds East 380.09 feet to a point; thence
2. Still along said Lot 18 Block 21501, South 30 degrees 29 minutes 07 seconds East 34.76 feet to a point; thence
3. Still along said Lot 18 Block 21501, continuing along the southwesterly line of Lot 17 Block 21501, across the right of way of Halladay Street and continuing along the southwesterly lines of Lot 12 and Lot 11 Block 21502, South 43 degrees 17 minutes 07 seconds East 622.30 feet to the southerly corner of Lot 11 Block 21502, said point being the intersection of the northeasterly sideline of Carteret Avenue, a 60 feet wide right of way, with the northwesterly sideline of Pacific Avenue, an 80 feet wide right of way; thence
4. Across the right of way of Carteret Avenue, South 46 degrees 42 minutes 53 seconds West 60.00 feet to the easterly corner of Lot 2 Block 21509, said point being the intersection of the southwesterly sideline of Carteret Avenue, a 60 feet wide right of way, with the northwesterly sideline of Pacific Avenue, an 80 feet wide right of way; thence
5. Along the northeasterly lines of Lot 2 and Lot 1 Block 21509, continuing across the right of way of Halladay Street and continuing along the northeasterly lines of Lot 3 and Lot 2 Block 21510, North 43 degrees 17 minutes 07 seconds West 666.92 feet to a point; thence
6. Still along said northeasterly line of Lot 2 Block 21510 and continuing along the northeasterly line of Lot 1 Block 21510, North 63 degrees 11 minutes 52 seconds West 345.45 feet to the northerly corner of Lot 1 Block 21510, said point being the


intersection of the southwesterly sideline of Carteret Avenue, a 60 feet wide right of way, with the southeasterly sideline of Garfield Avenue, a 60 feet wide right of way; thence

7. Across the right of way of Carteret Avenue, North 25 degrees 22 minutes 08 seconds East 60.02 feet to the point and place of BEGINNING.

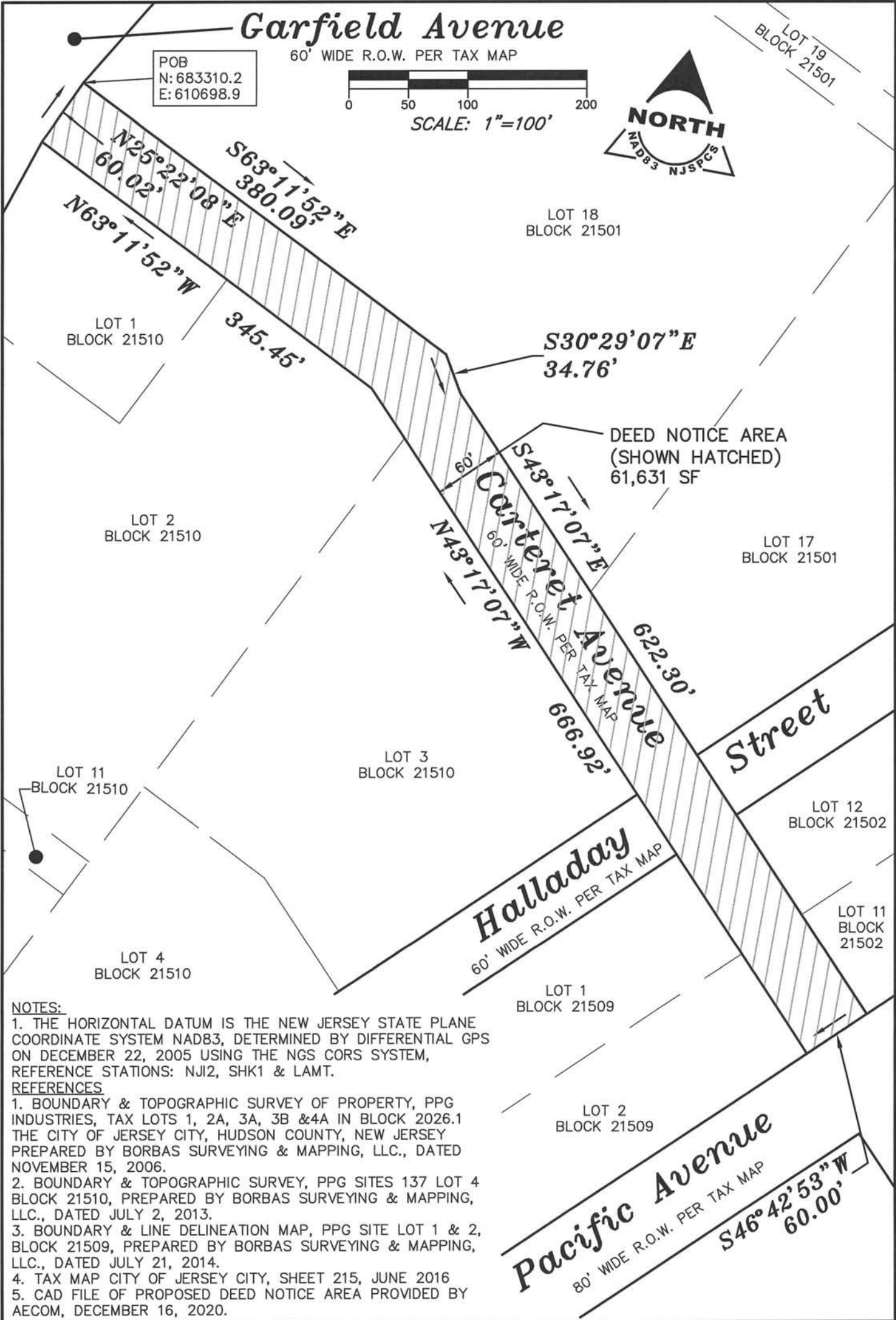
Containing 61,631 square feet of land.

The basis of bearings for this description is the New Jersey State Plane Coordinate System (NAD83).

This description was prepared in accordance with a plan entitled, "DEED NOTICE AREA LOCATED ON A PORTION OF CARTERET AVENUE JERSEY CITY, HUDSON COUNTY NEW JERSEY", prepared by Borbas Surveying and Mapping, dated February 24, 2021.



John D. Beattie, PLS
NJ 24GS04331900
February 24, 2021



NOTES:

1. THE HORIZONTAL DATUM IS THE NEW JERSEY STATE PLANE COORDINATE SYSTEM NAD83, DETERMINED BY DIFFERENTIAL GPS ON DECEMBER 22, 2005 USING THE NGS CORS SYSTEM, REFERENCE STATIONS: NJ12, SHK1 & LAMT.

REFERENCES:

1. BOUNDARY & TOPOGRAPHIC SURVEY OF PROPERTY, PPG INDUSTRIES, TAX LOTS 1, 2A, 3A, 3B & 4A IN BLOCK 2026.1 THE CITY OF JERSEY CITY, HUDSON COUNTY, NEW JERSEY PREPARED BY BORBAS SURVEYING & MAPPING, LLC., DATED NOVEMBER 15, 2006.
2. BOUNDARY & TOPOGRAPHIC SURVEY, PPG SITES 137 LOT 4 BLOCK 21510, PREPARED BY BORBAS SURVEYING & MAPPING, LLC., DATED JULY 2, 2013.
3. BOUNDARY & LINE DELINEATION MAP, PPG SITE LOT 1 & 2, BLOCK 21509, PREPARED BY BORBAS SURVEYING & MAPPING, LLC., DATED JULY 21, 2014.
4. TAX MAP CITY OF JERSEY CITY, SHEET 215, JUNE 2016
5. CAD FILE OF PROPOSED DEED NOTICE AREA PROVIDED BY AECOM, DECEMBER 16, 2020.

**DEED NOTICE AREA
LOCATED ON A PORTION OF
CARTERET AVENUE
JERSEY CITY, HUDSON COUNTY
NEW JERSEY**



BORBAS SURVEYING & MAPPING, LLC
402 MAIN STREET, BOONTON, NEW JERSEY 07005

Phone (973) 316-8743 www.borbas.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA28056200
Environmental Site Mapping • Hazardous Materials and Waste Surveys
Aerial Control and GPS Surveys • Topographic and Existing Condition Surveys
Remote Sensing and GIS • Hydrographic/Bathymetric Surveys • ALTA/NSPS Certified Surveys
Transportation and Right of Way Surveys • Deformation and Structure Monitoring Surveys

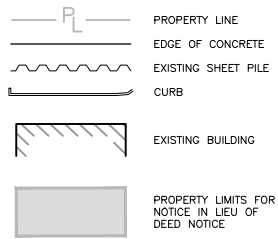
JOHN D. BEATTIE
NJ PROFESSIONAL LAND SURVEYOR 24GS04331900

JOB NO.: 051201
PROJECT NAME: 051201
DRAWING NO.: 051201_2021-02-24_CARTERET_DN_REVISED

SCALE: 1"=100'
FIELD BOOK: N/A

Date: FEBRUARY 24, 2021

LEGEND



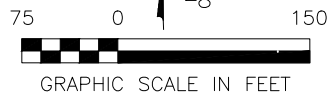
NOTES:

NAD83 - NORTH AMERICAN DATUM OF 1983

PI - PROGRAM INTEREST

1. PROPERTY BOUNDARIES ARE SOURCED FROM: "DEED NOTICE AREA LOCATED ON A PORTION OF CARTERET AVENUE, JERSEY CITY, HUDSON COUNTY, NEW JERSEY," PREPARED BY BORBAS SURVEYING AND MAPPING, LLC, DATED FEBRUARY 24, 2021.

2. THE PROPERTY REFERENCED IN THIS NOTICE IN LIEU OF DEED NOTICE IS CARTERET AVENUE.



AECOM

CARTERET AVENUE
PI NUMBER G000005480
JERSEY CITY, HUDSON COUNTY, NEW JERSEY

PROPERTY MAP
NOTICE IN LIEU OF DEED NOTICE

DATE: 07/07/2021

DRWN: SAP

EXHIBIT A-3

EXHIBIT B

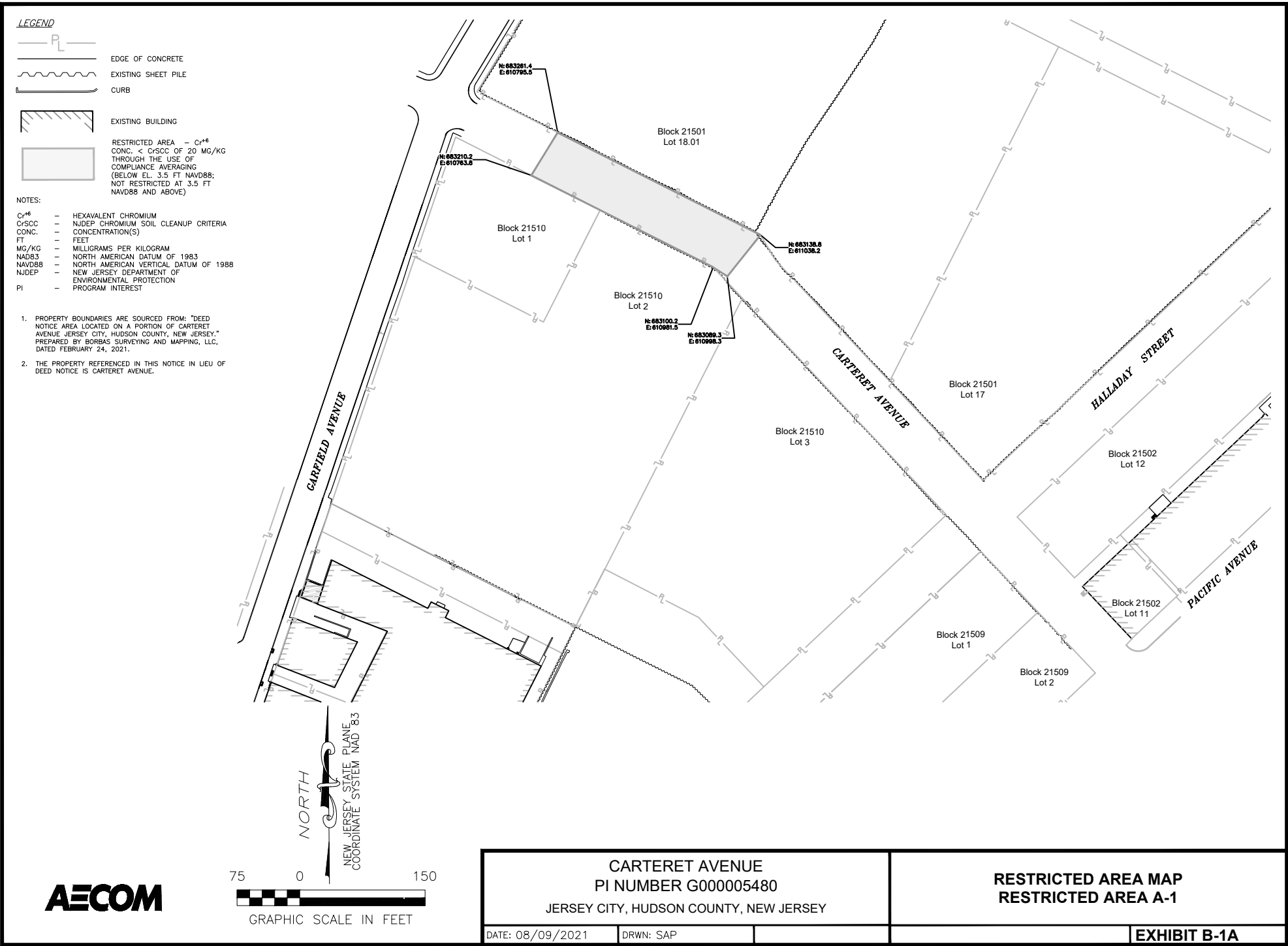
Description of Restricted Area

Exhibit B-1A: Restricted Area Map – Restricted Area A-1

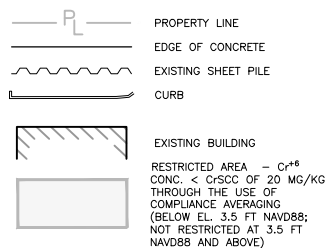
Exhibit B-1B: Restricted Area Map – Restricted Area A-2

Exhibit B-1C: Restricted Area Map – Restricted Area B – HDPE Liner

Exhibit B-1D: Engineering Control – As-Built Typical Section – Restricted Area B – HDPE Liner



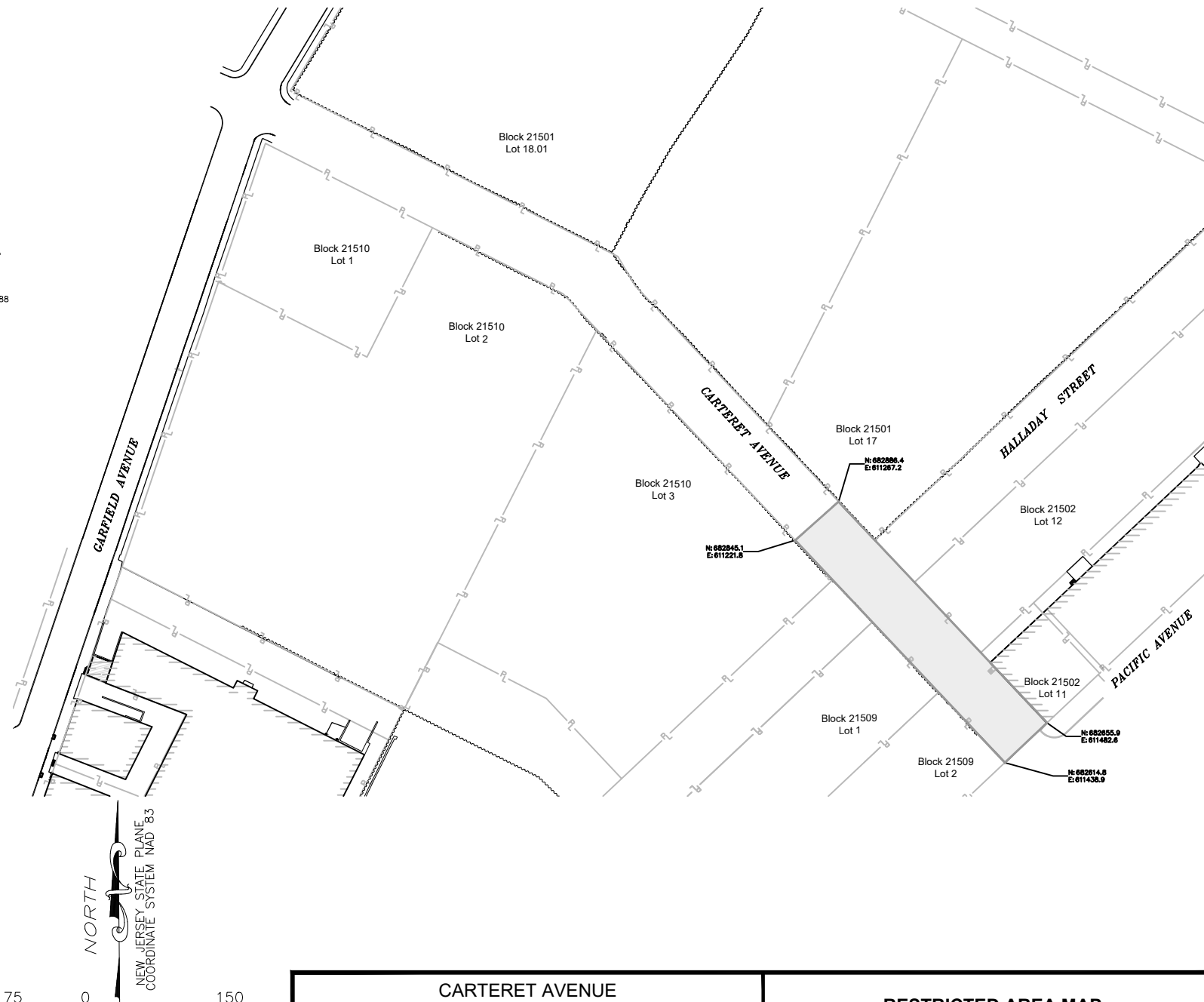
LEGEND



NOTES:

- Cr⁶ — HEXAVALENT CHROMIUM
- CrSCC — NJDEP CHROMIUM SOIL CLEANUP CRITERIA
- CONC. — CONCENTRATION(S)
- FT — FEET
- MG/KG — MILLIGRAMS PER KILOGRAM
- NAD83 — NORTH AMERICAN DATUM OF 1983
- NAVD88 — NORTH AMERICAN VERTICAL DATUM OF 1988
- NJDEP — NEW JERSEY DEPARTMENT OF
- ENVIRONMENTAL PROTECTION
- PI — PROGRAM INTEREST

1. PROPERTY BOUNDARIES ARE SOURCED FROM: "DEED NOTICE AREA LOCATED ON A PORTION OF CARTERET AVENUE JERSEY CITY, HUDSON COUNTY, NEW JERSEY," PREPARED BY BORBAS SURVEYING AND MAPPING, LLC, DATED FEBRUARY 24, 2021.
2. THE PROPERTY REFERENCED IN THIS NOTICE IN LIEU OF DEED NOTICE IS CARTERET AVENUE.



AECOM

CARTERET AVENUE
 PI NUMBER G000005480
 JERSEY CITY, HUDSON COUNTY, NEW JERSEY

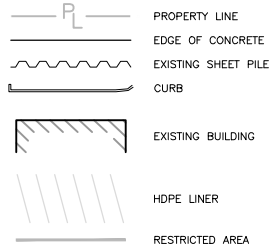
RESTRICTED AREA MAP
 RESTRICTED AREA A-2

DATE: 08/09/2021

DRWN: SAP

EXHIBIT B-1B

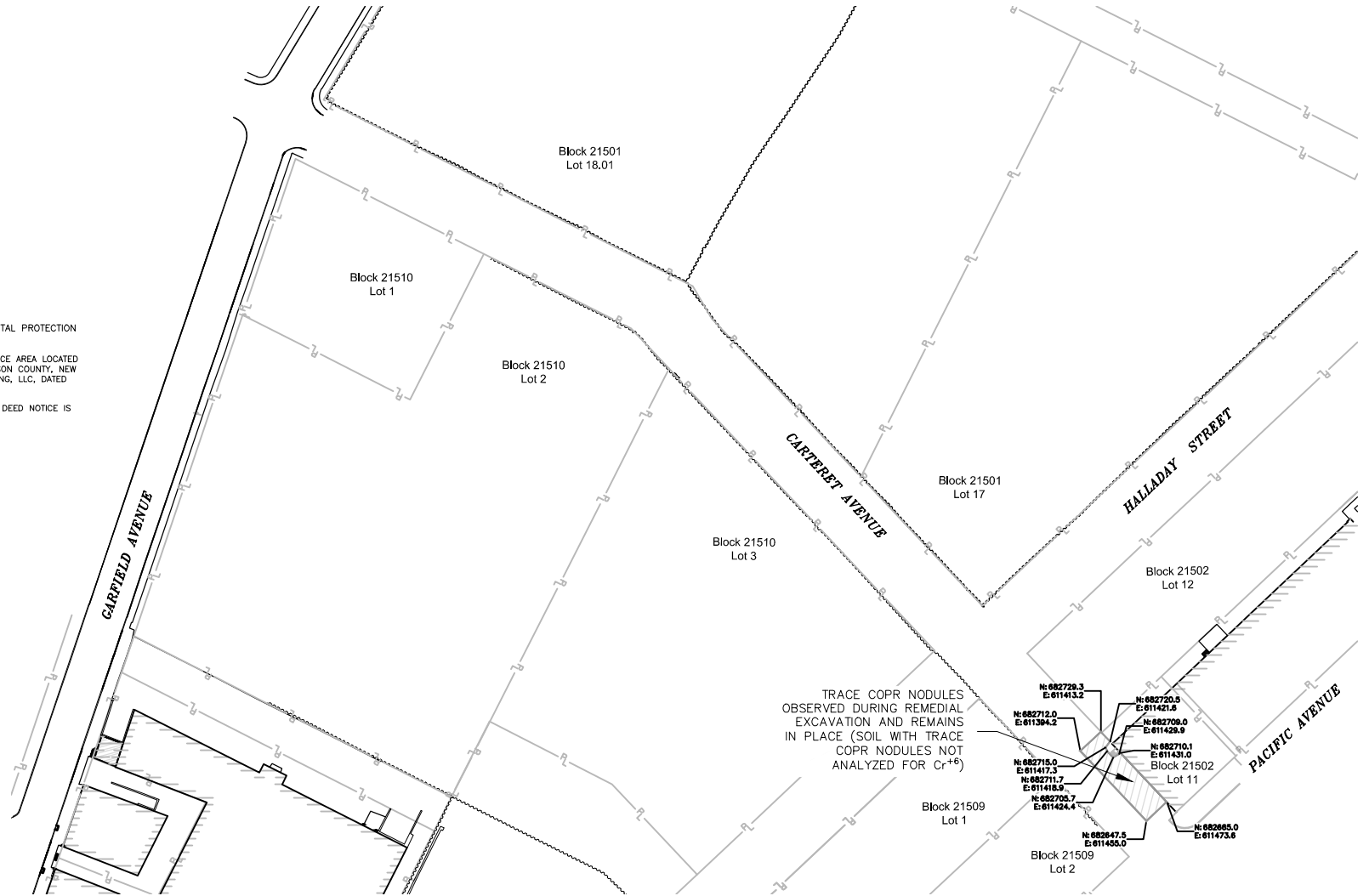
LEGEND



NOTES:

- COPR - CHROMITE ORE PROCESSING RESIDUE
- Cr+6 - HEXAVALENT CHROMIUM
- HDPE - HIGH-DENSITY POLYETHYLENE
- NAD 83 - NORTH AMERICAN DATUM OF 1983
- NJDEP - NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
- PI - PROGRAM INTEREST

1. PROPERTY BOUNDARIES ARE SOURCED FROM: "DEED NOTICE AREA LOCATED ON A PORTION OF CARTERET AVENUE JERSEY CITY, HUDSON COUNTY, NEW JERSEY," PREPARED BY BORBAS SURVEYING AND MAPPING, LLC, DATED FEBRUARY 24, 2021.
2. THE PROPERTY REFERENCED IN THIS NOTICE IN LIEU OF DEED NOTICE IS CARTERET AVENUE.



AECOM

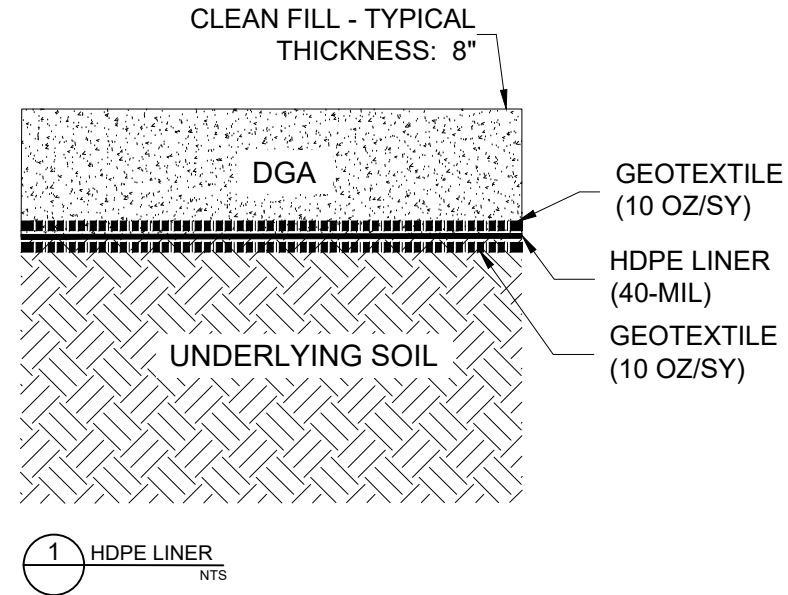
CARTERET AVENUE
PI NUMBER G000005480
JERSEY CITY, HUDSON COUNTY, NEW JERSEY

RESTRICTED AREA MAP
RESTRICTED AREA B
HDPE LINER

DATE: 07/07/2021

DRWN: SAP

EXHIBIT B-1C



- NOTES:
- 1. THE HDPE LINER SERVES AS AN ENGINEERING CONTROL. THE ADDITIONAL COMPONENTS SHOWN HERE WERE INSTALLED FOR RESTORATION PURPOSES.

DGA	DENSE-GRADED AGGREGATE
HDPE	HIGH-DENSITY POLYETHYLENE
MIL	ONE THOUSANDTH OF AN INCH
NTS	NOT TO SCALE
OZ	OUNCES
PI	PROGRAM INTEREST
SY	SQUARE YARD



CARTERET AVENUE PI NUMBER G000005480 JERSEY CITY, HUDSON COUNTY, NEW JERSEY			ENGINEERING CONTROL AS-BUILT TYPICAL SECTION RESTRICTED AREA B HDPE LINER	
DATE: 07/07/2021	DRWN: SAP			EXHIBIT B-1D

EXHIBIT C

Narrative descriptions of the institutional controls and engineering controls

Exhibit C-1: Notice in Lieu of Deed Notice as Institutional Control

Exhibit C-2: Narrative Description of the Restricted Area B Engineering Control:
HDPE Liner

EXHIBIT C

Narrative descriptions of the institutional and engineering controls

Exhibit C-1: Notice in Lieu of Deed Notice as Institutional Control

(A) Description and estimated size of the Restricted Areas:

The Notice in Lieu of Deed Notice is for soil (Soil Restricted Area A, including Soil Restricted Area A-1 and Soil Restricted Area A-2, and Soil Restricted Area B), located within the right-of-way of Carteret Avenue in Jersey City, New Jersey, as depicted on **Exhibits B-1A and B-1C**.

In Restricted Area A-1, the contaminant of concern is hexavalent chromium (Cr^{+6}) at concentrations less than the Chromium Soil Clean Up Criterion (CrSCC) attained through the use of compliance averaging. The estimated size of the Soil Restricted Area A-1 is 16,106 ft^2 (0.37 acres) and includes the area below elevation (El.) 3.5 feet (ft) in the North American Vertical Datum of 1988 (NAVD88). The area within the horizontal limits of Restricted Area A-1 from El. 3.5 ft NAVD88 and above is not restricted and, therefore, is not included within Restricted Area A-1.

In Restricted Area A-2, the contaminant of concern is Cr^{+6} at concentrations less than the Chromium Soil Clean Up Criterion (CrSCC) attained through the use of compliance averaging. The estimated size of the Soil Restricted Area A-2 is 18,944 ft^2 (0.43 acres) and includes the area below elevation (El.) 3.5 ft NAVD88. The area within the horizontal limits of Restricted Area A-2 at El. 3.5 ft NAVD88 and above is not restricted and, therefore, is not included within Restricted Area A-2.

In Restricted Area B, the contaminant of concern is trace visible Chromate Chemical Production Waste (CCPW), specifically trace chromite ore processing residue (COPR) nodules, which are a potential source of Cr^{+6} . The estimated size of the Soil Restricted Area B is 2,161 ft^2 (0.05 acres).

(B) Descriptions of the restrictions on the Property by operation of this Notice in Lieu of Deed Notice:

The restrictions included in this Notice in Lieu of Deed Notice minimize exposure to the contaminants of concern identified in **Exhibit C-1(A)**, which include trace visible CCPW and Cr^{+6} at concentrations less than the CrSCC attained through the use of compliance averaging in the Soil Restricted Areas of Carteret Avenue. Exposure to humans and the potential impact to the environment are reduced through 1) the use of this Notice in Lieu of Deed Notice for trace visible CCPW and Cr^{+6} at concentrations less than the CrSCC attained through the use of compliance averaging, and 2) implementation of engineering controls for trace visible CCPW.

(C) Objective of the restrictions:

The objective of the restrictions in this Notice in Lieu of Deed Notice is to permit continued use of the Property while reducing the exposure of humans to, and the potential impact to the environment from trace visible CCPW and Cr⁺⁶ at concentrations less than the CrSCC attained through the use of compliance averaging.

Exhibit C-2: Narrative Description of the Restricted Area B Engineering Control: HDPE Liner

(A) Description of the engineering control:

Following excavation of soil within a portion of Restricted Area B, the soil was graded and compacted. A 40-mil high-density polyethylene (HDPE) liner was sandwiched between layers of geotextile (10 ounces per square yard) and was placed on top of the prepared surface as an engineering control. Dense-graded aggregate (DGA) backfill material was then placed on top of the HDPE liner and compacted to final backfill subgrade at a thickness of 8 inches. The HDPE liner, but not the DGA backfill material, serves as an engineering control for the portion of Restricted Area B where the HDPE liner is present. The horizontal extent of the HDPE Liner Engineering Control is depicted on **Exhibit B-1C**. An as-built typical section of the HDPE Liner Engineering Control is shown on **Exhibit B-1D**.

(B) The objective of the engineering control:

The objective of the HDPE Liner Engineering Control is to protect human health and the environment by restricting access and eliminating exposure to underlying soil that contains visible CCPW.

(C) How the engineering control is intended to function:


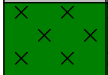
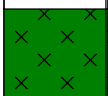
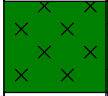
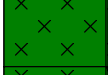


The HDPE Liner Engineering Control is intended to function as a physical barrier that prevents direct contact with and incidental exposure to the underlying soil that contains visible CCPW.

Appendix H

Boring Logs

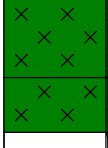
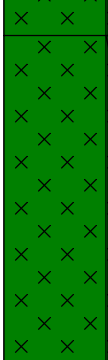
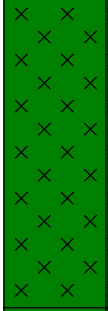
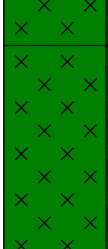
Boring logs for the remaining sample locations in Carteret Avenue collected via soil core are included in this appendix. Logs were not generated for grab samples collected during excavation activities, typically designated by “PB” or “SW” in the Location ID.

<div>ENSR AECOM</div>		Client: PPG Industries		BORING ID: 114-MW22B		
		Site: Site 114				
Start Date: 11/15/2006		Project: Site Investigation		Page: 1 of 5		
		Coordinates: X-610693.8 Y-683255.1		Depth of Boring: 35.00		
End Date: 11/21/2006		Elevation: 12.6		Geologist: M. Merdinger		
		Drill Subcontractor: ADI		Driller:		
Depth (ft)	Lithology	Description		PID	Sample ID	Sample Parameters

0		CONCRETE: CONCRETE			
		FILL: Dark Reddish Brown (5YR 3/2) SILT, some fine Sand, little Clay, Fill material (brick, tile, rock), dry. No odor.			
		NR: No Sample	0.0 ppm		
2					
		FILL: Reddish Brown (5YR 4/4) SILT, little Clay and fine Sand, Fill Material (rounded and angular rocks, tile fragments, slag), ~1% COPR, moist. No odor.	0.0 ppm		
		NR: No Sample			
4		FILL: Black Cinders, Ash, Slag and Rock fragments, oyster shell, trace Red (10R 4/6) Clay, moist. No odor.			
		NR: No Recovery			
		FILL: Black and Very Dark Gray Brown (10YR 3/2) sandy SILT, glass, dry. No odor.	2.3 ppm	114-MW22BA (5.0-5.5)	Cr+6, TAL Metals
		FILL: Light Olive Brown (2.5Y 5/6) SILT, medium dense, dry. No odor.			
6		NR: No Recovery			
					

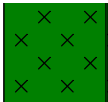
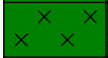
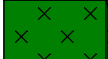

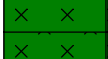




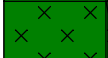
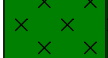

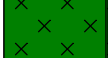
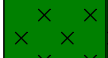
NOTES: Coordinates are provided in New Jersey State Plane NAD 1983 Feet.

<div>ENSR AECOM</div>		Client: PPG Industries		BORING ID: 114-MW22B		
		Site: Site 114				
Start Date: 11/15/2006		Project: Site Investigation		Page: 2 of 5		
		Coordinates: X-610693.8 Y-683255.1		Depth of Boring: 35.00		
End Date: 11/21/2006		Elevation: 12.6		Geologist: M. Merdinger		
		Drill Subcontractor: ADI		Driller:		
Depth (ft)	Lithology	Description		PID	Sample ID	Sample Parameters


8		FILL: Reddish Gray (10YR 5/1) silty SAND, coarse fill Sand, Fill material (slag, concrete), wet. No odor.	0.3 ppm		
		FILL: Dark Grayish Brown (10YR 4/2) SILT, little Clay, trace Gray rounded medium Gravel, wet. No odor.			
		NR: No Recovery			
10		FILL: Very Dark Gray (7.5YR 3/1) SILT, some coarse Sand, wet. No odor.	0.0 ppm	114-MW22BB (9.5-10.0)	MS/MSD, Cr+6, TAL Metals
		FILL: Dark Brown (7.5YR 3/2) SILT, trace to little Clay down gradient, oyster shell, moist, loose. No odor.			
12		FILL: Dark Brown (7.5YR 3/2) SILT, little Sand, trace to little Clay down gradient, oyster shell, moist, loose. No odor.	0.0 ppm		
14		UND: Olive (5Y 4/3) SAND, little Silt, moist. No odor.	0.0 ppm	114-MW22BC (13.0-14.0)	Cr+6, TAL Metals
		UND: Olive Brown (2.5 Y 4/3) silty CLAY, trace fine Gravel, wet. No odor.		114-MW22BCD (13.0-14.0)	Cr+6, TAL Metals

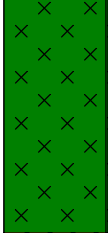
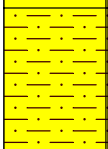

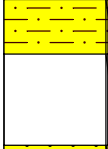
NOTES: Coordinates are provided in New Jersey State Plane NAD 1983 Feet.

<div> <div>ENSR</div> <div>AECOM</div> </div>		Client: PPG Industries	BORING ID: 114-MW22B		
		Site: Site 114			
Start Date: 11/15/2006	Project: Site Investigation		Page: 3 of 5		
	Coordinates: X-610693.8 Y-683255.1		Depth of Boring: 35.00		
End Date: 11/21/2006	Elevation: 12.6		Geologist: M. Merdinger		
	Drill Subcontractor: ADI		Driller:		
Depth (ft)	Lithology	Description	PID	Sample ID	Sample Parameters

16			0.0 ppm		
		UND: Reddish Brown (5YR 4/4) very fine SAND, some Silt, Shale.			
		UND: Dark Reddish Brown (2.5YR 3/4) fine to medium SAND, trace Silt, wet. No odor.			
16		UND: Dark Reddish Brown (2.5YR 3/4) amd Yellow mottled silty SAND, some fine to medium Gravel, wet. No odor.	0.0 ppm		
		NR: No Recovery			
		UND: Very Dark Gray (Gley N3/0) CLAY, medium stiff, moist.			
18		UND: Dusky Red (10R 3/4) silty SAND, some fine to coarse Gravel, Lime Green-stained CLAY interbedded, moist. No odor.	0.0 ppm	114-MW22BD (14.5-18.0)	Cr+6, TAL Metals
					
					
20		UND: Olive Brown (2.5 Y 4/3) silty CLAY, moist. No odor.	0.0 ppm		
		UND: Dusky Red (10R 3/2) CLAY, some Gravel, moist. No odor.			
		UND: Reddish Brown (5YR 4/3) SILT, little angular fine Gravel, moist. No odor.			
		NR: No Recovery	0.0 ppm		
		UND: Olive Brown (2.5Y 4/3) silty CLAY, interbedded			

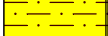
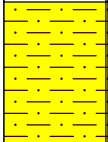
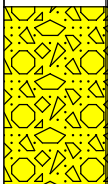
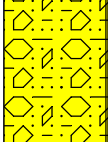
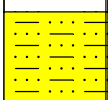
NOTES: Coordinates are provided in New Jersey State Plane NAD 1983 Feet.

		Client: PPG Industries		BORING ID: 114-MW22B	
		Site: Site 114			
Start Date: 11/15/2006		Project: Site Investigation		Page: 4 of 5	
		Coordinates: X-610693.8 Y-683255.1		Depth of Boring: 35.00	
End Date: 11/21/2006		Elevation: 12.6		Geologist: M. Merdinger	
		Drill Subcontractor: ADI		Driller:	
Depth (ft)	Lithology	Description	PID	Sample ID	Sample Parameters

22		Reddish Brown SILT at 22.2 feet, little rounded fine to medium Gravel, moist. No odor.	0.0 ppm	114-MW22BE (22.5-23.0)	Cr+6, TAL Metals
		SAND: Strong Brown (7.5YR 5/8) SAND, trace Silt, moist. No odor. (Native)			
24		SILT: Reddish Brown (5YR 4/4) SILT and fine to medium angular and rounded GRAVEL, trace Clay, wet. No odor.	0.2 ppm	114-MW22BF (25.5-26.0)	Cr+6, TAL Metals
		NR: No Recovery			
26		SILT: Reddish Brown (5YR 4/4) SILT and fine to medium angular and rounded GRAVEL, trace Clay, wet. No odor.	0.3 ppm		
		CLAY: Reddish Brown (5YR 4/4) CLAY, little Silt, moist, medium stiff. No odor.			
28		SAND: Reddish Brown (5YR 4/4) coarse SAND, some fine Gravel and Silt, wet. No odor.			
		SILT: Reddish Brown (5YR 4/4) SILT, moist. No odor.			
		NR: No Recovery			
		SAND: Reddish Brown (5YR 4/4) coarse SAND, some fine Gravel and Silt, moist. No odor.			
		SILT: Reddish Brown (5YR 4/4) SILT, moist. No odor.			

NOTES: Coordinates are provided in New Jersey State Plane NAD 1983 Feet.

<div>ENSR AECOM</div>		Client: PPG Industries		BORING ID: 114-MW22B		
		Site: Site 114				
Start Date: 11/15/2006		Project: Site Investigation		Page: 5 of 5		
		Coordinates: X-610693.8 Y-683255.1		Depth of Boring: 35.00		
End Date: 11/21/2006		Elevation: 12.6		Geologist: M. Merdinger		
		Drill Subcontractor: ADI		Driller:		
Depth (ft)	Lithology	Description		PID	Sample ID	Sample Parameters

30		NR: No Recovery	0.0 ppm	114-MW22BG (29.0-29.5)	MS/MSD, Cr+6, TAL Metals
		SILT: Reddish Brown (5YR 4/4) SILT, little Clay, trace fine Gravel, moist. No odor.			
		NR: No Recovery	0.2 ppm		
		GRAVEL: Reddish Brown (5YR 4/4) GRAVEL, little Silt, wet. No odor.			
		SILT AND GRAVEL: Reddish Brown (5YR 4/4) SILT and GRAVEL, trace Clay, wet. No odor.			
		NR: No Recovery			
34		SILTSTONE: Gray Rock, angular, trace Silt and coarse Sand, wet. No odor.			
NULL: End of boring at 35 feet.					

NOTES: Coordinates are provided in New Jersey State Plane NAD 1983 Feet.

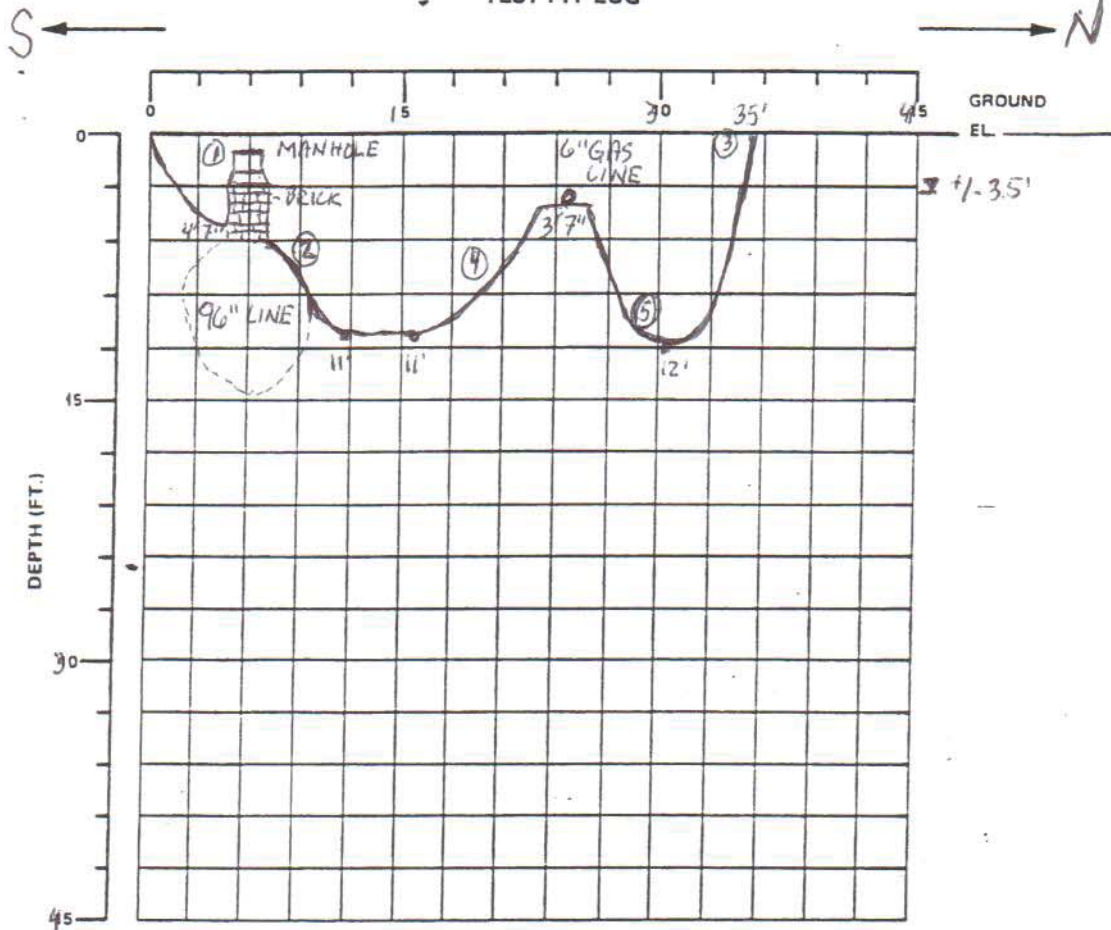
FIGURE 1. TEST PIT LOG

JOB NO. 60158739.0408
 PROJECT PPG SITE 114
 DATE 10/31-11/1/11

TEST PIT NO. TP-1 CAR
 LOCATION CARTERET AVE NEAR GARFIELD
 LOGGED BY PAPAGIAN/KANTOR

Metcalf & Eddy, Inc.

TEST PIT LOG



NOTES: MANHOLE w/ PRESSURE
RELIEF VALVE C/L 6' 5"
FROM SOUTH WALL. TOP OF
96" LINE 5' 8" BGS.
6" ACTIVE GAS LINE, 10' S of
NORTH WALL 3' 7" BGS

	NO.	DEPTH	
SAMPLES	① 114-TP-1S	12-19"	70/31
	② 114-TP-1N	84-89"	
	③ 114-TP-1N	4-6"	
	④ 114-TP-1N	90-96"	
	⑤ 114-TP-1N	126-132"	

SAMPLES COLLECTED AT SUSPECTED
 "CLEAN" ZONES

TEST PIT FIELD LOG

PROJECT DESCRIPTION <u>PPG Site 114</u> LOCATION <u>Carteret Ave, Jersey City</u>	TEST PIT No. <u>1</u> FILE No. _____ DATE <u>11-1-11</u>
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ENGINEER <u>Rita Papagian</u>	EXCAVATION EQUIPMENT CONTRACTOR <u>Entact</u> OPERATOR <u>Steve</u> MAKE <u>Takeuch</u> MODEL <u>mini-exc</u> CAPACITY _____ REACH <u>12' exc.</u>	GROUND ELEV. _____ TIME STARTED <u>10-31-11 0830</u> TIME COMPLETED <u>11-1-11 1130</u>
WEATHER <u>56°F Sunny, Breezy</u>		

DEPTH	SOIL DESCRIPTION	EXCAV. EFFORT	BOULDER COUNT QTY. CLASS	REMARK No.
0	0-4" Asphalt			
1'	4-6" stone - c sand & c gravel	M		
2'	6-25" - Brown f-c sand w/ gravel	M		
3'	25"-31" - Ash & concrete	D		
4'	31"-36" - Brown f-c sand & gravel, brick and wood debris			
5'	36"-68" - DK grey m-c sand & gravel, brick wood, cement, Ash debris	D (36"-42")		
6'	68"-96" - Brown silt	M		
7'				
8'	96"-132" - Brown silt w/ little clay	E		
9'				
10'				
11'	Bolt - 11.0'			
12'	114TP-1N-(2): Ground surface elevation = 11.7 ft NAVD88			
13'	114TP-1N-(4): Ground surface elevation = 11.7 ft NAVD88			
14'	114TP-1S-(1): Ground surface elevation = 11.8 ft NAVD88			
	114TP-1N-(5): Ground surface elevation = 12.0 ft NAVD88			

REMARKS: H₂O seeping in At 3.5', At 1.1' bgs uncover a manhole, at 5.8' uncover the 96" line. Gas line found at 3' 7" in northern part of test pit.


TEST PIT PLAN  NORTH VOLUME = _____ cu.yd.	LEGEND: BOULDER COUNT <table> <tr> <th>SIZE RANGE CLASSIFICATION</th> <th>LETTER DESIGNATION</th> </tr> <tr> <td>6"-18"</td> <td>A</td> </tr> <tr> <td>18"-36"</td> <td>B</td> </tr> <tr> <td>36" and Larger</td> <td>C</td> </tr> </table>	SIZE RANGE CLASSIFICATION	LETTER DESIGNATION	6"-18"	A	18"-36"	B	36" and Larger	C	PROPORTIONS USED TRACE (TR.) 0-10% LITTLE (L.) 10-20% SOME (SO) 20-35% AND 35-50%	ABBREVIATIONS F-FINE M-MEDIUM C-COARSE F/M-FINE TO MEDIUM F/C-FINE TO COARSE V-VERY GR.-GRAY BN.-BROWN YEL.-YELLOW	EXCAVATION EFFORT E _____ EASY M _____ MODERATE D _____ DIFFICULT GROUNDWATER ELAPSED TIME TO READING _____ G.W. (HRS.) No Groundwater
SIZE RANGE CLASSIFICATION	LETTER DESIGNATION											
6"-18"	A											
18"-36"	B											
36" and Larger	C											

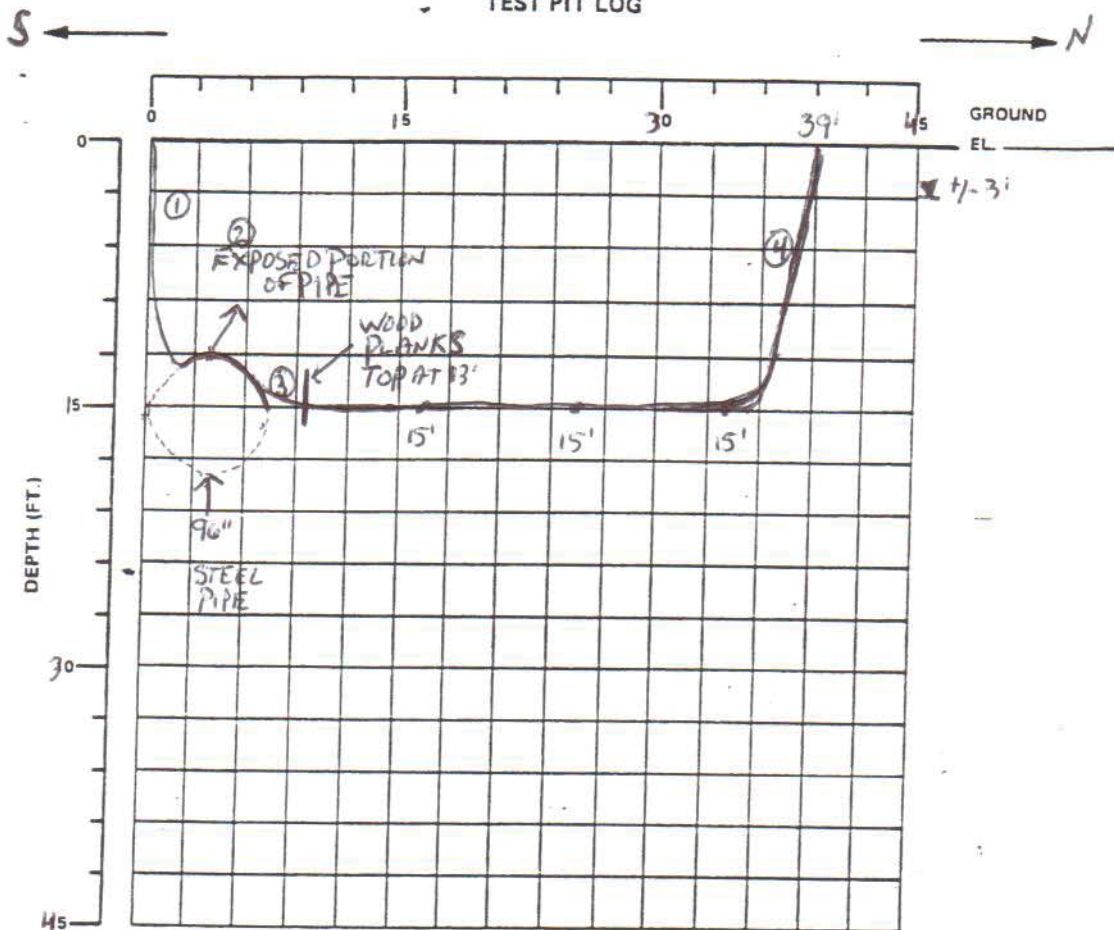
FIGURE 1. TEST PIT LOG

JOB NO. 60158739.0408
 PROJECT PPG-SITE 114
 DATE 10/25 - 10/27/11

TEST PIT NO. TP-2 CAR
 LOCATION CARTERET AVE. WEST OF CANAL
 LOGGED BY KANTOR/PAPAGIAN

Metcalf & Eddy, Inc.

TEST PIT LOG



NOTES: TOP OF 96" LINE "FELT"
BY EXCAVATOR AT 12'
NOT VISUALLY CONFIRMED
DUE TO WATER/SLOUGHING
OF SIDE WALLS

INTERBEDDED ASH AND DEBRIS
AND BROWN TO REDDISH
BROWN SILT AND F-C SAND
GRAY TO BROWN SILT WITH
DEBRIS FROM 9.0-12.0 FEET.

NO.	DEPTH	
SAMPLES: ① 114-TP2-S	48-54"	7/10/25
② 114-TP2-S	72-78"	
③ 114-TP2-N	160-174"	-10/26
④ 114-TP2-NW	78-84"	-10/27

SAMPLES COLLECTED FROM SUSPECTED
 "CLEAN" ZONES WITHIN TEST PIT

TEST PIT FIELD LOG

PROJECT	TEST PIT No. <u>2</u>
DESCRIPTION <u>PPG Site 114</u>	FILE No. _____
LOCATION <u>Lasteret Ave, Jersey City</u>	DATE <u>10-25-11</u>

ENGINEER <u>Rita Papagian</u>	EXCAVATION EQUIPMENT	GROUND ELEV. _____
CONTRACTOR <u>Entact</u>	OPERATOR <u>Steve</u>	TIME STARTED <u>10/25/11 @ 0825</u>
WEATHER <u>58-62°F light wind, Sunny</u>	MAKE <u>Takeuchi</u> MODEL <u>Mia-Exc</u>	TIME COMPLETED <u>10/27/11 @ 1105</u>
	CAPACITY <u>John Deere</u> REACH <u>19' Ecc</u>	

DEPTH	SOIL DESCRIPTION	EXCAV. EFFORT	BOULDER COUNT QTY. CLASS	REMARK No.
0	0-4" Asphalt			
1	4-7" Gravel	M		
1	7-12" m-c lt brown SAND, few c gravel			
2	12"-16" Grayish white Ash, Porcelain Debris, Glass	D (12-18")		
2	18-40" - DK brown m-c Sand w cement block & brick debris			
3		HL (3-40")		
4	40-48" Ash			
4	48-62" - Reddish brown SILT w/ f-m gravel	D (40-48")		
5		E (48-62")		
6	62-68" - Grayish white Ash	E		
6	68-72" - DK brown silt w/m sand & Black f sand			
7	72-96" - Reddish brown SILT	E		
8				
9	96-108" - Gray silt w/ little ash, glass, brick, and cement debris	E		
10	108-144" - Brown silt w/ m-c sand, cement blocks and wood debris	E		
11				
12				
13	Bottom - 12.0'			
14				

114TP2-N (3): Ground surface elevation = 12.7 ft NAVD88

114TP2-S (1): Ground surface elevation = 12.4 ft NAVD88

114TP2-S (2): Ground surface elevation = 12.6 ft NAVD88

REMARKS: H₂O is at 3.0'. Both the ~~northern~~ Eastern & western walls had severe sloughing. At 12' we encountered a pipe but couldn't expose it because pumps couldn't keep up with the water flowing into test pit. We were unable to continue w/ the excavation due to side wall sloughing.

TEST PIT PLAN 	LEGEND: BOULDER COUNT <table border="1"> <tr> <th>SIZE RANGE CLASSIFICATION</th> <th>LETTER DESIGNATION</th> </tr> <tr> <td>6"-18"</td> <td>A</td> </tr> <tr> <td>18"-36"</td> <td>B</td> </tr> <tr> <td>36" and Larger</td> <td>C</td> </tr> </table>	SIZE RANGE CLASSIFICATION	LETTER DESIGNATION	6"-18"	A	18"-36"	B	36" and Larger	C	PROPORTIONS USED TRACE (TR.) 0-10% LITTLE (L.) 10-20% SOME (SO) 20-35% AND 35-50%	ABBREVIATIONS F-FINE M-MEDIUM C-COARSE F/M-FINE TO MEDIUM F/C-FINE TO COARSE V-VERY GR-GRAY BN-BROWN YEL-YELLOW	EXCAVATION EFFORT E _____ EASY M _____ MODERATE D _____ DIFFICULT GROUNDWATER
		SIZE RANGE CLASSIFICATION	LETTER DESIGNATION									
6"-18"	A											
18"-36"	B											
36" and Larger	C											
ELAPSED TIME TO READING (HRS.) _____ G.W. _____ No Groundwater												















30 Knightsbridge Road, Piscataway, NJ 08854
732.564.3200 office telephone

Boring ID: 132-P3A-H15A

Page: 1

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 610896.125
Date Started Drilling: 4/11/2013 1:45:00 PM	Rig Type:	Coordinates (NJSPNAD83) y: 683151.125
Date Finished Drilling: 4/12/2013 10:00:00 AM	Core Size: 3 in	Boring Total Depth: 16 ft
Logged By: MI	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: Site 132 - H15A		Surface Elevation: 12.7 ft NAVD88

(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	2	0.0	slightly moist	ASPHALT		ASPHALT	
2	2	0.0	slightly moist	FILL		fine to medium SAND, some fine gravel, little wood fragments, (10YR 5/6) yellowish brown, non plastic, loose, slightly moist, no odor, no staining.	
3	2	0.0	slightly moist	FILL		fine SAND, little cinders, coal, (7.5YR 3/1) very dark gray, non plastic, loose, slightly moist, no odor, no staining.	
4	1.2	5.5	dry	FILL		fine SAND, little cinders, coal, (7.5YR 3/1) very dark gray, non plastic, loose, slightly moist, no odor, no staining.	
5	1.2	0.0	moist	FILL		fine SAND, little medium gravel, trace tar-like material, (7.5YR 2.5/1) black, non plastic, loose, dry slight tar odor, no staining.	
6	1.3	0.0	slightly moist	NR		fine to medium SAND, with fine gravel, little brick, (7.5YR 2.5/3) very dark brown, non plastic, loose, moist, no odor, no staining.	
7	1.3	0.0	slightly moist	FILL		NO RECOVERY	
8	1	0.0	slightly moist	FILL		SILT, little fine sand, trace fine gravel, (7.5YR 4/3) brown, non plastic, soft, slightly moist, no odor, no staining.	
9	1	0.0	slightly moist	NR		fine to coarse GRAVEL, with ash, little brick, (7.5YR 4/1) dark gray, non plastic, loose, slightly moist, no odor, no staining.	
10	0.9	0.0	slightly moist	FILL		NO RECOVERY	
11	0.9	0.0	slightly moist	NR		ASH, with wood fragments, some ceramics, fill material, (7.5YR 5/1) gray, medium plasticity, loose, slightly moist, no odor, no staining.	132-P3A-H15A-10.0-10.5
12	0.6	0.0	slightly moist	FILL		NO RECOVERY	
13	0.6	0.0	slightly moist	NR		ASH, with wood fragments, some ceramics, fill material, (7.5YR 5/1) gray, medium plasticity, loose, slightly moist, no odor, no staining.	132-P3A-H15A-12.0-12.5
14	2	0.0	slightly moist	FILL		NO RECOVERY	
15	2	2.3	dry	PT		fine silty SAND, little fine to coarse gravel, trace ash, (5YR 4/4) reddish brown, medium plasticity, soft to soft, slightly moist, no odor, no staining.	132-P3A-H15A-14.1-14.6
16						PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (7.5YR 3/4) dark brown, non plastic, stiff, dry, moderate organic odor, no staining. Soils consistent with MM.	132-P3A-H15A-14.6-15.1 132-P3A-H15A-14.6-15.1X

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick 3) No CCPW (COPR or GGM) present in any interval of this boring.

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 610922.875
Date Started Drilling: 4/4/2013 8:30:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 683137.6875
Date Finished Drilling: 4/4/2013 11:54:00 AM	Core Size: 3 in	Boring Total Depth: 17 ft
Logged By: EW	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: Site 132 - I15A		Surface Elevation: 12.6 ft NAVD88

(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	1.6	0.0		ASPHALT		ASPHALT	
		0.0	dry to moist	FILL		fine to medium SAND, with fine to medium gravel, some brick, (7.5YR 5/6) strong brown, non plastic, loose, dry to moist, no odor, no staining.	
2		0.0	dry to moist	NR		fine to medium SAND, trace silt and brick fragments, (7.5YR 3/1) very dark gray, non plastic, loose, dry to moist, no odor, no staining, with fill material and glass fragments.	
3	2	0.0	dry to moist	FILL		NO RECOVERY	
4		0.0	moist	FILL		fine silty SAND, with fine gravel, little brick and asphalt fragments, (7.5YR 3/2) dark brown, non plastic, soft, dry to moist, no odor, no staining.	
5	1.4	0.0	wet	FILL		medium SAND, trace silt, (7.5YR 3/4) dark brown, non plastic, soft, moist, no odor, no staining.	
6				NR		fine to medium SAND, little silt with wood fragments, (7.5YR 3/1) very dark gray, non plastic, soft to loose, moist, no odor, no staining, and some fine gravel.	
7	1.5	0.0	wet	FILL		fine to medium SAND, little COPR and fine gravel, (5YR 4/3) reddish brown, non plastic, loose, wet, no odor, no staining.	
		0.0	moist	FILL		NO RECOVERY	
8				NR		fine to medium SAND, little COPR and fine gravel, (5YR 4/3) reddish brown, non plastic, loose, wet, no odor, no staining.	
9	2	0.0	saturated	FILL		fine to medium SAND, little ash and fine gravel, (7.5YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining.	
10		0.0	wet	FILL		fine to medium silty SAND, some fine gravel and wood fragments, (7.5YR 2.5/3) very dark brown, non plastic, soft, moist, no odor, no staining.	132-P3A-I15A-10.0-10.5
11	1			NR		NO RECOVERY	
12		0.0	wet	FILL		fine to medium silty SAND, with fine gravel, (7.5YR 4/2) brown, non plastic, soft to loose, saturated, no odor, no staining.	132-P3A-I15A-12.0-12.5
13	0.7			NR		medium SAND, some silt, trace fine gravel, (7.5YR 5/1) gray, non plastic, soft, wet, no odor, no staining.	
14		0.0	moist	FILL		fine to medium SAND, little silt and fine gravel, (7.5YR 3/4) dark brown, non plastic, soft, wet, no odor, no staining.	132-P3A-I15A-14.0-14.5
15	2	0.0	moist	FILL		fine to medium SAND, and ash with fine to medium gravel, (7.5YR 6/1) gray, non plastic, loose, wet, no odor, no staining.	
16		0.4	moist	OL		NO RECOVERY	132-P3A-I15A-15.2-15.7
	1	1.4	moist	PT		fine to coarse SAND, with fine to coarse gravel and ash, (7.5YR 5/1) gray, non plastic, loose, wet, no odor, no staining.	132-P3A-I15A-15.2-15.7X 132-P3A-I15A-15.7-16.2
17						NO RECOVERY	
						medium to coarse SAND, with fine to medium gravel, little ash, (7.5YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining.	
						SILT, with roots, some wood fragments, (7.5YR 2.5/3) very dark brown, non plastic, soft, moist, no odor, no staining, disturbed native material.	
						UNDorg SILT, with organics, (7.5YR 2.5/3) very dark brown, non plastic, soft, moist, slight organic odor, no staining. Soils consistent with UNDorg.	
						PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (7.5YR 2.5/3) very dark brown, non plastic, stiff, moist, moderate organic odor, no staining. Soils consistent with MM.	

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick 3) No CCPW (COPR or GGM) present in any interval of this boring.




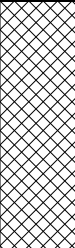
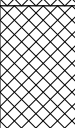
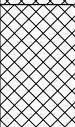

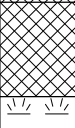
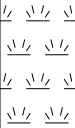

30 Knightsbridge Road, Piscataway, NJ 08854
732.564.3200 office telephone

Boring ID: 133-P3C-Z20AR

Page: 1

Project Name: PPG Garfield Ave	Drilling Company: SGS	
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 611312.962
Date Started Drilling: 11/25/2014 10:00:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 682776.76
Date Finished Drilling: 11/25/2014 11:00:00 AM	Core Size: 3.0 in	Boring Total Depth: 20 ft
Logged By: SS	Project Manager: Scott Mikaelian	Depth to Water: NA
Physical Location: P3C - Z20AR		Surface Elevation: 11.0 ft NAVD88



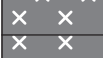

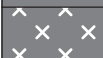
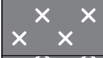
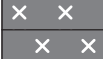





(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
		0.0		ASPHALT		ASPHALT	
1	5	0.0	dry	FILL		ASH, little fine to medium sand, little medium gravel, trace coal, (10YR 5/2) grayish brown, loose, dry, no odor, no staining.	
2							
3							
4							
5	5	0.0	slightly moist	FILL		ASH, little coal, trace wood fragments, trace debris, trace fine gravel, (10YR 5/2) grayish brown, loose, slightly moist, no odor, no staining.	133-P3C-Z20AR-4.5-5.0
6							
7		0.0	slightly moist	FILL		fine to medium silty SAND, trace ash, trace roots, (7.5YR 2.5/3) very dark brown, loose, slightly moist, no odor, no staining.	133-P3C-Z20AR-6.5-7.0
8							
9	5						133-P3C-Z20AR-8.5-9.0
10		0.0	dry to sl moist	FILL		fine to medium silty SAND, trace coal, trace fine to medium gravel, (7.5YR 4/3) brown, loose, dry to slightly moist, no odor, no staining.	133-P3C-Z20AR-10.5-11.0
11							
12							133-P3C-Z20AR-12.5-13.0
13	5						
14							
15		0.0	wet	FILL		fine silty SAND, little fine gravel, (7.5YR 4/3) brown, loose, wet, no odor, no staining.	133-P3C-Z20AR-14.5-15.0
16							
17	5	0.0	slightly moist	PT		PEAT (degraded vegetated material), 50% organic silt, 50% organic fibers, (7.5YR 4/4) brown, medium stiff, slightly moist, moderate organic odor, no staining. Soils consistent with MM.	133-P3C-Z20AR-16.3-16.8
18							133-P3C-Z20AR-16.8-17.3
19							
20		0.0	slightly moist	OL		UND organic SILT, 90% organic silt, 10% organic fibers, (10YR 5/1) gray, low plasticity, soft, slightly moist, no odor, no staining. Soils consistent with UNDorg.	

Comments: 1) 3 attempts were made to obtain best recovery 2) UND/MM confirmed to be 1 ft thick 3) No COPR or GGM present in any interval of this boring.




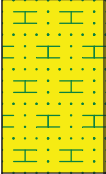
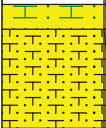

PPG - PPG_LOGS.GDT - 1/9/15 10:39

ENSR AECOM		Client: PPG Industries			BORING ID: 135-B19		
		Site: Site 135					
Start Date: 12/13/2006		Project: Site Investigation			Page: 1 of 3		
		Coordinates: X-611417.0 Y-682651.9			Depth of Boring: 32.00		
End Date: 1/2/2007		Elevation: 9.9 ft NAVD88			Geologist: P. Kelly, M. Merdinger		
		Subcontractor: EB/TPI			Driller: Heath Kneller		
Depth (ft)	Lithology	Description			PID	Sample ID	Sample Parameters

0		ASPHALT: ASPHALT			
		FILL: Gray fine COBBLES.			
		FILL: Brown coarse SAND, some Silt and Clay, little fine Gravel.	0.0 ppm	135-B19A (1.3-1.8)	Cr+6, TAL Metals
2		FILL: Grey fine COBBLES	1.4 ppm	135-B19B (2.1-2.6)	Cr+6, TAL Metals
		FILL: Gray-Brown ASH, some fine Gravel, little woody organics. Heavy petroleum odor.			
		FILL: Red Brick pieces		135-B19C (3.3-3.8)	Cr+6, TAL Metals
4		FILL: Black-Gray ASH, some fine Gravel, little brick fragments.	0.0 ppm		
		FILL: Dark Grayish Brown, (2.5Y 4/2) SILT and ASH, Fill materials (shells, clinkers, wood particles), wet, loose. No odor.	0.0 ppm	135-B19D (5.1-5.6)	Cr+6, TAL Metals
6		FILL: Black and Dark Grayish Brown (2.5Y 4/2) SILTY CLAY, trace coarse Sand and Topsoil, moist, firm.	0.0 ppm		
		NR: No Recovery			
8		FILL: Dark Grayish Brown (10YR 4/2) SAND CLAY, little Silt, wet, semi-firm. No odor.	0.0 ppm		
		FILL: Black medium SANDY SILT, Fill material, little interbedded Clay, wet, loose. No odor.	0.0 ppm		
10		FILL: Dark Yellowish Brown (10YR 4/4) SANDY SILT, trace Clay, moist, semi-firm. No odor.	0.1 ppm	135-B19E (9.4-9.9)	Cr+6, TAL Metals
		NR: No Recovery			


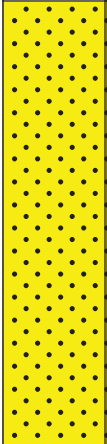
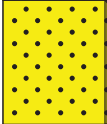

NOTES: Coordinates are provided in New Jersey State Plane NAD 1983 Feet.

ENSR AECOM		Client: PPG Industries			BORING ID: 135-B19		
		Site: Site 135					
Start Date: 12/13/2006		Project: Site Investigation			Page: 2 of 3		
		Coordinates: X-611417.0 Y-682651.9			Depth of Boring: 32.00		
End Date: 1/2/2007		Elevation: 9.9 ft NAVD88			Geologist: P. Kelly, M. Merdinger		
		Drill Subcontractor: EB/TPI			Driller: Heath Kneller		
Depth (ft)	Lithology	Description			PID	Sample ID	Sample Parameters


12		FILL: Dark Yellowish Brown (10YR 4/4) SANDY SILT, trace Clay and fine semi-rounded Gravel, wet, loose.	0.0 ppm		
		PEAT: PEAT, organics, moist, firm. Sulfur odor.	0.0 ppm	135-B19F (13.2-13.7)	MS/MSD, Cr+6, TAL Metals
14		NR: No Recovery	28.1 ppm		
16		PEAT: Dark Gray (Gley N4/0) organic CLAY, some organics, moist, firm. Sulfur odor.	34.8 ppm		
			30.0 ppm	135-B19G (17.2-18.2) 135-B19GD (17.2-18.2)	Cr+6, TAL Metals
18		SILT AND CLAY: Black and Dusky Red (2.5YR 3/2) organic SILTY CLAY, trace organics, moist, semi-firm. Sulfur odor.	164.0 ppm		
			389.0 ppm		
20		NR: No Recovery			
		SILT AND CLAY: Black and Dusky Red (2.5YR 3/2) organic SILTY CLAY, trace organics, moist, semi-firm. Sulfur odor.	54.0 ppm	135-B19H (20.2-20.7)	Cr+6, TAL Metals
		SILTY SAND: Gray (5Y 5/1) very fine SILTY SAND, trace Clay, moist, semi-firm (native). Slight sulfur odor.	2.1 ppm		


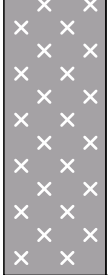
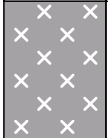

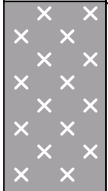

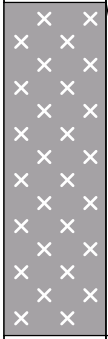
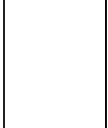

NOTES: Coordinates are provided in New Jersey State Plane NAD 1983 Feet.

<div>ENSR AECOM</div>		Client: PPG Industries		BORING ID: 135-B19	
		Site: Site 135			
Start Date: 12/13/2006		Project: Site Investigation		Page: 3 of 3	
		Coordinates: X-611417.0 Y-682651.9		Depth of Boring: 32.00	
End Date: 1/2/2007		Elevation: 9.9 ft NAVD88		Geologist: P. Kelly, M. Merdinger	
		Drill Subcontractor: EB/TPI		Driller: Heath Kneller	
Depth (ft)	Lithology	Description	PID	Sample ID	Sample Parameters


22		CLAYEY SAND: Gray (5Y 6/1) medium to coarse SAND, some to little Clay, trace fine semi-rounded Gravel, moist, firm. Slight naptha odor.	6.6 ppm		
		NR: No Recovery	0.0 ppm		
24		SAND: Dark Gray (10YR 4/1) fine to coarse SAND, trace fine to medium rounded Pebbles, wet, loose to semi-firm. No odor.	0.0 ppm	135-B19I (24.2-24.7)	Cr+6, TAL Metals
			0.0 ppm		
			0.0 ppm		
26			0.0 ppm		
			0.0 ppm		
28		NR: No Recovery	0.0 ppm	135-B19J (28.2-28.7)	Cr+6, TAL Metals
		SAND: Reddish Gray (5YR 5/2) very fine to medium SAND, wet, semi-firm. No odor.	0.0 ppm		
		SAND: Reddish Brown (5YR 5/4) very fine SAND, little to trace Silt, wet, semi-firm. No odor.	0.0 ppm		
30			0.0 ppm		
		NR: No Recovery			
32		NULL: End of Boring at 28 ft.			



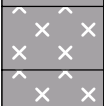

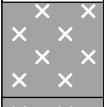
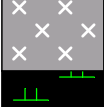
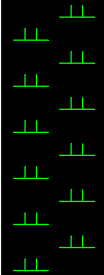

NOTES: Coordinates are provided in New Jersey State Plane NAD 1983 Feet.

		Client: PPG Industries		BORING ID: 143-B5		
		Site: Site 143				
Start Date: 1/9/2007		Project: Site Investigation		Page: 1 of 3		
		Coordinates: X-610774.0 Y-683208.0		Depth of Boring: 24.00		
End Date: 1/11/2007		Elevation: 12.9		Geologist: P. Kelly		
		Drill Subcontractor: Eichelberger/Terra Probe Incorporated		Driller: Heath Kneller		
Depth (ft)	Lithology	Description		PID (ppm)	Sample ID	Sample Parameters


0		ASPHALT: Asphalt	0.0 ppm		
		FILL: Black (5YR 2.5/1) fine SAND, some fine Gravel and Silt, little brick fragments and coarse Gravel, no odor		143-B5A (1.0-1.5)	Cr+6, TAL Metals
2		FILL: Dark Brown (7.5YR 2.5/1) coarse SAND, some fine Gravel, and little fine gravel sized COPR (10%), trace brick fragments, no odor	0.0 ppm	143-B5B (2.0-2.5)	Cr+6, TAL Metals
		FILL: White (7.5YR 8/1) SILT/CLAY, some black staining, no odor	0.0 ppm	143-B5C (2.9-3.4)	Cr+6, TAL Metals
4		FILL: Brown (7.5YR 4/3) CLAY, some silt, little fine to coarse Gravel and medium gravel sized Slag, black (10YR 2/1), no odor	0.0 ppm	143-B5D (3.5-4.1)	Cr+6, TAL Metals
		FILL: Cobbles	0.1 ppm		
		NR: No Sample			
6		FILL: Red-Brown (2.5YR 3/4) SILT/CLAY, some fine gravel, trace glass pieces, no odor		143-B5E (6.5-7.0)	Cr+6, TAL Metals
		NR: No Recovery			
8					

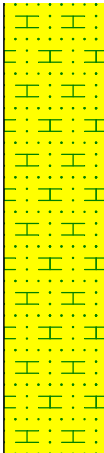
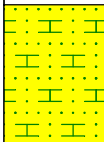
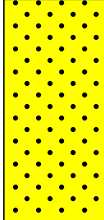
NOTES: Coordinates are provided in New Jersey State Plane NAD 1983 Feet.

		Client: PPG Industries		BORING ID: 143-B5		
		Site: Site 143				
Start Date: 1/9/2007		Project: Site Investigation		Page: 2 of 3		
		Coordinates: X-610774.0 Y-683208.0		Depth of Boring: 24.00		
End Date: 1/11/2007		Elevation: 12.9		Geologist: P. Kelly		
		Drill Subcontractor: Eichelberger/Terra Probe Incorporated		Driller: Heath Kneller		
Depth (ft)	Lithology	Description		PID (ppm)	Sample ID	Sample Parameters

10		FILL: Red-Brown (2.5YR 3/4) SILT/CLAY, some fine gravel, trace glass pieces, no odor	0.7 ppm		
		FILL: Dark Brown (7.5YR 2.5/2) SILT, some fine Gravel, little woody organics, no odor		143-B5F (8.8-9.5)	Cr+6, TAL Metals
		FILL: White (5Y 8/1) SILT/CLAY, very soft, some Brown (5YR 2.5/1) Silt and fine Sand, no odor		143-B5G (9.5-9.9)	Cr+6, TAL Metals
		FILL: Red-Black (2.5YR 2.5/1) coarse SAND, some Silt, little fine Gravel, trace glass fragments, no odor		143-B5H(9.9-10.6) 143-B5HD(9.9-10.6)	Cr+6, TAL Metals Cr+6, TAL Metals
		NR: No Recovery			
12			0.7 ppm		
		FILL: Red-Black (2.5YR 2.5/1) coarse SAND, some Silt, little fine Gravel, trace glass fragments, no odor			
		FILL: Dark Gray (N31 gley) SILT/Ash, some fine Gravel little debris, no odor		143-B5I (12.6-13.1)	Cr+6, TAL Metals
14		PEAT: Meadow Mat, dark Brown (2.5YR 2.5/2) CLAY, with Organics, no odor	0.6 ppm	143-B5J (13.1-13.9)	Cr+6, TAL Metals
			0.4 ppm		
		NR: No Recovery			
16		SILT AND CLAY: Green Gray (5BG 5/1) with little Dark			

NOTES: Coordinates are provided in New Jersey State Plane NAD 1983 Feet.

		Client: PPG Industries		BORING ID: 143-B5		
		Site: Site 143				
Start Date: 1/9/2007		Project: Site Investigation		Page: 3 of 3		
		Coordinates: X-610774.0 Y-683208.0		Depth of Boring: 24.00		
End Date: 1/11/2007		Elevation: 12.9		Geologist: P. Kelly		
		Drill Subcontractor: Eichelberger/Terra Probe Incorporated		Driller: Heath Kneller		
Depth (ft)	Lithology	Description		PID (ppm)	Sample ID	Sample Parameters

18		Rd (5YR 4/6) CLAY/SILT, little fine Sand, trace Dark Red (2.5YR 3/6) medium Gravel from 18.1' to 19.1', no odor	0.4 ppm	143-B5K (17.1-17.9)	Cr+6, TAL Metals
		NR: No Recovery			
	20				
22		SAND: Reddish Brown (2.5YR 4/6) coarse SAND, some fine to coarse Gravel, no odor	0.4 ppm		
		NR: No Recovery			
24		NULL: End of Boring			

NOTES: Coordinates are provided in New Jersey State Plane NAD 1983 Feet.



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Boring ID: 143-P3A-A`15A

Page: 1

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Soft Dig/Geoprobe	Coordinates (NJSPNAD83) x: 610681.8125
Date Started Drilling: 4/8/2013 8:30:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 683259
Date Finished Drilling: 4/8/2013 2:59:00 PM	Core Size: 3 in	Boring Total Depth: 21 ft
Logged By: MI	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: Site 143 - A`15A		Surface Elevation: 12.4 ft NAVD88

(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	GA Class	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
	1	0.0		1	CONCRETE		CONCRETE	
1		0.0	dry	3	FILL		fine to medium SAND, little fine gravel, (7.5YR 3/2) dark brown, non plastic, loose, dry, no odor, no staining.	
2	2	0.0	dry	3	FILL		fine to medium SAND, little fine gravel, (7.5YR 3/2) dark brown, non plastic, loose, dry, no odor, no staining.	
3		0.0	dry	3	FILL		fine to medium GRAVEL, little fine sand, (7.5YR 3/2) dark brown, non plastic, loose, dry, no odor, no staining.	
4	2	0.0	dry	6	FILL		fine to medium SAND, little fine to coarse gravel, trace cinders, ash, (7.5YR 3/1) very dark gray, non plastic, loose, dry, no odor, no staining.	
5		0.0	dry	6	FILL		fine to medium SAND, little fine to coarse gravel, trace cinders, ash, (7.5YR 3/1) very dark gray, non plastic, loose, dry, no odor, no staining.	
6	1	0.0	moist	6	FILL		fine SAND, with ash, little cinders, coal, (7.5YR 4/1) dark gray, non plastic loose, moist no odor no staining	
7				6	NR		NO RECOVERY	
8	0.8	0.0	moist	6	FILL		SILT, some cinders, coal, fine sand little ash, (7.5YR 3/3) dark brown, non plastic soft, moist no odor no staining	
9				NR	NR		NO RECOVERY	
10	2	0.0	moist	3	FILL		SILT, little fine sand, trace roots, (7.5YR 3/3) dark brown, non plastic, soft, moist, no odor, no staining.	
11		0.0	moist	3	FILL		SILT, little fine sand, trace roots, (7.5YR 3/3) dark brown, non plastic, soft, moist, no odor, no staining.	
12	2	0.0	moist	3	FILL		SILT, little fine sand, trace roots, (7.5YR 3/3) dark brown, non plastic, soft, moist, no odor, no staining.	
13		0.0	slightly moist	3	FILL		fine to medium SAND, some fine to coarse gravel, trace cobbles, (5YR 4/3) reddish brown, non plastic, hard, slightly moist, no odor.	
14	1.8	0.0	slightly moist	3	FILL		fine to medium SAND, some fine to coarse gravel, trace cobbles, (5YR 4/3) reddish brown, non plastic, hard, slightly moist, no odor.	
15		0.0	slightly moist	NR	NR		NO RECOVERY	
16	1.3			3	FILL		fine to medium SAND, some fine to coarse gravel, trace cobbles, fill material, (2.5YR 4/6) red (5YR 4/3) reddish brown, non plastic, hard, slightly moist, no odor.	
17				NR	NR		NO RECOVERY	
18	2	0.0	slightly moist	3	FILL		fine to medium SAND, some fine to coarse gravel, trace cobbles, fill material, (2.5YR 4/6) red (5YR 4/3) reddish brown, non plastic, hard, slightly moist, no odor.	143-P3A-A`15A-17.5-18.0
19		0.0	slightly moist	10	SM		fine SAND, with medium gravel, trace silt, (2.5YR 4/8) red, non plastic, dense, slightly moist, no odor, no staining. Soils consistent with UNDno.	143-P3A-A`15A-18.0-18.5
20	1.5			10	SM		fine SAND, with medium gravel, trace silt, (2.5YR 4/8) red, non plastic, dense, slightly moist, no odor, no staining. Soils consistent with UNDno.	143-P3A-A`15A-18.0-18.5X
21				NR	NR		NO RECOVERY	143-P3A-A`15A-18.5-19.0
								143-P3A-A`15A-20.0-20.5

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick 3) No CCPW (COPR or GGM) present in any interval of this boring.

PPG - PPG_LOGS.GDT - 4/24/13 13:28



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Boring ID: 143-P3A-A`15AR2

Page: 1

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 610689.8125
Date Started Drilling: 4/1/2014 9:20:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 683255.1875
Date Finished Drilling: 4/1/2014 10:10:00 AM	Core Size: 2 in	Boring Total Depth: 20 ft
Logged By: MI	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: Site 143 - A`15AR2		Surface Elevation: 12.6 ft NAVD88

(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	GA Class	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	3.2	0.0	slightly moist	1	CONCRETE		CONCRETE	
2		0.0		3	FILL		fine to medium SAND, some fine to coarse gravel, (2.5YR 4/2) weak red, loose, slightly moist, no odor, no staining.	
3		0.0	slightly moist	3	FILL		fine to medium SAND, with cinders, some silt, little ash, (7.5YR 2.5/1) black, loose to dense, slightly moist, no odor, no staining.	
4				NR	NR		NO RECOVERY	
5	3.5	0.0	dry to slight moist	3	FILL		fine to medium SAND, little cinders, (7.5YR 2.5/1) black, loose to dense, dry to slightly moist, no odor, no staining.	143-P3A-A`15A-R2-7.0-7.5
6		0.0		3	FILL		fine to medium silty SAND, trace ash, (10YR 5/4) yellowish brown, loose to dense, slightly moist, no odor, no staining.	
7		0.0		3	FILL		fine silty SAND, and ash, little fine gravel, trace ceramics, (7.5YR 5/1) gray, loose, slightly moist, no odor, no staining.	
8			slightly moist to wet					
9		0.0		3	FILL		SILT, some fine sand, trace cinders, roots, (7.5YR 3/4) dark brown, non plastic, soft, moist to wet, no odor, no staining.	
10	5		moist to wet	NR	NR		NO RECOVERY	143-P3A-A`15A-R2-11.0-11.5 143-P3A-A`15A-R2-11.5-12.0
11		0.0		3	FILL		SILT, some fine sand, trace cinders, roots, (7.5YR 3/4) dark brown, non plastic, soft, moist to wet, no odor, no staining.	
12		0.0		10	SP-SM		UNDno fine to medium SAND, trace silt, (10YR 5/4) yellowish brown, loose to dense, moist to wet, no odor, no staining. Soils consistent with UNDno.	
13		0.0		10	SP-SM		UNDno fine to medium SAND, some fine to coarse gravel, little silt, (5YR 5/2) reddish gray, loose to dense, moist to wet, no odor, no staining. Soils consistent with UNDno.	
14	4		moist to wet					143-P3A-A`15A-R2-16.5-17.0 143-P3A-A`15A-R2-17.0-17.5 143-P3A-A`15A-R2-17.5-18.0 143-P3A-A`15A-R2-18.0-18.5 143-P3A-A`15A-R2-18.5-19.0
15		0.0		10	SP-SM		UNDno fine to coarse SAND, with fine to medium gravel, trace silt, (2.5YR 5/6) red, loose, moist to wet, no odor, no staining. Soils consistent with UNDno.	
16		0.0		10	SP-SM		UNDno fine to coarse SAND, with fine to coarse gravel, (2.5YR 4/6) red, loose to hard, slightly moist, no odor, no staining. Soils consistent with UNDno.	
17								
18				NR	NR		NO RECOVERY	
19								
20								

Comments: 1) 3 attempts were made to obtain best recovery 2) UND/MM confirmed to be 1 ft thick 3) No COPR or GGM present in any interval of this boring.



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Boring ID: 143-P3A-A15A

Page: 1

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 610708.5625
Date Started Drilling: 4/5/2013 9:00:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 683245.625
Date Finished Drilling: 4/5/2013 10:40:00 AM	Core Size: 3 in	Boring Total Depth: 21 ft
Logged By: MI	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: Site 143 - A15A		Surface Elevation: 12.8 ft NAVD88

(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	GA Class	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	1	0.0	dry	2	ASPHALT		ASPHALT	
1		0.0		3	FILL		fine to medium SAND, some medium gravel, (7.5YR 2.5/3) very dark brown, non plastic, loose, dry, no odor, no staining.	
2	2	0.0	slightly moist	3	FILL		fine to medium SAND, some medium gravel, (5YR 4/4) reddish brown, non plastic, loose, slightly moist, no odor, no staining.	
2		0.0	slightly moist	3	FILL		fine to medium SAND, some medium gravel, (5YR 4/4) reddish brown, non plastic, loose, slightly moist, no odor, no staining.	
3		0.0	slightly moist	3	FILL		fine to medium SAND, some medium gravel, (5YR 4/4) reddish brown, non plastic, loose, slightly moist, no odor, no staining.	
4	2	0.0	slightly moist	3	FILL		fine to medium SAND, some medium gravel, (5YR 4/4) reddish brown, non plastic, loose, slightly moist, no odor, no staining.	
4		0.0	slightly moist	3	FILL		fine to medium SAND, some medium gravel, (5YR 4/4) reddish brown, non plastic, loose, slightly moist, no odor, no staining.	
5		0.0	slightly moist	6	FILL		fine to medium SAND, some medium gravel, (5YR 4/4) reddish brown, non plastic, loose, slightly moist, no odor, no staining.	143-P3A-A15A-5.0-5.5
6	1.4						fine SAND, trace fine gravel, trace coal, cinders, (7.5YR 2.5/1) black, non plastic, loose, slightly moist, no odor, no staining.	
7		0.0	moist	3	FILL		NO RECOVERY	143-P3A-A15A-7.0-7.5
8	1.7	0.0	slightly moist	6	FILL		SILT, little fine sand, (7.5YR 5/6) strong brown, non plastic, soft, moist, no odor, no staining.	143-P3A-A15A-7.0-7.5X
9				NR	NR		ASH, some fine sand, some wood fragments, trace cinders, brick, non plastic, loose, slightly moist, no odor, no staining.	
9		0.0	moist	3	FILL		NO RECOVERY	143-P3A-A15A-9.0-9.5
10	1.5						fine silty SAND, little medium gravel, trace concrete, (7.5YR 3/2) dark brown, non plastic, dense, moist, no odor, no staining.	
11				NR	NR		NO RECOVERY	
11		0.0	moist	3	FILL		fine silty SAND, little fine gravel, trace brick, (7.5YR 3/2) dark brown, non plastic, soft, moist, no odor, no staining.	143-P3A-A15A-11.0-11.5
12	2							
13		0.0	moist	3	FILL		fine silty SAND, trace fine gravel, (7.5YR 3/2) dark brown, non plastic, soft, moist, no odor, no staining.	143-P3A-A15A-13.0-13.5
14	2							
14		0.0	slightly moist	3	FILL		fine SAND, some silt, (10YR 5/2) grayish brown, non plastic, dense, slightly moist, no odor, no staining.	
15		0.0		3	FILL		fine to medium SAND, little fine gravel, trace silt.	143-P3A-A15A-15.0-15.5
16	2							
16		0.0	slightly moist	3	FILL		fine SAND, little silt, (10YR 5/2) grayish brown, non plastic, loose, slightly moist, no odor, no staining.	
17		0.0	slightly moist	3	FILL		fine to medium SAND, little fine to medium gravel, trace silt, (2.5YR 4/1) dark reddish gray, non plastic, loose, slightly moist, no odor, no staining.	143-P3A-A15A-17.0-17.5
18	2							143-P3A-A15A-18.0-18.5
18		0.0	slightly moist	10	SM		fine to medium SAND, little fine to medium gravel, trace silt, (2.5YR 4/6) red, non plastic, loose, slightly moist, no odor, no staining. Soils consistent with UNDno.	143-P3A-A15A-18.5-19.0
19		0.0	slightly moist	10	SM		fine to medium SAND, little fine to medium gravel, trace silt, (2.5YR 4/6) red, non plastic, loose, slightly moist, no odor, no staining. Soils consistent with UNDno.	
20	2							143-P3A-A15A-20.0-20.5
20		0.0	slightly moist					
21								

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick 3) No CCPW (COPR or GGM) present in any interval of this boring.

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 610735.3125
Date Started Drilling: 4/5/2013 11:10:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 683232.125
Date Finished Drilling: 4/5/2013 2:20:00 PM	Core Size: 3 in	Boring Total Depth: 17 ft
Logged By: MI	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: Site 143 - B15A		Surface Elevation: 12.8 ft NAVD88

(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	GA Class	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	1	0.0	dry	2	ASPHALT		ASPHALT	
1		0.0		6	FILL		fine silty SAND, little medium gravel, trace ash, cinders, coal, (7.5YR 2.5/2) very dark brown, non plastic, loose, dry, no odor, no staining.	
2	2	0.0	slightly moist	3	FILL		fine SAND, some fine to coarse gravel, trace wood fragments, (5YR 4/4) reddish brown, non plastic, loose, slightly moist, no odor, no staining.	
2		0.0		3	FILL		fine SAND, some fine to coarse gravel, trace wood fragments, (5YR 4/4) reddish brown, non plastic, loose, slightly moist, no odor, no staining.	
3		0.0	dry	6	FILL		fine silty SAND, some medium gravel, some coal, cinders, (7.5YR 3/1) very dark gray, non plastic, loose, dry, no odor, no staining.	
4	2	0.0	dry	3	FILL		fine silty SAND, some medium gravel, some coal, cinders, (7.5YR 3/1) very dark gray, non plastic, loose, dry, no odor, no staining.	
5		0.0	moist	3	FILL		fine silty SAND, some medium gravel, some coal, cinders, (7.5YR 3/1) very dark gray, non plastic, loose, dry, no odor, no staining.	143-P3A-B15A-5.0-5.5
6	1.5	0.0	moist	6	FILL		fine to medium SAND, little fine to medium gravel, trace silt, clay, (5YR 4/3) reddish brown, moist, no odor, no staining.	
7		0.0	moist	6	FILL		fine SAND, little fine to medium gravel, trace coal, cinders, (5YR 4/3) reddish brown (7.5YR 2.5/1) black, moist, no odor, no staining.	143-P3A-B15A-7.0-7.5
8	1.7	0.0	slightly moist	3	FILL		NO RECOVERY	
9		0.0	moist	NR	NR		fine SAND, little fine to medium gravel, trace coal, cinders, (5YR 4/3) reddish brown (7.5YR 2.5/1) black, moist, no odor, no staining.	143-P3A-B15A-9.0-9.5
10	0.6	0.0		6	FILL		fine SAND, little silt, trace wood fragments, (10YR 5/2) grayish brown, non plastic, hard, slightly moist, no odor, no staining.	
11		0.0	moist	3	FILL		NO RECOVERY	
12	2	0.0	moist	3	FILL		fine silty SAND, with ash trace ceramics, cinders, (10YR 4/1) dark gray, non plastic loose, moist no odor no staining	143-P3A-B15A-11.0-11.5
13		0.0	moist	3	FILL		fine silty SAND, with ash, little wood fragments, trace ceramics, cinders, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining.	
14	2	0.0	moist	9	OL		fine SAND, little silt, (7.5YR 3/2) dark brown, non plastic, loose, moist, no odor, no staining.	143-P3A-B15A-13.0-13.5
14		0.0	moist	10	MH		SILT, little fine sand, trace roots, (7.5YR 3/2) dark brown, non plastic, soft, moist, no odor, no staining.	143-P3A-B15A-13.5-14.0
15		0.0	moist	10	SM		SILT, little fine sand, trace roots, (7.5YR 3/2) dark brown, non plastic, soft, moist, no odor, no staining.	
16	2	0.0	moist				UNDorg SILT, 90% organic silt, 10% organic fibers, (7.5YR 2.5/1) black, low plasticity, soft, moist, moderate organic odor, no staining. Soils consistent with UNDorg.	
17		0.0	moist				UNDno SILT, some roots, (10YR 5/4) yellowish brown, low plasticity, soft, moist, no odor, no staining. Soils consistent with UNDno.	
							fine silty SAND, trace roots, trace fine to coarse gravel, (10YR 4/2) dark grayish brown, non plastic, loose, moist, no odor, no staining. Soils consistent with UNDno.	

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick 3) No CCPW (COPR or GGM) present in any interval of this boring.



30 Knightsbridge Road, Piscataway, NJ 08854
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Boring ID: 143-P3A-C15A

Page: 1

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Soft Dig/Geoprobe	Coordinates (NJSPNAD83) x: 610762.125
Date Started Drilling: 4/10/2013 10:15:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 683218.625
Date Finished Drilling: 4/10/2013 2:25:00 PM	Core Size: 3 in	Boring Total Depth: 15 ft
Logged By: MI	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: Site 143 - C15A		Surface Elevation: 12.7 ft NAVD88

(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	GA Class	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
0.2	0.0			2	ASPHALT		ASPHALT	
0.8	0.0		dry to sl. moist	6	FILL		medium SAND, with fine to coarse gravel, little coal, cinders, (7.5YR 2.5/1) black, non plastic, loose, dry to slightly moist.	
1	1	0.0	dry	3	FILL		fine SAND, little gravel, trace brick, (7.5YR 3/2) dark brown, non plastic, loose, dry, no odor, no staining.	
2	1	0.0	slightly moist	6	FILL		fine to medium SAND, some fine gravel, trace cinders, ash, coal, (7.5YR 2.5/1) black, non plastic, loose, slightly moist, no odor, no staining.	
3	1	0.0	slightly moist	6	FILL		fine to medium SAND, some fine gravel, trace cinders, ash, coal, (7.5YR 2.5/1) black, non plastic, loose, slightly moist, no odor, no staining.	
4	1	0.0	slightly moist	6	FILL		fine to medium SAND, some fine gravel, trace cinders, ash, coal, (7.5YR 2.5/1) black, non plastic, loose, slightly moist, no odor, no staining.	
5		0.0	moist	3	FILL		fine to medium SAND, some fine gravel, trace cinders, ash, coal, (7.5YR 2.5/1) black, non plastic, loose, slightly moist, no odor, no staining.	143-P3A-C15A-5.0-5.5
6	1.3	0.0	slightly moist	3	FILL		SILT, some fine to medium sand, little fine to coarse gravel, (5YR 4/3) reddish brown, non plastic, soft, moist, no odor, no staining.	
7		0.0	moist	3	FILL		fine to medium SAND, trace fine to coarse gravel, (7.5YR 4/1) dark gray, non plastic, loose, slightly moist, no odor, no staining.	143-P3A-C15A-7.0-7.5
8	2						NO RECOVERY	
9		0.0	slightly moist	3	FILL		SILT, some fine sand, little fine to medium gravel, (10YR 4/2) dark grayish brown, non plastic, soft, moist, no odor, no staining.	
10	1.3			6	FILL		fine to medium SAND, some wood fragments, trace fine to coarse gravel, (7.5YR 2.5/1) black, non plastic loose, slightly moist, no odor, no staining.	143-P3A-C15A-9.0-9.5
11				NR	NR		fine silty SAND, with ash, some cinders, coal, brick, trace wood fragments, (7.5YR 4/1) dark gray, non plastic, loose.	
12	2	0.0	moist	3	FILL		NO RECOVERY	143-P3A-C15A-11.0-11.5
13		0.0	moist	3	FILL		SILT, little fine sand, fine to coarse gravel, trace brick, (10YR 3/6) dark yellowish brown, non plastic, soft, moist, no odor, no staining.	143-P3A-C15A-12.3-12.8
14	2	0.0	moist	9	OL		fine to medium SAND, and ash, little fine gravel, (7.5YR 3/1) very dark gray (10YR 4/2) dark grayish brown, non plastic, dense, moist, no odor, no staining.	143-P3A-C15A-12.8-13.3
15		2.1	dry	7	PT		UNDorg SILT, 90% organic silt, 10% organic fibers, (7.5YR 2.5/1) black, low plasticity, soft, moist, slight organic odor, no staining. Soils consistent with UNDorg.	
							UNDorg SILT, 90% organic silt, 10% organic fibers, (7.5YR 2.5/1) black, low plasticity soft, moist, slight organic odor, no staining. Soils consistent with UNDorg.	
							PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (7.5YR 3/3) dark brown, non plastic, stiff, dry, strong organic odor. Soils consistent with MM.	

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick 3) No CCPW (COPR or GGM) present in any interval of this boring.

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Soft Dig/Geoprobe	Coordinates (NJSPNAD83) x: 610815.8125
Date Started Drilling: 4/9/2013 9:15:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 683191.625
Date Finished Drilling: 4/9/2013 11:45:00 AM	Core Size: 3 in	Boring Total Depth: 17 ft
Logged By: MI	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: Site 143 - E15A		Surface Elevation: 12.6 ft NAVD88

(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	GA Class	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	1	0.0	dry	6	FILL		medium SAND, some coal, cinders, (7.5YR 3/1) very dark gray, non plastic, loose, dry, no odor, no staining.	
2	2	0.0	dry	6	FILL		medium SAND, some coal, cinders, (7.5YR 3/1) very dark gray, non plastic, loose, dry, no odor, no staining.	
3	2	0.0	dry	6	FILL		medium to coarse SAND, some coal, cinders, (7.5YR 3/1) very dark gray, non plastic, loose, dry, no odor, no staining.	
4	2	0.0	dry	6	FILL		fine to medium SAND, some coal, cinders, little wood fragments, (7.5YR 3/1) very dark gray, non plastic, loose, dry, no odor, no staining.	
5	1.2	0.0	dry	3	FILL		fine to medium SAND, some fine to coarse gravel, little wood fragments, (7.5YR 3/1) very dark gray, non plastic, loose, dry, no odor, no staining.	
6	1.2	0.0	saturated	6	FILL		fine silty SAND, little fine to coarse gravel, trace coal, (7.5YR 3/3) dark brown, non plastic, soft, saturated, no odor, no staining.	143-P3A-E15A-5.0-5.5
7	1.2	0.0	moist	6	FILL		fine SAND, little fine to coarse gravel, little coal, (7.5YR 2.5/1) black, non plastic, loose, moist, no odor, no staining.	
8	1.4	0.0	saturated	6	FILL		fine silty SAND, little fine to coarse gravel, trace coal, (7.5YR 3/3) dark brown, non plastic, soft, saturated, no odor, no staining.	
9	1.4	0.0	slightly moist	3	FILL		NO RECOVERY	
10	1.3	0.0	moist	6	FILL		fine silty SAND, some fine to coarse gravel, little coal, (7.5YR 2.5/2) very dark brown, non plastic, soft, saturated, no odor, no staining.	143-P3A-E15A-9.0-9.5
11	1.3	0.0	moist	NR	NR		medium SAND, little fine to medium gravel, little brick, (5YR 3/2) dark reddish brown, non plastic, loose, slightly moist, no odor, no staining.	
12	2	0.0	moist	6	FILL		NO RECOVERY	143-P3A-E15A-11.0-11.5
13	2	0.0	moist	3	FILL		fine to medium SAND, some ash, little coal, cinders, brick, wood fragments, (7.5YR 3/1) very dark gray, non plastic, loose, moist, no odor, no staining.	
14	2	0.0	moist	3	FILL		NO RECOVERY	143-P3A-E15A-13.0-13.5
15	2	0.0	moist	3	FILL		fine SAND, some wood fragments, little silt, (7.5YR 3/4) dark brown, non plastic, loose to hard, moist, no odor, no staining.	143-P3A-E15A-14.1-14.6
16	2	1.3	dry to sl. moist	9	OL		fine SAND, some fine to medium gravel, little silt, brick silt, (7.5YR 3/4) dark brown, non plastic, loose to hard, moist, no odor, no staining.	143-P3A-E15A-14.6-15.1
17	2	1.3	dry to sl. moist	7	PT		SILT, little fine sand, trace roots, (7.5YR 2.5/3) very dark brown, low plasticity, soft, moist, no odor, no staining.	
			moist	7	PT		UNDorg SILT, 90% organic silt, 10% organic fibers, (7.5YR 2.5/1) black, low plasticity, soft, moist, slight organic odor, no staining. Soils consistent with UNDorg.	
							PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (7.5YR 3/2) dark brown, non plastic stiff, dry to slightly moist, strong organic odor, no staining. Soils consistent with MM.	
							PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (7.5YR 3/2) dark brown, non plastic, stiff, dry to slightly moist, strong organic odor, no staining. Soils consistent with MM.	

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick 3) No CCPW (COPR or GGM) present in any interval of this boring.



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Boring ID: 143-P3A-F15A

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Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Soft Dig/Geoprobe	Coordinates (NJSPNAD83) x: 610842.5
Date Started Drilling: 4/9/2013 9:00:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 683178.125
Date Finished Drilling: 4/11/2013 10:25:00 AM	Core Size: 3 in	Boring Total Depth: 13 ft
Logged By: MI	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: Site 143 - F15A		Surface Elevation: 12.8 ft NAVD88

(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	GA Class	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	1	0.0	dry	3	FILL		fine to medium SAND, with medium gravel, trace wood fragments, little fill material, (7.5YR 3/2) dark brown, non plastic, loose, dry, no odor, no staining.	
2	1	0.0	slightly moist	3	FILL		medium SAND, with ash and fine gravel, trace fill material, (7.5YR 4/1) dark gray, non plastic, loose, slightly moist, no odor, no staining.	
3	2	0.0	dry	6	FILL		fine silty SAND, with medium to coarse gravel, little coal, cinders, brick, (7.5YR 3/1) very dark gray, non plastic, loose, dry, no odor, no staining.	
4	1	0.0	dry	6	FILL		fine silty SAND, with medium to coarse gravel, little coal, cinders, brick, (7.5YR 3/1) very dark gray, non plastic, loose, dry, no odor, no staining.	
5	1	0.0	moist	6	FILL		fine silty SAND, with ash, little cinders, coal, brick, (10YR 4/2) dark grayish brown, non plastic, soft to loose, moist, no odor, no staining.	143-P3A-F15A-5.0-5.5
6		0.0	moist	6	FILL		fine SAND, little fine to coarse gravel, little ash, cinders, brick, coal, (7.5YR 3/2) dark brown, non plastic, loose, moist, no odor, no staining.	
7	2	0.0	moist	6	FILL		NO RECOVERY	143-P3A-F15A-7.0-7.5
8		0.0	moist	6	FILL		ASH, some cinders, coal, brick, little fine to coarse gravel, (7.5YR 3/1) very dark gray, non plastic, loose, moist, no odor, no staining.	
9	2	0.0	moist	6	FILL		SILT, little fine to coarse gravel, trace coal, (10YR 4/6) dark yellowish brown, non plastic, soft, moist, no odor, no staining.	143-P3A-F15A-9.0-9.5
10							SILT, little fine to medium gravel, little coal and cinders, (10YR 4/2) dark grayish brown, non plastic, soft, moist, no odor, no staining.	
11	2	0.0	moist	3	FILL		SILT, some fine to medium sand, little roots, fine to coarse gravel, (10YR 6/2) light brownish gray, non plastic, soft, moist, no odor, no staining.	143-P3A-F15A-11.0-11.5
12		1.9		7	PT		PEAT (degraded vegetated material), 75% organic fibers, 25% organic silt, (7.5YR 3/2) dark brown, non plastic, stiff. Soils consistent with MM.	143-P3A-F15A-11.5-12.0
13								

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick 3) No CCPW (COPR or GGM) present in any interval of this boring.



30 Knightsbridge Road, Piscataway, NJ 08854
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Boring ID: 143-P3A-G15A

Page: 1

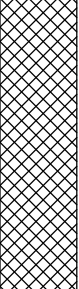














Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Soft Dig/Geoprobe	Coordinates (NJSPNAD83) x: 610869.3125
Date Started Drilling: 4/9/2013 2:00:00 PM	Rig Type:	Coordinates (NJSPNAD83) y: 683164.625
Date Finished Drilling: 4/10/2013 8:30:00 AM	Core Size: 3 in	Boring Total Depth: 14 ft
Logged By: MI	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: Site 143 - G15A		Surface Elevation: 11.8 ft NAVD88

(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
0 - 1	1	0.0		FILL		fine SAND, trace silt with fill material, and brick, (7.5YR 3/2) dark brown, non plastic, loose.	
1 - 2	1	0.0	dry to moist	FILL		fine to medium silty SAND, with medium gravel, trace fill material, brick, (7.5YR 3/3) dark brown, non plastic, loose, dry to moist.	
2 - 3	1	0.0	wet to moist	FILL		coarse SAND, little silt, little fine to medium gravel, (7.5YR 3/2) dark brown, non plastic, loose, wet to moist.	
3 - 4	1	0.0	wet to moist	FILL		coarse SAND, little silt, little fine to medium gravel, (7.5YR 3/2) dark brown, non plastic, loose, wet to moist.	
4 - 5	1	0.0	moist	FILL		fine SAND, with silt and medium gravel, (7.5YR 3/2) dark brown, non plastic, loose.	
5 - 6	1.3	0.0	moist	FILL		ASH, some ceramics, little coal, brick and cinders, (7.5YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining.	143-P3A-G15A-5.0-5.5
6 - 7				NR		NO RECOVERY	
7 - 8	1.6	0.0	moist	FILL		ASH, some fine gravel, little coal, brick, cinders, wood fragments, (7.5YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining.	143-P3A-G15A-7.0-7.5
8 - 9				NR		NO RECOVERY	
9 - 10	1.4	0.0	moist	FILL		fine silty SAND, some ash, little fine to coarse gravel, (7.5YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining.	143-P3A-G15A-9.0-9.5
10 - 11				NR		NO RECOVERY	
11 - 12	2	0.0	moist	FILL		SILT, some fine to coarse gravel, little ash, (5YR 4/2) dark reddish gray, non plastic, loose, moist, no odor, no staining.	143-P3A-G15A-11.0-11.5
12 - 13		1.4	dry	PT		fine silty SAND, little fine to coarse gravel, (5YR 3/3) dark reddish brown, non plastic, loose, moist, no odor, no staining.	143-P3A-G15A-12.0-12.5 143-P3A-G15A-12.0-12.5X
13 - 14	1	1.6		PT		PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (7.5YR 3/2) dark brown, non plastic, stiff, dry, strong organic odor, no staining. Soils consistent with MM.	143-P3A-G15A-12.5-13.0
						PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (7.5YR 3/3) dark brown, non plastic, stiff, strong organic odor. Soils consistent with MM.	

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick 3) No CCPW (COPR or GGM) present in any interval of this boring.

Project Name: PPG Garfield Ave	Drilling Company: Ameridrill	
Project Number: 60580814	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 610800
Date Started Drilling: 10/3/2005	Rig Type:	Coordinates (NJSPNAD83) y: 683259
Date Finished Drilling: 10/3/2005	Core Size: 2 inches	Boring Total Depth: 44 ft
Logged By: Richard Firely	Project Manager:	Depth to Water:
Physical Location: as drilled		Surface Elevation: 12.5 ft NAVD88

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	4.8			FILL		Not Logged	
2							
3							
4							
5	2.8		saturated	FILL		Very dark gray (10YR 3/1) silt and fine sand, trace organics, trace gravel	
6			saturated	NULL		End of Boring	
7			saturated	FILL		Yellowish brown (10YR 5/6) silt and gravel, loose	
8				FILL		Dark brown (7.5YR 3/2) silt, little fine sand and medium to coarse gravel, loose	
9	2.2			NR		No recovery	114-A4MW4VB10-10.5
10							
11							
12							
13	2.2		saturated	FILL		Black (7.5YR 2.5/1) gravel, little fine sand and silt, loose	
14			saturated	FILL		Black (7.5YR 2.5/1) fine sand and silt, trace gravel, loose	
15				FILL		Strong brown (7.5YR 3/2) fine sand and silt, trace gravel, loose	
16				FILL		Wood	
17	2.2			NR		No recovery	114-A4MW4VC-16-16.5
18							
19							
20							
21	2.2		saturated	FILL		Black (7.5YR 2.5/1) fine to coarse sand and gravel, loose	
22			moist	FILL		Dark brown (7.5YR 3/3) fine sand and silt, slight cohesive	
23			saturated	FILL		Gray (7.5YR 6/1) gravel, loose	
24			moist	FILL		Dark brown (7.5YR 3/3) silt, little fine sand and clay, slight cohesive	
25	2.2			NR		No recovery	A4MW-4VD
26							
27							
28							
29	2.2		moist	PEAT		Black (7.5YR 2.5/1) peat	
30							
31			saturated	SILT		Dark gray (7.5YR 4/1) fine sand and silt, little clay, trace organics, slight cohesive	
32			moist	CLAY		Gray (7.5YR 5/1) clay, some silt, trace organics, cohesive	
33	2.2			NR		No recovery	
34							

Notes:
bgs - below surface grade COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits MGP - manufactured gas plant
MM - meadow mat GGM - green grey mud UNDorg - organic undisturbed native deposits CCPW - chromate chemical production waste

Comments:

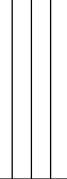
Project Name: PPG Garfield Ave	Drilling Company: Ameridrill	
Project Number: 60580814	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 610800
Date Started Drilling: 10/3/2005	Rig Type:	Coordinates (NJSPNAD83) y: 683259
Date Finished Drilling: 10/3/2005	Core Size: 2 inches	Boring Total Depth: 44 ft
Logged By: Richard Firely	Project Manager:	Depth to Water:
Physical Location: as drilled		Surface Elevation: 12.5 ft NAVD88

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
21	3		moist	SILT		Gray (7.5YR 5/1) silt and clay, trace strong brown color (7.5YR 4/6), cohesive	A4MW-4VE
22			saturated	SAND		Dark reddish brown (2.5YR 3/4) fine to medium sand, little silt and medium to coarse gravel, loose	
23				NR		No recovery	
24	3.3		saturated	SAND		Dark reddish brown (2.5YR 3/4) fine sand, loose	
25				NR		No recovery	
26				NR		No recovery	
27	1.6		saturated	SAND		Dark reddish brown (2.5YR 3/4) fine sand, loose	
28				NR		No recovery	
29				NR		No recovery	
30	2		saturated	SAND		Dark reddish brown (2.5YR 3/4) fine sand, little silt, slight cohesive	114-A4MW4VG-36-36.5
31				NR		No recovery	
32			moist	SILT		Dark reddish brown to weak red (2.5YR 3/4 to 2.5YR 4/2) silt and clay, cohesive	114-A4MW4-VH-37.4-37
33				NR		No recovery	
34				NR		No recovery	
35				NR		No recovery	
36							
37							
38							
39							

Notes:
bgs - below surface grade COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits MGP - manufactured gas plant
MM - meadow mat GGM - green grey mud UNDorg - organic undisturbed native deposits CCPW - chromate chemical production waste

Comments:

Project Name: PPG Garfield Ave	Drilling Company: Ameridrill	
Project Number: 60580814	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 610800
Date Started Drilling: 10/3/2005	Rig Type:	Coordinates (NJSPNAD83) y: 683259
Date Finished Drilling: 10/3/2005	Core Size: 2 inches	Boring Total Depth: 44 ft
Logged By: Richard Firely	Project Manager:	Depth to Water:
Physical Location: as drilled		Surface Elevation: 12.5 ft NAVD88

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
41	2.5			SILT		Dark reddish brown to weak red (2.5YR 3/4 to 2.5YR 4/2) silt and clay, cohesive	A4MW-4VI
42							A4MW-4VJ
43				NR		No recovery	
44				NULL		End of Boring	

Notes:
bgs - below surface grade COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits MGP - manufactured gas plant
MM - meadow mat GGM - green grey mud UNDorg - organic undisturbed native deposits CCPW - chromate chemical production waste

Comments:


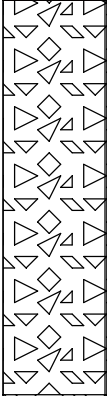
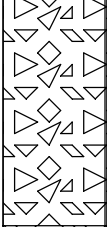
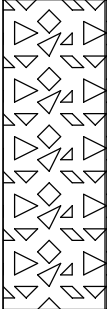
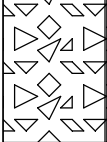
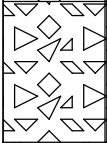
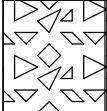
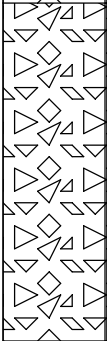
Project Name: PPG Garfield Ave	Drilling Company: Advanced Drilling Inc.	
Project Number: 60580814	Drilling Method: Hollow Stem Auger	Coordinates (NJSPNAD83) x: 610816.41
Date Started Drilling: 12/2/2003	Rig Type:	Coordinates (NJSPNAD83) y: 683245.47
Date Finished Drilling: 12/2/2003	Core Size: 4.25 inches	Boring Total Depth: 20 ft
Logged By: D. Sherman	Project Manager:	Depth to Water:
Physical Location:		Surface Elevation: 12.4 ft NAVD88

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
				ASPHALT		Asphalt	
1	5		dry	FILL		Very dark gray (7.5YR 3/1) coarse to fine SAND, some gravel, little silt. Fill-coal ash, clinker, metal	B4S(0.5-1)
2			wet	FILL		Dark reddish brown (2.5YR 3/3) SILT, some coarse to fine sand, little gravel. Fill-coal ash, clinker, cinder, 50% COPR	
3							
4	5		wet	FILL		Brown (7.5YR 5/4) SILT, some clay, little fine sand. Fill-soda ash, plastic, shells	
5							
6			wet	FILL		Very dark gray (10YR 3/1) SILT, some fine sand, little gravel. Fill-brick, clinker, cinder	B4S(5.5-6)
7	5						
8			wet	FILL		Weak red (2.5YR 4/2) medium to fine SAND, some silt. Fill-root, lime ash, soda ash-like	
9							
10	5		wet	FILL		Weak red (10R 4/4) fine SAND, some gravel, little silt. Fill-brick, wood, lignite, root, cinder	B4S(9.5-10)
11							
12			wet to saturated	FILL		Dark reddish brown (2.5YR 3/4) fine SAND, some silt, little gravel. Fill-brick, cinder, lignite	
13	5						
14			dry	PEAT		Very dark grayish brown (10YR 3/2) PEAT(meadow mat), some silt	B4S(13.5-14)
15							
16	3			NR		No Recovery	B4S(15.5-16)
17							
18			wet	SAND		Weak red (10R 4/3) coarse to fine SAND, some gravel, little silt, till, native	
19							

Notes:
bgs - below surface grade COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits MGP - manufactured gas plant
MM - meadow mat GGM - green grey mud UNDOrg - organic undisturbed native deposits CCPW - chromate chemical production waste

Comments:

<div>ENSR AECOM</div>		Client: PPG		BORING ID: C3		
		Site: PPG - Jersey City, NJ				
Start Date: 8/27/2003		Project: Site Investigation		Page: 1 of 2		
		Coordinates: X-611046.58 Y-683115.86		Depth of Boring: 16.00		
End Date: 8/27/2003		Elevation: 12.5 ft NAVD88		Geologist:		
		Drill Subcontractor: S&S		Driller:		
Depth (ft)	Lithology	Description		PID	Sample ID	Sample Parameters

0		ASPHALT			
		FILL: COPR, yellow (staining), concrete	0.0 ppm	C3 (0.5-1.0)	TAL Metals, Cr+6
2			0.0 ppm	C3 (1.5-2.0)	TAL Metals, Cr+6
			0.0 ppm		
4			0.0 ppm		
		FILL: COKE/SLAG, brick, wood	0.0 ppm		
			0.0 ppm	C3 (5.0-5.5)	TAL Metals, SVOCs, PCBs, VOCs, Cyanide
6			0.0 ppm		
			0.0 ppm		
		FILL: Gray silt (green staining), fine, some fine sand	0.0 ppm		
8					
			0.0 ppm		
		FILL: COKE/SLAG	0.0 ppm		
			0.0 ppm		
		FILL: Gray silt, (yellow staining), fine, some fine sand	0.0 ppm		
10					
			0.0 ppm		
			0.0 ppm	C3 (11.0-11.5)	TAL Metals, Cr+6
12					

NOTES: Coordinates are provided in New Jersey State Plane NAD 1983 Feet.

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: direct push	Coordinates (NJSPNAD83) x: 611350.91
Date Started Drilling: 6/13/2016 8:30:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 682789.21
Date Finished Drilling: 6/13/2016 9:30:00 AM	Core Size: 3.0 in	Boring Total Depth: 20 ft
Logged By: ES	Project Manager: Scott Mikaelian	Depth to Water: NA
Physical Location: Actual - CAR PDI		Surface Elevation: 10.9 ft NAVD88

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
		0.0		ASPHALT		Asphalt and gravel sub-base	
1	4.5		dry	FILL		ASH, some coal, trace glass, (7.5YR 4/1) dark gray, loose, dry, no odor, no staining.	CAR-PDI-AA19A-0.5-1.0
2							CAR-PDI-AA19A-2.0-2.5
3			dry	FILL		fine to medium SAND, little to trace ash, trace coarse gravel, (7.5YR 6/3) light brown, medium dense, dry, no odor, no staining.	
4							CAR-PDI-AA19A-4.0-4.5
5	3.5	0.0		NR		NO RECOVERY	
6			wet	FILL		fine silty SAND, little fine gravel, trace ash, (5YR 4/3) reddish brown, medium dense, wet, no odor, no staining, water at 5.0 feet.	
7			wet	FILL		ASH, some silt and fine sand, trace wood, (7.5YR 2.5/1) black, medium dense, wet, no odor, no staining.	CAR-PDI-AA19A-6.0-6.5
8			wet	FILL		fine silty SAND, fine little gravel, (5YR 4/4) reddish brown, medium dense, wet, no odor, no staining.	CAR-PDI-AA19A-8.0-8.5
9	5	0.0		NR		NO RECOVERY	
10			wet	FILL		fine silty SAND, little organics, trace fine gravel, (5YR 4/3) reddish brown, medium dense, wet, no odor, no staining.	CAR-PDI-AA19A-10.0-10.5
11							
12							CAR-PDI-AA19A-12.0-12.5
13	5	0.0					
14							CAR-PDI-AA19A-14.0-14.5
15							CAR-PDI-AA19A-14.7-15.2
16			wet dry	FILL PT		fine silty SAND, trace metal, (5YR 4/3) reddish brown, medium dense, wet, no odor, no staining.	CAR-PDI-AA19A-15.2-15.7
17	5		dry	OL		PEAT (degraded vegetated material), 75% organic fibers, 25% organic silt, (5YR 3/3) dark reddish brown, stiff, dry, no odor, no staining. Soils consistent with MM.	
18						Organic SILT, 75% organic silt, 25% organic fibers, (7.5YR 4/3) brown, medium stiff, dry, no odor, no staining. Soils consistent with UNDorg.	
19							
20			moist	SM		fine to medium silty SAND, (5Y 5/1) gray, medium dense, moist, no odor, no staining. Soils consistent with UNDno.	

Notes:
bgs - below surface grade COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits MGP - manufactured gas plant
MM - meadow mat GGM - green grey mud UNDorg - organic undisturbed native deposits CCPW - chromate chemical production waste

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick 3) No CCPW (COPR or GGM) present in any interval of this boring.

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: direct push	Coordinates (NJSPNAD83) x: 611330.21
Date Started Drilling: 6/9/2016 11:05:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 682753.43
Date Finished Drilling: 6/9/2016 12:00:00 PM	Core Size: 3.0 in	Boring Total Depth: 20 ft
Logged By: ES	Project Manager: Scott Mikaelian	Depth to Water: NA
Physical Location: Actual - CAR PDI		Surface Elevation: 10.7 ft NAVD88

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
		13.6		ASPHALT		Asphalt	
1				CONCRETE		Concrete	CAR-PDI-AA20A-1.0-1.5
2	4.5		dry	FILL		fine to medium SAND, (7.5YR 6/3) light brown, medium dense, dry, no odor, no staining.	CAR-PDI-AA20A-2.0-2.5
3							
4			dry	FILL		ASH, (5Y 5/1) gray, loose, dry, slight petroleum odor, no staining.	CAR-PDI-AA20A-4.0-4.5
5				NR		NO RECOVERY	
6		0.0	wet	FILL		fine to medium SAND, some ash, (5Y 5/1) gray, medium dense, wet, no odor, no staining.	CAR-PDI-AA20A-6.0-6.5
7	3.5						
8			wet	FILL		SILT, (5Y 5/1) gray, soft, wet, slight petroleum odor and staining.	CAR-PDI-AA20A-8.0-8.5
9				NR		NO RECOVERY	
10		0.0	wet	FILL		fine to medium silty SAND, some fine gravel, (5YR 4/3) reddish brown, medium dense, wet, no odor, no staining.	CAR-PDI-AA20A-10.0-10.5
11	4.5						
12							CAR-PDI-AA20A-12.0-12.5
13							
14							CAR-PDI-AA20A-14.0-14.5
15				NR		NO RECOVERY	
16		0.0	wet	FILL		fine to medium silty SAND, trace fine gravel, (5YR 4/3) reddish brown, medium dense, wet, no odor, no staining.	CAR-PDI-AA20A-15.0-15.5
17	5		dry	PT		PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (5YR 3/3) dark reddish brown, stiff, dry, moderate organic odor, no staining. Soils consistent with MM.	CAR-PDI-AA20A-15.5-16.0
18							
19							
20			moist	OL		Organic SILT, 80% organic SILT, 20% organic fibers, (7.5YR 4/2) brown, soft, moist, no odor, no staining. Soils consistent with UNDorg.	

Notes:
bgs - below surface grade COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits MGP - manufactured gas plant
MM - meadow mat GGM - green grey mud UNDorg - organic undisturbed native deposits CCPW - chromate chemical production waste

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick 3) No CCPW (COPR or GGM) present in any interval of this boring.

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: direct push	Coordinates (NJSPNAD83) x: 611363.12
Date Started Drilling: 6/10/2016 8:15:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 682749.54
Date Finished Drilling: 6/10/2016 9:00:00 AM	Core Size: 3.0 in	Boring Total Depth: 15 ft
Logged By: ES	Project Manager: Scott Mikaelian	Depth to Water: NA
Physical Location: Actual - CAR PDI		Surface Elevation: 10.7 ft NAVD88

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	4	0.0		ASPHALT		Asphalt and gravel sub-base	
2			dry	FILL		fine to medium SAND, little ash, trace coal, (7.5YR 3/3) dark brown, medium dense, dry, no odor, no staining.	
3			dry	FILL		ASH, little coal, (5Y 4/1) dark gray, loose, dry, no odor, no staining.	
4				NR		NO RECOVERY	
5	5	3.2	moist to wet	FILL		ASH, little wood, trace coal, (5Y 5/1) gray, loose, moist to wet, slight petroleum odor, no staining, water at 6.0 feet.	
6							
7							
8							
9	3.5	307	wet	FILL		fine silty SAND, trace fine gravel, (5YR 4/3) reddish brown, medium dense, wet, strong petroleum odor and staining, sheen.	CAR-PDI-BB20A-10.0-10.5
10							
11							
12							
13				NR		NO RECOVERY	
14							
15							

Notes:
bgs - below surface grade COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits MGP - manufactured gas plant
MM - meadow mat GGM - green grey mud UNOrg - organic undisturbed native deposits CCPW - chromate chemical production waste

Comments: 1) 3 attempts were made to obtain best recovery 2) No CCPW (COPR or GGM) present in any interval of this boring.

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: direct push	Coordinates (NJSPNAD83) x: 611393.78
Date Started Drilling: 6/10/2016 9:10:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 682735.13
Date Finished Drilling: 6/10/2016 9:45:00 AM	Core Size: 3.0 in	Boring Total Depth: 15 ft
Logged By: ES	Project Manager: Scott Mikaelian	Depth to Water: NA
Physical Location: Actual - CAR PDI		Surface Elevation: 10.1 ft NAVD88

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	3.5	0.0		ASPHALT		Asphalt and gravel sub-base	
2			dry	FILL		fine to medium SAND, some fine gravel, (7.5YR 4/2) brown, medium dense, dry, no odor, no staining.	
3				NR		NO RECOVERY	
4	3	12.2					
5			moist to wet	FILL		fine to coarse SAND, some fine to medium gravel, (5Y 5/1) gray, moist to wet, slight petroleum odor and staining, water at 6.0 feet.	
6			wet	FILL		fine silty SAND, little fine gravel, (5YR 4/3) reddish brown, medium dense, wet, no odor, no staining.	
7	5	1.4		NR		NO RECOVERY	
8							
9							
10	5	1.4	wet	FILL		fine silty SAND, little fine gravel, (5YR 4/3) reddish brown, medium dense, wet, no odor, no staining.	CAR-PDI-CC20A-10.0-10.5
11							
12							CAR-PDI-CC20A-12.0-12.5
13			dry	PT		PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (5YR 3/3) dark reddish brown, stiff, dry, slight petroleum odor, no staining. Soils consistent with MM. Organic SILT, 80% organic silt, 20% organic fibers, (7.5YR 4/2) brown, soft, moist, slight organic odor, no staining. Soils consistent with UNDorg.	CAR-PDI-CC20A-12.5-13.0
14			moist	OL			CAR-PDI-CC20A-13.0-13.5
15				NR		NO RECOVERY	

Notes:
bgs - below surface grade COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits MGP - manufactured gas plant
MM - meadow mat GGM - green grey mud UNDorg - organic undisturbed native deposits CCPW - chromate chemical production waste

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick 3) No CCPW (COPR or GGM) present in any interval of this boring.

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: direct push	Coordinates (NJSPNAD83) x: 611377.53
Date Started Drilling: 6/9/2016 10:30:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 682702.81
Date Finished Drilling: 6/9/2016 11:30:00 AM	Core Size: 3.0 in	Boring Total Depth: 15 ft
Logged By: ES	Project Manager: Scott Mikaelian	Depth to Water: NA
Physical Location: Actual - CAR PDI		Surface Elevation: 10.7 ft NAVD88

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	4.5	0.0		ASPHALT		Asphalt and gravel sub-base	
2			moist	FILL		fine to medium SAND, little wood, trace ash, (5Y 5/1) gray, medium dense, moist, no odor, no staining.	
3			moist	FILL		fine to medium SAND, (7.5YR 6/3) light brown, medium dense, moist, no odor, no staining.	CAR-PDI-CC21A-2.0-2.5
4			moist	FILL		ASH, trace metal, (5Y 4/1) dark gray, loose, moist, no odor, no staining.	CAR-PDI-CC21A-4.0-4.5
5	3.5	0.0		NR		NO RECOVERY	
6			wet	FILL		ASH, some fine to medium sand, trace wood, (5Y 5/1) gray, loose, wet, no odor, no staining, water at 5.0 feet.	
7			wet	FILL		fine to medium silty SAND, some gravel, trace wood, (5YR 4/3) reddish brown, medium dense, wet, no odor, black staining.	CAR-PDI-CC21A-8.0-8.5
8	4	0.0		NR		NO RECOVERY	
9							
10			wet	FILL		fine to medium silty SAND, some fine gravel, (5YR 4/3) reddish brown, dense, wet, no odor, no staining.	CAR-PDI-CC21A-11.0-11.5
11							
12	4	0.0	dry	PT		PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (5YR 3/3) dark reddish brown, stiff, dry, slight organic odor, no staining. Soils consistent with MM.	CAR-PDI-CC21A-11.5-12.0
13			moist	OL		Organic SILT, 80% organic SILT, 20% organic fibers, (5Y 5/1) gray, soft, moist, no odor, no staining. Soils consistent with UNDorg.	
14				NR		NO RECOVERY	
15							

Notes:
bgs - below surface grade COPR - chromite ore processing residue UNDo - non-organic undisturbed native deposits MGP - manufactured gas plant
MM - meadow mat GGM - green grey mud UNDo - organic undisturbed native deposits CCPW - chromate chemical production waste

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick 3) No CCPW (COPR or GGM) present in any interval of this boring.







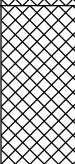


Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: direct push	Coordinates (NJSPNAD83) x: 611415.46
Date Started Drilling: 6/13/2016 9:40:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 682721.33
Date Finished Drilling: 6/13/2016 10:40:00 AM	Core Size: 3.0 in	Boring Total Depth: 15 ft
Logged By: ES	Project Manager: Scott Mikaelian	Depth to Water: NA
Physical Location: Actual - CAR PDI		Surface Elevation: 10.7 ft NAVD88

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	5	23.0	dry	ASPHALT		Asphalt and gravel sub-base.	
			dry	FILL		fine to medium SAND, little ash, trace wood, (5Y 2.5/1) black, dense, dry, slight solvent odor, no staining.	
2	3.5	3.0					CAR-PDI-DD20A-4.0-4.5
3							
4							
5							
6	3.5	3.0	wet	FILL		ASH, some fine to medium sand, (5Y 5/1) gray, medium dense, wet, slight solvent odor, no staining, water at 5.0 feet.	CAR-PDI-DD20A-6.0-6.5
7			wet	FILL		SILT, (5Y 5/1) gray, soft, wet, no odor, no staining.	
8			wet	FILL		fine silty SAND, some fine gravel, (5YR 4/3) reddish brown, medium dense, wet, no odor, no staining.	
9				NR		NO RECOVERY	CAR-PDI-DD20A-8.0-8.5
10	4.5	5.0	wet	FILL		fine to medium silty SAND, little fine gravel, trace wood, (5YR 4/4) reddish brown, medium dense, wet, slight solvent odor and black staining.	CAR-PDI-DD20A-10.0-10.5
11							
12							CAR-PDI-DD20A-12.0-12.5
13							CAR-PDI-DD20A-12.5-13.0
14	4.5	5.0	dry	PT		PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (5YR 3/3) dark reddish brown, stiff, dry, slight organic odor, no staining. Soils consistent with MM.	CAR-PDI-DD20A-13.0-13.5
15				NR		NO RECOVERY	
15							

Notes:
bgs - below surface grade COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits MGP - manufactured gas plant
MM - meadow mat GGM - green grey mud UNOrg - organic undisturbed native deposits CCPW - chromate chemical production waste

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick 3) No CCPW (COPR or GGM) present in any interval of this boring.

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: direct push	Coordinates (NJSPNAD83) x: 611401.67
Date Started Drilling: 6/13/2016 10:45:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 682689.25
Date Finished Drilling: 6/13/2016 11:45:00 AM	Core Size: 3.0 in	Boring Total Depth: 15 ft
Logged By: ES	Project Manager: Scott Mikaelian	Depth to Water: NA
Physical Location: Actual - CAR PDI		Surface Elevation: 10.7 ft NAVD88

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID	
1	4.5	0.0		ASPHALT		Asphalt and gravel sub-base.	CAR-PDI-DD21A-1.5-2.0	
2				CONCRETE		Concrete		
3			dry	FILL		fine to coarse SAND, little fine to medium gravel, trace ash, (7.5YR 2.5/1) black, medium dense, dry, no odor, no staining.		
4			moist	FILL		fine silty SAND, little coal, trace ash, (7.5YR 4/3) brown, medium dense, moist, no odor, no staining.		
5				NR		NO RECOVERY		
6	5	10.0	moist to wet	FILL		ASH, some fine gravel, little fine to medium sand, (5YR 2.5/1) black, loose, moist to wet, slight MGP-like odor, no staining, water at 6.0 feet.	CAR-PDI-DD21A-5.5-6.0	
7			wet	FILL		fine to medium silty SAND, some fine gravel, little ash, trace wood, (5YR 2.5/1) black, medium dense, wet, strong MGP-like odor, product staining.	CAR-PDI-DD21A-7.5-8.0	
8								CAR-PDI-DD21A-9.5-10.0
9								
10	5	8.0	wet	FILL		SILT, little organics, (7.5YR 4/3) brown, soft, wet, strong MGP-like odor, product staining.	CAR-PDI-DD21A-11.5-12.0	
11								
12			wet	FILL		fine silty SAND, little fine gravel, (5YR 4/4) reddish brown, medium dense, wet, slight MGP-like odor, no staining.	CAR-PDI-DD21A-13.5-14.0	
13			dry	PT		PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (5YR 3/3) dark reddish brown, stiff, dry, no odor, no staining. Soils consistent with MM.	CAR-PDI-DD21A-14.0-14.5	
14								
15								

Notes:

bgs - below surface grade
MM - meadow mat

COPR - chromite ore processing residue
GGM - green grey mud

UNDno - non-organic undisturbed native deposits
UNDorg - organic undisturbed native deposits

MGP - manufactured gas plant
CCPW - chromate chemical production waste

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick 3) No CCPW (COPR or GGM) present in any interval of this boring.

PPG - 2012-09 RA PPG LOGS A.GDT - 9/20/16 16:55






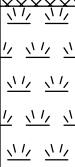
Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Direct PUSH	Coordinates (NJSPNAD83) x: 611431.85
Date Started Drilling: 6/14/2016 7:50:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 682699.37
Date Finished Drilling: 6/14/2016 8:55:00 AM	Core Size: 3.0 in	Boring Total Depth: 20 ft
Logged By: HBB	Project Manager: Scott Mikaelian	Depth to Water: NA
Physical Location: Actual - CAR PDI		Surface Elevation: 10.7 ft NAVD88

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	4.5	19.0	dry to moist	ASPHALT		Asphalt and gravel sub-base	CAR-PDI-EE20A-0.3-0.8
2				FILL		fine GRAVEL, some medium to coarse sand, trace ash and fill debris, (7.5YR 4/2) brown, medium dense, dry to moist, no odor, no staining.	CAR-PDI-EE20A-2.0-2.5
3			moist	FILL		fine silty SAND, trace fine gravel, (7.5YR 4/2) brown, medium dense, moist, no odor, no staining, slight gasoline-like odor, no staining.	CAR-PDI-EE20A-4.0-4.5
4				NR		NO RECOVERY	
5	3.5	60.5	wet	FILL		medium to coarse SAND, little silt, trace fine gravel, cinders and fill debris, (5YR 2.5/1) black, medium dense, moderate gasoline-like odor, no staining, water at 5.0 feet.	CAR-PDI-EE20A-6.0-6.5
6				FILL		fine to medium sandy SILT, (7.5YR 4/2) brown, soft, saturated, no staining, slight gasoline-like odor, no staining.	CAR-PDI-EE20A-8.0-8.5
7			saturated	NR		NO RECOVERY	
8				NR			
9	4.5	0.2	saturated	FILL		fine to medium sandy SILT, trace fine gravel and organics, (7.5YR 4/2) brown, medium dense, saturated, no odor, no staining.	CAR-PDI-EE20A-10.0-10.5
10				FILL			
11			NR	NR		NO RECOVERY	
12				NR			
13	4	0.0	wet	FILL		SILT, trace coal, (7.5YR 4/2) brown, medium stiff, wet, slight organic odor, no staining.	CAR-PDI-EE20A-15.0-15.5
14			dry	PT		PEAT (degraded vegetated material), 90% organic fibers, 10% organic silt, (5YR 3/3) dark reddish brown, stiff, dry, moderate organic odor, no staining. Soils consistent with MM.	CAR-PDI-EE20A-15.5-16.0
15			moist	OL		Organic SILT, 90% organic silt, 10% organic fibers, (5Y 5/1) gray, stiff, moist, slight organic odor, no staining. Soils consistent with UNDno.	
16				NR		NO RECOVERY	
17							
18							
19							
20							

Notes:
bgs - below surface grade COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits MGP - manufactured gas plant
MM - meadow mat GGM - green grey mud UNDorg - organic undisturbed native deposits CCPW - chromate chemical production waste

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick 3) No CCPW (COPR or GGM) present in any interval of this boring.

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: direct push	Coordinates (NJSPNAD83) x: 611430.42
Date Started Drilling: 6/7/2016 11:30:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 682677.6
Date Finished Drilling: 6/7/2016 12:30:00 PM	Core Size: 3.0 in	Boring Total Depth: 15 ft
Logged By: ES	Project Manager: Scott Mikaelian	Depth to Water: NA
Physical Location: Actual - CAR PDI		Surface Elevation: 10.4 ft NAVD88

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	3	0.0		ASPHALT		ASPHALT and gravel sub-base.	
2			dry	FILL		fine to medium SAND, some fine to medium gravel, (5YR 6/3) light reddish brown, medium dense, dry, no odor, no staining.	
3				NR		NO RECOVERY	
4	3	11.7					
5			wet	FILL		fine to coarse SAND, some fine gravel, trace ash, (5YR 4/3) reddish brown, medium dense, wet, slight petroleum odor, product staining, water at 6.0 feet bgs.	
6							
7	3		wet	FILL		SILT, (5Y 2.5/1) black, soft, wet, slight petroleum odor, product staining.	
8				NR		NO RECOVERY	
9							
10	3.5	0.0	wet	FILL		fine silty SAND, some fine gravel, (5YR 4/3) reddish brown, medium dense, wet, no odor, no staining.	CAR-PDI-EE21A-10.5-11.0
11			dry	PT		PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (5YR 3/2) dark reddish brown, stiff, dry, moderate organic odor, no staining. Soils consistent with MM.	CAR-PDI-EE21A-11.0-11.5
12							
13							
14				NR		NO RECOVERY	
15							

Notes:
bgs - below surface grade COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits MGP - manufactured gas plant
MM - meadow mat GGM - green grey mud UNDorg - organic undisturbed native deposits CCPW - chromate chemical production waste

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick 3) No CCPW (COPR or GGM) present in any interval of this boring.


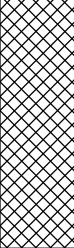





Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: direct push	Coordinates (NJSPNAD83) x: 611421.8
Date Started Drilling: 6/10/2016 10:25:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 682655.8
Date Finished Drilling: 6/10/2016 11:15:00 AM	Core Size: 3.0 in	Boring Total Depth: 15 ft
Logged By: ES	Project Manager: Scott Mikaelian	Depth to Water: NA
Physical Location: Actual - CAR PDI		Surface Elevation: 9.8 ft NAVD88

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	4.5	0.5		ASPHALT		Asphalt and gravel sub-base.	
2				CONCRETE		Concrete	
3			dry	FILL		fine to medium SAND, little fine gravel, (7.5YR 4/3) brown, medium dense, dry, no odor, no staining.	
4			dry to moist	FILL		ASH, (5Y 5/1) gray, loose, dry to moist, no odor, no staining.	
5				NR		NO RECOVERY	
6	2	0.3	moist	FILL		ASH, (5Y 4/1) dark gray, loose, moist, no odor, no staining.	CAR-PDI-EE22A-7.0-7.5
7			moist	FILL		SILT, (7.5YR 3/3) dark brown, soft, moist no odor, no staining.	
8			wet	FILL		fine to medium silty SAND, trace fine gravel, (5YR 4/3) reddish brown, medium dense, wet, no odor, no staining, water at 7.0 feet.	
9				NR		NO RECOVERY	
10	5	0.0	wet	FILL		fine to medium silty SAND, little fine gravel, (5YR 4/3) reddish brown, medium dense, wet, no odor, no staining.	CAR-PDI-EE22A-11.0-11.5
11							
12							
13							CAR-PDI-EE22A-12.7-13.2
14			dry	PT		PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (5YR 3/3) dark reddish brown, stiff, dry, no odor, no staining. Soils consistent with MM.	
15							

Notes:
bgs - below surface grade COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits MGP - manufactured gas plant
MM - meadow mat GGM - green grey mud UNOrg - organic undisturbed native deposits CCPW - chromate chemical production waste

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick 3) No CCPW (COPR or GGM) present in any interval of this boring.

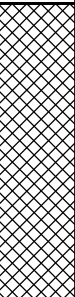
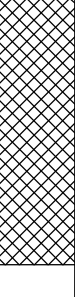
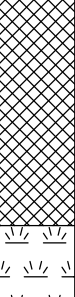

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: direct push	Coordinates (NJSPNAD83) x: 611459.7
Date Started Drilling: 6/7/2016 10:20:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 682658.75
Date Finished Drilling: 6/7/2016 11:20:00 AM	Core Size: 3.0 in	Boring Total Depth: 20 ft
Logged By: ES	Project Manager: Scott Mikaelian	Depth to Water: NA
Physical Location: Actual - CAR PDI		Surface Elevation: 9.8 ft NAVD88

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
		0.0		ASPHALT		ASPHALT and gravel sub-base.	
1	4.5		dry to moist	FILL		fine to medium SAND, little coal fragments, trace ash and wood, (7.5YR 3/2) dark brown, medium dense, dry to moist, no odor, no staining.	CAR-PDI-FF21A-0.7-1.2
2							CAR-PDI-FF21A-2.0-2.5
3							
4							CAR-PDI-FF21A-4.0-4.5
5				NR		NO RECOVERY	
6	3.5	6.7	dry	FILL		fine to medium Gravel, (5Y 5/1) gray, medium dense, dry, no odor, no staining.	
7							CAR-PDI-FF21A-6.0-6.5
8							
9				NR		NO RECOVERY	CAR-PDI-FF21A-8.0-8.5
10	4	0.0	wet	FILL		fine silty SAND, some fine gravel, (5YR 4/3) reddish brown, medium dense, wet, no odor, no staining, light sheen.	CAR-PDI-FF21A-10.0-10.5
11							
12							CAR-PDI-FF21A-12.0-12.5
13							CAR-PDI-FF21A-13.0-13.5
14				PT		PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (5YR 4/3) reddish brown, medium stiff, dry, slight organic odor, no staining. Soils consistent with MM. NO RECOVERY	CAR-PDI-FF21A-13.5-14.0
15			NR				
16	3	0.0	dry	PT		PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (5YR 3/2) dark reddish brown, stiff, dry, slight organic odor, no staining. Soils consistent with MM.	
17							
18							
19				OL		Organic SILT, 80% organic SILT, 20% organic fibers, (7.5YR 4/2) brown, soft, moist, no odor, no staining. Soils consistent with UNDorg.	
20				NR		NO RECOVERY	

Notes:
bgs - below surface grade COPR - chromite ore processing residue UNdno - non-organic undisturbed native deposits MGP - manufactured gas plant
MM - meadow mat GGM - green grey mud UNDorg - organic undisturbed native deposits CCPW - chromate chemical production waste

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick 3) No CCPW (COPR or GGM) present in any interval of this boring.

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: direct push	Coordinates (NJSPNAD83) x: 611484.23
Date Started Drilling: 6/7/2016 9:15:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 682649.09
Date Finished Drilling: 6/7/2016 10:15:00 AM	Core Size: 3.0 in	Boring Total Depth: 15 ft
Logged By: ES	Project Manager: Scott Mikaelian	Depth to Water: NA
Physical Location: Actual - CAR PDI		Surface Elevation: 9.1 ft NAVD88

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	4.5	0.0	dry to moist	FILL		fine to medium SAND, little ash, little to fine trace gravel, trace wood and ceramics, (7.5YR 3/3) dark brown, medium dense, dry to moist, no odor, no staining.	CAR-PDI-GG21A-0.0-0.5
2							CAR-PDI-GG21A-2.0-2.5
3							CAR-PDI-GG21A-4.0-4.5
4							CAR-PDI-GG21A-4.0-4.5
5	4	0.0	moist to wet	FILL		fine silty SAND, little fine gravel, trace ash, (7.5YR 4/2) brown, medium dense, moist to wet, no odor, no staining, water at 6.0 feet bgs.	CAR-PDI-GG21A-6.0-6.5
6							CAR-PDI-GG21A-6.0-6.5
7							CAR-PDI-GG21A-8.0-8.5
8							CAR-PDI-GG21A-8.0-8.5
9	5	0.0	wet	FILL		fine silty SAND, trace fine to medium gravel, (5YR 4/3) reddish brown, medium dense, wet, no odor, no staining.	CAR-PDI-GG21A-10.0-10.5
10							CAR-PDI-GG21A-10.0-10.5
11							CAR-PDI-GG21A-12.0-12.5
12							CAR-PDI-GG21A-12.0-12.5
13	5	0.0	dry	PT		PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (5YR 3/2) dark reddish brown, stiff, dry, slight organic odor, no staining. Soils consistent with MM.	CAR-PDI-GG21A-13.0-13.5
14							CAR-PDI-GG21A-13.5-14.0
15							CAR-PDI-GG21A-13.5-14.0

Notes:
bgs - below surface grade COPR - chromite ore processing residue UNDo - non-organic undisturbed native deposits MGP - manufactured gas plant
MM - meadow mat GGM - green grey mud UNDo - organic undisturbed native deposits CCPW - chromate chemical production waste

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick 3) No CCPW (COPR or GGM) present in any interval of this boring.

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: direct push	Coordinates (NJSPNAD83) x: 611470.04
Date Started Drilling: 6/9/2016 9:00:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 682631.79
Date Finished Drilling: 6/9/2016 9:30:00 AM	Core Size: 3.0 in	Boring Total Depth: 25 ft
Logged By: ES	Project Manager: Scott Mikaelian	Depth to Water: NA
Physical Location: Actual - CAR PDI		Surface Elevation: 9.2 ft NAVD88

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
		0.0		ASPHALT		Asphalt and gravel sub-base.	
1	4		dry	FILL		fine to medium SAND, little fine gravel and concrete, trace ash, (5YR 4/3) reddish brown, medium dense, dry, no odor, no staining	CAR-PDI-GG22A-1.0-1.5
2							
3							
4			dry	FILL		ASH, (2.5Y 5/2) grayish brown, loose, dry, no odor, no staining.	CAR-PDI-GG22A-3.0-3.5
5				NR		NO RECOVERY	
6	4.5	0.0	dry	FILL		ASH, some fine to medium sand, little coal, (5YR 2.5/1) black, loose, dry, no odor, no staining.	CAR-PDI-GG22A-5.0-5.5
7			moist to wet	FILL		fine to medium silty SAND, some fine gravel, little ash, (5YR 4/1) dark gray, medium dense, moist to wet, no odor, no staining, water at 7.0 feet.	CAR-PDI-GG22A-7.0-7.5
8							
9							
10				NR		NO RECOVERY	
11	3.5	0.0	wet	FILL		fine to medium silty SAND, some fine gravel, (5YR 4/3) reddish brown, medium dense, wet, no odor, black staining.	CAR-PDI-GG22A-11.0-11.5
12							
13							
14				NR		NO RECOVERY	
15	5	5.0	wet	FILL		fine to medium silty SAND, some fine gravel, (5Y 2.5/1) black, medium dense, wet, slight MGP like odor and black staining.	CAR-PDI-GG22A-15.0-15.5
16							
17							
18							
19			saturated	FILL		fine to coarse Gravel, (5Y 2.5/1) black, loose, saturated, moderate MGP-like odor, product soaked.	CAR-PDI-GG22A-19.0-19.5
20	1	5.0	saturated	FILL		fine to coarse Gravel, (5Y 2.5/1) black, loose, saturated, moderate MGP-like odor, product soaked.	CAR-PDI-GG22A-20.0-20.5
21				NR		NO RECOVERY	

Notes:

bgs - below surface grade COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits MGP - manufactured gas plant
MM - meadow mat GGM - green grey mud UNDorg - organic undisturbed native deposits CCPW - chromium chemical production waste

Comments: 1) 3 attempts were made to obtain best recovery 2) No CCPW (COPR or GGM) present in any interval of this boring.



30 Knightsbridge Road, Piscataway, NJ 08854
732.564.3200 office telephone

Boring ID: CAR-PDI-GG22A

Page: 2


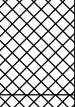
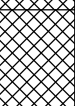
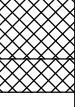
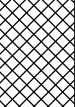
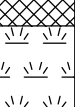
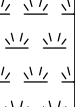
Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: direct push	Coordinates (NJSPNAD83) x: 611470.04
Date Started Drilling: 6/9/2016 9:00:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 682631.79
Date Finished Drilling: 6/9/2016 9:30:00 AM	Core Size: 3.0 in	Boring Total Depth: 25 ft
Logged By: ES	Project Manager: Scott Mikaelian	Depth to Water: NA
Physical Location: Actual - CAR PDI		

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
23							
24							
25							

Notes:
bgs - below surface grade COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits MGP - manufactured gas plant
MM - meadow mat GGM - green grey mud UNDorg - organic undisturbed native deposits CCPW - chromate chemical production waste

Comments: 1) 3 attempts were made to obtain best recovery 2) No CCPW (COPR or GGM) present in any interval of this boring.





Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: direct push	Coordinates (NJSPNAD83) x: 611448.17
Date Started Drilling: 6/14/2016 9:15:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 682604.15
Date Finished Drilling: 6/14/2016 10:15:00 AM	Core Size: 3.0 in	Boring Total Depth: 15 ft
Logged By: HBB	Project Manager: Scott Mikaelian	Depth to Water: NA
Physical Location: Actual - CAR PDI		

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	4.5	0.0	moist	FILL		fine to medium SAND, little fine to medium gravel, (7.5YR 4/3) brown, medium dense, moist, no odor, no staining.	CAR-PDI-GG23A-0.0-0.5
2			moist	FILL		fine to medium SAND, trace fine gravel and brick, (7.5YR 4/2) brown, medium dense, moist, no odor, no staining.	
3			moist	FILL		ASH, trace cinders and fill debris, (5Y 5/1) gray, medium dense, moist, no odor, no staining.	CAR-PDI-GG23A-2.0-2.5
4			moist	FILL		SILT, little fine sand, (7.5YR 4/3) brown, medium dense, moist, no odor, no staining.	CAR-PDI-GG23A-4.0-4.5
5	3.5	0.0		NR		NO RECOVERY	
6			wet	FILL		SILT, trace fine sand, (7.5YR 4/2) brown, soft, wet, no odor, no staining, water at 6.0 feet.	CAR-PDI-GG23A-6.0-6.5
7							
8							
9				NR		NO RECOVERY	CAR-PDI-GG23A-8.0-8.5
10	3	0.0	saturated	FILL		fine sandy SILT, little fine gravel, (7.5YR 4/2) brown, medium dense, saturated, no odor, no staining.	CAR-PDI-GG23A-10.0-10.5
11			dry	PT		PEAT (degraded vegetated material), 90% organic fibers, 10% organic silt, (5YR 3/2) dark reddish brown, stiff, dry, moderate organic odor, no staining. Soils consistent with MM.	CAR-PDI-GG23A-10.5-11.0
12							
13				NR		NO RECOVERY	
14							
15							

Notes:
bgs - below surface grade COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits MGP - manufactured gas plant
MM - meadow mat GGM - green grey mud UNDorg - organic undisturbed native deposits CCPW - chromate chemical production waste

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick 3) No CCPW (COPR or GGM) present in any interval of this boring.

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: direct push	Coordinates (NJSPNAD83) x: 611268.1
Date Started Drilling: 6/15/2016 8:25:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 682823.83
Date Finished Drilling: 6/15/2016 9:30:00 AM	Core Size: 3.0 in	Boring Total Depth: 20 ft
Logged By: ES	Project Manager: Scott Mikaelian	Depth to Water: NA
Physical Location: Actual - HSN PDI		Surface Elevation: 11.8 ft NAVD88

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	5	0.0		FILL		Asphalt and gravel sub-base.	
2			moist	FILL		GGM (100%), (5Y 5/1) gray, soft, moist, no odor, green staining.	
3			dry	FILL		CINDERS, some ash, (5Y 2.5/1) black, dense, dry, no odor, no staining.	
4			moist	FILL		GGM (100%), (5Y 5/1) gray, soft, moist, no odor, green staining.	
5			moist	FILL		fine to coarse SAND, some medium gravel, trace coal, (5Y 5/1) gray, medium dense, moist, no odor, green staining.	
6	5	0.0	wet	FILL		fine to medium gravel, little fine to medium sand, (2.5Y 4/1) dark gray, medium dense, wet, no odor, no staining, water at 5.0 feet.	
7			wet	FILL		GGM (100%), (5Y 5/1) gray, soft, wet, no odor, green staining.	
8							
9	4.5	60.0					CAR-PDI-X19A-10.0-10.5 CAR-PDI-X19A-12.0-12.5 CAR-PDI-X19A-14.0-14.5
10			wet	FILL		fine to medium GRAVEL, trace wood, (5Y 2.5/1) black, medium dense, wet, strong MGP-like odor and staining.	
11							
12			wet	FILL		SILT, little fine gravel, (5YR 4/4) reddish brown, soft, wet, strong MGP-like odor, product soaked.	
13	5	60.0					CAR-PDI-X19A-16.0-16.5 CAR-PDI-X19A-17.5-18.0 CAR-PDI-X19A-18.0-18.5
14				NR		NO RECOVERY	
15			wet	FILL		SILT, little fine gravel, (7.5YR 4/3) brown, soft, wet, strong MGP-like odor, product soaked.	
16			wet	FILL		fine silty SAND, little fine gravel, (5YR 4/4) reddish brown, medium dense, wet, moderate MGP-like odor, product staining.	
17							
18			moist	PT		PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (5YR 3/3) dark reddish brown, stiff, moist, slight MGP-like odor, no staining. Soils consistent with MM.	
19							
20							

Notes:
bgs - below surface grade COPR - chromite ore processing residue UNdno - non-organic undisturbed native deposits MGP - manufactured gas plant
MM - meadow mat GGM - green grey mud UNdorg - organic undisturbed native deposits CCPW - chromate chemical production waste

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UNd confirmed to be 1 ft thick.

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: direct push	Coordinates (NJSPNAD83) x: 611302.26
Date Started Drilling: 6/15/2016 10:25:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 682817.9
Date Finished Drilling: 6/15/2016 11:30:00 AM	Core Size: 3.0 in	Boring Total Depth: 20 ft
Logged By: ES	Project Manager: Scott Mikaelian	Depth to Water: NA
Physical Location: Actual - CAR PDI		Surface Elevation: 11.6 ft NAVD88

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	5	0.0		ASPHALT		Asphalt and gravel sub-base	
2			dry	FILL		fine to coarse SAND, little medium gravel, (2.5Y 5/2) grayish brown, medium dense, dry, no odor, green staining.	
3			moist	FILL		GGM (100%), (5Y 5/1) gray, soft, moist, no odor, green staining.	
4			moist	FILL		fine to coarse SAND, some medium gravel, (2.5Y 5/2) grayish brown, medium dense, moist, no odor, green staining.	
5	5	0.0	wet	FILL		GGM (70%), some ash, trace fill debris, (5Y 5/1) gray, soft, wet, no odor, green staining, water at 5.0 feet.	
6							
7			wet	FILL		ASH, little GGM (30%), (5Y 5/1) gray, loose, wet, no odor, green staining.	
8	4	10					
9							
10				FILL		fine silty SAND, little fine gravel, (5YR 4/4) reddish brown, medium dense, moist, MGP-like odor, no staining.	
11							
12	5	30					
13							
14				NR		NO RECOVERY	
15				FILL		fine silty SAND, some fine gravel, (5YR 4/4) reddish brown, medium dense, wet, strong MGP-like odor, product staining	
16							
17							
18			dry	PT		PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (5YR 3/3) dark reddish brown, stiff, dry, slight MGP like odor, no staining. Soils consistent with MM.	CAR-PDI-Y19A-17.5-18.0 CAR-PDI-Y19A-18.0-18.5
19	5	30	moist	OL		Organic SILT, 80% organic silt, 20% organic fibers, (5Y 5/1) gray, soft, moist, no odor, no staining. Soils consistent with UNDorg.	
20							

Notes:

bgs - below surface grade
MM - meadow mat

COPR - chromite ore processing residue
GGM - green grey mud

UNDno - non-organic undisturbed native deposits
UNDorg - organic undisturbed native deposits

MGP - manufactured gas plant
CCPW - chromate chemical production waste

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick.

PPG - GINT STD US LAB.GDT - 11/3/11 14:35 - \\USPSW2\FP001\ENVIRONMENT\PISCATAWAY\PROJECT\PPG-NJC\PROGRAM9-WORKFILES\PROJECT MANAGER-CATALDO\BGA RI-SOIL INVESTIGATION\FIELD WORKING LOGS\GINT L



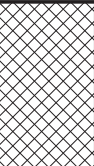
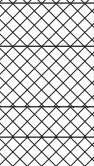
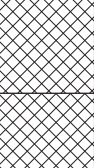
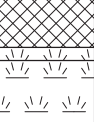

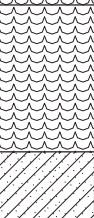


30 Knightsbridge Road, Piscataway, NJ 08854
732.564.3200 office telephone

Boring ID: EF-17

Page: 1


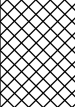








Project Name: PPG Soil RIWP	Drilling Company: SGS	
Project Number: 6015-4801	Drilling Method: Airknife/Geoprobe	Coordinates (NJSPNAD83) x: 611494.743
Date Started Drilling: 4/19/2011	Rig Type: Airknife/Geoprobe	Coordinates (NJSPNAD83) y: 682560.847
Date Finished Drilling: 4/20/2011	Core Size: 2 in	Boring Total Depth: 25 ft
Logged By: B. Daniels, M. Merdinger	Project Manager: Robert Cataldo	Depth to Water: 4 ft
Physical Location: Pacific and Carteret		Surface Elevation: 9.7 ft NAVD88

(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	GA Class	USCS	Graphic Log	Surface Cover and Thickness:	Sample Number
1		0	dry	3	Fill		Dark Brown (7.5YR 3/2) fine to medium SAND and SILT, little fine to medium angular Gravel, Organics, and Fill Material (glass, slag, brick), dry, loose. No odor.	EF-B17_0.5
2		0						EF-B17_2.0
3		0						EF-B17_2.5
4		0						EF-B17_4.0
5	2.1	0.3	wet	3	Fill		Brown (7.5YR 4/3) SILT, some fine Sand, little fine to medium Gravel, trace Fill (slag), wet, medium stiff. No odor. Reddish Brown (5YR 4/3) to Black fine to medium SAND, some Cinders, Coal and Ash, trace Glass, medium dense, wet. No odor. Brown (7.5YR 4/2) SILT, little fine to medium Sand and Clay, soft, moist. No odor. No Recovery	
6		0.7	wet	6	Fill			EF-B17_6.0
7			moist	3	Fill			
8				Fill				
9								
10		0.1						
11	3.2	0	moist	3	Fill		Same as above.	
12		0						EF-B17_12.0 EF-B17_12.0X
13			moist	7	PT PT		Dark Reddish Gray (2.5YR 3/1) PEAT, Organics, medium stiff, moist. Sulfur odor. No Recovery	
14								
15		124					Very Dark Gray (7.5YR 3/1) Organic SILTY CLAY, cohesive, stiff, moist. Sulfur odor.	
16	2.1	106	moist	7	OH			EF-B17_17.0
17					OH			
18								
19								
20		49.2					Same as above.	
21	5	45.7	moist	7	OH			
22		165						
23		10.8						EF-B17_22.5
24			0.4	moist	8	SC		Gray (Gley1 3/0) fine to medium SAND, little Clay, trace Silt, semi-cohesive, medium dense, moist. No odor.
25								
26							End of boring at 25 ft.	
27								
28								
29								
30								
31								
32								
33								
34								
35								

Comments: No COPR/GGM identified at this location.


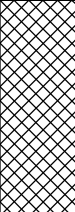

Project Name: PPG Soil RIWP	Drilling Company: SGS North America	
Project Number: 6015-4801	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 611399.447
Date Started Drilling: 5/25/2011	Rig Type:	Coordinates (NJSPNAD83) y: 682675.465
Date Finished Drilling: 5/25/2011	Core Size: 12 in	Boring Total Depth: 15 ft
Logged By: E. Acs, M. Merdinger	Project Manager: Robert Cataldo	Depth to Water: NA
Physical Location: Narula Property		Surface Elevation: 10.2 ft NAVD88

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	5	0	dry	ASPHALT		Black Asphalt	EF-B49-0.5
2		0	dry	FILL		Black (10YR 2/1) fine to coarse SAND (40-25% COPR), some-little fine to medium Gravel, trace Fill Material (ash, cinders, glass, brick), loose. No odor.	
3		0	dry	FILL		Black TAR, sheet layer in boring.	
4		0	moist	FILL		Black (10YR 2/1) fine to coarse SAND (25% COPR), some fine to medium Gravel, little Fill Material (ash, cinders, glass, brick), medium dense. No odor.	
5		0	wet	FILL		Black (10YR 2/1) to Dark Gray (10YR 4/1) ASH, CINDERS, and Silt, trace fine Sand and Fill Material (brick, coal, wood, clinker, glass), medium dense. No odor.	
6	2	0	wet	FILL		Black-stained fine to medium SAND and GRAVEL, little Silt, loose. No odor.	EF-B49-11.0
7		0	moist	FILL		Black-stained SILT, little Clay, trace medium Sand, semi-cohesive, medium Stiff. No odor.	
8			moist	VOID		No Recovery	
9							
10							
11	5	0	wet	FILL		Black-stained CINDERS and SILT, interbedded, loose. No odor.	EF-B49-11.0
12		0					
13		0	moist	FILL		Black-stained SILT, little Clay, trace organics, soft. No odor.	EF-B49-12.0
14		0	moist	FILL		Brown (7.5YR 4/3) very fine SAND, some-little Silt, trace coarse Sand and medium rounded Gravel, medium stiff. No odor.	
15				NULL		End of boring at 15 ft.	

Notes:
bgs - below surface grade COPR - chromite ore processing residue UNDo - non-organic undisturbed native deposits MGP - manufactured gas plant
MM - meadow mat GGM - green grey mud UNDo - organic undisturbed native deposits CCPW - chromate chemical production waste

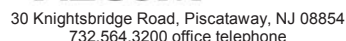
Comments: COPR/GGM identified from 0.4-3.5 ft bgs. No native material encountered.


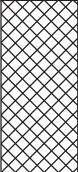

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Soft Dig/Geoprobe	Coordinates (NJSPNAD83) x: 611413.128
Date Started Drilling: 9/4/2012 10:25:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 682723.521
Date Finished Drilling: 9/4/2012 10:55:00 AM	Core Size: 2 in	Boring Total Depth: 3 ft
Logged By:	Project Manager: Chris Martell	Depth to Water: NA
Physical Location:		Surface Elevation: 10.8 ft NAVD88

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
				ASPHALT		ASPHALT	
1	3	0.0	dry	FILL		ASH, and cinders little coal, (7.5YR 4/1) dark gray, dry, no odor, Little slag.	EF-B099-0.5-1.0
2		0.0	moist	FILL		silty SAND, little fine to medium gravel and fill material, moist, no odor, angular, Slag, brick, coal, glass.	EF-B099-2.5-3.0
3							

Notes:
bgs - below surface grade COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits MGP - manufactured gas plant
MM - meadow mat GGM - green grey mud UNDorg - organic undisturbed native deposits CCPW - chromate chemical production waste

Comments:



Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1 2 3	3			ASPHALT		ASPHALT	
		0.0	moist	FILL		fine to coarse SAND, some silt little fine to medium gravel, (10YR 4/3) brown, moist, no odor, angular, Trace glass.	EF-B100-0.5-1.0
		0.0	moist	FILL		ASH, and cinders trace ceramics, moist, no odor, Trace coal and glass.	EF-B100-2.5-3.0



Notes:
bgs - below surface grade COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits MGP - manufactured gas plant
MM - meadow mat GGM - green grey mud UNDorg - organic undisturbed native deposits CCPW - chromate chemical production waste

Comments:

PPG - 2012-09 RA PPG LOGS A.GDT - 10/14/16 09:47




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Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	1	0.0		ASPHALT		ASPHALT	
		0.0	dry	FILL		Dark brown (7.5YR 3/2) silty SAND, little fine to coarse angular Gravel, dry, no odor.	

PPG - 2012-09 RA PPG_LOGS_A.GDT - 10/14/16 15:05

Notes: bgs - below surface grade COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits MGP - manufactured gas plant MM - meadow mat GGM - green grey mud UNDorg - organic undisturbed native deposits CCPW - chromate chemical production waste			
Comments: No COPR/GGM identified.			

Project Name: PPG Garfield Ave	Drilling Company:	
Project Number: 60580814	Drilling Method: Hand Auger	Coordinates (NJSPNAD83) x: 611457.79
Date Started Drilling: 10/19/2018	Rig Type:	Coordinates (NJSPNAD83) y: 682695.82
Date Finished Drilling: 10/19/2018	Core Size: 2 inches	Boring Total Depth: 5 ft
Logged By: Tarique Islam	Project Manager: Bill Spronz	Depth to Water: NA
Physical Location:		Surface Elevation: 13.4 ft NAVD88

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	5	0.0	moist	FILL		fine to coarse silty SAND, trace gravel, (7.5YR 4/2) brown, moist, no odor, no staining	
2							
3							FF20A-PUB1-3.3-3.8
4							FF20A-PUB1-4.3.4.8
5				NULL		End of Boring	

Notes:
bgs - below surface grade COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits MGP - manufactured gas plant
MM - meadow mat GGM - green grey mud UNDorg - organic undisturbed native deposits CCPW - chromate chemical production waste

Comments:

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Direct Push	Coordinates (NJSPNAD83) x: 611370
Date Started Drilling: 6/3/2016 10:35:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 682770.3
Date Finished Drilling: 6/3/2016 11:50:00 AM	Core Size:	Boring Total Depth: 20 ft
Logged By: HBB	Project Manager: Scott Mikaelian	Depth to Water: NA
Physical Location: Actual - HSD PDI		Surface Elevation: 10.4 ft NAVD88

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	4.5	0.0	moist	ASPHALT FILL		Asphalt and gravel sub-base ASH, some silt, trace fine gravel, coal and glass, (7.5YR 4/2) brown, medium dense, moist, no odor, no staining.	HSD-PDI-BB19A-0.2-0.7
2							HSD-PDI-BB19A-2.0-2.5
3							
4			wet	FILL		fine SAND, trace silt, (5YR 4/3) reddish brown, medium dense, wet, no odor, no staining.	HSD-PDI-BB19A-4.0-4.5
5	4	0.0		NR		NO RECOVERY	
6			wet	FILL		fine SAND, trace silt, (5YR 4/3) reddish brown, medium dense, wet, no odor, no staining.	HSD-PDI-BB19A-6.0-6.5
7			wet to saturated	FILL		SILT, little fine gravel, trace fine sand and metal debris, (5Y 5/1) gray, medium dense, wet to saturated, water at 6.0 feet.	
8			saturated	FILL		SILT, trace wood, (5Y 2.5/1) black, soft, saturated, no odor, no staining.	HSD-PDI-BB19A-8.0-8.5
9			wet	FILL		fine SAND, little silt, (5YR 4/3) reddish brown, medium dense, wet, no odor, no staining.	
10			moist	FILL		Disturbed Organic SILT, 90% organic silt, 10% organic fibers, (7.5YR 4/2) brown, medium dense, moist, slight organic odor, no staining.	
11	4.5	0.0		NR		NO RECOVERY	HSD-PDI-BB19A-10.0-10.5
12			moist	FILL		fine SAND, trace silt, fine gravel and wood, (5YR 4/3) reddish brown, medium dense, moist, no odor, no staining.	HSD-PDI-BB19A-12.0-12.5
13							HSD-PDI-BB19A-13.5-14.0
14							
15			dry	PT		PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (5YR 3/3) dark reddish brown, medium stiff, dry, moderate organic odor, no staining. Soils consistent with MM.	HSD-PDI-BB19A-14.0-14.5
16				NR		NO RECOVERY	
17	2.5	0.0	dry	PT		PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (5YR 3/4) dark reddish brown, dry, slight organic odor, no staining. Soils consistent with MM.	
18							
19				NR		NO RECOVERY	
20							

Notes:
bgs - below surface grade COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits MGP - manufactured gas plant
MM - meadow mat GGM - green grey mud UNDorg - organic undisturbed native deposits CCPW - chromate chemical production waste

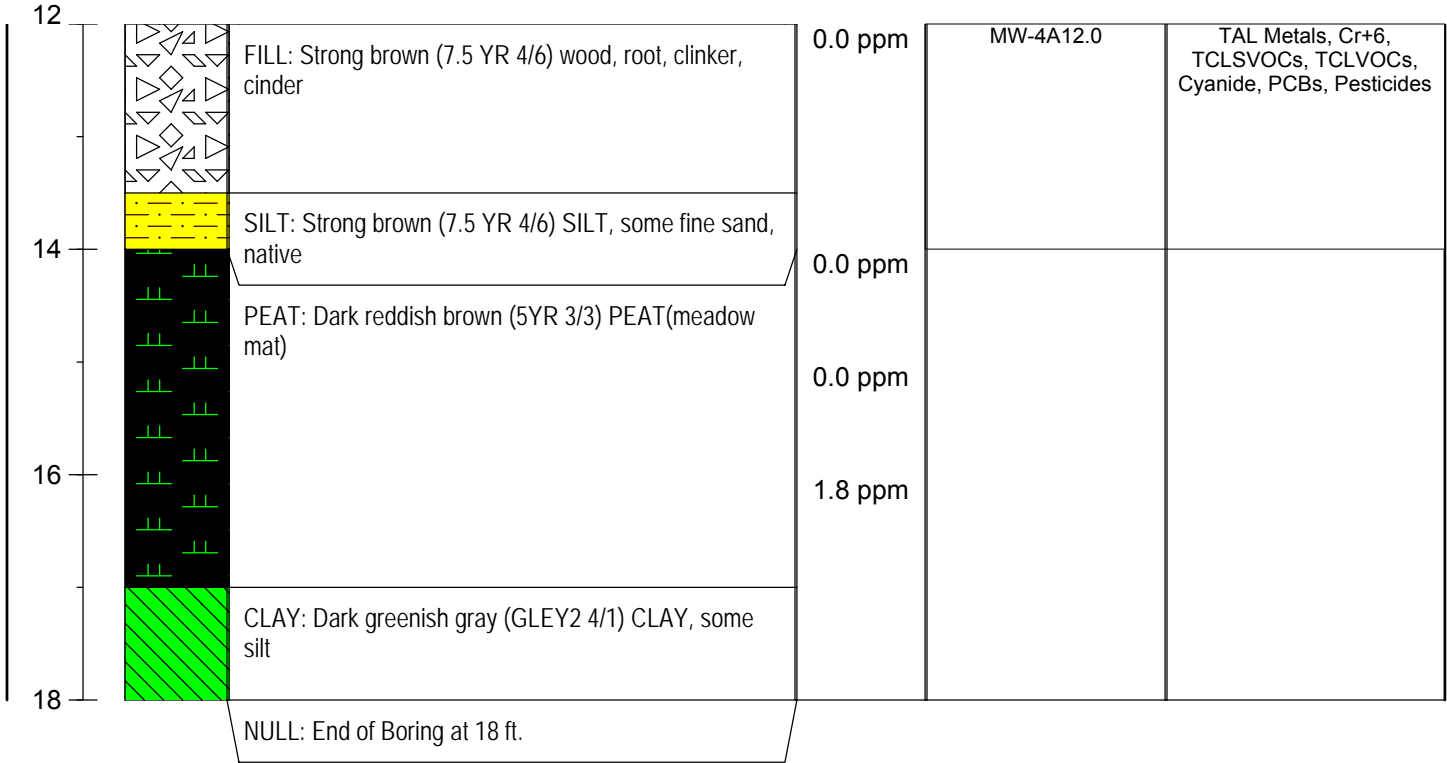
Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick 3) No CCPW (COPR or GGM) present in any interval of this boring.

ENSR AECOM		Client: PPG		BORING ID: MW4A		
		Site: PPG - Jersey City, NJ				
Start Date: 11/18/2003		Project: Site Investigation		Page: 1 of 2		
		Coordinates: X-610811.29 Y-683249.66		Depth of Boring: 18.00		
End Date: 11/18/2003		Elevation: 12.8		Geologist: D. Sherman		
		Drill Subcontractor: ADI		Driller:		
Depth (ft)	Lithology	Description		PID	Sample ID	Sample Parameters


0		FILL: Black medium to fine SAND, some silt, little gravel, cinder, brick clinker, 30% COPR			
2		FILL: Black to dark reddish brown (5YR 2.5/2) medium to fine SAND, some silt, cinder, clinker, shell, 20% COPR	0.0 ppm	MW-4A2.0	TAL Metals, Cr+6, TCLSVOCs, TCLVOCs, Cyanide, PCBs, Pesticides
4		FILL: Dark yellowish brown (10YR 3/4) coarse to fine SAND, some silt, trace gravel, clinker, brick, 50% COPR	0.0 ppm		
6		FILL: Reddish brown (2.5YR 4/3) coarse to fine SAND, some gravel and silt, trace clay, brick, clinker, 30% COPR, cinder	0.0 ppm		
8		FILL: Dark reddish brown (5YR 3/4) medium to fine SAND, some silt, wood, brick, clinker, 10% COPR	0.0 ppm		
10		FILL: Reddish black (2.5YR 2.5-1) fine SAND, some silt, little clay and medium sand, wood, brick, cinder	0.0 ppm		
12					

NOTES: Coordinates are provided in New Jersey State Plane NAD 1983 Feet.

<div>ENSR AECOM</div>		Client: PPG		BORING ID: MW4A		
		Site: PPG - Jersey City, NJ				
Start Date: 11/18/2003		Project: Site Investigation		Page: 2 of 2		
		Coordinates: X-610811.29 Y-683249.66		Depth of Boring: 18.00		
End Date: 11/18/2003		Elevation: 12.8		Geologist: D. Sherman		
		Drill Subcontractor: ADI		Driller:		
Depth (ft)	Lithology	Description		PID	Sample ID	Sample Parameters



NOTES: Coordinates are provided in New Jersey State Plane NAD 1983 Feet.

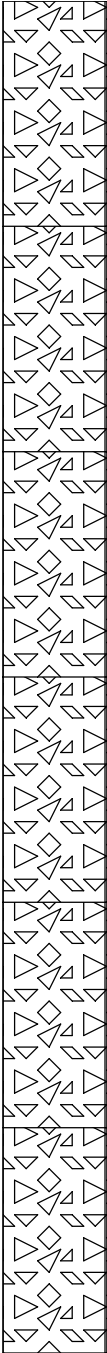
	Client: PPG		BORING ID: MW4A		
	Site: PPG - Garfield, NJ				
Start Date: 11/18/2003	Project: Site Investigation		Page: 1 of 2		
	Coordinates: X-610811.3 Y-683249.7		Depth of Boring: 18.00		
End Date: 11/18/2003	Elevation: 14.52		Geologist: D. Sherman		
	Drill Subcontractor: Advanced Drilling		Driller:		
Depth (ft)	Lithology	Description	PID	Sample ID	Sample Parameters

0		FILL: Black medium to fine SAND, some silt, little gravel, cinder, brick clinker, 30% COPR			
2		FILL: Black to dark reddish brown (5YR 2.5/2) medium to fine SAND, some silt, cinder, clinker, shell, 20% COPR			
4		FILL: Dark yellowish brown (10YR 3/4) coarse to fine SAND, some silt, trace gravel, clinker, brick, 50% COPR			
6		FILL: Reddish brown (2.5YR 4/3) coarse to fine SAND, some gravel and silt, trace clay, brick, clinker, 30% COPR, cinder			
8		FILL: Dark reddish brown (5YR 3/4) medium to fine SAND, some silt, wood, brick, clinker, 10% COPR			
10		FILL: Reddish black (2.5YR 2.5-1) fine SAND, some silt, little clay and medium sand, wood, brick, cinder			
12		FILL: Strong brown (7.5 YR 4/6) wood, root, clinker, cinder			
14		SILT: Strong brown (7.5 YR 4/6) SILT, some fine sand, native			
16		PEAT: Dark reddish brown (5YR 3/3) PEAT(meadow mat)			
18		CLAY: Dark greenish gray (GLEY2 4/1) CLAY, some silt			
		NULL: End of Boring			

NOTES:

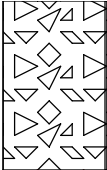

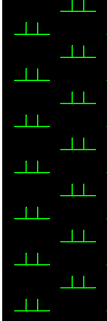
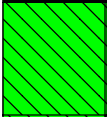

Coordinates are provided in New Jersey State Plane NAD 1983 Feet.
 Elevation is provided in feet above mean sea level - NAVD 1988.

<div>ENSR AECOM</div>		Client: PPG		BORING ID: MW4B		
		Site: PPG - Jersey City, NJ				
Start Date: 12/3/2003		Project: Site Investigation		Page: 1 of 4		
		Coordinates: X-610816.71 Y-683246.98		Depth of Boring: 40.00		
End Date: 12/3/2003		Elevation: 12.7		Geologist: D. Sherman		
		Drill Subcontractor: ADI		Driller:		
Depth (ft)	Lithology	Description		PID	Sample ID	Sample Parameters

0		FILL: Black medium to fine SAND, some silt, little gravel, cinder, brick clinker, 30% COPR			
2		FILL: Black to dark reddish brown (5YR 2.5/2) medium to fine SAND, some silt, cinder, clinker, shell, 20% COPR	0.0 ppm	MW-4B2.0	TAL Metals, Cr+6, TCLSVOCs, TCLVOCs, Cyanide, PCBs, Pesticides
4		FILL: Dark yellowish brown (10YR 3/4) coarse to fine SAND, some silt, trace gravel, clinker, brick, 50% COPR	0.0 ppm		
6		FILL: Reddish brown (2.5YR 4/3) coarse to fine SAND, some gravel and silt, trace clay, brick, clinker, 30% COPR, cinder	0.0 ppm		
8		FILL: Dark reddish brown (5YR 3/4) medium to fine SAND, some silt, wood, brick, clinker, 10% COPR	0.0 ppm		
10		FILL: Reddish black (2.5YR 2.5-1) fine SAND, some silt, little clay and medium sand, wood, brick, cinder	0.0 ppm		
12					

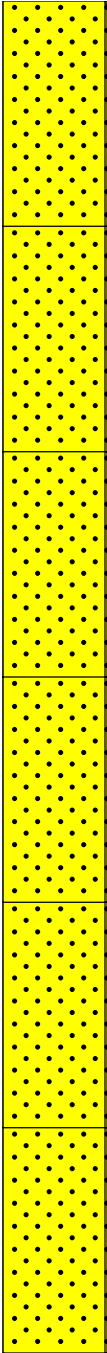
NOTES: Coordinates are provided in New Jersey State Plane NAD 1983 Feet.

<div>ENSR AECOM</div>		Client: PPG		BORING ID: MW4B		
		Site: PPG - Jersey City, NJ				
Start Date: 12/3/2003		Project: Site Investigation		Page: 2 of 4		
		Coordinates: X-610816.71 Y-683246.98		Depth of Boring: 40.00		
End Date: 12/3/2003		Elevation: 12.7		Geologist: D. Sherman		
		Drill Subcontractor: ADI		Driller:		
Depth (ft)	Lithology	Description		PID	Sample ID	Sample Parameters

12		FILL: Strong brown (7.5 YR 4/6) Wood, root, clinker, cinder	0.0 ppm	MW-4B12.0	TAL Metals, Cr+6, TCLSVOCs, TCLVOCs, Cyanide, PCBs, Pesticides
14		SILT: Strong brown (7.5 YR 4/6) SILT, some fine sand, native	0.0 ppm		
		PEAT: Dark reddish brown (5YR 3/3) PEAT(meadow mat)	0.0 ppm		
16			1.8 ppm		
		CLAY: Dark greenish gray (GLEY2 4/1) CLAY, some silt			
18		CLAY: Greenish gray (GLEY2 5/1) CLAY, some silt, little fine sand at 19.5" bgs	0.0 ppm		
20		CLAY: Dark greenish gray (GLEY1 4/1) CLAY, some silt, native soft	0.0 ppm		
22			0.0 ppm		
24		SAND: Red (2.5YR 5/8) coarse to fine SAND, some			

NOTES: Coordinates are provided in New Jersey State Plane NAD 1983 Feet.

<div>ENSR AECOM</div>		Client: PPG		BORING ID: MW4B		
		Site: PPG - Jersey City, NJ				
Start Date: 12/3/2003		Project: Site Investigation		Page: 3 of 4		
		Coordinates: X-610816.71 Y-683246.98		Depth of Boring: 40.00		
End Date: 12/3/2003		Elevation: 12.7		Geologist: D. Sherman		
		Drill Subcontractor: ADI		Driller:		
Depth (ft)	Lithology	Description		PID	Sample ID	Sample Parameters


24		gravel SAND: Red (2.5YR 4/6) coarse to fine SAND, little gravel, till, fairly sorted	0.0 ppm		
26		SAND: Red (2.5YR 4/8) coarse to fine SAND, trace gravel 26'-27' bgs, trace fine sand, some silt 27'-28' bgs	0.0 ppm		
28		SAND: Red (2.5YR 4/6) fine SAND, little medium sand, soft, well sorted	0.0 ppm		
30		SAND: Red (2.5YR 4/6) fine SAND, little silt, soft, well sorted	0.0 ppm	MW-4B30.0	TAL Metals, Cr+6, TCLSVOCs, TCLVOCs, Cyanide, PCBs, Pesticides
32		SAND: Red (2.5YR 4/6) fine SAND, some silt, poorly graded, moderately well sorted	0.0 ppm		
34		SAND: Red (2.5YR 4/6) fine SAND, some silt, fairly to poorly graded, moderately well sorted	0.0 ppm		
36					









NOTES: Coordinates are provided in New Jersey State Plane NAD 1983 Feet.

<div> <div>ENSR</div> <div>AECOM</div> </div>		Client: PPG	BORING ID: MW4B		
		Site: PPG - Jersey City, NJ			
Start Date: 12/3/2003	Project: Site Investigation		Page: 4 of 4		
	Coordinates: X-610816.71 Y-683246.98		Depth of Boring: 40.00		
End Date: 12/3/2003	Elevation: 12.7		Geologist: D. Sherman		
	Drill Subcontractor: ADI		Driller:		
Depth (ft)	Lithology	Description	PID	Sample ID	Sample Parameters


36		SAND: Red (2.5YR 4/6) fine SAND and SILT, wet, fairly graded, moderately sorted	0.0 ppm		
38		SILT: Red (2.5YR 4/6) fine SILT, some fine sand	0.0 ppm		
		SILT: Reddish gray (5YR 5/2) SILT, some clay, trace fine sand			
40	<div> NULL: End of Boring at 40 ft. </div>				

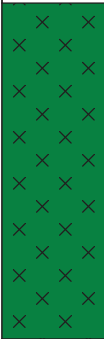

NOTES: Coordinates are provided in New Jersey State Plane NAD 1983 Feet.

		Client: PPG Industries			BORING ID: OSB/XOSB-10	
		Site: Site OSB				
Start Date: 7/20/2006		Project: Site Investigation			Page: 1 of 3	
		Coordinates: X-610903.4 Y-683195			Depth of Boring: 26.00	
End Date: 9/14/2006		Elevation: OSB-10 = 12.5; XOSB-10 = 12.4 ft NAVD88			Geologist: M. Abdelaziz	
		Drill Subcontractor: ADI			Driller:	
Depth (ft)	Lithology	Description	PID	Blows/6"	Sample ID	Sample Parameters


0		ASPHALT: Asphalt	N/A			
		CONCRETE: Concrete				
		FILL: Dark brown (7.5YR3/2) coarse to medium SAND, some medium Gravel, trace Silt, dry. 80% COPR.	N/A		OSB-10A(1.0-1.5)	Cr+6, TAL Metals
2		CONCRETE: Concrete stained with Cr6 water at 2.5 ft.			OSB-10 was advanced in Grid G14A on 7/20/2006 to 5.1'.	
		NR: No Sample				
		FILL: Black (7.5RN2.5) coarse medium GRAVEL, some Cinders, Glass and Wood chips, little Silt, wet. ~10% COPR.	N/A		OSB-10B(3.1-3.6)	Cr+6, TAL Metals
4		NR: No Sample	0.0 ppm	2		
		FILL: Dark Brown (7.5YR 4/4) silty CLAY, some fine to very fine Sand, trace medium Gravel, wet. ~60% COPR.	N/A	2	OSB-10C(4.6-5.1)	Cr+6, TAL Metals
		NR: No Recovery		1		
6		FILL: Very dark brown (10YR3/3) coarse to fine SAND, some to little Silt, trace Clay, wet.		2		
		NR: No Recovery		4	XOSB-10 was advanced on 9/14/2006 from 5.1' to 26' in Grid H14A as a step-out from OSB-10	
				2		
				5		
8		FILL: Very dark brown (10YR3/3) coarse to fine SAND, some to little Silt, trace Clay and fine Gravel, wet.	0.0 ppm	2		
				1		


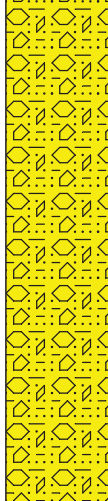


NOTES: Coordinates are provided in New Jersey State Plane NAD 1983 Feet.
XOSB location is offset from original OSB location due to presence of stormwater drain.

		Client: PPG Industries			BORING ID: OSB/XOSB-10	
		Site: Site OSB				
Start Date: 7/20/2006		Project: Site Investigation			Page: 2 of 3	
		Coordinates: X-610903.4 Y-683195			Depth of Boring: 26.00	
End Date: 9/14/2006		Elevation: OSB-10 = 12.5; XOSB-10 = 12.4 ft NAVD88			Geologist: M. Abdelaziz	
		Drill Subcontractor: ADI			Driller:	
Depth (ft)	Lithology	Description	PID	Blows/6"	Sample ID	Sample Parameters

10		NR: No Recovery	N/A	1		
		FILL: Black (10YR2/1) coarse to fine SAND, little to trace (+) fine Gravel and Silt, wet.		1		
				1	XOSB-10D(10.0-11.0)	MS/MSD, Cr+6, TAL Metals
				1		
				1		
				1		
				2	XOSB-10E(12.0-12.9)	Cr+6, TAL Metals
				1	XOSB-10ED(12.0-12.9)	Cr+6, TAL Metals
				5		
	14			NR: No Recovery	0.0 ppm	4
	PEAT: PEAT, moist.	2	XOSB-10F(14.0-14.5)	Cr+6, TAL Metals		
		1				
		2				
		2				
		3				
		2				
		2	XOSB-10G(17.0-17.5)	Cr+6, TAL Metals		
		3				








NOTES: Coordinates are provided in New Jersey State Plane NAD 1983 Feet.
XOSB location is offset from original OSB location due to presence of stormwater drain.

		Client: PPG Industries			BORING ID: OSB/XOSB-10	
		Site: Site OSB				
Start Date: 7/20/2006		Project: Site Investigation			Page: 3 of 3	
		Coordinates: X-610903.4 Y-683195			Depth of Boring: 26.00	
End Date: 9/14/2006		Elevation: OSB-10 = 12.5; XOSB-10 = 12.4 ft NAVD88			Geologist: M. Abdelaziz	
		Drill Subcontractor: ADI			Driller:	
Depth (ft)	Lithology	Description	PID	Blows/6"	Sample ID	Sample Parameters

18		NR: No Recovery	N/A	7		
		SAND: Very dark greenish gray (Gley 1 3/1) medium to fine SAND, little medium to fine Gravel, little to trace Silt, wet.		7		
20		GRAVEL AND SAND: Dark reddish brown (5YR3/2) coarse to fine SAND and medium to fine GRAVEL, some to little Silt and Clay, wet.	0.1 ppm	6		
				10		
				7		
				10		
22		GRAVEL AND SAND: Dark reddish brown (5YR3/2) coarse to fine SAND and fine GRAVEL, some to little Silt, little to trace Clay, wet.	N/A	14		
				15		
				10		
				14		
24			N/A	11		
				11		
				12		
				13		
26				11		
		NULL: End of boring at 26 feet.				




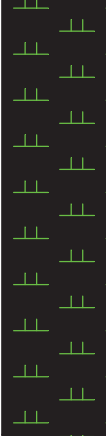

NOTES: Coordinates are provided in New Jersey State Plane NAD 1983 Feet.
 XOSB location is offset from original OSB location due to presence of stormwater drain.

<div> <div>ENSR</div> <div>AECOM</div> </div>	Client: PPG Industries	BORING ID: OSB-22
	Site: Site 133	
Start Date: 7/18/2006	Project: Site Investigation	Page: 1 of 3
	Coordinates: X-611312.6 Y-682776	Depth of Boring: 30.00
End Date: 7/25/2006	Elevation: 10.9 ft NAVD88	Geologist: M. Abdelaziz
	Drill Subcontractor:	Driller: ADI

Depth (ft)	Lithology	Description	PID	Sample ID	Sample Parameters
0		ASPHALT: Asphalt	N/A		
		CONCRETE: Concrete			
		FILL: Dusky red (2.5YR3/2) medium to fine SAND, some medium to fine Gravel, trace Silt, dry. 25% COPR.		OSB-22A(1.05-1.55)	MS/MSD, Cr+6, TAL Metals
		NR: Soft Dig - No Recovery			
2			N/A		
4		FILL: Light brownish gray (2.5Y6/2) fine SAND, some Slag and medium Gravel, little Clay and Silt, wet. >10% COPR.		OSB-22B(4.0-4.5) OSB-22BD(4.0-4.5)	Cr+6, TAL Metals Cr+6, TAL Metals
		NR: Soft Dig - No Recovery			
6		FILL: Gray (7.5YRN6) CINDERS, some Glass and coarse to medium Sand, little Silt, wet.			
		NR: No Recovery			
8			N/A		
10		FILL: Very dark gray (7.5YRN3) CINDERS, some Glass and coarse to medium Sand, little Silt, wet.			
		FILL: Dark brown (7.5YR3/2) fine to very fine SAND, PEAT and SILT, moist to wet.			

NOTES: Coordinates are provided in New Jersey State Plane NAD 1983 Feet.

<div> <div>ENSR</div> <div>AECOM</div> </div>	Client: PPG Industries	BORING ID: OSB-22
	Site: Site 133	
Start Date: 7/18/2006	Project: Site Investigation	Page: 2 of 3
	Coordinates: X-611312.6 Y-682776	Depth of Boring: 30.00
End Date: 7/25/2006	Elevation: 10.9 ft NAVD88	Geologist: M. Abdelaziz
	Drill Subcontractor:	Driller: ADI

Depth (ft)	Lithology	Description	PID	Sample ID	Sample Parameters
12			N/A	OSB-22C(11.0-12.0)	MS/MSD, Cr+6, TAL Metals
		NR: No Recovery			
		FILL: Very dark gray (7.5YRN3) CINDERS, some Glass and coarse to medium Sand, little Silt, wet.			
14		FILL: Dark reddish brown (5YR3/2) fine to very fine SAND, some Silt, trace coarse Sand, wet.	N/A		
16			N/A	OSB-22D(16.8-17.3)	Cr+6, TAL Metals
		PEAT: PEAT.			
18			N/A		
20		PEAT: Black (5YR2.5/1) PEAT, some fine to very fine Sand and Silt, moist.			

NOTES: Coordinates are provided in New Jersey State Plane NAD 1983 Feet.



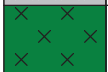

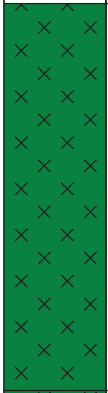
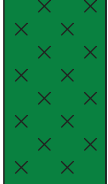
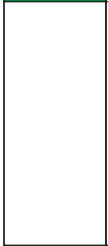
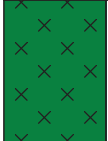
<div> <div>ENSR</div> <div>AECOM</div> </div>	Client: PPG Industries	BORING ID: OSB-22
	Site: Site 133	
Start Date: 7/18/2006	Project: Site Investigation	Page: 3 of 3
	Coordinates: X-611312.6 Y-682776	Depth of Boring: 30.00
End Date: 7/25/2006	Elevation: 10.9 ft NAVD88	Geologist: M. Abdelaziz
	Drill Subcontractor:	Driller: ADI

Depth (ft)	Lithology	Description	PID	Sample ID	Sample Parameters
22		SAND: Gray (7.5RN5) fine to very fine SAND, some Silt, trace Clay, moist.			
24		NR: No Recovery	0.0		
26		SAND: Weak red (10R4/3) coarse to medium SAND, some Silt and fine Sand, wet.			
28			0.0		
30		NULL: End of boring at 30 feet.			

NOTES:

Coordinates are provided in New Jersey State Plane NAD 1983 Feet.

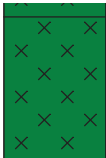


<div>ENSR AECOM</div>		Client: PPG Industries		BORING ID: OSB/XOSB-9	
		Site: Site OSB			
Start Date: 7/21/2006		Project: Site Investigation		Page: 1 of 3	
		Coordinates: X-610809.6 Y-683242.5		Depth of Boring: 26.00	
End Date: 9/20/2006		Elevation: OSB-9 = 12.9; XOSB-9 = 13.7 ft NAVD88		Geologist: M. Abdelaziz	
		Drill Subcontractor: ADI		Driller:	
Depth (ft)	Lithology	Description	PID	Sample ID	Sample Parameters

0		ASPHALT: Asphalt	N/A		
		CONCRETE: Concrete			
2		FILL: Black (7.5YR2) coarse to medium SAND, some medium to fine Gravel, trace to no Silt, dry.	N/A	OSB-9A(1.0-1.5)	Cr+6, TAL Metals, BNs, VOCs
		NR: No Sample			
4		FILL: Dark reddish brown, (5YR3/2) coarse to medium SAND, some medium to fine Gravel, little Silt, trace Clay, dry. ~5% COPR.	N/A	OSB-9B(2.3-2.8)	Cr+6, TAL Metals, BNs, VOCs
6		FILL: Very dark grayish brown (10YR3/2) medium to fine SAND, some Silt, trace fine Gravel, wet.	0.0 ppm	XOSB-9C(5.0-6.3) XOSB-9CD(5.0-6.3)	MS/MSD, Cr+6, TAL Metals, BNs, VOCs Cr+6, TAL Metals, BNs, VOCs
		NR: No Recovery			
8		FILL: Very dark grayish brown (10YR3/2) fine to medium SAND, some Silt, trace fine Gravel, trace Clay(-), wet.	0.0 ppm	XOSB-9D(8.0-10.1)	Cr+6, TAL Metals, BNs, VOCs

NOTES: Coordinates are provided in New Jersey State Plane NAD 1983 Feet.

Start Date: 7/21/2006	Project: Site Investigation	Page: 2 of 3
	Coordinates: X-610809.6 Y-683242.5	Depth of Boring: 26.00
End Date: 9/20/2006	Elevation: OSB-9 = 12.9; XOSB-9 = 13.7 ft NAVD88	Geologist: M. Abdelaziz
	Drill Subcontractor: ADI	Driller:

Depth (ft)	Lithology	Description	PID	Sample ID	Sample Parameters
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10		FILL: Black (10YR2/1) coarse to medium SAND, some fine Gravel, little to trace Silt, trace Wood, wet.	0.0 ppm		
		NR: No Recovery			
12		FILL: Black (10YR2/1) coarse to medium SAND, some fine Gravel, little to trace Silt, trace Wood, wet.			
		NR: No Recovery			
14			0.0 ppm		
16		PEAT: Peat, Some clay.		XOSB-9E(16.0-17.0)	Cr+6, TAL Metals, BNs, VOCs
18					

NOTES: Coordinates are provided in New Jersey State Plane NAD 1983 Feet.

Start Date:
7/21/2006

Project: **Site Investigation**

Page: 3 of 3

Coordinates: X-610809.6 Y-683242.5

Depth of Boring: 26.00

End Date:
9/20/2006

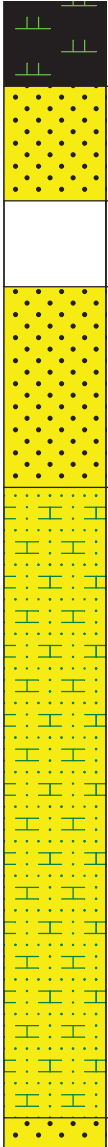
Elevation: OSB-9 = 12.9; XOSB-9 = 13.7 ft NAVD88

Geologist: M. Abdelaziz

Drill Subcontractor: ADI




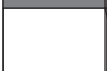


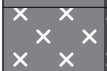

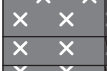


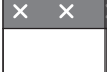
Driller:

Depth (ft)	Lithology	Description	PID	Sample ID	Sample Parameters
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		SAND: Gray (10YR5/1) fine to very fine SAND, some Silt, trace Clay, wet.			
		NR: No Recovery			
20		SAND: Gray (10YR5/1) fine to very fine SAND, some Silt, trace Clay, wet.	N/A		
22		SILT AND CLAY: Gray (5YR5/1) clayey SILT, trace fine Sand, moist.			
24					
26		SAND: Yellowish red (5YR4/6) medium to fine SAND, some Silt, trace Clay, moist	N/A	XOSB-9G(24.0-26.0)	Cr+6, TAL Metals, BNs, VOCs
		NULL: End of boring at 26 feet.			

NOTES: Coordinates are provided in New Jersey State Plane NAD 1983 Feet.

<div> <div>ENSR</div> <div>AECOM</div> </div>	Client: PPG Industries	BORING ID: OSB/XOSB-13
	Site: Site 133	
Start Date: 7/20/2006	Project: Site Investigation	Page: 1 of 3
	Coordinates: X-611056.3 Y-683090.4	Depth of Boring: 28.00
End Date: 9/13/2006	Elevation: OSB-13 = 12.6; XOSB-13 = 12.5 ft NAVD88	Geologist: M. Abdelaziz
	Drill Subcontractor:	Driller: ADI

Depth (ft)	Lithology	Description	PID	Sample ID	Sample Parameters
0		ASPHALT: Asphalt	N/A		
		CONCRETE: Concrete			
2		FILL: Very dark brown (7.5 YR 3/3) coarse to medium SAND, some coarse to fine Gravel, little Silt, dry. 50% COPR nodules.	0.0	OSB-13A(1.0-1.5)	MS/MSD, Cr+6, TAL Metals
		NR: Soft Dig - No Recovery		OSB-13B(2.0-2.5)	Cr+6, TAL Metals
		FILL: Dusky red (7.5R3/4) some coarse Sand and fine Gravel, little Silt, wet. 100% COPR nodules			
4		NR: Soft Dig - No Recovery	0.0		
		FILL: Very dark grayish brown (10YR3/2) SILTY SAND, little Clay, wet.		XOSB-13C(4.5-5.5)	MS/MSD, Cr+6, TAL Metals
6		NR: No Recovery	0.0		
		FILL: Very dark grayish brown (2.5YR3/2) coarse to fine SAND, trace Silt, moist.			
		FILL: Very dark grayish brown (2.5YR3/2) coarse to fine SAND and medium to fine GRAVEL, little to trace Silt, moist.		XOSB-13D(7.0-8.0)	Cr+6, TAL Metals
		FILL: Olive (5Y 4/3) SILTY CLAY and coarse to fine SAND, moist.		XOSB-13DD(7.0-8.0)	Cr+6, TAL Metals
8			0.0		
		FILL: Yellowish brown (10YR5/6) SILTY CLAY becoming black (10YR2/1) SILTY SAND, moist.			
		FILL: Olive (5Y5/6) SILTY SAND, trace Gravel, moist.			
		FILL: Olive gray (5Y4/2) medium to fine SAND and CLAYEY SILT, moist.			


NOTES: Coordinates are provided in New Jersey State Plane NAD 1983 Feet.


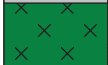



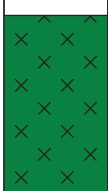
<div> <div>ENSR</div> <div>AECOM</div> </div>	Client: PPG Industries	BORING ID: OSB/XOSB-13
	Site: Site 133	
Start Date: 7/20/2006	Project: Site Investigation	Page: 3 of 3
	Coordinates: X-611056.3 Y-683090.4	Depth of Boring: 28.00
End Date: 9/13/2006	Elevation: OSB-13 = 12.6; XOSB-13 = 12.5 ft NAVD88	Geologist: M. Abdelaziz
	Drill Subcontractor:	Driller: ADI

Depth (ft)	Lithology	Description	PID	Sample ID	Sample Parameters
20		SILTY CLAY: Black (5Y 2.5/1) SILTY CLAY, trace Peat.	0.0		
22			0.0		
24		SILTY CLAY: Black (2.5YR 2.5/1) SILTY CLAY and medium to fine SAND.			
		CLAYEY SAND: Black (2.5YR 2.5/1) CLAYEY SAND, trace Organics.	0.0		
		SILTY SAND: Very dark grayish brown (10YR 3/2) SILTY SAND, little to trace Clay.			
		SAND: Dark reddish brown (5YR3/3) coarse to fine SAND, trace Silt and fine Gravel.	0.0		
26					
28		NULL: End of boring at 28 feet.			


NOTES:






Coordinates are provided in New Jersey State Plane NAD 1983 Feet.

		Client: PPG Industries			BORING ID: OSB/XOSB-17	
		Site: Site OSB				
Start Date: 7/19/2006		Project: Site Investigation			Page: 1 of 3	
		Coordinates: X-611166.6 Y-682972			Depth of Boring: 28.00	
End Date: 9/12/2006		Elevation: OSB-17 = 12.1; XOSB-17 = 11.8 ft NAVD88			Geologist: M. Abdelaziz, R. Firely	
		Drill Subcontractor: ADI			Driller:	
Depth (ft)	Lithology	Description	PID	Blows/6"	Sample ID	Sample Parameters


0		ASPHALT: Asphalt	N/A			OSB-17A(0.9-1.4)	MS/MSD, Cr+6, TAL Metals
		CONCRETE: Concrete					
		FILL: Dark gray (7.5YRN4) coarse medium SAND, some medium to fine Gravel, little fine Sand and Silt, dry. 40% COPR.					
		NR: No Sample					
2		FILL: Dark gray (7.5YRN4) coarse to medium SAND, some medium to fine Gravel and Silt, little fine Sand and Clay, moist. 40% COPR.					
		NR: No Sample					
4		FILL: Dark gray (7.5YRN4) WOOD CHIPS, some Glass pieces and Silt, little medium Sand, wet.	0.0 ppm	1	7	OSB-17B(4.2-4.7)	Cr+6, TAL Metals
		NR: No Sample					
6		FILL: Very dark brown (10YR2/2) medium to fine SAND and SILT, some Coal ash, little medium to fine Gravel, wet.	0.5 ppm	37	45	XOSB-17C(6.2-7.2)	MS/MSD, Cr+6, TAL Metals
		NR: No Recovery					
8		FILL: Very dark brown (10YR2/2) coarse to fine SAND and medium to fine GRAVEL, wet. MGP like odor and slight sheen.	5.8 ppm	65	35	XOSB-17D(8.2-9.2)	Cr+6, TAL Metals
						XOSB-17DD(8.2-9.2)	Cr+6, TAL Metals
					42		


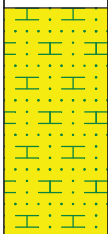
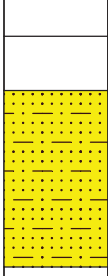
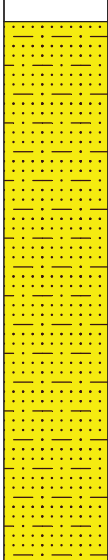
NOTES: Coordinates are provided in New Jersey State Plane NAD 1983 Feet.
XOSB location is offset from original OSB location due to presence of stormwater drain.

		Client: PPG Industries			BORING ID: OSB/XOSB-17	
		Site: Site OSB				
Start Date: 7/19/2006		Project: Site Investigation			Page: 2 of 3	
		Coordinates: X-611166.6 Y-682972			Depth of Boring: 28.00	
End Date: 9/12/2006		Elevation: OSB-17 = 12.1; XOSB-17 = 11.8 ft NAVD88			Geologist: M. Abdelaziz, R. Firely	
		Drill Subcontractor: ADI			Driller:	
Depth (ft)	Lithology	Description	PID	Blows/6"	Sample ID	Sample Parameters


10		FILL: Very dark grayish brown (10YR3/2) fine SAND and SILT, trace Clay, wet.	8.5 ppm	21		
				15	XOSB-17E(10.2-10.7)	Cr+6, TAL Metals
12		FILL: Reddish brown (5YR4/4) fine SAND and SILT, trace Clay, wet.	1.5 ppm	16		
				10		
				10		
				12	XOSB-17F(12.2-12.7)	Cr+6, TAL Metals
14		FILL: Reddish brown (5YR4/4) fine SAND and SILT, trace Clay, wet.	0.6 ppm	10		
				8		
				4		
				8	XOSB-17G(14.2-14.7)	Cr+6, TAL Metals
16		PEAT: PEAT, moist.	10.0 ppm	12		
				70		
				5		
				3	XOSB-17H(16.0-16.5)	Cr+6, TAL Metals
18		PEAT: PEAT, peat-like odor, moist.	2.2 ppm	4		
				4		
				4		
				3		
				2		
				2		



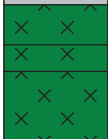



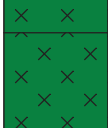
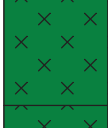

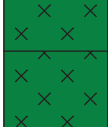
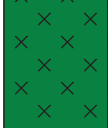

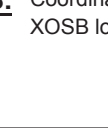

NOTES: Coordinates are provided in New Jersey State Plane NAD 1983 Feet.
XOSB location is offset from original OSB location due to presence of stormwater drain.

		Client: PPG Industries			BORING ID: OSB/XOSB-17	
		Site: Site OSB				
Start Date: 7/19/2006		Project: Site Investigation			Page: 3 of 3	
		Coordinates: X-611166.6 Y-682972			Depth of Boring: 28.00	
End Date: 9/12/2006		Elevation: OSB-17 = 12.1; XOSB-17 = 11.8 ft NAVD88			Geologist: M. Abdelaziz, R. Firely	
		Drill Subcontractor: ADI			Driller:	
Depth (ft)	Lithology	Description	PID	Blows/6"	Sample ID	Sample Parameters


20		SILT AND CLAY: Dark gray (10YR4/1)SILT and CLAY, wet.	0.7 ppm	4		
				6		
22		SILT AND CLAY: Dark gray (10YR4/1)SILT and CLAY, wet.	51.4 ppm	3		
				5		
				8		
				11		
24		SAND AND GRAVEL: Dark reddish brown (5YR3/3) coarse to fine SAND and medium to fine GRAVEL, little coarse Gravel, wet. MGP like odor and sheen.	11.4 ppm	10		
				8		
				4		
				6		
26		SAND AND SILT: Dark reddish brown (5YR3/3) fine SAND and SILT, wet. MGP like odor and sheen.	3.2 ppm	4	XOSB-17L(26.0-27.0)	Cr+6, TAL Metals
				4		
				4	XOSB-17LD(26.0-27.0)	Cr+6, TAL Metals
				4		
				4		
				4		
				3		
				4		
28		NULL: End of boring at 28 feet.				

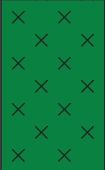

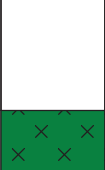


NOTES: Coordinates are provided in New Jersey State Plane NAD 1983 Feet.
XOSB location is offset from original OSB location due to presence of stormwater drain.

		Client: PPG Industries			BORING ID: OSB/XOSB-19	
		Site: Site OSB				
Start Date: 7/18/2006		Project: Site Investigation			Page: 1 of 3	
		Coordinates: X-611217.1 Y-682922.8			Depth of Boring: 28.00	
End Date: 9/11/2006		Elevation: OSB-19 = 11.7; XOSB-19 = 11.9 ft NAVD88			Geologist: M. Abdelaziz	
		Drill Subcontractor: ADI			Driller:	
Depth (ft)	Lithology	Description	PID	Blows/6"	Sample ID	Sample Parameters

0		ASPHALT: Asphalt	N/A			
		CONCRETE: Concrete	N/A			
		FILL: Weak red (2.5YR4/2) medium SAND, some fine Sand and fine Gravel, little Silt, trace Clay, dry. 40% COPR.	N/A		OSB-19A(0.9-1.4)	Cr+6, TAL Metals
2		FILL: Dark red (7.5YR3/6) medium SAND, some fine Sand and fine Gravel, little Silt, trace Clay, dry. 10% COPR.				
		FILL: Dark red (7.5YR3/6) medium SAND, some fine Sand and fine Gravel, little Silt, trace Clay, dry. 90% COPR.				
4			0.0 ppm	2		
				2		
		FILL: Pinkish gray (7.5YR7/2) fine to very fine SAND and SILT, some very fine Gravel, moist.		2		
6				2		
		FILL: Weak red (10R4/2) coarse to fine SAND, some Silt, trace fine Gravel, moist.		3		
				3		
8				2		
		FILL: Very dark gray (2.5YRN3) medium to fine GRAVEL, some coarse to medium Sand, trace Silt and fine Sand, wet. Petroleum odor and sheen.	19.6 ppm	4		
				4		
			19.6 ppm	3	OSB-19D(9.2-9.7)	Cr+6, TAL Metals
				2		


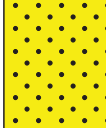

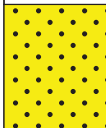
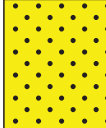
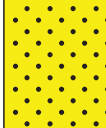
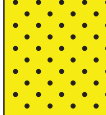
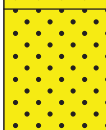
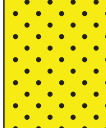
NOTES: Coordinates are provided in New Jersey State Plane NAD 1983 Feet.
XOSB location is offset from original OSB location due to presence of stormwater drain.

		Client: PPG Industries			BORING ID: OSB/XOSB-19	
		Site: Site OSB				
Start Date: 7/18/2006		Project: Site Investigation			Page: 2 of 3	
		Coordinates: X-611217.1 Y-682922.8			Depth of Boring: 28.00	
End Date: 9/11/2006		Elevation: OSB-19 = 11.7; XOSB-19 = 11.9 ft NAVD88			Geologist: M. Abdelaziz	
		Drill Subcontractor: ADI			Driller:	
Depth (ft)	Lithology	Description	PID	Blows/6"	Sample ID	Sample Parameters

10		NR: No Recovery	50.4 ppm	4		
		FILL: Very Dark Gray (2.5YR N3) silty CLAY, some fine Sand, trace medium Sand, wet. Petroleum odor and sheen.	50.4 ppm	5		
12		NR: No Recovery		7	OSB-19E(10.8-11.3)	MS/MSD, Cr+6, TAL Metals
		FILL: PEAT (Uplifted - fill), wet. Petroleum odor and sheen.		9		
14		NR: No Recovery	1.4-2.3 ppm	9		
				10		
16		NR: No Recovery	2.3 ppm	8	OSB-19F(13.5-14.0) OSB-19FD(13.5-14.0)	Cr+6, TAL Metals Cr+6, TAL Metals
			0.0 ppm	8		
18		NR: No Recovery		9		
				11		
		NR: No Recovery		12		
				7		
		NR: No Recovery	5.6 ppm	7		
				7		
		NR: No Recovery		8		
				9		
		NR: No Recovery		3	XOSB-19H(18.0-18.5)	Cr+6, TAL Metals
				3	XOSB-19HD(18.0-18.5)	Cr+6, TAL Metals
		SAND: Gray (7.5YR5/1) fine to very fine SAND, some Silt, trace Clay, moist.	5.3 ppm	3		











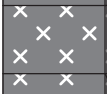



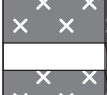

NOTES: Coordinates are provided in New Jersey State Plane NAD 1983 Feet.
XOSB location is offset from original OSB location due to presence of stormwater drain.

<div>ENSR AECOM</div>		Client: PPG Industries			BORING ID: OSB/XOSB-19	
		Site: Site OSB				
Start Date: 7/18/2006		Project: Site Investigation			Page: 3 of 3	
		Coordinates: X-611217.1 Y-682922.8			Depth of Boring: 28.00	
End Date: 9/11/2006		Elevation: OSB-19 = 11.7; XOSB-19 = 11.9 ft NAVD88			Geologist: M. Abdelaziz	
		Drill Subcontractor: ADI			Driller:	
Depth (ft)	Lithology	Description	PID	Blows/6"	Sample ID	Sample Parameters

20		CLAYEY SAND: Gray (7.5YR5/1) clayey SILT, some fine to very fine Sand, trace Peat, wet.	1.2 ppm	3		
				5		
		SAND: Gray (7.5YR5/1) fine to very fine SAND, some Silt, trace coarse Sand, moist.		7		
				10		
22		NR: No Recovery		11		
		SAND: Gray (7.5YR5/1) fine to very fine SAND, some Silt, trace coarse Sand and Clay, moist.	2.2 ppm	10		
				10		
		SAND: Dark brown (7.5YR3/2) coarse SAND, some fine Gravel, little Silt, moist to dry.		11		
				13		
24		SAND: Dark reddish brown (5YR3/4) coarse to medium SAND, little Silt and fine Sand, wet.	3.3 ppm	10		
				11		
				10		
				9		
26		SAND: Dark reddish brown (5YR3/4) fine to very fine SAND, little Silt, trace coarse Sand, wet.	5.3 ppm	10		
				10		
				10		
				10		
28	NULL: End of boring at 28 feet.					





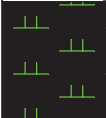

NOTES: Coordinates are provided in New Jersey State Plane NAD 1983 Feet.
 XOSB location is offset from original OSB location due to presence of stormwater drain.

<div> <div>ENSR</div> <div>AECOM</div> </div>	Client: PPG Industries	BORING ID: OSB/XOSB-21
	Site: Site 133	
Start Date: 7/18/2006	Project: Site Investigation	Page: 1 of 3
	Coordinates: X-611281 Y-682858.2	Depth of Boring: 30.00
End Date: 9/11/2006	Elevation: OSB-21 = 11.5; XOSB-21 = 11.7 ft NAVD88	Geologist: M. Abdelaziz
	Drill Subcontractor:	Driller: ADI

Depth (ft)	Lithology	Description	PID	Sample ID	Sample Parameters
0		ASPHALT: Asphalt	N/A		
		CONCRETE: Concrete			
2		FILL: Dusky red (2.5YR3/2) coarse to fine SAND, some medium to fine Gravel, trace Silt, dry. 35% COPR.		OSB-21A(1.15-1.65)	Cr+6, TAL Metals
		NR: Soft Dig - No Recovery			
4		FILL: Reddish gray (5YR5/2) medium to fine SAND, some medium Gravel and Slag, little Silt, trace(-) Clay, wet.		OSB-21B(2.7-3.2)	Cr+6, TAL Metals
		NR: Soft Dig - No Recovery			
6		FILL: Black (5YR2.5/1) SILTY SAND, some Glass, Cinders and Tiles, wet.	0.1		
		FILL: Gray (5YR5/1) coarse to medium SAND, some Silt, wet.			
8		NR: No Recovery	0.1		
		FILL: Black (5YR2.5/1) SILTY SAND, some Glass, Cinders and Tiles, wet.			
10		FILL: Gray (5YR5/1) coarse to medium SAND, some Silt, wet.	0.4		
		FILL: Brown (7.5YR4/2) medium SAND, some Silt, little fine Gravel, trace Clay, moist.			
		NR: No Recovery			
		FILL: Dark grayish brown (10YR4/2) coarse to medium SAND, some Silt, little fine to very fine Gravel, trace Clay, wet.			
		FILL: Dark grayish brown (10YR4/2) medium to fine SAND, some Silt and Clay, trace coarse Sand, wet.	12.8		
		NR: No Recovery			

NOTES: Coordinates are provided in New Jersey State Plane NAD 1983 Feet.

<div> <div>ENSR</div> <div>AECOM</div> </div>	Client: PPG Industries	BORING ID: OSB/XOSB-21
	Site: Site 133	
Start Date: 7/18/2006	Project: Site Investigation	Page: 2 of 3
	Coordinates: X-611281 Y-682858.2	Depth of Boring: 30.00
End Date: 9/11/2006	Elevation: OSB-21 = 11.5; XOSB-21 = 11.7 ft NAVD88	Geologist: M. Abdelaziz
	Drill Subcontractor:	Driller: ADI

Depth (ft)	Lithology	Description	PID	Sample ID	Sample Parameters
12		FILL: Dark reddish gray (10R3/1) SILTY SAND, some Clay, trace medium Sand and olive yellow (5Y6/8) fine Gravel, wet.	49.3	OSB-21C(13.3-13.8)	Cr+6, TAL Metals
	NR: No Recovery				
		FILL: Dark reddish gray (10R3/1) SILTY SAND, some Clay, trace medium Sand and olive yellow (5Y6/8) fine Gravel, wet.			
14		FILL: Very dark brown (7.5YR2.5/2) fine to very fine SAND, some Silt, trace fine Gravel and Clay, wet. Petroleum odor and sheen.	39.5		
	PEAT: PEAT, wet. Petroleum odor and sheen.				
	NR: No Recovery				
16		PEAT: PEAT, wet. Petroleum odor and sheen.	78.8		
	NR: No Recovery				
18		PEAT: PEAT, wet. Petroleum odor and sheen.	7.3		
20		PEAT: PEAT, wet. Petroleum odor and sheen.	6.2	XOSB-21E(20.0-21.0)	MS/MSD, Cr+6, TAL Metals

NOTES: Coordinates are provided in New Jersey State Plane NAD 1983 Feet.

<div> <div>ENSR</div> <div>AECOM</div> </div>	Client: PPG Industries	BORING ID: OSB/XOSB-21
	Site: Site 133	
Start Date: 7/18/2006	Project: Site Investigation	Page: 3 of 3
	Coordinates: X-611281 Y-682858.2	Depth of Boring: 30.00
End Date: 9/11/2006	Elevation: OSB-21 = 11.5; XOSB-21 = 11.7 ft NAVD88	Geologist: M. Abdelaziz
	Drill Subcontractor:	Driller: ADI

Depth (ft)	Lithology	Description	PID	Sample ID	Sample Parameters
22		SILTY CLAY: Gray (gley16/1) SILTY CLAY, some fine to very fine Sand, wet.	7.3		
		NR: No Recovery			
		SILTY CLAY: Gray (gley16/1) SILTY CLAY, some fine to very fine Sand, wet.			
		SAND: Gray (gley16/1) coarse to medium SAND, some Silt, trace fine Sand, wet.			
24		NR: No Recovery	0.4		
		SAND: Dark reddish brown (2.5YR3/3) coarse SAND, some medium Sand and Silt, trace fine Gravel, wet.			
		NR: No Recovery			
26		SAND: Dark reddish brown (2.5YR3/3) coarse SAND, some medium Sand and Silt, trace fine Gravel, wet.	1.4		
		NR: No Recovery			
		NR: No Recovery			
28		SAND: Dark reddish brown (2.5YR3/3) coarse SAND, some medium Sand and Silt, trace fine Gravel, wet.	6.2		
		NR: No Recovery			
		NR: No Recovery			
30	NULL: End of boring at 30 feet.				

NOTES:

Coordinates are provided in New Jersey State Plane NAD 1983 Feet.



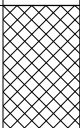

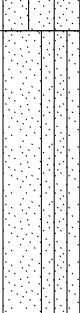
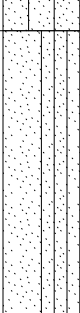
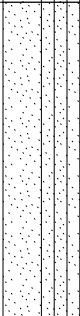
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Boring ID: P4-A`14A

Page: 1

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 610701
Date Started Drilling: 3/10/2014 11:20:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 683297
Date Finished Drilling: 3/10/2014 11:50:00 AM	Core Size: 2 in	Boring Total Depth: 25 ft
Logged By: MI & FM	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: A`14A- Carteret Ave.		Surface Elevation: 11.3 ft NAVD88

(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID						
1	0			NR		Boring advanced directly to 5 ft bgs.							
2													
3													
4													
5	2	0.0	moist	FILL		fine to medium silty SAND, trace cinders, (7.5YR 4/6) strong brown, dense, moist, no odor, no staining.							
6													
7				NR		NO RECOVERY							
8													
9	5	0.0	moist	FILL		fine to medium silty SAND, trace cinders, (7.5YR 4/6) strong brown, dense, moist, no odor, no staining.	P4-A`14A-9.5-10.0						
10							moist to wet	SP-SM		UNDno SILT, with fine sand, trace coarse gravel, (10YR 5/8) yellowish brown, dense to soft, moist, no odor, no staining. Soils consistent with UNDno. UNDno fine to coarse SAND, with fine to coarse gravel, trace silt, (2.5YR 4/8) red, loose to hard, moist to wet, no odor, no staining. Soils consistent with UNDno.	P4-A`14A-10.0-10.5		
11													
12			P4-A`14A-12.0-12.5										
13													
14			P4-A`14A-14.0-14.5										
15													
16			5	0.0	moist to wet	SP-SM						UNDno fine to coarse SAND, with fine to coarse gravel, trace silt, (2.5YR 4/8) red, loose to hard, moist to wet, no odor, no staining. Soils consistent with UNDno.	P4-A`14A-16.0-16.5
17													
18							P4-A`14A-18.0-18.5						
19	5	0.0	moist to wet	SP-SM		UNDno fine to coarse SAND, with fine to coarse gravel, trace silt, (2.5YR 4/8) red, loose to hard, moist to wet, no odor, no staining. Soils consistent with UNDno.	P4-A`14A-20.0-20.5						
20													
21													
22													
23													

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick 3) No COPR or GGM encountered in any interval of this boring.

PPG - PPG LOGS.GDT - 4/15/14 17:43



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Boring ID: P4-A14A

Page: 1

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 610726
Date Started Drilling: 3/10/2014 12:00:00 PM	Rig Type:	Coordinates (NJSPNAD83) y: 683283
Date Finished Drilling: 3/10/2014 1:40:00 PM	Core Size: 2 in	Boring Total Depth: 25 ft
Logged By: MI & FM	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: P14A- Carteret Ave.		Surface Elevation: 11.9 ft NAVD88

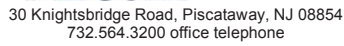
(Note: bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	0			NR		Boring advanced directly to 5 ft bgs.	
2							
3							
4							
5	5	0.0	slightly moist	FILL		fine to medium SAND, some cinders, little fine gravel, (7.5YR 2.5/1) black, loose, slightly moist, no odor, no staining.	P4-A14A-6.0-6.5
6							
7		0.0	moist	FILL		fine to medium silty SAND, little fine gravel, trace brick fragments, cinders, (7.5YR 4/2) brown, dense, moist, no odor, no staining.	P4-A14A-8.0-8.5
8							
9	5						
10		0.0	moist	FILL		SILT, some fine sand, trace roots, (7.5YR 3/4) dark brown, low plasticity, soft, moist, no odor, no staining.	P4-A14A-10.0-10.5
11							P4-A14A-11.0-11.5
12		0.0	moist	OL		UNDorg SILT, 90% organic silt, 10% organic fibers, low plasticity, soft to stiff, moist, slight organic odor, no staining. Soils consistent with UNDorg.	P4-A14A-11.5-12.0
13							P4-A14A-12.0-12.5
14	5	0.0	moist	SM		UNDno fine SAND, and silt trace organics, (10YR 5/4) yellowish brown, dense to soft, moist, no odor, no staining. Soils consistent with UNDno.	P4-A14A-14.0-14.5
15							
16		0.0	moist	SM		UNDno fine to medium SAND, some silt, (5YR 5/8) yellowish red, loose to dense, moist, no odor, no staining. Soils consistent with UNDno.	P4-A14A-16.0-16.5
17							
18	5			SP		UNDno fine to coarse SAND, with fine to coarse gravel, little silt, (2.5YR 4/8) red, loose to hard, moist, no odor, no staining. Soils consistent with UNDno.	P4-A14A-18.0-18.5
19							
20							
21							
22	5	0.0	moist	SP		UNDno fine to coarse SAND, with fine to coarse gravel, little silt, (2.5YR 4/8) red, loose to hard, moist, no odor, no staining. Soils consistent with UNDno.	P4-A14A-20.0-20.5
23							

Re-Review of soil description indicates that the USCS for this interval is SP-SM

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick 3) No COPR or GGM encountered in any interval of this boring.

PPG - PPG_LOGS.GDT - 4/15/14 17:43














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Boring ID: P4-B14A

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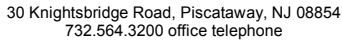
Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 610753
Date Started Drilling: 3/11/2014 9:16:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 683270
Date Finished Drilling: 3/11/2014 10:00:00 AM	Core Size: 2.0 in	Boring Total Depth: 25 ft
Logged By: MI & FM	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: B14A - Carteret Ave.		Surface Elevation: 12.4 ft NAVD88

(Note: bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	0			NR		Boring advanced directly to 5 ft bgs.	
2							
3							
4							
5	5	0.0	dry	FILL		fine to medium silty SAND, little coal, trace glass fragments, (7.5YR 3/2) dark brown, medium dense, dry, no odor, no staining.	P4-B14A-6.0-6.5
6		0.0	slightly moist	FILL		fine to medium SAND, little coarse gravel, trace glass fragments, (5YR 4/3) reddish brown, medium dense, slightly moist, no odor, no staining.	P4-B14A-8.0-8.5
7							
8							
9	5	0.0	moist to wet	FILL		fine silty SAND, trace glass fragments, trace ceramics, (10YR 4/3) brown, soft to medium dense, moist to wet, no odor, no staining.	P4-B14A-10.0-10.5
10							
11							
12							
13	5	0.0	moist	OL		80% organic silt, 20% organic fibers fine SILT, (7.5YR 2.5/3) very dark brown, medium plasticity, medium dense, moist, no odor, no staining. Soils consistent with UNDorg.	P4-B14A-12.0-12.5
14		0.0	moist	SM		fine to medium sandy SILT, (7.5YR 5/1) gray, medium dense to dense, moist, no odor, no staining. Soils consistent with UNDno.	P4-B14A-12.5-13.0
15		0.0	moist to wet	SM		fine SAND, little silt, (7.5YR 5/1) gray, medium dense, moist to wet, no odor, no staining. Soils consistent with UNDno.	P4-B14A-13.0-13.5
16		0.0	dry	SM		fine to medium SAND, some fine to coarse gravel, (2.5YR 7/3) light reddish brown, dense to very dense, dry, no odor, no staining. Soils consistent with UNDno.	P4-B14A-14.0-14.5
17	5	0.0	dry	SM		fine to coarse SAND, some fine to coarse gravel, (2.5YR 4/3) reddish brown, medium dense to very dense, dry, no odor, no staining. Soils consistent with UNDno.	P4-B14A-16.0-16.5
18							
19							
20							
21	5	0.0	dry	SM		fine to coarse SAND, fine to coarse gravel, (2.5YR 4/3) reddish brown, medium dense to very dense, dry, no odor, no staining. Soils consistent with UNDno.	P4-B14A-18.0-18.5
22							
23							
24							

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick 3) No COPR or GGM encountered in any interval of this boring.

PPG - PPG LOGS.GDT - 4/15/14 17:43



Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Direct Push	Coordinates (NJSPNAD83) x: 611366.605
Date Started Drilling: 12/9/2014 9:30:00 AM	Rig Type: Geoprobe	Coordinates (NJSPNAD83) y: 682752.926
Date Finished Drilling: 12/9/2014 11:00:00 AM	Core Size: 3.0 in	Boring Total Depth: 20 ft
Logged By: SP	Project Manager: Scott Mikaelian	Depth to Water: N/A
Physical Location: Carteret Avenue		Surface Elevation: 10.5 ft NAVD88

(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	5	0.0		ASPHALT		ASPHALT.	
2		0.0	moist	FILL		fine to medium SAND, trace gravel, (10YR 5/1) gray, loose, moist, no odor, no staining. fine to medium SAND, some ash trace gravel, (10YR 4/2) dark grayish brown, loose to medium dense, moist, no staining.	P4-BB20A-1.5-2.0
3		0.0	moist	FILL			P4-BB20A-2.0-2.5
4	5						P4-BB20A-4.0-4.5
5		0.0	saturated	FILL		fine to coarse well-graded SAND, trace brick, trace glass, trace silt, (10YR 5/1) gray, medium dense, saturated, no odor, no staining.	
6							P4-BB20A-6.0-6.5
7							
8	3					NO RECOVERY.	
9							
10		0.0		NR			
11	3					fine to medium silty SAND, trace ash, trace debris, (10YR 3/1) very dark gray, low plasticity soft to medium dense, saturated, moderate petroleum odor, sheen.	
12		13.6	saturated	FILL			P4-BB20A-12.0-12.5
13							
14	5					fine to medium silty SAND, trace fine gravel, (10YR 2/2) very dark brown, low plasticity, moist, no odor, no staining. PEAT (degraded vegetated material), (60% organic silt, 40% organic fibers), (10YR 4/3) brown, low plasticity medium dense, slightly moist, moderate organic odor, no staining. Soils consistent with MM. UNDorg SILT, (90% organic silt, 10% organic fibers), (10YR 4/1) dark gray, low plasticity, medium dense, slightly moist, moderate organic odor, no staining. Soils consistent with UNDorg.	
15		0.0	moist	FILL			P4-BB20A-15.0-15.5
16		0.0	slightly moist	PT			P4-BB20A-15.5-16.0
17							
18	5						
19		0.0	slightly moist	OL			
20							

PPG - 2012-09 RA PPG_LOGS_A.GDT - 8/11/15 15:59

Comments: 1) Three attempts were made to obtain best recovery 2) UND/MM confirmed to be 1 ft thick 3) No COPR or GGM present in any interval of this boring.



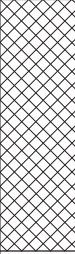
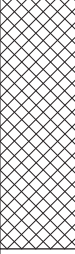

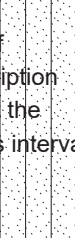
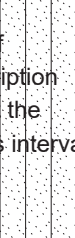
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Boring ID: P4-C14A

Page: 1

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 610780
Date Started Drilling: 3/11/2014 9:20:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 683256
Date Finished Drilling: 3/11/2014 10:05:00 AM	Core Size: 2 in	Boring Total Depth: 25 ft
Logged By: MI & FM	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: C14A- Carteret Ave.		Surface Elevation: 12.6 ft NAVD88

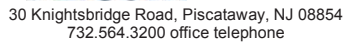
(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	0			NR		Boring advanced directly to 5 ft bgs.	
2							
3							
4							
5	4	0.0	moist	FILL		fine to medium silty SAND, some fine to medium gravel, little fill material, (10YR 5/2) grayish brown, dense, moist, no odor, no staining.	P4-C14A-6.0-6.5
6							
7							
8							
9	5	0.0	moist	FILL		fine silty SAND, trace ceramics, trace fill material, (7.5YR 4/2) brown, dense, moist, no odor, no staining.	P4-C14A-10.0-10.5
10							
11							
12							
13	5	0.0	moist	OL		UNDorg SILT, 70% organic silt, 30% organic fibers, (7.5YR 2.5/3) very dark brown, low plasticity, soft to stiff, moist, moderate organic odor. Soils consistent with UNDorg.	P4-C14A-12.0-12.5
14							
15							
16							
17	5	0.0	slightly moist	SM		UNDorg SILT, 70% organic silt, 30% organic fibers, (7.5YR 2.5/3) very dark brown, low plasticity, soft to stiff, moist, moderate organic odor. Soils consistent with UNDorg. UNDno fine SAND, little silt, (7.5YR 5/1) gray, dense, slightly moist, no odor, no staining. Soils consistent with UNDno.	P4-C14A-14.0-14.5
18							
19							
20							
21	5	0.0	moist	SM		UNDno fine to medium SAND, some fine to medium gravel, (5YR 5/2) reddish gray, loose, moist, no odor, no staining. Soils consistent with UNDno. UNDno fine to coarse SAND, with fine to medium gravel, (2.5YR 4/6) red, loose to hard, moist. Soils consistent with UNDno.	P4-C14A-16.0-16.5
22							
23							
24							

Re-Review of the soil description indicates that the USCS for this interval is SP

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick 3) No COPR or GGM encountered in any interval of this boring.

PPG - PPG LOGS.GDT - 4/15/14 17:43





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Boring ID: P4-CC20A

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Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Direct Push	Coordinates (NJSPNAD83) x: 611391.808
Date Started Drilling: 12/11/2014 9:15:00 AM	Rig Type: Geoprobe	Coordinates (NJSPNAD83) y: 682734.17
Date Finished Drilling: 12/11/2014 10:15:00 AM	Core Size: 3.0 in	Boring Total Depth: 10 ft
Logged By: SP	Project Manager: Scott Mikaelian	Depth to Water: N/A
Physical Location: Carteret Avenue		Surface Elevation: 10.1 ft NAVD88

(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
		0.0		ASPHALT		ASPHALT.	
1	5	0.0	slightly moist	FILL		fine SAND,(10YR 5/8) yellowish brown,loose to medium dense,slightly moist,no odor,no staining.	P4-CC20A-0.5-1.0
2							P4-CC20A-2.0-2.5
3		0.0	slightly moist	FILL		fine to coarse SAND,some ash,trace gravel,trace coal,(10YR 4/2) dark grayish brown,loose,slightly moist,no odor,no staining.	P4-CC20A-4.0-4.5
4							
5	5	0.0	slightly moist	FILL		fine to medium SAND,trace gravel,trace ash,(2.5YR 2.5/2) very dusky red,medium dense,slightly moist,no odor,no staining.	P4-CC20A-6.0-6.5
6		0.0	moist saturated	FILL		fine to medium SAND,some gravel,trace ash,(2.5YR 2.5/2) very dusky red,loose,saturated,no odor,no staining.	P4-CC20A-8.0-8.5
7							
8							
9							
10							

Comments: 1) Three attempts were made to obtain best recovery 2) No COPR or GGM present in any interval of this boring.



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Boring ID: P4-D14A

Page: 1

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 610807
Date Started Drilling: 3/11/2014 11:11:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 683242
Date Finished Drilling: 3/11/2014 12:00:00 PM	Core Size: 2.0 in	Boring Total Depth: 25 ft
Logged By: MI & FM	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: D14A - Carteret Ave.		Surface Elevation: 12.6 ft NAVD88

(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	0			NR		Boring advanced directly to 5 ft bgs.	
2							
3							
4							
5	5	0.0	dry	FILL		fine to medium SAND, trace gravel, (5YR 5/1) gray, loose to medium dense, dry, no odor, no staining.	
6		0.0	dry	FILL		fine to medium SAND, little silt, trace coarse gravel, (5YR 4/3) reddish brown, dense, dry, no odor, no staining.	P4-D14A-6.0-6.5
7							
8	5	0.0	moist	FILL		fine to medium sandy SILT, some organic fibers, (7.5YR 2.5/3) very dark brown, soft, moist, no odor, no staining.	P4-D14A-8.0-8.5
9							
10							
11	5	0.0		FILL		fine to medium SAND, with cinders and ash, (7.5R 2.5/1) reddish black, (7.5YR 2.5/3) very dark brown, medium dense, no odor, no staining.	P4-D14A-10.0-10.5
12							
13		0.0	moist	FILL		fine to medium SAND, trace silt, (5YR 4/3) reddish brown, medium dense, moist, no odor, sheen.	P4-D14A-12.0-12.5
14	5						P4-D14A-14.0-14.5
15		0.0	dry to moist	FILL		SILT, some fill material, (5YR 4/3) reddish brown, medium plasticity, medium dense, dry to moist, no odor, no staining.	P4-D14A-14.5-15.0
16		0.0	dry to moist	OL		SILT 60% organic silt, 40% organic fibers, (7.5YR 6/1) gray, medium plasticity, medium dense, dry to moist, no odor, sheen. Soils consistent with UNDorg.	P4-D14A-15.0-15.5
17	5	0.0	moist	PT		(80% organic fibers, 20% organic silt) PEAT, (7.5YR 3/2) dark brown, medium plasticity, stiff, moist, strong organic odor, no staining. Soils consistent with MM.	P4-D14A-16.0-16.5
18							
19		0.0	moist	SM		fine to medium silty SAND, (7.5YR 5/1) gray, medium dense to stiff, moist, no odor, no staining. Soils consistent with UNDno.	P4-D14A-18.0-18.5
20	5	0.0	moist to wet	SM		fine to medium silty SAND, (5YR 5/1) gray, medium dense, moist to wet, no odor, no staining. Soils consistent with UNDno.	P4-D14A-20.0-20.5
21							
22							
23		0.0	dry	SP		fine to coarse SAND, with coarse gravel, (5YR 4/3) reddish	

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick 3) No COPR or GGM encountered in any interval of this boring.

PPG - PPG LOGS.GDT - 4/15/14 17:43

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick 3) No COPR or GGM encountered in any interval of this boring.



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Boring ID: P4-E14A

Page: 1

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 610834
Date Started Drilling: 3/13/2014 9:00:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 683228
Date Finished Drilling: 3/13/2014 9:40:00 AM	Core Size: 2.0 in	Boring Total Depth: 25 ft
Logged By: MI	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: E14A- Carteret Ave.		Surface Elevation: 12.5 ft NAVD88

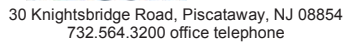
(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	0			NR		Boring advanced directly to 5 ft bgs.	
2							
3							
4							
5	3.5	0.0		FILL		fine to medium gravelly SAND, little silt, trace ash, (7.5YR 4/3) brown, loose to hard, no odor, no staining.	
6		0.0	moist	FILL		fine to medium SAND, some fine to medium gravel, trace ash, cinders, brick, (7.5YR 4/3) brown, moist, no odor, no staining.	P4-E14A-6.0-6.5
7							
8							P4-E14A-8.0-8.5
9				NR		NO RECOVERY	
10	5	0.0	moist	FILL		fine to medium SAND, some fine to medium gravel, trace ash, cinders, brick, (7.5YR 4/3) brown, moist, no odor, no staining.	P4-E14A-10.0-10.5
11							
12							P4-E14A-12.0-12.5
13							P4-E14A-14.0-14.5
14							P4-E14A-14.5-15.0
15	5	0.0	moist	OL		UNDorg SILT, 90% organic silt, 10% organic fibers, (7.5YR 2.5/1) black, low plasticity, soft, moist, no odor, no staining. Soils consistent with UNDorg.	P4-E14A-15.0-15.5
16		0.0	slightly moist	PT		PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (7.5YR 2.5/3) very dark brown, stiff, slightly moist, strong organic odor, no staining. Soils consistent with MM.	P4-E14A-16.0-16.5
17							
18		0.0	moist	SM		UNDno fine SAND, some silt, (7.5YR 6/1) gray, dense, moist, no odor, no staining. Soils consistent with UNDno.	P4-E14A-18.0-18.5
19							
20	5	0.0	moist	SM		UNDno SILT, some fine sand, trace coarse gravel, (7.5YR 6/1) gray, stiff, moist, no odor, no staining. Soils consistent with UNDno.	P4-E14A-20.0-20.5
21		0.0	moist	SM		UNDno fine SAND, little silt, (7.5YR 7/1) light gray, dense, moist, no odor, no staining. Soils consistent with UNDno.	
22		0.0		SP-SM		UNDno fine to medium SAND, some fine to medium trace silt, (5YR 5/2) reddish gray, loose to hard. Soils consistent with UNDno.	
23							

Re-review of the soil descriptions indicates the USCS for interval 20-21 ft bgs is SP-SM

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick 3) No COPR or GGM encountered in any interval of this boring.

PPG - PPG LOGS.GDT - 4/15/14 17:43



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(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
25							

PPG - PPG_LOGS.GDT - 4/15/14 17:43

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick 3) No COPR or GGM encountered in any interval of this boring.									
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Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Direct Push	Coordinates (NJSPNAD83) x: 611433.137
Date Started Drilling: 12/10/2014 10:10:00 AM	Rig Type: Geoprobe	Coordinates (NJSPNAD83) y: 682678.79
Date Finished Drilling: 12/10/2014 11:30:00 AM	Core Size: 3.0 in	Boring Total Depth: 20 ft
Logged By: SS	Project Manager: Scott Mikaelian	Depth to Water: N/A
Physical Location: Carteret Avenue		Surface Elevation: 10.4 ft NAVD88

(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
		0.0		ASPHALT		ASPHALT.	
1	5	0.0	dry	FILL		fine to medium SAND, little fine gravel, little ash, trace debris, (7.5YR 2.5/2) very dark brown, loose, dry, no odor, no staining.	P4-EE21A-1.0-1.5
2							P4-EE21A-2.0-2.5
3							
4							P4-EE21A-4.0-4.5
5	5	0.0	slightly moist	FILL		fine to medium SAND, little ash, trace brick, trace coal, (7.5YR 2.5/3) very dark brown, loose, slightly moist to moist, no odor, no staining.	
6							P4-EE21A-6.0-6.5
7							
8		0.0	wet	FILL			P4-EE21A-8.0-8.5
9	4					NO RECOVERY.	
10				NR			
11		0.0	wet	FILL			P4-EE21A-11.0-11.5
12							P4-EE21A-12.0-12.5
13	5	0.0	dry	FILL		fine SAND, little fine gravel, (10YR 5/2) grayish brown, loose, dry to slightly moist, slight petroleum odor, no staining.	
14							P4-EE21A-14.0-14.5
15							P4-EE21A-14.5-15.0
16		0.0	slightly moist	PT			P4-EE21A-15.0-15.5
17	5	0.0	slightly moist	OL		UNDorg SILT, (70% organic silt, 30% organic fibers), (10YR 4/2) dark grayish brown, low plasticity soft, slightly moist, slight organic odor, no staining. Soils consistent with UNDorg.	
18							
19							
20							

PPG - 2012-09 RA PPG_LOGS_A.GDT - 8/11/15 15:59

Comments: 1) Three attempts were made to obtain best recovery 2) UND/MM confirmed to be 1 ft thick 3) No COPR or GGM present in any interval of this boring.



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Boring ID: P4-F14A

Page: 1

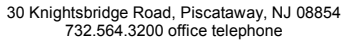
Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 610860
Date Started Drilling: 3/13/2014 9:45:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 683214
Date Finished Drilling: 3/13/2014 10:30:00 AM	Core Size: 2.0 in	Boring Total Depth: 25 ft
Logged By: MI	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: F14A- Carteret Ave.		Surface Elevation: 12.4 ft NAVD88

(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	0			NR		Boring advanced directly to 5 ft bgs.	
2							
3							
4							
5	5	0.0	moist	FILL		fine to medium silty SAND, with fine to medium gravel, (7.5YR 4/3) brown, loose, moist, no odor, no staining.	
6		0.0	moist	FILL		fine silty SAND, trace coal, fine gravel, (7.5YR 2.5/1) black, dense, moist, no odor, no staining.	P4-F14A-6.0-6.5
7		0.0	moist to wet	FILL		fine to medium silty SAND, little fine gravel, trace brick fragments, ash, (7.5YR 5/3) brown, moist to wet, no odor, no staining.	P4-F14A-8.0-8.5
8							
9	5						
10		0.0	wet to saturated	FILL		fine silty SAND, trace fine gravel, (7.5YR 5/3) brown, loose to dense, wet to saturated, no odor, no staining.	P4-F14A-10.0-10.5
11							
12							
13	5	0.0	moist	FILL		SILT, little roots trace cinders, (7.5YR 2.5/2) very dark brown, non plastic, soft, moist, no odor, no staining.	P4-F14A-12.0-12.5
14		0.0	wet	FILL		fine silty SAND, trace fine gravel, (7.5YR 5/3) brown, loose to dense, wet, no odor, no staining.	
15		0.0	moist	FILL		fine to medium SAND, little silt, little fine to medium gravel, (7.5YR 4/1) dark gray, loose, moist, no odor, no staining.	P4-F14A-14.0-14.5
16							P4-F14A-14.5-15.0
17	5	0.0	moist	OL		UNDorg SILT, 90% organic silt, 10% organic fibers, (7.5YR 2.5/2) very dark brown, low plasticity, soft, moist, moderate organic odor, no staining. Soils consistent with UNDorg.	P4-F14A-15.0-15.5
18		0.0	slightly moist	PT		PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (7.5YR 2.5/2) very dark brown, stiff, slightly moist, strong organic odor. Soils consistent with MM.	P4-F14A-16.0-16.5
19		0.0	moist	SM		UNDno fine to medium SAND, some silt, (7.5YR 5/1) gray, dense, moist, no odor, no staining. Soils consistent with UNDno.	P4-F14A-18.0-18.5
20							
21	5	0.0	moist	SM		UNDno fine to medium SAND, some silt, (7.5YR 5/1) gray, dense, moist, no odor, no staining. Soils consistent with UNDno.	P4-F14A-20.0-20.5
22		0.0	slightly moist	SP		UNDno fine to medium SAND, with fine to medium gravel, (2.5YR 4/8) red, loose to hard, slightly moist, no odor, no staining. Soils consistent with UNDno.	
23							
24							

PPG - PPG LOGS.GDT - 4/15/14 17:43

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick 3) No COPR or GGM encountered in any interval of this boring.



Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Direct Push	Coordinates (NJSPNAD83) x: 611444.244
Date Started Drilling: 12/10/2014 9:10:00 AM	Rig Type: Geoprobe	Coordinates (NJSPNAD83) y: 682640.07
Date Finished Drilling: 12/10/2014 10:00:00 AM	Core Size: 3.0 in	Boring Total Depth: 15 ft
Logged By: SP	Project Manager: Scott Mikaelian	Depth to Water: N/A
Physical Location: Carteret Avenue		Surface Elevation: 9.5 ft NAVD88

(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	5	0.0		ASPHALT		ASPHALT.	
2		0.0		CONCRETE		CONCRETE.	P4-FF22A-1.5-2.0
3		0.0	dry	FILL		ASH,trace gravel,trace ceramics,trace wood fragments,(10YR 3/1) very dark gray,loose,dry,no odor,no staining.	P4-FF22A-2.0-2.5
4	5						P4-FF22A-4.0-4.5
5		6.5	moist	FILL		ASH,trace gravel,trace glass,trace ceramics,trace wood fragments,(10YR 2/1) black,loose to medium dense,moist,slight petroleum odor.	P4-FF22A-6.0-6.5
6		8.1	saturated	FILL		fine to medium silty SAND,trace gravel,trace glass,trace wood fragments,trace ceramics,(10YR 2/1) black,low plasticity soft to medium dense,saturated,slight petroleum odor,sheen.	P4-FF22A-8.0-8.5
7	5						P4-FF22A-10.0-10.5
8		0.0	saturated	FILL		fine to medium silty SAND,trace gravel,trace glass,trace metal scraps,(10YR 4/4) dark yellowish brown,low plasticity soft,saturated,no odor,no staining.	P4-FF22A-12.0-12.5
9							P4-FF22A-13.5-14.0
10	5						P4-FF22A-13.5-14.0
11		0.0	slightly moist	PT		PEAT (degraded vegetated material),(60% organic silt, 40% organic fibers),(10YR 4/3) brown,low plasticity,medium dense,slightly moist,moderate organic odor,no staining. Soils consistent with MM.	P4-FF22A-14.0-14.5
12							
13							
14							
15							

Comments: 1) Three attempts were made to obtain best recovery 2) UND/MM confirmed to be 1 ft thick 3) No COPR or GGM present in any interval of this boring.



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Boring ID: P4-G14A

Page: 1

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 610887
Date Started Drilling: 3/11/2014 1:09:00 PM	Rig Type:	Coordinates (NJSPNAD83) y: 683201
Date Finished Drilling: 3/11/2014 1:55:00 PM	Core Size: 2 in	Boring Total Depth: 25 ft
Logged By: MI & FM	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: G14A- Carteret Ave.		Surface Elevation: 12.4 ft NAVD88

(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	0			NR		Boring advanced directly to 5 ft bgs.	
2							
3							
4							
5	5	0.0	moist	FILL		fine to medium SAND, (7.5YR 2.5/3) very dark brown, medium stiff, moist, no odor, no staining.	
6		0.0	dry to moist	FILL		fine to medium silty SAND, (5YR 4/3) reddish brown, soft to medium dense, dry to moist, no odor, no staining.	P4-G14A-6.0-6.5
7							
8							P4-G14A-8.0-8.5
9	5	0.0	wet	FILL		fine to medium silty SAND, little wood fragments, (10YR 5/2) grayish brown, loose, wet, no odor, no staining.	P4-G14A-10.0-10.5
10		0.0	wet	FILL		fine to medium silty SAND, with ash, little coarse gravel, (5YR 4/4) reddish brown, soft to medium dense, wet, no odor, no staining.	P4-G14A-12.0-12.5
11		0.0	moist	FILL		fine to medium silty SAND, trace coarse gravel, (10YR 5/2) grayish brown, medium dense, moist, no odor, no staining.	P4-G14A-14.0-14.5
12							
13	5	0.0	dry	PT		PEAT (degraded vegetated material), (7.5YR 3/2) dark brown, dense, dry. Soils consistent with MM.	P4-G14A-14.5-15.0
14		0.0	dry	PT		PEAT (degraded vegetated material), (7.5YR 3/2) dark brown, very dense, dry, no odor, no staining. Soils consistent with MM.	P4-G14A-16.0-16.5
15							
16		0.0	moist to wet	SM		fine to medium silty SAND, some gravel, (7.5YR 5/1) gray, medium dense, moist to wet, no odor, no staining. Soils consistent with UNDno.	P4-G14A-18.0-18.5
17	5	0.0	moist	SM		fine to medium silty SAND, (5YR 5/1) gray, moist, no odor, no staining. Soils consistent with UNDno.	P4-G14A-20.0-20.5
18		0.0	moist to wet	SW		fine to coarse SAND, with gravel, (5YR 4/3) reddish brown, medium dense, moist to wet, no odor, no staining. Soils consistent with UNDno.	
19							
20							
21							
22							
23							

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick 3) No COPR or GGM encountered in any interval of this boring.

PPG - PPG LOGS.GDT - 4/15/14 17:43



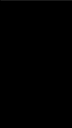
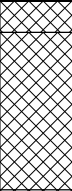
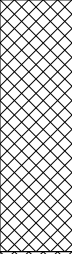


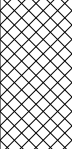
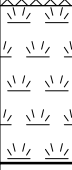
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Boring ID: P4-HAL-Y20A

Page: 1

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 611283.761
Date Started Drilling: 9/25/2014 9:10:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 682791.299
Date Finished Drilling: 9/25/2014 9:55:00 AM	Core Size: 3.0 in	Boring Total Depth: 20 ft
Logged By: SP	Project Manager: Scott Mikaelian	Depth to Water: NA
Physical Location: Halliday		Surface Elevation: 11.3 ft NAVD88

(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	5	0.0		ASPHALT		ASPHALT, with concrete.	
2		0.0	dry	FILL		fine to coarse SAND, trace gravel, trace ash, (10YR 5/2) grayish brown, non plastic, loose, dry, no odor. CINDERS, trace gravel, trace wood fragments, trace coal, trace ceramics, (10YR 5/1) gray, non plastic, loose, dry, no odor.	P4-HAL-Y20A-2.0-2.5
3		0.0	dry	FILL			P4-HAL-Y20A-4.0-4.5
4	5					CINDERS, trace ceramics, trace wood fragments, trace gravel, (10YR 5/1) gray, non plastic, loose, moist, no odor.	
5		0.0	moist	FILL			P4-HAL-Y20A-6.0-6.5
6							
7						fine to medium silty SAND, trace gravel, (10YR 2/1) black, non plastic, soft, moist, moderate petroleum odor, sheen. fine to medium silty SAND, trace ceramics, trace wood fragments, trace gravel, (5YR 3/4) dark reddish brown, non plastic, saturated, no odor, sheen.	P4-HAL-Y20A-8.0-8.5
8		27.1	moist	FILL			
9	5	0.5	saturated	FILL			P4-HAL-Y20A-10.0-10.5
10							P4-HAL-Y20A-12.0-12.5
11							P4-HAL-Y20A-14.0-14.5
12							
13	5					fine to medium silty SAND, trace gravel, (5YR 3/4) dark reddish brown, non plastic, soft, wet, no odor.	
14		0.0	wet	FILL			P4-HAL-Y20A-16.0-16.5
15							P4-HAL-Y20A-17.0-17.5
16		0.0	moist	PT		PEAT (degraded vegetated material), 60% organic silt, 40% organic fibers, (10YR 3/3) dark brown, medium dense, moist, moderate organic odor. Soils consistent with MM.	P4-HAL-Y20A-17.5-18.0
17							
18							
19							
20							

Comments: 1) 3 attempts were made to obtain best recovery 2) UND/MM confirmed to be 1 ft thick 3) No COPR or GGM present in any interval of this boring.

PPG - PPG_LOGS.GDT - 11/17/14 10:21



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Boring ID: P4-I14A

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Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 610940
Date Started Drilling: 3/14/2014 10:50:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 683174
Date Finished Drilling: 3/14/2014 11:25:00 AM	Core Size: 2 in	Boring Total Depth: 25 ft
Logged By: MI & FM	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: I14A- Carteret Ave.		Surface Elevation: 12.1 ft NAVD88

(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	0			NR		Boring advanced directly to 5 ft bgs.	
2							
3							
4							
5	5	0.0	slightly moist	FILL		medium to coarse SAND, with fine to coarse gravel, trace COPR cinders, (10YR 5/2) grayish brown, loose, slightly moist, no odor.	
6							
7		0.0	wet to saturated	FILL		fine to medium silty SAND, some fine to medium gravel, (2.5YR 4/3) reddish brown, loose, wet to saturated, no odor.	
8							
9	5						
10		0.0	wet to saturated	FILL		fine to medium silty SAND, some fine to medium gravel, (2.5YR 4/3) reddish brown, loose, wet to saturated, no odor.	P4-I14A-10.0-10.5
11							
12							P4-I14A-12.0-12.5
13	5						
14							P4-I14A-14.0-14.5
15		0.0	moist	FILL		SILT, some fibers, little wood fragments, ash, (10YR 5/2) grayish brown, non plastic, moist, no odor.	P4-I14A-14.5-15.0
16		0.0	moist	OL		UNDorg SILT, 90% organic silt, 10% organic fibers, (10YR 5/2) grayish brown, moist, no odor.	P4-I14A-15.0-15.5
17	5	0.0	dry to moist	PT		PEAT (degraded vegetated material), 80% organic silt, 20% organic fibers, (7.5YR 2.5/2) very dark brown, dry to moist, strong organic odor, no staining. Soils consistent with MM.	P4-I14A-16.0-16.5
18							
19		0.0	moist	ML		UNDno SILT, trace roots, (7.5YR 5/1) gray, low plasticity, stiff, moist, no odor, no staining. Soils consistent with UNDno.	P4-I14A-18.0-18.5
20							
21	5	0.0	moist	SM		UNDno fine SAND, little silt, (10YR 7/1) light gray, loose to dense, moist, no odor, no staining. Soils consistent with UNDno.	P4-I14A-20.0-20.5
22							
23		0.0	moist	SP		UNDno fine to medium SAND, with fine to medium gravel, (5YR 4/3) reddish brown, loose to hard, moist, no odor, no staining. Soils consistent with UNDno.	
24							

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick.



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Boring ID: P4-J14A

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Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 610968
Date Started Drilling: 3/14/2014 10:00:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 683161
Date Finished Drilling: 3/14/2014 10:20:00 AM	Core Size: 2.0 in	Boring Total Depth: 25 ft
Logged By: SS	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: J14A- Carteret Ave.		Surface Elevation: 12.1 ft NAVD88

(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	0			NR		Boring advanced directly to 5 ft bgs.	
2							
3							
4							
5	5	0.0	moist	FILL		medium SAND, some coarse gravel, little ash, little cinders, trace ceramics, (10YR 5/2) grayish brown, dense, moist, no odor, no staining.	
6							
7		0.0	wet	FILL		GGM, with silty sand, little coarse gravel, little cinders, (5GY 6/2) light grayish green, soft, wet, no odor, no staining.	
8	5						
9							
10		0.0	wet	FILL		GGM, with silty sand, trace coarse gravel, (5Y 6/2) light olive gray, soft, wet, no odor, no staining.	
11							
12	5	0.0	moist	FILL		CLAY, little silt, (7.5YR 2.5/1) black, low plasticity, soft, moist, no odor, no staining.	
13							
14		0.0	moist	FILL		fine to medium silty SAND, little coarse gravel, trace wood fragments, (7.5YR 3/3) dark brown, medium dense, moist, no odor, no staining.	
15	5	0.0	dry	OL		UNDorg fine to medium silty SILT, trace 90% organic silt, 5% organic fibers, trace fine sands, (7.5YR 4/2) brown, low plasticity, soft, dry, no odor, no staining. Soils consistent with UNDorg.	
16							
17		0.0	moist	PT		PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (7.5YR 2.5/2) very dark brown, medium dense, moist, strong organic odor, no staining. Soils consistent with MM.	P4-J14A-18.0-18.5
18							
19	5						
20		0.0	moist to wet	SM		UNDno medium SAND, trace coarse gravel, (2.5Y 5/1) gray, dense, moist to wet, no odor, no staining. Soils consistent with UNDno.	P4-J14A-20.0-20.5
21							
22							
23		0.0	wet	SP		UNDno fine to medium SAND, little coarse gravel, (2.5YR 4/3) reddish brown, medium dense, wet, no odor, no	

Re-review of the soil descriptions indicates the USCS for this interval is SP.

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick.

PPG - PPG LOGS.GDT - 4/15/14 17:43





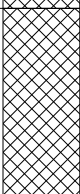
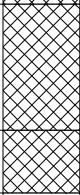



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Boring ID: P4-K14A

Page: 1

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 610994
Date Started Drilling: 3/14/2014 9:00:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 683147
Date Finished Drilling: 3/14/2014 9:20:00 AM	Core Size: 2.0 in	Boring Total Depth: 25 ft
Logged By: SS	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: K14A- Carteret Ave.		Surface Elevation: 12.2 ft NAVD88

(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	0			NR		Boring advanced directly to 5 ft bgs.	
2							
3							
4							
5	5	0.0	dry	FILL		medium SAND, some coarse gravel, some ash, little cinders, (7.5YR 3/2) dark brown, medium dense, dry, no odor, no staining. GGM and silty sand, little coarse gravel, (5GY 5/4) light olive green, medium dense, dry, no odor, no staining.	
6		0.0	dry	FILL			
7							
8							
9	5					GGM, with fine to medium sand, little coarse gravel, (5GY 5/4) light olive green, medium dense, dry, no odor, no staining.	
10		0.0	dry	FILL			
11							
12							
13	5	0.0	moist to wet	FILL		CLAY, little silt, (7.5YR 2.5/1) black, low plasticity, soft, moist to wet, no odor, no staining.	
14							
15							
16		0.0	moist to wet	FILL			
17	5	0.0	dry to moist	OL		UNDorg fine to medium silty SAND, (80% organic silt, 20% organic fibers), trace wood fragments, (7.5YR 3/2) dark brown, low plasticity, soft, dry to moist, no odor, no staining. Soils consistent with UNDorg.	
18		0.0	dry to moist	OL			
19							
20		5	0.0	wet			SM
21							
22							
23	0.0		moist	SP			

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick.

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Boring ID: P4-M14A

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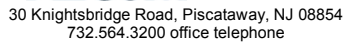
Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 611047
Date Started Drilling: 3/6/2014 11:15:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 683118
Date Finished Drilling: 3/6/2014 12:15:00 PM	Core Size: 2 in	Boring Total Depth: 25 ft
Logged By: MI	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: M14A - Carteret Ave.		Surface Elevation: 12.3 ft NAVD88

(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	5	0.0		FILL		DGA	
2		0.0	slightly moist	FILL		COPR, little fine sand, trace cinders, (2.5YR 3/6) dark red, loose, slightly moist, no odor.	
3							
4	5	0.0	moist	FILL		GGM, some fine to medium gravel, little cinders, (5GY 5/2) grayish green, stiff, moist, no odor, green staining.	
5		0.0	moist	FILL		GGM, some fine to medium gravel, little cinders, (5GY 5/2) grayish green, stiff, moist, no odor, green staining.	
6		0.0	moist	FILL		GGM, little fine sand, (10YR 7/6) yellow, soft, moist, no odor, green staining.	
7	5						
8							
9							
10	5	0.0	wet	FILL		GGM, little fine gravel, (5GY 4/4) olive green, stiff, wet, no odor, no staining.	
11		0.0	moist	FILL		SILT, some fine sand, trace roots, wood fragments, (5GY 4/4) olive green, low plasticity, soft, moist, no odor, no staining.	P4-M14A-11.7-12.2
12		0.0	slightly moist	PT		PEAT (degraded vegetated material), 80% organic fibers 20% organic silt, (7.5YR 2.5/3) very dark brown, stiff, slightly moist, strong organic odor, no staining. Soils consistent with MM.	P4-M14A-12.2-12.7
13	5						
14							P4-M14A-14.0-14.5
15		0.0	slightly moist	PT		PEAT (degraded vegetated material), 80% organic fibers 20% organic silt, (7.5YR 2.5/3) very dark brown, stiff, slightly moist, strong organic odor, no staining. Soils consistent with MM.	
16	5						
17							P4-M14A-16.0-16.5
18							
19	5	0.0	moist	SM		UNDno SILT, little roots, (10YR 4/2) dark grayish brown, low plasticity soft to stiff, moist, no odor, no staining. Soils consistent with UNDno.	
20		0.0	moist	SM		UNDno SILT, little roots, little fine sand, (10YR 4/1) dark gray, low plasticity, soft to stiff, moist, no odor, no staining. Soils consistent with UNDno.	P4-M14A-20.0-20.5
21							
22	5						
23							

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick.

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Boring ID: P4-M15A

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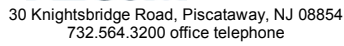
Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 611014
Date Started Drilling: 3/7/2014 8:50:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 683079
Date Finished Drilling: 3/7/2014 9:15:00 AM	Core Size: 2 in	Boring Total Depth: 25 ft
Logged By: MI	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: M15A- Carteret Ave.		Surface Elevation: 12.7 ft NAVD88

(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	5		slightly moist	FILL		ASPHALT	
2			slightly moist	FILL		medium SAND, little crushed concrete, crushed asphalt, little fine to medium gravel, (7.5YR 2.5/3) very dark brown, loose, slightly moist, no odor, no staining.	
3			slightly moist	FILL		COPR, little fine sand, trace cinders, (2.5YR 3/6) dark red, loose to hard, slightly moist, no odor, slight green staining.	
4	5						
5			slightly moist	FILL		COPR, little fine sand, trace cinders, (2.5YR 3/6) dark red, loose to hard, slightly moist, no odor, slight green staining.	
6			moist	FILL		GGM, little fine to medium sand, (5GY 4/4) olive green, soft, moist to wet, no odor, green staining.	
7	5						
8							
9							
10	5		moist	FILL		GGM, little fine to medium sand, (5GY 4/4) olive green, soft, moist to wet, no odor, green staining.	P4-M15A-12.0-12.5
11							
12			moist	FILL		SILT, some fine to medium sand, little clay, trace cinders, (7.5YR 2.5/1) black, low plasticity, soft, moist, no odor, no staining.	
13	5						P4-M15A-14.0-14.5
14							
15			slightly moist	PT		PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (7.5YR 3/2) dark brown, stiff, slightly moist, strong organic odor, no staining. Soils consistent with MM.	
16	5		slightly moist	PT		PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (7.5YR 3/2) dark brown, stiff, slightly moist, strong organic odor, no staining. Soils consistent with MM.	P4-M15A-14.5-15.0
17			moist	OL		PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (7.5YR 3/2) dark brown, stiff, slightly moist, strong organic odor, no staining. Soils consistent with MM.	
18						UNDorg SILT, 70% organic silt, 30% organic fibers, (10YR 5/2) grayish brown, low plasticity, soft to stiff, moist, moderate organic odor, no staining. Soils consistent with UNDorg.	
19	5						P4-M15A-16.0-16.5
20							
21							
22	5		moist	OL		UNDorg SILT, 70% organic silt, 30% organic fibers, (10YR 5/2) grayish brown, low plasticity, soft to stiff, moist, moderate organic odor, no staining. Soils consistent with UNDorg.	P4-M15A-18.0-18.5
23							
24							
25	5						P4-M15A-20.0-20.5
26			moist	SM		UNDno SILT, some fine to medium sand, little fine to coarse gravel, (10YR 5/1) gray, low plasticity, stiff, moist, no odor,	

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick.

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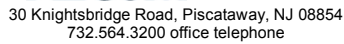
Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 611064
Date Started Drilling: 3/13/2014 11:10:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 683080
Date Finished Drilling: 3/13/2014 11:25:00 AM	Core Size: 2.0 in	Boring Total Depth: 25 ft
Logged By: MI & FM	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: N15A- Carteret Ave.		Surface Elevation: 12.5 ft NAVD88

(Note bgs = below ground surface)


Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
0				NR		Boring advanced directly to 5 ft bgs.	
5		0.0		FILL		COPR, some fine to medium sand, little fine to medium gravel, (2.5YR 4/6) red, loose to hard.	
		0.0	moist	FILL		ASH, with GGM, little cinders, fine gravel, loose, moist, no odor, green staining.	
		0.0	moist	FILL		GGM, some fine to medium sand, little ash, (5GY 6/4) pale yellowish green, low plasticity, soft, moist, green staining.	
5		0.0	moist	FILL		GGM, trace fine sand, trace cinders, (5GY 4/4) olive green, stiff, moist, no odor, green staining.	
		0.0	moist	FILL		SILT, little roots, (10YR 5/2) grayish brown, low plasticity, soft to stiff, moist, no odor, no staining.	
		0.0	moist	OL		UNDorg SILT, 90% organic silt, 10% organic fibers, low plasticity, soft, moist, moderate organic odor, no staining. Soils consistent with UNDorg.	
3.5							P4-N15A-16.0-16.5
				NR		NO RECOVERY	P4-N15A-18.0-18.5
5		0.0	moist	SM		UNDno SILT, some fine sand, low plasticity, soft to stiff, moist, no odor, no staining. Soils consistent with UNDno.	P4-N15A-20.0-20.5
		0.0		SP-SM		UNDno fine to medium SAND, some silt, dense. Soils consistent with UNDno.	

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick.

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Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 611064
Date Started Drilling: 3/13/2014 11:10:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 683080
Date Finished Drilling: 3/13/2014 11:25:00 AM	Core Size: 2.0 in	Boring Total Depth: 25 ft
Logged By: MI & FM	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: N15A- Carteret Ave.		Surface Elevation: 12.5 ft NAVD88

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
25		0.0	moist	SP		UNDno fine to medium SAND, with fine to medium gravel, loose to hard, moist, no odor, no staining. Soils consistent with UNDno.	

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick.

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 611056
Date Started Drilling: 3/10/2014 9:30:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 683025
Date Finished Drilling: 3/10/2014 10:50:00 AM	Core Size: 2 in	Boring Total Depth: 25 ft
Logged By: MI	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: 016A- Carteret Ave.		Surface Elevation: 13.1 ft NAVD88

(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	5	0.0		FILL		ASPHALT	
		0.0	moist	FILL		fine to medium SAND, some fine to medium gravel, (7.5YR 3/2) dark brown, loose to hard, moist, no odor, no staining.	
2		0.0	moist	FILL		GGM, little fine sand, little fine to medium gravel, (5GY 4/4) olive green, low plasticity, soft, moist, green staining.	
3							
4		0.0	moist	FILL		GGM, some cinders, fine to medium gravel, little fine sand, trace COPR, (5GY 5/2) grayish green, low plasticity, soft, moist, no odor, green staining.	
5		0.0	slightly moist	FILL		GGM, with cinders, some salt precipitate, (5GY 5/2) grayish green, dense to hard, slightly moist, no odor, green staining.	
6							
7	5	0.0	slightly moist	FILL		CINDERS, some fine to medium gravel, (7.5YR 3/1) very dark gray, loose to hard, slightly moist, no odor, slight green staining.	
8							
9		0.0	slightly moist	FILL		CINDERS, some fine to medium gravel, little GGM, fine sand, (7.5YR 3/1) very dark gray, loose to hard, slightly moist, no odor, green staining, slight green staining.	
10		0.0	slightly moist	FILL		GGM, little fine sand, trace cinders, COPR, (5GY 4/4) olive green, stiff, slightly moist, no odor, green staining.	
11		0.0	slightly moist	FILL		GGM, little fine sand, trace cinders, COPR, (5GY 4/4) olive green, stiff, slightly moist, no odor, green staining.	
12	5						
13		0.0	slightly moist	FILL		fine SAND, some silt, trace cinders, coal, coarse gravel, (7.5YR 5/1) gray, dense, slightly moist, no odor, no staining.	P4-O16A-13.3-13.8
14		0.0	moist	OL		UNDorg SILT, 90% organic silt, 10% organic fibers, (7.5YR 3/2) dark brown, low plasticity, stiff, moist, moderate organic odor, hydrocarbon staining. Soils consistent with UNDorg.	P4-O16A-13.8-14.3
15		0.0		PT		PEAT (degraded vegetated material), 70% organic fibers, 30% organic silt, (7.5YR 2.5/3) very dark brown, stiff, strong organic odor, no staining. Soils consistent with MM.	
16		0.0	moist	OL		UNDorg SILT, 90% organic silt, 10% organic fibers, (7.5YR 3/2) dark brown, low plasticity, stiff, moist, moderate organic odor, hydrocarbon staining. Soils consistent with UNDorg.	P4-O16A-16.0-16.5
17	5						
18							P4-O16A-18.0-18.5
19							
20		0.0	moist	SM		UNDno SILT, trace organics, (10YR 4/2) dark grayish brown, low plasticity, stiff, moist, no odor, no staining. Soils consistent with UNDno.	P4-O16A-20.0-20.5
21							
22	5						
23		0.0	slightly moist	SM		UNDno fine SAND, some silt, (7.5YR 4/1) dark gray, dense, slightly moist, no odor, no staining. Soils consistent with	

Re-review of the soil descriptions indicates the USCS for this interval is ML.

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick.



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Boring ID: P4-P15A

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Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 611115
Date Started Drilling: 3/7/2014 10:30:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 683053
Date Finished Drilling: 3/7/2014 11:20:00 AM	Core Size: 2.0 in	Boring Total Depth: 25 ft
Logged By: MI	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: P15A - Carteret Ave.		Surface Elevation: 11.9 ft NAVD88

(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	5	0.0		FILL		ASPHALT	
		0.0		FILL		fine to medium SAND, little fine to medium gravel, (7.5YR 2.5/3) very dark brown, loose, no odor, no staining.	
2		0.0	moist	FILL		COPR, little fine sand, trace fine to medium gravel, (2.5YR 4/8) red, loose, moist, no odor, slight green staining.	
3							
4							
5		0.0	moist	FILL		COPR, little fine sand, trace fine to medium gravel, (2.5YR 4/8) red, loose, moist, no odor, slight green staining.	
6	5	0.0	moist	FILL		CINDERS, some coal slag, oil-like material, little silt, trace organic fibers, (7.5YR 2.5/1) black, loose, moist, moderate naphthalene odor, sheen.	
7							
8							
9							
10		0.0	moist	FILL		SILT, some fine sand, little organic fibers, trace oil-like material, (7.5YR 3/2) dark brown, moist, slight naphthalene odor, sheen.	
11		0.0	moist	FILL		SILT, some fine to medium sand, (5YR 4/3) reddish brown, stiff, moist, no odor, no staining.	
12	5						
13							P4-P15A-13.5-14.0
14		0.0	moist	OL		UNDorg SILT, 70% organic silt, 30% organic fibers, (7.5YR 3/3) dark brown, soft to stiff, moist, moderate organic odor, no staining. Soils consistent with UNDorg.	P4-P15A-14.0-14.5
15		0.0	moist	OL		UNDorg SILT, 70% organic silt, 30% organic fibers, (7.5YR 3/3) dark brown, soft to stiff, moist, moderate organic odor, no staining. Soils consistent with UNDorg.	
16	5						P4-P15A-16.0-16.5
17							
18							P4-P15A-18.0-18.5
19							
20		0.0	moist	SM		UNDno SILT, little fine sand, (7.5YR 3/2) dark brown, soft, moist, no odor, no staining. Soils consistent with UNDno.	
21		0.0	moist	SM		UNDno SILT, little fine sand, (7.5YR 3/2) dark brown, soft, moist, no odor, no staining. Soils consistent with UNDno.	P4-P15A-20.0-20.5
22	5	0.0	moist	SP-SM		UNDno fine to medium SAND, little fine to medium gravel, (10YR 5/1) gray, loose to hard, moist. Soils consistent with UNDno.	
23		0.0	slightly moist	SP-SM		UNDno fine to coarse SAND, some fine to medium gravel, (2.5YR 4/8) red, loose to hard, slightly moist, no odor, no	

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick.

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Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 611080.495
Date Started Drilling: 3/14/2014 9:00:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 683010.017
Date Finished Drilling: 3/14/2014 10:40:00 AM	Core Size: 2 in	Boring Total Depth: 25 ft
Logged By: MI & FM	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: P16A- Carteret Ave.		Surface Elevation: 12.6 ft NAVD88

(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	0			NR		Boring advanced directly to 5 ft bgs.	
2							
3							
4							
5	2	0.0	moist	FILL		GGM, little fine sand, trace cinders, (5GY 4/4) olive green, low plasticity, stiff, moist, no odor, green staining.	
6							
7							
8							
9	5	0.0	moist	FILL		GGM, little fine sand, trace cinders, (5GY 4/4) olive green, low plasticity, stiff, moist, no odor, green staining.	
10							
11							
12							
13	5	0.0	slightly moist	FILL		fine to coarse SAND, with fine to coarse gravel, trace oil-like material, (7.5YR 4/2) brown, loose, slightly moist, slight naphthalene odor.	
14							
15							
16							
17	5	0.0	moist	FILL		fine silty GRAVEL, trace wood fragments, trace roots, (10YR 5/6) yellowish brown, slightly moist, no odor.	
18							
19							
20							
21	5	0.0	moist	OL		UNDorg SILT, 80% organic silt, 20% organic fibers, (10YR 4/2) dark grayish brown, stiff, moist, moderate organic odor. Soils consistent with UNDorg.	P4-P16A-16.0-16.5
22							
23							
24							
25	5	0.0	moist	SM		UNDno SILT, some fine sand, trace roots, (7.5YR 5/1) gray, low plasticity, soft to stiff, moist, no odor, no staining. Soils consistent with UNDno.	P4-P16A-20.0-20.5
26							
27							
28							
29	5	0.0	slightly moist	SP		UNDno fine to medium SAND, trace wood fragments, (7.5YR 7/1) light gray, loose, slightly moist, no odor, no staining. Soils consistent with UNDno.	
30							
31							
32							
33	5	0.0	slightly moist	SP		UNDno fine to medium SAND, with coarse gravel, (2.5YR 4/6) red, loose to hard, slightly moist, no odor, no staining. Soils consistent with UNDno.	
34							
35							
36							

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick.











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Boring ID: P4-Q16A

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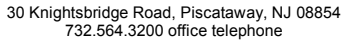
Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 611138
Date Started Drilling: 3/7/2014 11:30:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 683008
Date Finished Drilling: 3/7/2014 12:00:00 PM	Core Size: 2.0 in	Boring Total Depth: 25 ft
Logged By: MI	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: Q16A - Carteret Ave.		Surface Elevation: 11.9 ft NAVD88

(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
		0.0		ASPHALT		ASPHALT	
1	5	0.0	moist to wet	FILL		fine to medium silty SAND, and coarse gravel, little GGM, (10YR 4/3) brown, medium dense, moist to wet. GGM, little COPR, (10YR 5/3) brown, medium dense, moist to wet.	
2		0.0		FILL			
3		0.0		FILL			
4	5	0.0	moist to saturated wet	FILL		GGM, (10YR 5/3) brown, (2.5Y 5/2) grayish brown, medium dense, moist to saturated, sheen.	
5		0.0	moist to saturated wet	FILL		GGM, some cinders, (2.5Y 5/2) grayish brown, medium dense, wet.	
6		0.0	wet	FILL		COPR, some GGM, (2.5YR 5/3) reddish brown, medium dense, wet, sheen.	
7		0.0	wet	FILL		SILT, little oil-like material, trace fine gravel, (10YR 3/2) very dark grayish brown, low plasticity, soft, wet, moderate petroleum odor, sheen, diesel odor.	
8	5	0.0	wet	FILL		fine to medium silty SAND, little coarse gravel, (10YR 4/4) dark yellowish brown, medium dense, wet, slight petroleum odor sheen, diesel odor.	
9		0.0	moist to saturated	FILL			
10		0.0	moist to saturated	FILL			
11	5	0.0	moist	PT		PEAT (degraded vegetated material), 80% organic fibers, 20% roots, (10YR 3/3) dark brown, low plasticity, stiff, moist, slight sulfur odor. Soils consistent with MM.	P4-Q16A-14.0-14.5
12		0.0	moist to wet	PT			P4-Q16A-14.5-15.0
13		0.0	moist to wet	PT			P4-Q16A-16.0-16.5
14		0.0	moist to wet	PT			P4-Q16A-18.0-18.5
15	5	0.0	moist to wet	SP-SM		fine to medium silty SAND, trace fine gravel, (10YR 6/1) gray, medium dense, moist to wet. Soils consistent with UNDno.	
16		0.0	moist to wet	SP-SM			
17		0.0	moist to wet	SP-SM			
18	5	0.0	moist to wet	SP-SM		fine to medium silty SAND, some coarse gravel, (7.5YR 4/3) brown, medium dense, moist. Soils consistent with UNDno.	
19		0.0	moist to wet	SP-SM			
20		0.0	moist to wet	SP-SM			
21	5	0.0	moist to wet	SP-SM		fine to medium silty SAND, some coarse gravel, (7.5YR 4/3) brown, medium dense, moist. Soils consistent with UNDno.	
22		0.0	moist to wet	SP-SM			
23		0.0	moist to wet	SP-SM			

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick.

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Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 611121
Date Started Drilling: 3/11/2014 11:15:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 682958
Date Finished Drilling: 3/11/2014 11:45:00 AM	Core Size: 2 in	Boring Total Depth: 25 ft
Logged By: MI	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: R17A- Carteret Ave.		Surface Elevation: 12.3 ft NAVD88

(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	5	0.0		FILL		ASPHALT	
		0.0	moist	FILL		fine to medium SAND, little fine gravel, trace cinders, (7.5YR 2.5/2) very dark brown, loose, moist, no odor, no staining.	
2		0.0	moist	FILL		GGM, some COPR, little salt precipitate, trace cinders, (5YR 5/2) reddish gray, low plasticity, soft, moist, no odor, green staining.	
3		0.0	slightly moist	FILL		CINDERS, little coal ash, little fine gravel, (7.5YR 2.5/1) black, slightly moist, no odor, slight green staining.	
4							
5		0.0	slightly moist	FILL		CINDERS, little coal ash, little fine gravel, (7.5YR 2.5/1) black, slightly moist, no odor, slight green staining.	
6	5	0.0	slightly moist	FILL		GGM, some cinders, little gravel, little salt precipitate, (5GY 5/4) light olive green, non plastic, soft, slightly moist, no odor, green staining.	
7							
8		0.0	moist	FILL		GGM, some fine sand, trace salt precipitate, (5GY 4/4) olive green, low plasticity, soft to stiff, moist, no odor, green staining.	
9							
10		0.0	moist	FILL		GGM, some fine sand, trace salt precipitate, (5GY 4/4) olive green, low plasticity, soft to stiff, moist, no odor, green staining.	
11							
12	5	0.0	moist	OL		UNDorg SILT, 90% organic silt, 10% organic fibers, (7.5YR 3/2) dark brown, low plasticity, soft, moist, moderate organic odor. Soils consistent with UNDorg.	P4-R17A-12.0-12.5
13							
14							P4-R17A-14.0-14.5
15		0.0	moist	OL		UNDorg SILT, 95% organic silt, 5% organic fibers, (7.5YR 3/2) dark brown, low plasticity, soft, moist, moderate organic odor. Soils consistent with UNDorg.	
16							P4-R17A-16.0-16.5
17	5	0.0	slightly moist	PT		PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (7.5YR 2.5/3) very dark brown, stiff, slightly moist, strong organic odor, no staining. Soils consistent with MM.	
18							P4-R17A-18.0-18.5
19							
20		0.0	dry	OL		UNDorg SILT, 80% organic silt, 20% organic fibers, (10YR 4/2) dark grayish brown, stiff, dry, strong organic odor, no staining. Soils consistent with UNDorg.	
21		0.0	dry	OL		UNDorg SILT, 80% organic silt, 20% organic fibers, (10YR 4/2) dark grayish brown, stiff, dry, strong organic odor, no staining. Soils consistent with UNDorg.	P4-R17A-20.0-20.5
22	5	0.0	moist	SM		UNDno fine SAND, some silt, (7.5YR 5/1) gray, dense, moist, no odor, no staining. Soils consistent with UNDno.	
23							

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick.

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Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 611145
Date Started Drilling: 3/13/2014 10:25:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 682943
Date Finished Drilling: 3/13/2014 10:45:00 AM	Core Size: 2 in	Boring Total Depth: 25 ft
Logged By: MI & FM	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: S17A- Carteret Ave.		Surface Elevation: 12.2 ft NAVD88

(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	5	0.0		CONCRETE		CONCRETE	
2		0.0	dry	FILL		fine to medium SAND, (5YR 4/3) reddish brown, medium dense, dry, no odor, no staining.	
3	5						
4							
5							
6	5	0.0	moist to wet	FILL		medium to coarse gravelly SAND, some glass fragments, little wood fragments, (7.5YR 4/1) dark gray, loose, moist to wet, no odor, no staining.	P4-S17A-6.0-6.5
7							
8							P4-S17A-8.0-8.5
9	5						
10		0.0	moist to wet	FILL		SILT, some roots, little fine sand, (7.5YR 5/1) gray, low plasticity, soft to stiff, moist to wet, no odor, no staining.	P4-S17A-10.0-10.5
11							
12							P4-S17A-12.0-12.5
13	5	0.0	wet	FILL		fine to medium silty SAND, little fine sand, (5YR 2.5/2) dark reddish brown, low plasticity, wet, no odor, no staining.	P4-S17A-14.0-14.5
14							
15		0.0	wet	FILL		fine to medium silty SAND, trace fine gravel, (5YR 4/3) reddish brown, low plasticity, loose, wet, no odor, no staining.	P4-S17A-16.0-16.5
16		0.0	moist	FILL		SILT, with fine to medium sand, trace roots, (10YR 5/2) grayish brown, low plasticity, soft, moist, no odor, no staining.	P4-S17A-18.0-18.5
17	5						
18							
19							P4-S17A-19.0-19.5
20		0.0	moist	PT		PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, medium dense, moist, moderate organic odor, no staining. Soils consistent with MM.	P4-S17A-19.5-20.0
21	5	0.0	moist	PT		PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (5YR 2.5/2) dark reddish brown, medium dense, moist, moderate organic odor, no staining. Soils consistent with MM.	
22							
23		0.0	wet	SM		SILT, (7.5YR 5/1) gray, low plasticity, medium dense, wet, no odor, no staining. Soils consistent with UNDno.	

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick 3) No COPR or GGM encountered in any interval of this boring.

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Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 611206
Date Started Drilling: 3/7/2014 9:15:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 682941
Date Finished Drilling: 3/7/2014 10:15:00 AM	Core Size: 2.0 in	Boring Total Depth: 25 ft
Logged By: MI	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: T17A - Carteret Ave.		Surface Elevation: 11.9 ft NAVD88

(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	5			ASPHALT		ASPHALT	
				FILL		fine to medium silty SAND, some fine gravel, little GGM, (10YR 4/2) dark grayish brown, very dense.	
2			wet	FILL		GGM, (10Y 5/2) grayish olive, medium dense, wet.	
3	5						
4							
5				FILL		fine to medium silty SAND, some GGM, (5Y 4/3) olive.	
6			moist to wet	FILL		CINDERS, some fine to medium sand, little GGM, trace oil-like material, (10YR 4/2) dark grayish brown, loose, moist to wet.	
7	4	0.0 44.0					
8				FILL			
9			moist	FILL		SILT, little fine sand, (10YR 2/1) black, medium plasticity, soft, moist, slight naphthalene odor.	
10			moist wet	FILL		fine to medium SAND, little silt, (10YR 4/3) brown, non plastic, medium dense, moist, slight naphthalene odor.	
11	5	1.2					P4-T17A-14.0-14.5
12				FILL		fine to medium silty SAND, little fine gravel, little roots, (10YR 5/3) brown, non plastic, loose, wet, moderate naphthalene odor, sheen.	
13							
14							
15	5	6.6	moist to wet	FILL		fine to medium silty COBBLES, little fine gravel, (7.5YR 4/3) brown, non plastic, medium dense, moist to wet, slight naphthalene odor, sheen.	P4-T17A-16.0-16.5
16							P4-T17A-16.7-17.2
17			moist	PT		PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (10YR 3/3) dark brown, low plasticity, medium dense, moist, slight sulfur odor. Soils consistent with MM.	P4-T17A-17.2-17.7
18							P4-T17A-19.2-19.7
19	5	4.2	moist	SP-SM		fine silty SAND, (10YR 5/2) grayish brown, non plastic, medium dense, moist, slight sulfur odor. Soils consistent with UNDno.	P4-T17A-20.0-20.5
20			moist to wet	SP-SM		fine to medium silty SAND, little gravel, little roots, (10YR 5/1) gray, non plastic, medium dense, moist to wet. Soils consistent with UNDno.	
21							
22	5	0.0					
23			moist to	SP		fine to medium SAND, little fine gravel, (5YR 4/4) reddish brown, non plastic, medium dense, moist to wet. Soils	

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick.



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Boring ID: P4-U19A

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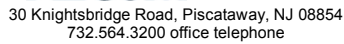
Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 611189
Date Started Drilling: 3/11/2014 1:00:00 PM	Rig Type:	Coordinates (NJSPNAD83) y: 682869
Date Finished Drilling: 3/11/2014 1:25:00 PM	Core Size: 2 in	Boring Total Depth: 25 ft
Logged By: MI	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: U19A- Carteret Ave.		Surface Elevation: 12.4 ft NAVD88

(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	5	0.0		ASPHALT		ASPHALT	
2		0.0	slightly moist	FILL		GGM, little fine sand, little salt precipitate, (5GY 4/4) olive green, low plasticity, stiff, slightly moist, no odor, green staining.	
3							
4	5						
5		0.0	moist	FILL		GGM, some cinders, little fine gravel, (5GY 5/2) grayish green, soft, moist, no odor, green staining.	
6		0.0	moist	FILL		CINDERS, some ash, coal, little fine gravel, (7.5YR 4/1) dark gray, moist, no odor, slight green staining.	
7	5	0.0	moist	FILL		ASH, with cinders, little coal, ceramics, (7.5YR 6/1) gray, loose, moist, no odor, no staining.	
8							
9							
10	5	0.0	slightly moist	FILL		GGM, little fine sand, little salt precipitate, (5GY 4/4) olive green, low plasticity, stiff, slightly moist, no odor, green staining.	
11							
12							
13	5	0.0	moist	FILL		SILT, some fine sand, little fill materail, (7.5YR 2.5/2) very dark brown, low plasticity, soft to stiff, moist, no odor, no staining.	
14							
15		0.0	moist to wet	FILL		fine to medium silty SAND, (7.5YR 4/2) brown, dense, moist to wet, no odor, no staining.	
16	5						
17							
18		0.0	slightly moist	PT		PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (7.5YR 2.5/3) very dark brown, stiff, slightly moist, strong organic odor. Soils consistent with MM.	P4-U19A-18.0-18.5
19	5						
20		0.0	slightly moist	PT		PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (7.5YR 2.5/3) very dark brown, stiff, slightly moist, strong organic odor. Soils consistent with MM.	P4-U19A-20.0-20.5
21		0.0	moist	SM		UNDno fine SAND, some silt, (7.5YR 5/1) gray, dense, moist, no odor, no staining. Soils consistent with UNDno.	
22							
23							

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick.

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(Note bgs = below ground surface)

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Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick.



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Boring ID: P4-V18A

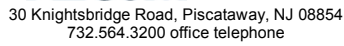
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Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 611245
Date Started Drilling: 3/13/2014 8:55:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 682887
Date Finished Drilling: 3/13/2014 10:00:00 AM	Core Size: 2 in	Boring Total Depth: 25 ft
Logged By: MI & FM	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: V18A- Carteret Ave.		Surface Elevation: 11.8 ft NAVD88 (Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	5	0.0	moist	FILL		fine to medium silty SAND, with fill material, (5YR 4/3) reddish brown, medium dense, moist, no odor, no staining.	
2							
3							
4							
5							
6	5	0.0	moist	FILL		fine to medium SAND, with fill material, little sand, (10YR 5/2) grayish brown, medium dense, moist, no odor, no staining.	
7		0.0	moist	FILL		GGM, with fill material (cinders, ash, glass), some COPR (5.5-6.5 chromium precipitate white), little coarse gravel, (10Y 4/4) olive, medium dense, moist, no odor, green staining.	
8		0.0	moist to wet	FILL		coarse sandy GRAVEL, with fill material, some oil-like material, (7.5YR 5/1) gray, medium dense, moist to wet, moderate chemical odor, hydrocarbon staining.	
9							
10		0.0	moist to wet	FILL		medium to coarse gravelly SAND, with fill material, some tar-like material, medium dense, moist to wet, moderate petroleum odor, hydrocarbon staining.	
11	5	0.0	moist to wet	FILL		SILT, (5YR 4/1) dark gray (10YR 5/2) grayish brown, non plastic, very loose, wet, moderate petroleum odor, sheen.	
12		0.0	moist to wet	FILL		gravelly SILT, with fill material, some tar-like material, (5YR 4/3) reddish brown, low plasticity, loose, moist to wet, moderate hydrocarbon odor, sheen.	
13		0.0	moist to wet	FILL		sandy SILT, with fill material, some gravel, little tar like material, (5YR 4/3) reddish brown, low plasticity, soft, moist to wet, strong hydrocarbon odor, hydrocarbon staining.	
14							
15							
16	5	0.0	moist to wet	FILL		fine to medium SAND, some fill material, little silt, little coarse gravel, (5YR 4/3) reddish brown, low plasticity, soft, moist to wet, no odor, sheen.	
17							P4-V18A-17.0-17.5
18		0.0	dry to moist	PT		PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (7.5YR 2.5/3) very dark brown, stiff, dry to moist, strong organic odor, no staining. Soils consistent with MM.	P4-V18A-17.5-18.0
19							
20		0.0	dry	OL		UNDorg SILT, 70% organic silt, 30% organic fibers, (7.5YR 5/1) gray (10YR 5/2) grayish brown, stiff, dry, slight organic odor, no staining. Soils consistent with UNDorg.	
21	5	0.0	dry	OL		UNDorg SILT, 70% organic silt, 30% organic fibers, (7.5YR 5/1) gray (10YR 5/2) grayish brown, stiff, dry, slight organic odor, no staining. Soils consistent with UNDorg.	
22		0.0	moist	SM		UNDno SILT, with fine to medium sand, (7.5YR 5/1) gray, medium dense, moist, no odor, no staining. Soils consistent with UNDno.	
23		0.0	moist	SP-SM		UNDno fine to coarse SAND, with gravel, (5YR 4/3) reddish	

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick.

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Boring ID: P4-W18A

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Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 611264
Date Started Drilling: 3/13/2014 11:00:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 682867
Date Finished Drilling: 3/13/2014 1:20:00 PM	Core Size: 2 in	Boring Total Depth: 25 ft
Logged By: MI & FM	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: W18A- Carteret Ave.		Surface Elevation: 11.9 ft NAVD88

(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	5	0.0		FILL		fine to coarse gravelly SAND, with 10% ash and cinders.	
2							
3							
4							
5							
6	5	13.0	wet	FILL		fine to coarse gravelly FILL MATERIAL, with fine to coarse sand, wet, moderate hydrocarbon odor, sheen, hydrocarbon staining.	
7							
8							
9							
10							
11	5	6.0	wet	FILL		GGM, some coarse gravel, (5GY 4/4) olive green, low plasticity, loose, wet, no odor, green staining.	
12		5.0	wet	FILL		fine to medium sandy GRAVEL, with tar-like material, some silt, (5YR 3/1) very dark gray (7.5YR 2.5/2) very dark brown, soft, wet, moderate hydrocarbon odor, hydrocarbon staining.	
13		5.0	wet to moist	FILL		fine to medium silty SAND, with fill material, some tar-like material, (5YR 4/2) dark reddish gray, loose, wet to moist, strong naphthalene odor, sheen.	
14		4.0	moist	FILL		fine to medium silty SAND, some fine to medium sand, little fill material, trace oil-like material, (5YR 4/3) reddish brown, low plasticity, soft, moist, slight naphthalene odor, no staining.	
15		0.0	dry	FILL		fine to medium SAND, some coarse gravel, (5YR 4/3) reddish brown, medium dense, dry, no odor, no staining.	
16	5	0.0	dry	PT		PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (7.5YR 2.5/3) very dark brown, medium stiff, dry, moderate organic odor, no staining. Soils consistent with peat.	P4-W18A-16.0-16.5
17							P4-W18A-16.5-17.0
18							
19							
20							
21	5	0.0	moist	OL		SILT, with sand, 80% organic silt, 20% organic fibers, (7.5YR 5/1) gray, moist, no odor, no staining. Soils consistent with UNDorg.	
22		0.0	dry	SP		fine SAND, little silt, (7.5YR 5/1) gray, medium stiff, dry, no odor, no staining. Soils consistent with UNDno.	
23		0.0	dry	SP		fine SAND, (7.5YR 5/1) gray, very dense, dry, no odor, no staining. Soils consistent with UNDno.	
24		0.0	dry	SP		fine to coarse SAND, with coarse gravel, (5YR 4/3) reddish	

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick.

PPG - PPG LOGS.GDT - 4/15/14 17:43



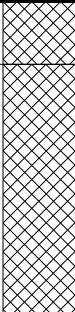
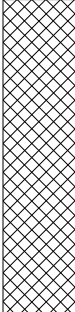
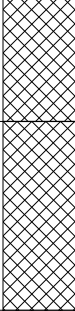
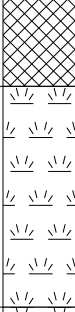
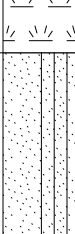
30 Knightsbridge Road, Piscataway, NJ 08854
732.564.3200 office telephone

Boring ID: P4-W19A

Page: 1

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 611232
Date Started Drilling: 3/5/2014 11:40:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 682835
Date Finished Drilling: 3/5/2014 12:10:00 PM	Core Size: 2 in	Boring Total Depth: 25 ft
Logged By: A. Bogucki	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: W19A - Carteret Ave.		Surface Elevation: 12.5 ft NAVD88

(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	5	0.0	slightly moist	FILL		fine to medium SAND, little fine gravel, trace GGM, cinders, (10YR 5/4) yellowish brown, loose to dense, slightly moist, no odor, green staining. GGM, little salt precipitate, (5GY 4/4) olive green, low plasticity, soft, moist, no odor, green staining.	
2		0.0	moist	FILL			
3							
4							
5	5	0.0	moist	FILL		GGM, little salt precipitate, (5GY 4/4) olive green, low plasticity, soft, moist, no odor, green staining.	
6							
7							
8							
9	5	0.0	moist	FILL		medium SAND, some fine to medium gravel, little cinders, trace GGM, (10YR 5/6) yellowish brown, low plasticity, hard, moist, no odor, green staining. GGM, little salt precipitate, (5GY 4/4) olive green, low plasticity soft, moist, no odor, green staining.	
10		0.0	moist	FILL			
11							
12							
13	5	0.0	wet	FILL		sandy SILT, little GGM, (10YR 3/2) very dark grayish brown, non plastic, medium dense, wet. PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (10YR 3/3) dark brown, low plasticity, medium stiff, moist, strong sulfur odor. Soils consistent with MM.	P4-W19A-16.2-16.7
16		0.0	moist	PT			P4-W19A-16.7-17.2
17							P4-W19A-18.0-18.5
18							
19	5	0.0	moist	PT		PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (10YR 3/3) dark brown, low plasticity, medium stiff, moist, strong sulfur odor. Soils consistent with MM. fine to medium silty SAND, some gravel little clay, (10YR 5/1) gray, non plastic, dense, wet. Soils consistent with UNDno.	P4-W19A-20.0-20.5
20		0.0	wet	SP-SM			
21							
22							
23							

P4-W19A-16.2-16.7

P4-W19A-16.7-17.2

P4-W19A-18.0-18.5

P4-W19A-20.0-20.5

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick.

PPG - PPG LOGS.GDT - 4/15/14 17:43

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 611270.755
Date Started Drilling: 12/12/2014 9:10:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 682827.642
Date Finished Drilling: 12/12/2014	Core Size: 3.0 in	Boring Total Depth: 20.5 ft
Logged By: SS	Project Manager: Scott Mikaelian	Depth to Water: NA
Physical Location: X19A - Carteret Ave.		Surface Elevation: 11.9 ft NAVD88

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
		0.0		ASPHALT		ASPHALT	
1	5	0.0	dry	FILL		fine to medium SAND, little fine to medium gravel, little (30%) COPR, (5YR 3/4) dark reddish brown, loose, dry, no odor, no staining.	P4-X19A-1.0-1.5
2							P4-X19A-2.0-2.5
3		0.0	dry	FILL		ASH, some fine to medium sand, trace brick and coal, (10YR 4/2) dark grayish brown, loose, dry, no odor, no staining.	P4-X19A-4.0-4.5
4							
5	5	0.0	moist to saturated	FILL		ASH, little fine to medium sand and gravel, (7.5YR 2.5/1) black, loose, moist to saturated, no odor, no staining, water at 6.0 feet.	P4-X19A-6.0-6.5
6							
7		0.0	wet	FILL		GGM (70%), little fine gravel, (5GY 5/2) grayish green, loose, wet, no odor, no staining.	
8							
9							
10	5	0.0	wet	FILL		GGM (100%), (2.5Y 3/3) dark olive brown, soft, wet, slight petroleum odor, product staining.	
11							
12		8.5	wet	FILL		fine to medium silty SAND, trace fine gravel, (10YR 2/2) very dark brown, loose, wet, slight petroleum odor, product staining.	P4-X19A-11.5-12.0 P4-X19A-12.0-12.5
13							
14							
15	2	0.5	saturated	FILL		fine to medium silty SAND, (10YR 5/1) gray, soft, saturated, no odor, no staining.	
16		0.0	moist	FILL		fine to medium SAND, trace fine gravel, (7.5YR 4/2) brown, medium dense, moist, no odor, no staining.	
17		0.8	moist	FILL		fine to medium SAND, trace fine gravel, (10YR 4/1) dark gray, medium dense, moist, slight petroleum odor, no staining.	
18	3.5	0.0	moist	PT		PEAT (degraded vegetated material), (60% organic silt, 40% organic fibers), (10YR 4/3) brown, medium dense, moist, moderate organic odor, no staining. Soils consistent with MM.	
19							
20							P4-X19A-20.0-20.5R

Notes:
bgs - below surface grade COPR - chromite ore processing residue UNDo - non-organic undisturbed native deposits MGP - manufactured gas plant
MM - meadow mat GGM - green grey mud UNOrg - organic undisturbed native deposits CCPW - chromate chemical production waste

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UNDo confirmed to be 1 ft thick.

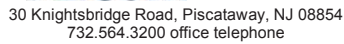
Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 611253
Date Started Drilling: 3/5/2014 10:20:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 682823
Date Finished Drilling: 3/5/2014 10:20:00 AM	Core Size: 2 in	Boring Total Depth: 25 ft
Logged By: A.Bogucki	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: X19A - Carteret Ave.		Surface Elevation: 12.0 ft NAVD88

(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
1	5	0.0	slightly moist	FILL		fine to medium SAND, some GGM, little cinders, (7.5YR 3/4) dark brown, loose to dense, slightly moist, no odor, green staining. GGM, with ash, cinders, coal, little fine to medium gravel, (5GY 3/2) very dark grayish green, stiff, slightly moist, no odor, no staining.	
2		0.0	slightly moist	FILL			
3							
4							
5							
6	5	0.0	slightly moist	FILL		GGM, with ash, cinders, coal, little fine to medium gravel, (5GY 3/2) very dark grayish green, stiff, slightly moist, no odor, no staining. GGM, little fine sand, trace COPR, (5GY 4/4) olive green, low plasticity, soft to stiff, moist, no odor, green staining.	
7		0.0	moist	FILL			
8							
9							
10	4.5	0.0	moist	FILL		GGM, little fine sand, trace COPR, (5GY 4/4) olive green, low plasticity, soft to stiff, moist, no odor, green staining. fine silty SAND, little coarse gravel, trace oil-like material, stiff, slightly moist, slight naphthalene odor, no staining. SILT, trace roots, fibers, little fine to medium sand, (7.5YR 2.5/2) very dark brown, low plasticity, soft to stiff, moist, slight naphthalene odor, sheen. fine to medium SAND, with silt, trace oil-like material, (7.5YR 3/3) dark brown, dense, slightly moist, slight naphthalene odor.	
11		0.0	slightly moist	FILL			
12		0.0	slightly moist	FILL			
13		0.0	slightly moist	FILL			
14							
15	5			NR		NO RECOVERY	P4-X19A-14.0-14.5
16		0.0	wet	FILL			P4-X19A-16.0-16.5
17							P4-X19A-16.5-17.0
18		0.0					P4-X19A-17.0-17.5
19							
20	5			PT		PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (10YR 3/3) dark brown, low plasticity, medium dense, moist, moderate sulfur odor. Soils consistent with MM.	P4-X19A-18.0-18.5
21		0.0	moist	PT			P4-X19A-20.0-20.5
22		0.0	wet	SP-SM			
23		0.0	moist	SP-SM			

Re-review of the soil descriptions indicates the USCS for this interval is SM-SC.

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick.



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(Note bgs = below ground surface)

consistent with UNDno.

PPG - PPG_LOGS.GDT - 4/15/14 17:43

Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick.



30 Knightsbridge Road, Piscataway, NJ 08854
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Boring ID: P4-Y19A

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Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Direct Push	Coordinates (NJSPNAD83) x: 611303.112
Date Started Drilling: 12/8/2014 12:40:00 PM	Rig Type: Geoprobe	Coordinates (NJSPNAD83) y: 682811.3
Date Finished Drilling: 12/8/2014 1:30:00 PM	Core Size: 3.0 in	Boring Total Depth: 17 ft
Logged By: SS	Project Manager: Scott Mikaelian	Depth to Water: N/A
Physical Location: Carteret Avenue		Surface Elevation: 11.8 ft NAVD88

(Note bgs = below ground surface)

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
		0.0		ASPHALT		ASPHALT.	
1	5	0.0	dry	FILL		fine to medium SAND, little medium gravel, little COPR(20%), (5YR 3/3) dark reddish brown, loose, dry, no odor, no staining.	P4-Y19A-1.0-1.5
2		0.0	moist	FILL			P4-Y19A-2.0-2.5
3		0.0	moist	FILL			
4							
5	5	0.0	moist	FILL		ASH, little GGM, little medium gravel, trace debris, (7.5YR 3/1) very dark gray, loose, moist, no odor, green staining.	P4-Y19A-5.0-5.5
6							P4-Y19A-6.0-6.5
7							
8							P4-Y19A-8.0-8.5
9							
10	5	0.0	moist	FILL		ASH, little debris, little GGM, trace wood, (7.5YR 4/1) dark gray, loose, moist, no odor green staining.	P4-Y19A-10.0-10.5
11							
12		0.0	wet	FILL			P4-Y19A-12.0-12.5
13							
14	2					fine to medium silty SAND, some oil-like material, little fine to medium gravel, trace roots, (7.5YR 2.5/1) black, soft, wet, moderate petroleum odor sheen.	P4-Y19A-14.0-14.5
15		0.0	dry	FILL			
16							P4-Y19A-16.0-16.5
17							

Comments: 1) Three attempts were made to obtain best recovery.

AECOM Note: Ground surface elevation = 12.0 ft NAVD88

**PSEG SC Former Halladay Street Gas Works Site
Supplemental Remedial Investigation**

SCHOOR DEPALMA

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LOG OF SOIL BORING SB-28

PROJECT LOCATION				GROUND ELEVATION (FT. MSL)		PROJECT NUMBER						
Halladay Street, Jersey City, New Jersey						020667601						
DRILLING CONTRACTOR		FOREMAN		DATE STARTED		DATE COMPLETED						
Advanced Drilling, Inc.		Jeremy Logel		04/11/05		04/11/05						
DRILLING EQUIPMENT				COMPLETION DEPTH (FT BGS)		ROCK DEPTH (FT)						
Hollow Stem Auger Rig, 4.25" Augers				54'		not encountered						
TYPE BIT		N/A		SIZE AND TYPE CORE BARREL		NO. SAMPLES	DIST.	27	UNDIST.	N/A	CORE	N/A
CASING		N/A		N/A		WATER DEPTH	FIRST	2.5'	COMPL.	N/A	24HR	N/A
CASING HAMMER		WEIGHT		N/A		DROP		N/A				
SAMPLER						BORING LOCATION						
2" diameter, 2' long split-spoon						Southern side of Carteret Avenue, Road Shoulder						
SAMPLER HAMMER		WEIGHT		140 lbs.		DROP		30"				
				INSPECTOR		Eric Gaulin						

DESCRIPTION	Sample Interval	Depth (ft bgs)	Water Table	Samples				PID READINGS (PPM)					REMARKS
				Number	Recov. (ft)	Penetr. Resist. BL/6in	Time	Sample	Ambient Air	Time	Head Space	Time Date	
0.0-0.5' Asphalt road surface		0		1	2.0	5	0845	0.0	0.0	0845	N/A	N/A	
0.5-0.6' Gravel sub-base		-											
0.6-3.0' FILL: Dark greenish gray (GLEY1 4/1) fine to medium SAND, trace silt, tight		-				2		0.0					
		-				2		0.0					
		-				3		0.0					
		-											
3.0-3.2' FILL: Bright green / yellow sand, suspected Chromate Ore Processing Residue (COPR)		2	1.2	4	0850	0.0	0.0	0850	N/A	N/A			
		-				2		0.0					
		-				3							
		-				10							
4.0-6.0' FILL: Dark gray (5YR4/1) fine to medium SAND, trace silt, wood fragments, gravel, glass fragments		3	2.0	4	0857	0.0	0.0	0857	N/A	N/A			
		-				5		0.0					
		-				5		0.0					
		-				6		0.0					
6.0-7.5' FILL: Dark gray to black fine to medium SAND, with 50% angular gravel (1/4"), loose		4	2.0	11	0900	0.0	0.0	0900	N/A	N/A			
		-				13		0.0					
		-				10		0.0					
		-				12		0.0					
7.5-8.0' FILL: Bright green, fine SILTY SAND, COPR		5	1.0	3	0913	0.0	0.0	0913	N/A	N/A			
		-				2		0.0					
		-				2							
		-				1							
8.0-9.0' FILL: Greyish green (GLEY1 5/2) tight fine SANDY SILT, little coal fragments		5											
		-											
		-											
		-											

AECOM Note: Ground surface elevation = 12.0 ft NAVD88

PSEG SC Former Halladay Street Gas Works Site Supplemental Remedial Investigation						SCHOOR DEPALMA Page 2 of 6					
LOG OF SOIL BORING SB-28											
PROJECT LOCATION Halladay Street, Jersey City, New Jersey						GROUND ELEVATION (FT. MSL)		PROJECT NUMBER 020667601			
DRILLING CONTRACTOR Advanced Drilling, Inc.				FOREMAN Jeremy Logel		DATE STARTED 04/11/05		DATE COMPLETED 04/11/05			
DRILLING EQUIPMENT Hollow Stem Auger Rig, 4.25" Augers						COMPLETION DEPTH (FT BGS) 54'		ROCK DEPTH (FT) not encountered			
TYPE BIT N/A				SIZE AND TYPE CORE BARREL N/A		NO. SAMPLES DIST. 27		UNDIST. N/A		CORE N/A	
CASING N/A				N/A		WATER DEPTH FIRST 2.5'		COMPL. N/A		24HR N/A	
CASING HAMMER		WEIGHT N/A		DROP N/A		BORING LOCATION Southern side of Carteret Avenue, Road Shoulder					
SAMPLER 2" diameter, 2' long split-spoon						INSPECTOR Eric Gaulin					
SAMPLER HAMMER		WEIGHT 140 lbs.		DROP 30"		SLOPE					

DESCRIPTION	Sample Interval	Depth (ft bgs)	Water Table	Samples				PID READINGS (PPM)					REMARKS
				Number	Recov. (ft)	Penetr. BL/6in	Time	Sample	Ambient Air	Time	Head Space	Time Date	
10.0-10.3' FILL: Greyish green (GLE1 5/2) tight fine SANDY SILT, little coal fragments, some fine gravel 10.3-14.0' Bluish black (GLE2 2.5/1) organic SILT and CLAY, with visible peat fibers (PT)		- 10 -		6	1.5	3	0922	0.0	0.0	0922	N/A	N/A	Slight naphthaline like odors, some staining from 10.5-11.25 0930 Sample SB-28(10.5-11.0) for TCL VOC, TCL SVOC, TAL Metals, CN
		- -											
		- 11 -											
		- -											
		- 12 -											
		- -											
		- 13 -											
		- -											
		- 14 -											
		- -											
14.0-16.8' Reddish brown (2.5YR4/3) fine SAND, wet, trace silty clay (SM)		- 14 -		8	0.5	1	0936	0.0	0.0	0936	N/A	N/A	No staining or odors noted in this spoon
		- -											
		- 15 -											
		- -											
		- 16 -											
		- -											
		- 17 -											
		- -											
		- 18 -											
		- -											
16.8-18.5' Dark yellowish brown (10YR3/4) PEAT, very fibrous and firm		- 16 -		9	2.0	2	0941	0.0	0.0	0941	N/A	N/A	0943 Sample SB-28(16.0-16.5) for TCL VOC, TCL SVOC, TAL Metals, CN
		- -											
		- 17 -											
		- -											
		- 18 -											
		- -											
		- 19 -											
		- -											
		- 20 -											
		- -											
18.5-23.0' Very dark bluish gray (GLE2 3/1) bands (1" to 1.5") of PEAT and organic CLAY (OH)		- 18 -		10	1.5	2	0947	0.0	0.0	0947	N/A	N/A	
		- -											
		- 19 -											
		- -											
		- 20 -											
		- -											

AECOM Note: Ground surface elevation = 12.0 ft NAVD88

PSEG SC Former Halladay Street Gas Works Site
Supplemental Remedial Investigation

SCHOOR DEPALMA

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LOG OF SOIL BORING SB-28

PROJECT LOCATION			GROUND ELEVATION (FT. MSL)		PROJECT NUMBER					
Halladay Street, Jersey City, New Jersey					020667601					
DRILLING CONTRACTOR		FOREMAN	DATE STARTED		DATE COMPLETED					
Advanced Drilling, Inc.		Jeremy Logel	04/11/05		04/11/05					
DRILLING EQUIPMENT			COMPLETION DEPTH (FT BGS)		ROCK DEPTH (FT)					
Hollow Stem Auger Rig, 4.25" Augers			54'		not encountered					
TYPE BIT	N/A	SIZE AND TYPE CORE BARREL	NO. SAMPLES	DIST.	27	UNDIST.	N/A	CORE	N/A	
CASING	N/A	N/A	WATER DEPTH	FIRST	2.5'	COMPL.	N/A	24HR	N/A	
CASING HAMMER	WEIGHT	N/A	DROP	N/A	BORING LOCATION					
SAMPLER					2" diameter, 2' long split-spoon					
					Southern side of Carteret Avenue, Road Shoulder					
SAMPLER HAMMER	WEIGHT	140 lbs.	DROP	30"	INSPECTOR					Eric Gaulin

DESCRIPTION	Sample Interval	Depth (ft bgs)	Water Table	Samples				PID READINGS (PPM)					REMARKS
				Number	Recov. (ft)	Penetr. Resist. BL/6in	Time	Sample	Ambient Air	Time	Head Space	Time Date	
18.5-23.0' Very dark bluish gray (GLE Y2 3/1) bands (1" to 1.5") of PEAT and organic CLAY (OH)		- 20 -											
			11	2.0	2	0951	0.0	0.0	0951	N/A	N/A		
					1		0.0						
		- 21 -			2		0.0						
					7		0.0						
		- 22 -											
			12	2.0	13	0955	0.0	0.0	0955	N/A	N/A		
					10		0.0						
23.0-24.0' Dark gray (GLE Y1 4/N) fine to medium SILTY SAND, tight, 5% fine gravel, rounded (GM)		- 23 -			8		0.0						
					6		0.0						
		- 24 -											
			13	1.5	2	1030	0.0	0.0	1030	N/A	N/A		
24.0-25.5' Very dark gray (GLE Y1 3/N) fine to medium SAND, trace silt (SW)					2		0.0						
		- 25 -			1		0.0						
					2								
		- 26 -			14	2.0	2	1035	0.0	0.0	1035	N/A	N/A
26.0-30.0' Dark reddish gray (2.5YR4/1) fine to medium SILTY SAND, trace silt (SW)					3		0.0						
		- 27 -			2		0.0						
					2		0.0						
		- 28 -			15	2.0	3	1036	0.0	0.0	1036	N/A	N/A
					2		0.0						
		- 29 -			3		0.0						
					4		0.0						
		- 30 -											

AECOM Note: Ground surface elevation = 12.0 ft NAVD88

PSEG SC Former Halladay Street Gas Works Site Supplemental Remedial Investigation										SCHOOR DEPALMA Page 4 of 6					
LOG OF SOIL BORING SB-28															
PROJECT LOCATION Halladay Street, Jersey City, New Jersey					GROUND ELEVATION (FT. MSL)		PROJECT NUMBER 020667601								
DRILLING CONTRACTOR Advanced Drilling, Inc.			FOREMAN Jeremy Logel		DATE STARTED 04/11/05		DATE COMPLETED 04/11/05								
DRILLING EQUIPMENT Hollow Stem Auger Rig, 4.25" Augers					COMPLETION DEPTH (FT BGS) 54'		ROCK DEPTH (FT) not encountered								
TYPE BIT N/A			SIZE AND TYPE CORE BARREL N/A		NO. SAMPLES 27		DIST. 2.5'		UNDIST. N/A		CORE N/A				
CASING N/A			N/A		WATER DEPTH FIRST		2.5'		COMPL. N/A		24HR N/A				
CASING HAMMER		WEIGHT N/A		DROP N/A		BORING LOCATION Southern side of Carteret Avenue, Road Shoulder									
SAMPLER 2" diameter, 2' long split-spoon					INSPECTOR Eric Gaulin										
SAMPLER HAMMER		WEIGHT 140 lbs.		DROP 30"											
DESCRIPTION	Sample Interval	Depth (ft bgs)	Water Table	Samples				PID READINGS (PPM)					REMARKS		
				Number	Recov. (ft)	Penetr. BL/6in	Time	Sample	Ambient Air	Time	Head Space	Time Date			
30.0-32.9' Dark reddish gray (2.5YR4/1) fine to medium SAND, with trace silt, <1% fine rounded gravel (SW)	-	- 30 -	-	16	2.0	2	1051	0.0	0.0	1051	N/A	N/A			
					3		0.0								
		- 31 -			3		0.0								
					3		0.0								
		- 32 -													
					17	1.7	3	1053	0.0	0.0	1053	N/A		N/A	Oil material (OM) from 34.5 to 38.0, naphthalene like odors; positive dye test at 36'
							4		0.0						
							4		0.0						
		- 33 -					3		0.0						
		- 34 -													
		18	2.0	1	1119	10.4	0.0	1119	N/A	N/A	1145 Sample SB-28(36.5-37.0) for GC fingerprint, TCL VOC, TCL SVOC, TAL Metals, Total and Amenable CN				
				1		87.0									
				3		72.0									
- 35 -				4		118.0									
						74.0									
- 36 -															
		19	2.0	3	1138	94.0	0.0	1138	N/A	N/A		Sheen and odors noted from 38.0' to 42.7'			
				3		58.0									
- 37 -				2		284.0									
				1		62.0									
- 38 -															
		20	2.0	1	1152	1.0	0.0	1152	N/A	N/A					
				2		1.0									
- 39 -				2		1.0									
				1		1.0									
- 40 -															

AECOM Note: Ground surface elevation = 12.0 ft NAVD88

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LOG OF SOIL BORING SB-28

PROJECT LOCATION				GROUND ELEVATION (FT. MSL)		PROJECT NUMBER						
Halladay Street, Jersey City, New Jersey						020667601						
DRILLING CONTRACTOR			FOREMAN		DATE STARTED		DATE COMPLETED					
Advanced Drilling, Inc.			Jeremy Logel		04/11/05		04/11/05					
DRILLING EQUIPMENT				COMPLETION DEPTH (FT BGS)		ROCK DEPTH (FT)						
Hollow Stem Auger Rig, 4.25" Augers				54'		not encountered						
TYPE BIT		N/A		SIZE AND TYPE CORE BARREL		NO. SAMPLES	DIST.	27	UNDIST.	N/A	CORE	N/A
CASING		N/A		N/A		WATER DEPTH	FIRST	2.5'	COMPL.	N/A	24HR	N/A
CASING HAMMER		WEIGHT		N/A		DROP		N/A				
SAMPLER						BORING LOCATION						
2" diameter, 2' long split-spoon						Southern side of Carteret Avenue, Road Shoulder						
SAMPLER HAMMER		WEIGHT		140 lbs.		DROP		30"				
						INSPECTOR						
						Eric Gaulin						

DESCRIPTION	Sample Interval	Depth (ft bgs)	Water Table	Samples				PID READINGS (PPM)					REMARKS
				Number	Recov. (ft)	Penetr. Resist. BL/6in	Time	Sample	Ambient Air	Time	Head Space	Time	
												Date	
38.0-42.7' Dark reddish brown (2.5YR3/4) fine SANDY SILT (SM)		- 40 -										Sheen and odors noted from 38.0' to 42.7'	
		21	2.0	3	1209	14.2	0.0	1209	N/A	N/A			
				4		14.7							
		- 41 -		4		44.3							
42.7-48.25' Dark reddish brown (2.5YR3/4) fine SANDY SILT with occassional thin (1/2") bands of SILT		- 42 -										1217 Sample SB-28 (43.5-44.0) for TCL VOC, TCL SVOC, TAL Metals, Total and Amenable CN	
		22	2.0	3	1211	0.0	0.0	1211	N/A	N/A			
				4		1.0							
		- 43 -		6		0.0							
			7		0.0								
		- 44 -											
		23	2.0	4	1337	0.0	0.0	1337	N/A	N/A			
				5		0.0							
		- 45 -		6		0.0							
			7		0.0								
		- 46 -											
		48.25-51.8' Dark reddish brown (2.5YR3/4) loose fine SILTY SAND (SM)		- 47 -									
24	2.0			6	1342	0.0	0.0	1342	N/A	N/A			
				8		0.0							
- 48 -				7		0.0							
	6				0.0								
- 49 -													
25	2.0			5	1410	0.0	0.0	1410	N/A	N/A			
				7		0.0							
- 50 -		8		0.0									
		8		0.0									

AECOM Note: Ground surface elevation = 12.0 ft NAVD88

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LOG OF SOIL BORING SB-28

PROJECT LOCATION Halladay Street, Jersey City, New Jersey				GROUND ELEVATION (FT. MSL)		PROJECT NUMBER 020667601			
DRILLING CONTRACTOR Advanced Drilling, Inc.		FOREMAN Jeremy Logel		DATE STARTED 04/11/05		DATE COMPLETED 04/11/05			
DRILLING EQUIPMENT Hollow Stem Auger Rig, 4.25" Augers				COMPLETION DEPTH (FT BGS) 54'		ROCK DEPTH (FT) not encountered			
TYPE BIT N/A		SIZE AND TYPE CORE BARREL N/A		NO. SAMPLES 27		DIST. 2.5'		UNDIST. N/A	
CASING N/A		N/A		WATER DEPTH 2.5'		COMPL. N/A		24HR N/A	
CASING HAMMER		WEIGHT N/A		DROP N/A		BORING LOCATION Southern side of Carteret Avenue, Road Shoulder			
SAMPLER 2" diameter, 2' long split-spoon				INSPECTOR Eric Gaulin					
SAMPLER HAMMER		WEIGHT 140 lbs.		DROP 30"					

DESCRIPTION	Sample Interval	Depth (ft bgs)	Samples				PID READINGS (PPM)					REMARKS
			Number	Recov. (ft)	Penetr. Resist. BL/6in	Time	Sample	Ambient Air	Time	Head Space	Time Date	
48.25-51.8' Dark reddish brown (2.5YR3/4) loose fine SILTY SAND (SM)		- 50 -	26	2.0	9	1452	0.0	0.0	1452	N/A	N/A	1456 Sample SB-28 (50.5-51.0) for TCL VOC, TCL SVOC, TAL Metals, Total and Amenable CN
		- -			10		0.0					
51.8-52.0' Dark reddish brown (2.5YR3/4) bands of SAND SILTY and SILTY CLAY, wet		- 51 -			12		0.0					
		- -			11		0.0					Running sands jamming rods
52.0-52.5' Dark reddish brown (2.5YR3/4) bands of SAND SILTY and SILTY CLAY, wet, with layers of fine SILTY SAND (1" thick)		- 52 -	27	0.5	10	1455	0.0	0.0	1455	N/A	N/A	
		- -			11							
		- 53 -			12							End of Boring at 54'
		- -			13							
		- 54 -										
		- -										
		- 55 -										
		- -										
		- 56 -										
		- -										
		- 57 -										
		- -										
		- 58 -										
		- -										
		- 59 -										
		- -										
		- 60 -										

PSEG SC Former Halladay Street Gas Works Site Supplemental Remedial Investigation						SCHOOR DEPALMA Page 1 of 9					
LOG OF SOIL BORING SB-29											
PROJECT LOCATION						GROUND ELEVATION (FT. MSL)			PROJECT NUMBER		
Halladay Street, Jersey City, New Jersey									020667601		
DRILLING CONTRACTOR				FOREMAN		DATE STARTED			DATE COMPLETED		
Advanced Drilling, Inc.				Jeremy Logel		04/12/05			04/13/05		
DRILLING EQUIPMENT						COMPLETION DEPTH (FT BGS)			ROCK DEPTH (FT)		
Hollow Stem Auger Rig, 4.25" Augers to 34' ; mud rotary with 3 7/8" Roller Bid to 84'						84'			not encountered		
TYPE BIT				SIZE AND TYPE CORE BARREL		NO. SAMPLES		DIST.		UNDIST.	
N/A				N/A		25		3'		N/A	
CASING				N/A		WATER DEPTH		FIRST		COMPL.	
4" steel casing to 34'				N/A		3'		N/A		24HR	
CASING HAMMER				WEIGHT		DROP		BORING LOCATION			
140 lbs.				30"							
SAMPLER						Southern side of Carteret Avenue, Road Shoulder					
2" diameter, 2' long split-spoon											
SAMPLER HAMMER				WEIGHT		DROP		INSPECTOR			
140 lbs.				30"				Eric Gaulin			

DESCRIPTION	Sample Interval	Depth (ft bgs)	Water Table	Samples				PID READINGS (PPM)					REMARKS
				Number	Recov. (ft)	Penetr. BL/6in	Time	Sample	Ambient Air	Time	Head Space	Time Date	
0.0-0.3' Asphalt road surface		0		1	1.7	3	0931	0.0	0.0	0931	N/A	N/A	
0.3-0.7' FILL: Dark brown fine to medium SAND, clinker, glass fragments		-				4		0.0					
0.7-1.7' FILL: Bright greenish gray fine SANDY SILT, Chromate Ore Processing Residue (COPR)		- 1 -				4		0.0					
		-				3		0.0					
2.0-4.25' FILL: Gray fine to medium SAND, silt, clinker, ash, brick pieces		- 2 -		2	1.5	5	0937	0.0	0.0	0937	N/A	N/A	
		-				8		0.0					
		- 3 -				9		0.0					
		-				11							
		- 4 -		3	1.25	5	0946	0.0	0.0	0946	N/A	N/A	
		-				5		0.0					
		- 5 -				7		0.0					
		-				4							
6.0-7.25' FILL: black fine to medium SAND, silt, wood fragments		- 6 -		4	1.5	6	0947	0.0	0.0	0947	N/A	N/A	Sweet, organic odors from 6.0' to 6.5'
		-				7		0.0					
		- 7 -				5		0.0					
		-				5							
8.0-9.75' FILL: black fine to medium SAND, silt, wood fragments, clam shell fragment		- 8 -		5	2.0	10	0951	0.0	0.0	0951	N/A	N/A	No odors this spoon
		-				9		0.0					
		- 9 -				8		0.0					
		-				8		0.0					
9.75-10.0' Weak red (2.5YR4/2) medium dense fine SILTY SAND (SM)		- 10 -											

AECOM Note: Ground surface elevation = 11.7 ft NAVD88

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LOG OF SOIL BORING SB-29

PROJECT LOCATION			GROUND ELEVATION (FT. MSL)		PROJECT NUMBER							
Halladay Street, Jersey City, New Jersey					020667601							
DRILLING CONTRACTOR		FOREMAN		DATE STARTED		DATE COMPLETED						
Advanced Drilling, Inc.		Jeremy Logel		04/12/05		04/13/05						
DRILLING EQUIPMENT				COMPLETION DEPTH (FT BGS)		ROCK DEPTH (FT)						
Hollow Stem Auger Rig, 4.25" Augers to 34' ; mud rotary with 3 7/8" Roller Bid to 84'				84'		not encountered						
TYPE BIT		N/A		SIZE AND TYPE CORE BARREL		NO. SAMPLES	DIST.	25	UNDIST.	N/A	CORE	N/A
CASING		4" steel casing to 34'		N/A		WATER DEPTH	FIRST	3'	COMPL.	N/A	24HR	N/A
CASING HAMMER		WEIGHT 140 lbs.		DROP 30"		BORING LOCATION Southern side of Carteret Avenue, Road Shoulder						
SAMPLER		2" diameter, 2' long split-spoon										
SAMPLER HAMMER		WEIGHT 140 lbs.		DROP 30"		INSPECTOR Eric Gaulin						

DESCRIPTION	Sample Interval	Depth (ft bgs)	Water Table	Samples				PID READINGS					REMARKS
				Number	Recov. (ft)	Penetr. Resist. BL/6in	Time	(PPM)					
								Sample	Ambient Air	Time	Head Space	Time Date	
10.0-14.0' Weak red (2.5YR5/2) firm fine SILTY SAND (SM) with occassional large (1") gravel, rounded, some roots, occassional thin band (1/2") band of silty clay		- 10 -		6	0.5	4	1001	0.0	0.0	1001	N/A	N/A	Sweet, solvent odors
		- -				4							
		- 11 -				6							
		- -				5							
		- 12 -		7	2.0	5	1003	0.0	0.0	1003	N/A	N/A	
		- -				5		0.0					1054 No water in hydropunch (10 to 14). Sample with bailer SB-29-W(10) for TCL VOC, TCL SVOC, TAL Metals, level of water observed in augers
		- 13 -				4		0.0					
		- -				4		0.0					
		- 14 -											
		- -											
15.0-15.3' Gravel 1" to 2" in diameter, subangular to subrounded		- 15 -		8	1.7	6	1153	0.0	0.0	000	N/A	N/A	Swampy odors this spoon
15.3-15.5' Very dark gray (10YR3/1) fine SILTY SAND (SM)		- -				7		0.0					
15.5-17.2' Dark brown (10YR3/3) PEAT, very fibrous and firm		- 16 -				9		0.0					
17.2-17.5' Dark reddish gray (2.5YR4/1) organic CLAY, with a single piece of gravel (coarse grained metamorphic, peppery colored)		- -				10		0.0					
		- 17 -		9	0.5	10	1157	0.0	0.0	1157	N/A	N/A	
		- -				12							
		- 18 -				11							
		- -				10							
		- 19 -											
		- -											
		- 20 -											

AECOM Note: Ground surface elevation = 11.7 ft NAVD88

**PSEG SC Former Halladay Street Gas Works Site
Supplemental Remedial Investigation**

SCHOOR DEPALMA

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LOG OF SOIL BORING SB-29

PROJECT LOCATION			GROUND ELEVATION (FT. MSL)		PROJECT NUMBER	
Halladay Street, Jersey City, New Jersey					020667601	
DRILLING CONTRACTOR		FOREMAN	DATE STARTED		DATE COMPLETED	
Advanced Drilling, Inc.		Jeremy Logel	04/12/05		04/13/05	
DRILLING EQUIPMENT			COMPLETION DEPTH (FT BGS)		ROCK DEPTH (FT)	
Hollow Stem Auger Rig, 4.25" Augers to 34' ; mud rotary with 3 7/8" Roller Bid to 84'			84'		not encountered	
TYPE BIT		N/A	SIZE AND TYPE CORE BARREL		NO. SAMPLES	DIST.
					25	
CASING		4" steel casing to 34'	N/A		UNDIST.	N/A
					CORE	N/A
CASING HAMMER		WEIGHT	140 lbs.	DROP	30"	BORING DEPTH
						FIRST
						3'
						COMPL.
						N/A
						24HR
						N/A
SAMPLER			2" diameter, 2' long split-spoon		BORING LOCATION	
					Southern side of Carteret Avenue, Road Shoulder	
SAMPLER HAMMER		WEIGHT	140 lbs.	DROP	30"	INSPECTOR
						Eric Gaulin

DESCRIPTION	Sample Interval	Depth (ft bgs)	Water Table	Samples				PID READINGS					REMARKS
				Number	Recov. (ft)	Penetr. Resist. BL/6in	Time	(PPM)					
								Sample	Ambient Air	Time	Head Space	Time Date	
20.0-20.1' Dark reddish gray (5YR4/2) fine SILTY SAND (SM)		- 20 -		10	0.3	11	1301	0.0	0.0	1301	N/A	N/A	
20.1-22.2' Dark reddish gray (5YR4/2) angular to subangular fine gravel (1/8" to 1"), sand, silt		- -				12							
		- 21 -				11							
		- -				11							
22.2-22.8' Dark bluish gray (GLE Y2 4/1) fine SANDY SILT and SILT, firm		- 22 -		11	1.7	3	1308	0.0	0.0	1308	N/A	N/A	
22.8-23.5' Dark bluish gray (GLE Y2 4/1) fine to medium SAND, trace silt, trace fine gravel		- -				3		0.0					
		- 23 -				5		0.0					
23.5-24.1' Dark bluish gray (GLE Y2 4/1) fine to medium SAND, trace gravel		- -				5		0.0					
24.1-24.7' Dark reddish gray (2.5YR4/1) coarse to fine very loose SAND, banding of coarse sand (SW)		- 24 -		12	1.2	7	1331	0.0	0.0	1331	N/A	N/A	
24.7-24.9' Dark reddish gray (2.5YR4/1) fine grained sedimentary rock gravel fragment		- -				7		0.0					
24.9-25.0' Reddish brown (2.5YR4/4) fine to medium SAND (SW)		- 25 -				8		0.0					
25.0-27.0' Reddish brown (2.5YR4/4) fine SILTY SAND (SM)		- -				11							
		- 26 -		13	1.3	9	1341	0.0	0.0	1341	N/A	N/A	
27.0-27.3' Reddish brown (2.5YR4/4) fine SAND, firm (SP)		- -				5		0.0					
		- 27 -				3		0.0					
		- -				4							
28.0-28.7' Reddish brown (2.5YR4/4) coarse to fine SAND and gravel (GP)		- 28 -		14	1.6	4	1349	0.0	0.0	1349	N/A	N/A	
28.3-30.2' Reddish brown (2.5YR4/4) fine SAND (SP)		- -				5		0.0					
		- 29 -				6		0.0					
		- -				5							
		- 30 -											

AECOM Note: Ground surface elevation = 11.7 ft NAVD88

PSEG SC Former Halladay Street Gas Works Site
Supplemental Remedial Investigation

SCHOOR DEPALMA

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LOG OF SOIL BORING SB-29

PROJECT LOCATION			GROUND ELEVATION (FT. MSL)		PROJECT NUMBER														
Halladay Street, Jersey City, New Jersey					020667601														
DRILLING CONTRACTOR		FOREMAN		DATE STARTED		DATE COMPLETED													
Advanced Drilling, Inc.		Jeremy Logel		04/12/05		04/13/05													
DRILLING EQUIPMENT				COMPLETION DEPTH (FT BGS)		ROCK DEPTH (FT)													
Hollow Stem Auger Rig, 4.25" Augers to 34' ; mud rotary with 3 7/8" Roller Bid to 84'				84'		not encountered													
TYPE BIT		N/A		SIZE AND TYPE CORE BARREL		NO. SAMPLES		DIST.		25		UNDIST.		N/A		CORE		N/A	
CASING		4" steel casing to 34'		N/A		WATER DEPTH		FIRST		3'		COMPL.		N/A		24HR		N/A	
CASING HAMMER		WEIGHT 140 lbs.		DROP 30"		BORING LOCATION													
SAMPLER		2" diameter, 2' long split-spoon		Southern side of Carteret Avenue, Road Shoulder															
SAMPLER HAMMER		WEIGHT 140 lbs.		DROP 30"		INSPECTOR Eric Gaulin													

DESCRIPTION	Sample Interval	Depth (ft bgs)	Water Table	Samples				PID READINGS (PPM)					REMARKS
				Number	Recov. (ft)	Penetr. Resist. BL/6in	Time	Sample	Ambient Air	Time	Head Space	Time Date	
28.3-30.2' Reddish brown (2.5YR4/4) fine SAND (SP)		- 30 -		15	1.2	4	1412	0.0	0.0	1412	N/A	N/A	
30.2-31.2' Reddish brown (2.5YR4/4) coarse to fine SAND and 1/4" angular to subrounded gravel (GP)		- -				4		0.0					
		- 31 -				4		0.0					
		- -				4							
		- 32 -				4							
32.0-31.1' Reddish brown (2.5YR4/4) fine SAND (SP) and black angular rock fragments		- 32 -		16	0.1	5	1415	0.0	0.0	1415	N/A	N/A	Remnants of rock couldn't be moved by augers. Drove casing to 34' and switched to mud rotary
	- -					7							
	- 33 -					7							
	- -					7							
34.0-34.5' Reddish brown (2.5YR4/4) coarse to fine SAND and 1/4" angular to subrounded gravel (GP)		- 34 -		17	0.7	8	1510	0.0	0.0	1510	N/A	N/A	1515 Sample SB-29 (36.5-37.0) for total and amenable CN, TCL VOC, TCL SVOC, TAL Metals
34.5-37.0' Reddish brown (2.5YR4/4) fine grained siltstone fragments (GW)		- -				9							
		- 35 -				9							
		- -				10							
37.0-40.2' Reddish brown (2.5YR4/4) fine SILTY SAND (SM)		- 36 -		18	1.5	6	1511	0.0	0.0	1511	N/A	N/A	
		- -				7		0.0					
		- 37 -				8		0.0					
		- -				9							
		- 38 -		19	1.75	8	1515	0.0	0.0	1515	N/A	N/A	
		- -				9		0.0					
	- 39 -				9		0.0						
		- 40 -				11		0.0					

PSEG SC Former Halladay Street Gas Works Site Supplemental Remedial Investigation						SCHOOR DEPALMA Page 5 of 9					
LOG OF SOIL BORING SB-29											
PROJECT LOCATION						GROUND ELEVATION (FT. MSL)			PROJECT NUMBER		
Halladay Street, Jersey City, New Jersey									020667601		
DRILLING CONTRACTOR				FOREMAN		DATE STARTED			DATE COMPLETED		
Advanced Drilling, Inc.				Jeremy Logel		04/12/05			04/13/05		
DRILLING EQUIPMENT						COMPLETION DEPTH (FT BGS)			ROCK DEPTH (FT)		
Hollow Stem Auger Rig, 4.25" Augers to 34' ; mud rotary with 3 7/8" Roller Bid to 84'						84'			not encountered		
TYPE BIT				SIZE AND TYPE CORE BARREL		NO. SAMPLES		DIST.		UNDIST.	
N/A				N/A		25		3'		N/A	
CASING				N/A		WATER DEPTH		FIRST		COMPL.	
4" steel casing to 34'				N/A		3'		N/A		24HR	
CASING HAMMER		WEIGHT		DROP		BORING LOCATION					
140 lbs.		30"		30"							
SAMPLER						Southern side of Carteret Avenue, Road Shoulder					
2" diameter, 2' long split-spoon											
SAMPLER HAMMER		WEIGHT		DROP		INSPECTOR					
140 lbs.		30"		30"		Eric Gaulin					

DESCRIPTION	Sample Interval	Depth (ft bgs)	Samples				PID READINGS (PPM)					REMARKS
			Number	Recov. (ft)	Penetr. BL/6in	Time	Sample	Ambient Air	Time	Head Space	Time Date	
37.0-40.2' Reddish brown (2.5YR4/4) fine SILTY SAND (SM)		- 40 -	20	0.6	11	1539	0.0	0.0	1539	N/A	N/A	
40.2-40.5' Coarse SAND and fine GRAVEL (GP)		- -			12							
40.5-42.2' Reddish brown (2.5YR4/4) fine SANDY SILT (SM)		- 41 -			12							
		- -			13							
42.2-42.3' Reddish brown (2.5YR4/4) fine SILTY SAND (SM)		- 42 -	21	0.7	4	1540	0.0	0.0	1540	N/A	N/A	
42.3-42.5' Reddish brown (2.5YR4/4) fine SANDY SILT (SM)		- -			4		0.0					
42.5-46.3' Reddish brown (2.5YR4/4) fine SILTY SAND (SM)		- 43 -			5							
		- -			4							
		- 44 -	22	1.25	5	1601	0.0	0.0	1601	N/A	N/A	Slight naphthalene like odors from 44' to 45.25'; no sheen, no staining; odors limited to this interval
		- -			6		0.0					
		- 45 -			6		0.0					
		- -			5							
46.3-46.8' Reddish brown (2.5YR4/4) fine SANDY SILT (SM)		- 46 -	23	2.0	4	1605	0.0	0.0	1605	N/A	N/A	No odors
		- -			4		0.0					
46.8-49.8' Reddish brown (2.5YR4/4) fine SILTY SAND (SM)		- 47 -			4		0.0					
		- -			3		0.0					
		- 48 -	24	2.0	3	1615	0.0	0.0	1615	N/A	N/A	
		- -			3		0.0					
		- 49 -			3		0.0					
49.8-50.0' Reddish brown (2.5YR4/4) fine SANDY SILT (SM)		- -			3		0.0					Ended here on 4/12/05
		- 50 -										

AECOM Note: Ground surface elevation = 11.7 ft NAVD88

PSEG SC Former Halladay Street Gas Works Site
Supplemental Remedial Investigation

SCHOOR DEPALMA
Page 6 of 9

LOG OF SOIL BORING SB-29

PROJECT LOCATION			GROUND ELEVATION (FT. MSL)		PROJECT NUMBER						
Halladay Street, Jersey City, New Jersey					020667601						
DRILLING CONTRACTOR		FOREMAN		DATE STARTED		DATE COMPLETED					
Advanced Drilling, Inc.		Jeremy Logel		04/12/05		04/13/05					
DRILLING EQUIPMENT			COMPLETION DEPTH (FT BGS)		ROCK DEPTH (FT)						
Hollow Stem Auger Rig, 4.25" Augers to 34' ; mud rotary with 3 7/8" Roller Bid to 84'			84'		not encountered						
TYPE BIT	N/A	SIZE AND TYPE CORE BARREL		NO. SAMPLES	DIST.	25	UNDIST.	N/A	CORE	N/A	
CASING	4" steel casing to 34'		N/A		WATER DEPTH	FIRST	3'	COMPL.	N/A	24HR	N/A
CASING HAMMER	WEIGHT	140 lbs.	DROP	30"							
SAMPLER				2" diameter, 2' long split-spoon							
				Southern side of Carteret Avenue, Road Shoulder							
SAMPLER HAMMER	WEIGHT	140 lbs.	DROP	30"							
				INSPECTOR Eric Gaulin							

DESCRIPTION	Sample Interval	Depth (ft bgs)	Water Table	Samples				PID READINGS (PPM)					REMARKS
				Number	Recov. (ft)	Penetr. BL/6in	Time	Sample	Ambient Air	Time	Head Space	Time Date	
50.0-54.0' No Sample Collected - Hydropunch Driven		- 50 -											Started here on 4/13/05
		- -											0931 Sample SB-29- W(50-54) collected for TCL VOC, TCL SVOC, TAL Metals; sample turbid, no odors or sheen
		- 51 -											
		- -											
	- 52 -												
		- -											
		- 53 -											
		- -											
		- 54 -											
54.0-57.6' Reddish brown (2.5YR4/4) fine SANDY SILT (SM), firm		- 54 -		25	1.5	12	1008	0.0	0.0	1008	N/A	N/A	
		- -				10		0.0					
		- 55 -				8		0.0					
		- -			10								
		- 56 -		26	2.0	10	1011	0.0	0.0	1011	N/A	N/A	1021 Sample SB-29(56.5- 57.0) for TCL VOC, TCL SVOC, TAL Metals, CN
		- -				10		0.0					
		- 57 -				8		0.0					
		- -			6		0.0						
57.6-61.75' Reddish brown (5YR5/3) thinly interlaminated CLAY and SILTY CLAY		- 58 -		27	2.0	5	1032	0.0	0.0	1032	N/A	N/A	
		- -				6		0.0					
		- 59 -				7		0.0					
		- -			8		0.0						
		- 60 -											

AECOM Note: Ground surface elevation = 11.7 ft NAVD88

PSEG SC Former Halladay Street Gas Works Site Supplemental Remedial Investigation						SCHOOR DEPALMA Page 7 of 9										
LOG OF SOIL BORING SB-29																
PROJECT LOCATION Halladay Street, Jersey City, New Jersey						GROUND ELEVATION (FT. MSL)		PROJECT NUMBER 020667601								
DRILLING CONTRACTOR Advanced Drilling, Inc.				FOREMAN Jeremy Logel		DATE STARTED 04/12/05		DATE COMPLETED 04/13/05								
DRILLING EQUIPMENT Hollow Stem Auger Rig, 4.25" Augers to 34' ; mud rotary with 3 7/8" Roller Bid to 84'						COMPLETION DEPTH (FT BGS) 84'		ROCK DEPTH (FT) not encountered								
TYPE BIT N/A				SIZE AND TYPE CORE BARREL		NO. SAMPLES DIST. 25		UNDIST. N/A		CORE N/A						
CASING 4" steel casing to 34'				N/A		WATER DEPTH FIRST 3'		COMPL. N/A		24HR N/A						
CASING HAMMER		WEIGHT 140 lbs.		DROP 30"		BORING LOCATION Southern side of Carteret Avenue, Road Shoulder										
SAMPLER 2" diameter, 2' long split-spoon						INSPECTOR Eric Gaulin										
SAMPLER HAMMER		WEIGHT 140 lbs.		DROP 30"												
DESCRIPTION			Sample Interval	Depth (ft bgs)	Water Table	Samples				PID READINGS (PPM)					REMARKS	
						Number	Recov. (ft)	Penetr. Resist. BL/6in	Time	Sample	Ambient Air	Time	Head Space	Time Date		
57.6-61.75' Reddish brown (5YR5/3) thinly interlaminated CLAY and SILTY CLAY				- 60 -		28	1.75	6	1037	0.0	0.0	1037	N/A	N/A		
				- - -												
				- 61 -												
				- - -												
				- 62 -												
				- - -												
				- 63 -												
				- - -												
				- 64 -												
				- - -												
62.0-70.0' No Sample Collected				- 65 -												
				- - -												
				- 66 -												
				- - -												
				- 67 -												
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				- 68 -												
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				- 69 -												
				- - -												
				- 70 -												
				- - -												

AECOM Note: Ground surface elevation = 11.7 ft NAVD88

PSEG SC Former Halladay Street Gas Works Site Supplemental Remedial Investigation						SCHOOR DEPALMA Page 8 of 9						
LOG OF SOIL BORING SB-29												
PROJECT LOCATION Halladay Street, Jersey City, New Jersey					GROUND ELEVATION (FT. MSL)		PROJECT NUMBER 020667601					
DRILLING CONTRACTOR Advanced Drilling, Inc.			FOREMAN Jeremy Logel		DATE STARTED 04/12/05		DATE COMPLETED 04/13/05					
DRILLING EQUIPMENT Hollow Stem Auger Rig, 4.25" Augers to 34' ; mud rotary with 3 7/8" Roller Bid to 84'					COMPLETION DEPTH (FT BGS) 84'		ROCK DEPTH (FT) not encountered					
TYPE BIT N/A			SIZE AND TYPE CORE BARREL		NO. SAMPLES DIST. 25		UNDIST. N/A		CORE N/A			
CASING 4" steel casing to 34'			N/A		WATER DEPTH FIRST 3'		COMPL. N/A		24HR N/A			
CASING HAMMER		WEIGHT 140 lbs.		DROP 30"		BORING LOCATION Southern side of Carteret Avenue, Road Shoulder						
SAMPLER 2" diameter, 2' long split-spoon												
SAMPLER HAMMER		WEIGHT 140 lbs.		DROP 30"		INSPECTOR Eric Gaulin						
DESCRIPTION	Sample Interval	Depth (ft bgs)	Samples				PID READINGS (PPM)					REMARKS
			Number	Recov. (ft)	Penetr. BL/6in	Time	Sample	Ambient Air	Time	Head Space	Time Date	
70.0-71.5' Dark reddish brown (5YR5/3) thinly interlaminated CLAY and SILTY CLAY, tight	-	- 70 -	29	2.0	8	1107	0.0	0.0	1107	N/A	N/A	
		- - -										
		- - -										
		- - -										
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		- - -										
		- - -										
		- - -										
		- - -										
71.5-72.0' Reddish brown (5YR5/3) very soft CLAY and SILTY CLAY, with 10% angular 1/4" gravel	-	- 71 -			7		0.0					
		- - -										
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		- - -										
72.0-74.0' Dark reddish brown (2.5YR3/4) thinly interlaminated CLAY and SILTY CLAY, tight (CL)	-	- 72 -	30	2.0	5	1111	0.0	0.0	1111	N/A	N/A	
		- - -										
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74.0-78.0' No Sample Collected	-	- 73 -			8		0.0					
		- - -										
		- - -										
		- - -										
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78.0-82.0' Hydropunch driven	-	- 74 -			3		0.0					
		- - -										
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	-	- 76 -										Drillers noted change to coarse till at 77.5' based on screening mud
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AECOM Note: Ground surface elevation = 11.7 ft NAVD88

PSEG SC Former Halladay Street Gas Works Site Supplemental Remedial Investigation						SCHOOR DEPALMA Page 9 of 9									
LOG OF SOIL BORING SB-29															
PROJECT LOCATION Halladay Street, Jersey City, New Jersey						GROUND ELEVATION (FT. MSL)		PROJECT NUMBER 020667601							
DRILLING CONTRACTOR Advanced Drilling, Inc.				FOREMAN Jeremy Logel		DATE STARTED 04/12/05		DATE COMPLETED 04/13/05							
DRILLING EQUIPMENT Hollow Stem Auger Rig, 4.25" Augers to 34' ; mud rotary with 3 7/8" Roller Bid to 84'						COMPLETION DEPTH (FT BGS) 84'		ROCK DEPTH (FT) not encountered							
TYPE BIT N/A				SIZE AND TYPE CORE BARREL N/A		NO. SAMPLES DIST. 25		UNDIST. N/A		CORE N/A					
CASING 4" steel casing to 34'				N/A		WATER DEPTH FIRST 3'		COMPL. N/A		24HR N/A					
CASING HAMMER		WEIGHT 140 lbs.		DROP 30"		BORING LOCATION Southern side of Carteret Avenue, Road Shoulder									
SAMPLER 2" diameter, 2' long split-spoon						INSPECTOR Eric Gaulin									
SAMPLER HAMMER		WEIGHT 140 lbs.		DROP 30"		INSPECTOR Eric Gaulin									
DESCRIPTION			Sample Interval	Depth (ft bgs)	Water Table	Samples				PID READINGS (PPM)					REMARKS
						Number	Recov. (ft)	Penetr. BL/6in	Time	Sample	Ambient Air	Time	Head Space	Time Date	
78.0-82.0' Hydropunch driven				- 80 -											
				- - -											
				- 81 -											
				- - -											
82.0-84.0 No Sample Collected				- 82 -											1242 Sample SB-29-W (78-82) for TCL VOC only due to lack of sample
				- - -											
				- 83 -											
				- - -											
				- 84 -											
End of boring at 84.0'				- - -											
				- 85 -											
				- - -											
				- 86 -											
				- - -											
				- 87 -											
				- - -											
				- 88 -											
				- - -											
				- 89 -											
				- - -											
				- 90 -											

AECOM Notes: Ground surface elevation = 11.1 ft NAVD88

PSEG SC Former Halladay Street Gas Works
Interim Data Submittal No.4

SCHOOR DEPALMA

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LOG OF SOIL BORING SB-52


PROJECT LOCATION			GROUND ELEVATION (FT. MSL)		PROJECT NUMBER	
Halladay Street , Jersey City, NJ			12.22		020667601	
DRILLING CONTRACTOR		FOREMAN	DATE STARTED		DATE COMPLETED	
Advanced Drilling, Inc.		Roger Logel	11/22/06		11/27/06	
DRILLING EQUIPMENT			COMPLETION DEPTH (FT BGS)		ROCK DEPTH (FT)	
GEFCO SS 5 Drill Rig turning 4.25-inch hollow-stem augers			56		not encountered	
TYPE BIT Hollow-stem auger		SIZE AND TYPE CORE BARREL	NO. SAMPLES	DIST. 26	UNDIST. N/A	CORE N/A
CASING N/A		N/A	WATER DEPTH	FIRST NA	COMPL. N/A	24HR N/A
CASING HAMMER		WEIGHT N/A	DROP N/A	BORING LOCATION: Western shoulder of Carteret Avenue, 88 ft SE from the southern corner of the Halladay Street / Carteret Avenue intersection.		
SAMPLER 2" diameter, 2' long split-spoon						
SAMPLER HAMMER		WEIGHT 140 lbs.	DROP 30"	INSPECTOR Eric Gaulin		

DESCRIPTION	Sample Interval	Depth (ft bgs)	Water Table	Samples				PID READINGS					REMARKS	
				Number	Recov. (ft)	Penetr. BL/6in	Time	(PPM)						
								Sample	Ambient Air	Time	Head Space	Time Date		
Cleared via hand digging to 4'; ash material (AM), gravel, clinker material (CM)		- 0 -												
		- -												
		- 1 -												
		- -												
		- 2 -												
		- -												
		- 3 -												
		- -												
4.0-6.9 FILL: CM, trace ash, gravel		- 4 -		1	1.0	4	1311	0.0	0.0	1311	N/A	N/A	No odors or other evidence of contamination	
		- -				5		0.0	0.0					
		- 5 -				5								
		- -				7								
		- 6 -		2	1.1	4	1313	0.0	0.0	1313	N/A	N/A		
		- -				4		0.0	0.0					
	6.9-8.0 Black fine SAND (SP) with silty clay, highly plastic		- 7 -				3		0.0	0.0				
			- -				4							
8.0-8.8 Grayish brown SILTY CLAY (CL) with black mottling		- 8 -		3	1.0	4	1317	0.0	0.0	1317	N/A	N/A	No odors or other evidence of contamination	
		- -				2		0.0	0.0					
8.8-8.9 Reddish brown SILTY CLAY (CL)		- 9 -				2		0.0	0.0					
8.9-12.0 Disturbed PEAT (PT), with some reddish gray silty clay		- -				2								
		- 10 -												

AECOM Note: Ground surface elevation = 11.1 ft NAVD88

PSEG SC Former Halladay Street Gas Works										SCHOOR DEPALMA			
Interim Data Submittal No.4										Page 2 of 6			
LOG OF SOIL BORING SB-52													
PROJECT LOCATION Halladay Street , Jersey City, NJ					GROUND ELEVATION (FT. MSL) 12.22		PROJECT NUMBER 020667601						
DRILLING CONTRACTOR Advanced Drilling, Inc.			FOREMAN Roger Logel		DATE STARTED 11/22/06		DATE COMPLETED 11/27/06						
DRILLING EQUIPMENT GEFCO SS 5 Drill Rig turning 4.25-inch hollow-stem augers					COMPLETION DEPTH (FT BGS) 56		ROCK DEPTH (FT) not encountered						
TYPE BIT Hollow-stem auger			SIZE AND TYPE CORE BARREL N/A		NO. SAMPLES 26		DIST. 26		UNDIST. N/A		CORE N/A		
CASING N/A			N/A		WATER DEPTH 4.8		FIRST 4.8		COMPL. N/A		24HR N/A		
CASING HAMMER			WEIGHT N/A		DROP N/A		BORING LOCATION: Western shoulder of Carteret Avenue, 88 ft SE from the southern corner of the Halladay Street / Carteret Avenue intersection.						
SAMPLER 2" diameter, 2' long split-spoon			SAMPLER HAMMER		WEIGHT 140 lbs.		DROP 30"		INSPECTOR Eric Gaulin				
DESCRIPTION	Sample Interval	Depth (ft bgs)	Water Table	Samples				PID READINGS (PPM)					REMARKS
				Number	Recov. (ft)	Penetr. BL/6in	Time	Sample	Ambient Air	Time	Head Space	Time Date	
8.9-12.0 Disturbed PEAT (PT), with some reddish gray silty clay	-	- 10 -	-	4	1.2	2	1329	0.0	0.0	1329	N/A	N/A	
		1				0.0	0.0						
		2				0.0	0.0						
		2											
12.0-16.0 Reddish brown SILT (ML) and silty clay, trace fine gravel	-	- 12 -	-	5	1.5	2	1338	0.0	0.0	1338	N/A	N/A	
		2				0.0	0.0						
		2				0.0	0.0						
		2											
16.0-16.4 Very dark greenish gray (GLE Y1 3/1 10Y) PEAT (PT)	-	- 14 -	-	6	0.9	2	1339	0.0	0.0	1339	N/A	N/A	
		3				0.0	0.0						
		3											
		3											
16.4-18.4 Very dark greenish gray (GLE Y1 3/1 10Y) organic CLAY (OH), with 10% peat fragments	-	- 16 -	-	7	1.2	1	0900	0.0	0.0	0900	N/A	N/A	Drilling ended here 11-22-06 Drilling resumed here 11-27-06 Anaerobic, swampy odors
		2				10.3	0.0						
		1				10.0	0.0						
		2											
18.4-20.0 Grey organic CLAY (OH), with less than 5% peat fibers	-	- 18 -	-	8	2.0	2	0905	26.3	0.0	0905	N/A	N/A	Anaerobic, swampy odors
		2				53.6	0.0						
		2				?	0.0						
		2				?	0.0						
		- 20 -											

AECOM Note: Ground surface elevation = 11.1 ft NAVD88

PSEG SC Former Halladay Street Gas Works Interim Data Submittal No.4						SCHOOR DEPALMA Page 3 of 6							
LOG OF SOIL BORING SB-52													
PROJECT LOCATION Halladay Street , Jersey City, NJ					GROUND ELEVATION (FT. MSL) 12.22		PROJECT NUMBER 020667601						
DRILLING CONTRACTOR Advanced Drilling, Inc.			FOREMAN Roger Logel		DATE STARTED 11/22/06		DATE COMPLETED 11/27/06						
DRILLING EQUIPMENT GEFCO SS 5 Drill Rig turning 4.25-inch hollow-stem augers					COMPLETION DEPTH (FT BGS) 56		ROCK DEPTH (FT) not encountered						
TYPE BIT Hollow-stem auger			SIZE AND TYPE CORE BARREL		NO. SAMPLES DIST. 26		UNDIST. N/A		CORE N/A				
CASING N/A			N/A		WATER DEPTH FIRST 4.8		COMPL. N/A		24HR N/A				
CASING HAMMER		WEIGHT N/A		DROP N/A		BORING LOCATION: Western shoulder of Carteret Avenue, 88 ft SE from the southern corner of the Halladay Street / Carteret Avenue intersection.							
SAMPLER 2" diameter, 2' long split-spoon													
SAMPLER HAMMER		WEIGHT 140 lbs.		DROP 30"		INSPECTOR Eric Gaulin							
DESCRIPTION	Sample Interval	Depth (ft bgs)	Water Table	Samples				PID READINGS (PPM)					REMARKS
				Number	Recov. (ft)	Penetr. BL/6in	Time	Sample	Ambient Air	Time	Head Space	Time Date	
20.0-20.8 Brown PEAT (PT)		- 20 -	9	1.8	2	0910	10.0	0.0	0910	N/A	N/A	Unidentifiable odors, strong, no staining visible Sample SB-52(21.0-21.5) collected at 0919 for TCL SVOC, TCL VOC, TAL Metals, Total and Amenable CN	
20.8-24.0 light gray, SILTY CLAY (CL)		- - -											
		- 21 -			2		5.2	0.0					
		- - -			3		98.8	0.0					
24.0-24.9 Grayish red fine to coarse SAND (SW), trace silt		- 22 -	10	1.3	3	0915	15	0.0	0915	N/A	N/A		
		- - -											
		- 23 -			5		20	0.0					
		- - -			6		14.3	0.0					
24.9-25.2 angular gravel/cobble fragments, 1/4" in diameter		- - -			6								
		- 24 -	11	2.0	4	0928	0.0	0.0	0928	N/A	N/A		
	- - -												
25.2-26.0 Reddish brown (2.5YR4/4) fine to medium SAND (SW), trace silt	- 25 -			5		0.0	0.0						
	- - -												
	- 26 -			7		0.0	0.0						
26.0-28.0 Reddish brown (2.5YR4/4) fine to medium SAND (SW), trace silt, with some fine (1/8") gravel layers up to 1" thick	- - -			7		0.0	0.0						
	- 27 -	12	1.2	6	0933	0.0	0.0	0933	N/A	N/A			
	- - -												
	- 28 -			7		0.0	0.0						
28.0-29.4 Reddish brown (2.5YR4/4) fine to medium SAND (SW), trace silt, with some fine (1/8") gravel layers up to 1" thick, and with some coarse sand	- - -			7		0.0	0.0						
	- 29 -	13	2.0	7	0942	0.0	0.0	0942	N/A	N/A			
	- - -												
29.4-30.0 Reddish brown (2.5YR4/4) fine SILTY SAND (SM)	- 30 -			6		0.0	0.0						
	- - -												
	- 30 -			7		0.0	0.0						

AECOM Note: Ground surface elevation = 11.1 ft NAVD88

PSEG SC Former Halladay Street Gas Works
Interim Data Submittal No.4

SCHOOR DEPALMA
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LOG OF SOIL BORING SB-52

PROJECT LOCATION			GROUND ELEVATION (FT. MSL)		PROJECT NUMBER				
Halladay Street , Jersey City, NJ			12.22		020667601				
DRILLING CONTRACTOR		FOREMAN	DATE STARTED		DATE COMPLETED				
Advanced Drilling, Inc.		Roger Logel	11/22/06		11/27/06				
DRILLING EQUIPMENT			COMPLETION DEPTH (FT BGS)		ROCK DEPTH (FT)				
GEFCO SS 5 Drill Rig turning 4.25-inch hollow-stem augers			56		not encountered				
TYPE BIT	Hollow-stem auger	SIZE AND TYPE CORE BARREL	NO. SAMPLES	DIST.	26	UNDIST.	N/A	CORE	N/A
CASING	N/A	N/A	WATER DEPTH	FIRST	4.8	COMPL.	N/A	24HR	N/A
CASING HAMMER		WEIGHT N/A	DROP N/A	BORING LOCATION: Western shoulder of Carteret Avenue, 88 ft SE from the southern corner of the Halladay Street / Carteret Avenue intersection.					
SAMPLER 2" diameter, 2' long split-spoon									
SAMPLER HAMMER		WEIGHT 140 lbs.	DROP 30"	INSPECTOR Eric Gaulin					

DESCRIPTION	Sample Interval	Depth (ft bgs)	Water Table	Samples				PID READINGS (PPM)					REMARKS
				Number	Recov. (ft)	Penetr. Resist. BL/6in	Time	Sample	Ambient Air	Time	Head Space	Time Date	
30.0-34.0 Reddish brown (2.5YR5/4) fine SANDY SILT (ML)		- 30 -		14	0.8	5	1003	0.0	0.1	1003	N/A	N/A	No odors, no sheen
		- -			6		0.0	0.0					
		- 31 -			6								
		- -			7								
		- 32 -		15	1.1	5	1012	0.0	0.0	1012	N/A	N/A	No odors, no sheen
		- -			7		0.0	0.0					
		- 33 -			9		0.0	0.0					
		- -			9								
34.0-44.0 Reddish brown (2.5YR5/4) fine SILTY SAND (SM)		- 34 -		16	1.1	4	1031	0.0	0.0	1031	N/A	N/A	Extremely faint naphthalene-like odors, no sheen, no staining, no product
		- -			5		0.0	0.0					
		- 35 -			5		1.4	0.0					
		- -			5								
		- 36 -		17	0.8	4	1033	1.9	0.0	1033	N/A	N/A	Sample SB-52(36.3-36.8) collected at 1039 for TCL SVOC, TCL VOC, TAL Metals, Total and Amenable CN
		- -			4		5.6	0.0					
		- 37 -			5								
		- -			6								
		- 38 -		18	1.2	4	1043	3.3	0.0	1043	N/A	N/A	Extremely faint odors, unidentifiable, possibly naphthalene-like
		- -			4		2.5	0.0					
		- 39 -			4		11.6	0.0					
		- -			5								
		- 40 -											






AECOM Note: Ground surface elevation = 11.1 ft NAVD88

PSEG SC Former Halladay Street Gas Works
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SCHOOR DEPALMA
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LOG OF SOIL BORING SB-52

PROJECT LOCATION			GROUND ELEVATION (FT. MSL)		PROJECT NUMBER				
Halladay Street , Jersey City, NJ			12.22		020667601				
DRILLING CONTRACTOR		FOREMAN	DATE STARTED		DATE COMPLETED				
Advanced Drilling, Inc.		Roger Logel	11/22/06		11/27/06				
DRILLING EQUIPMENT			COMPLETION DEPTH (FT BGS)		ROCK DEPTH (FT)				
GEFCO SS 5 Drill Rig turning 4.25-inch hollow-stem augers			56		not encountered				
TYPE BIT	Hollow-stem auger	SIZE AND TYPE CORE BARREL	NO. SAMPLES	DIST.	26	UNDIST.	N/A	CORE	N/A
CASING	N/A	N/A	WATER DEPTH	FIRST	4.8	COMPL.	N/A	24HR	N/A
CASING HAMMER		WEIGHT N/A	DROP N/A	BORING LOCATION: Western shoulder of Carteret Avenue, 88 ft SE from the southern corner of the Halladay Street / Carteret Avenue intersection.					
SAMPLER 2" diameter, 2' long split-spoon									
SAMPLER HAMMER		WEIGHT 140 lbs.	DROP 30"	INSPECTOR Eric Gaulin					

DESCRIPTION	Sample Interval	Depth (ft bgs)	Water Table	Samples				PID READINGS					REMARKS
				Number	Recov. (ft)	Penetr. BL/6in	Time	(PPM)					
								Sample	Ambient Air	Time	Head Space	Time Date	
34.0-44.0 Reddish brown (2.5YR5/4) fine SILTY SAND (SM)		- 40 -		19	1.0	3	1056	9.5	0.0	1056	N/A	N/A	Faint naphthalene-like odors, no sheen, no staining, no product at top of spoon; no odors noted from 40.5 down
		- -					2		0.8	0.0			
		- 41 -					2						
		- -					2						
44.0-48.8 Reddish brown (2.5YR5/4) fine SANDY SILT (ML)		- 42 -		20	1.2	2	1100	11.5	0.0	1100	N/A	N/A	Dark layer observed at 42.9' in this spoon Sample SB-52(42.9-43.2) collected at 1100 for TCL SVOC, TCL VOC, TAL Metals, Total and Amenable CN
		- -					3		1.0	0.0			
		- 43 -					3		0.0	0.0			
		- -					4						
		- 44 -		21	1.2	2	1115	0.0	0.0	1115	N/A	N/A	No odors noted in this spoon
		- -					3		0.0	0.0			
		- 45 -					3		0.0	0.0			
		- -					3						
		- 46 -		22	1.2	3	1117	0.0	0.0	1117	N/A	N/A	No odors noted in this spoon
		- -					4		0.0	0.0			
		- 47 -					3		0.0	0.0			
		- -					5						
48.8-50.6 Reddish brown (2.5YR5/4) fine SANDY SILT (ML), with silty clay		- 48 -		23	1.0	4	1129	0.0	0.0	1129	N/A	N/A	No odors noted in this spoon
		- -					4		0.0	0.0			
		- 49 -					4						
		- -					4						
		- 50 -											

AECOM Note: Ground surface elevation = 11.1 ft NAVD88

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Interim Data Submittal No.4

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LOG OF SOIL BORING SB-52

PROJECT LOCATION			GROUND ELEVATION (FT. MSL)			PROJECT NUMBER					
Halladay Street , Jersey City, NJ			12.22			020667601					
DRILLING CONTRACTOR		FOREMAN		DATE STARTED			DATE COMPLETED				
Advanced Drilling, Inc.		Roger Logel		11/22/06			11/27/06				
DRILLING EQUIPMENT				COMPLETION DEPTH (FT BGS)			ROCK DEPTH (FT)				
GEFCO SS 5 Drill Rig turning 4.25-inch hollow-stem augers				56			not encountered				
TYPE BIT	Hollow-stem auger		SIZE AND TYPE CORE BARREL		NO. SAMPLES	DIST.	26	UNDIST.	N/A	CORE	N/A
CASING	N/A		N/A		WATER DEPTH	FIRST	4.8	COMPL.	N/A	24HR	N/A
CASING HAMMER		WEIGHT	N/A		BORING LOCATION: Western shoulder of Carteret Avenue, 88 ft SE from the southern corner of the Halladay Street / Carteret Avenue intersection.						
SAMPLER		2" diameter, 2' long split-spoon									
SAMPLER HAMMER		WEIGHT	140 lbs.		DROP		30"				
					INSPECTOR Eric Gaulin						

DESCRIPTION	Sample Interval	Depth (ft bgs)	Water Table	Samples				PID READINGS (PPM)					REMARKS
				Number	Recov. (ft)	Penetr. BL/6in	Time	Sample	Ambient Air	Time	Head Space	Time Date	
48.8-50.6 Reddish brown (2.5YR5/4) fine SANDY SILT (ML), with silty clay		- 50 -											No odors noted in this spoon
		24	1.2		1139	0.0	0.0	1139	N/A	N/A			
						0.0	0.0						
50.6-52.0 Reddish brown (2.5YR5/4) fine SILTY SAND (SM)		- 51 -											
52.0-55.2 dark reddish brown (2.5YR3/3) fine to medium SAND (SW), trace silt		- 52 -											No odors noted in this spoon
		25	1.7		1143	0.0	0.0	1143	N/A	N/A			
						0.0	0.0						
						0.0							
		- 53 -											
						0.0							
		- 54 -											Sample SB-54(55.5-56.0) collected at 1157 for TCL VOC, TCL SVOC, TAL Metals, Total and Amenable CN
		26	1.2		1155	0.0	0.0	1155	N/A	N/A			
						0.0	0.0						
						0.0	0.0						
		- 55 -											
End of Boring at 56'		- 56 -											
		- 57 -											
		- 58 -											
		- 59 -											
		- 60 -											

PSEG SC Former Halladay Street Gas Works Interim Data Submittal No.4						SCHOOR DEPALMA Page 1 of 6							
LOG OF SOIL BORING SB-54													
PROJECT LOCATION Halladay Street , Jersey City, NJ					GROUND ELEVATION (FT. MSL) 11.40		PROJECT NUMBER 020667601						
DRILLING CONTRACTOR Advanced Drilling, Inc.			FOREMAN Roger Logel		DATE STARTED 11/27/06		DATE COMPLETED 11/28/06						
DRILLING EQUIPMENT GEFCO SS 5 Drill Rig turning 4.25-inch hollow-stem augers					COMPLETION DEPTH (FT BGS) 56		ROCK DEPTH (FT) not encountered						
TYPE BIT Hollow-stem auger			SIZE AND TYPE CORE BARREL		NO. SAMPLES DIST. 26		UNDIST. N/A		CORE N/A				
CASING N/A			N/A		WATER DEPTH FIRST 4.8		COMPL. N/A		24HR N/A				
CASING HAMMER			WEIGHT N/A		DROP N/A		BORING LOCATION: Eastern shoulder of Carteret Avenue, 95 ft SE from the eastern corner of the Halladay Street / Carteret Avenue intersection.						
SAMPLER 2" diameter, 2' long split-spoon													
SAMPLER HAMMER			WEIGHT 140 lbs.		DROP 30"		INSPECTOR Eric Gaulin						
DESCRIPTION	Sample Interval	Depth (ft bgs)	Water Table	Samples				PID READINGS (PPM)					REMARKS
				Number	Recov. (ft)	Penetr. BL/6in	Time	Sample	Ambient Air	Time	Head Space	Time Date	
Cleared via hand digging to 4'; boring through asphalt; Fill consisted of brownish yellow (10YR6/8) fine to medium sand		- 0 -											
		- -											
		- 1 -											
		- -											
4.0-4.2 FILL: black fill, silt, wood		- 2 -											
		- -											
		- 3 -											
		- -											
4.0-4.2 FILL: black fill, silt, wood		- 4 -											
		- -											
		- 5 -	1	0.8	1	1455	0.0	0.0	1455	N/A	N/A	No odors or other evidence of contamination	
		- -											
4.2-6.0 FILL: white gray ash material (AM), clinker		- 6 -											
		- -											
		- 7 -											
		- -											
6.0-6.9 Black fine SAND with silty clay, highly plastic (SP)		- 8 -											
		- -											
		- 9 -	2	1.1	1	1457	0.0	0.0	1457	N/A	N/A	No odors or other evidence of contamination	
		- -											
6.9-8.4 Disturbed brownish peat (PT) and organic matter		- 10 -											
		- -											
		- 11 -											
		- -											
8.4-10.0 Reddish grayish SILTY SANDY CLAY (CL)		- 12 -											
		- -											
		- 13 -											
		- -											

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Interim Data Submittal No.4
SCHOOR DEPALMA
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LOG OF SOIL BORING SB-54

PROJECT LOCATION			GROUND ELEVATION (FT. MSL)			PROJECT NUMBER						
Halladay Street , Jersey City, NJ			11.40			020667601						
DRILLING CONTRACTOR		FOREMAN		DATE STARTED			DATE COMPLETED					
Advanced Drilling, Inc.		Roger Logel		11/27/06			11/28/06					
DRILLING EQUIPMENT				COMPLETION DEPTH (FT BGS)			ROCK DEPTH (FT)					
GEFCO SS 5 Drill Rig turning 4.25-inch hollow-stem augers				56			not encountered					
TYPE BIT		Hollow-stem auger		SIZE AND TYPE CORE BARREL		NO. SAMPLES	DIST.	26	UNDIST.	N/A	CORE	N/A
CASING		N/A		N/A		WATER DEPTH	FIRST	4.8	COMPL.	N/A	24HR	N/A
CASING HAMMER		WEIGHT		N/A		BORING LOCATION: Eastern shoulder of Carteret Avenue, 95 ft SE from the eastern corner of the Halladay Street / Carteret Avenue intersection.						
SAMPLER		2" diameter, 2' long split-spoon										
SAMPLER HAMMER		WEIGHT		140 lbs.		DROP		30"				
INSPECTOR		Eric Gaulin										

DESCRIPTION	Sample Interval	Depth (ft bgs)	Water Table	Samples				PID READINGS (PPM)					REMARKS
				Number	Recov. (ft)	Penetr. Resist. BL/6in	Time	Sample	Ambient Air	Time	Head Space	Time Date	
10.0-14.0 Reddish grayish SILTY SANDY CLAY (CL), disturbed, trace wood, trace fine gravel		- 10 -		4	1.0	2	1512	0.0	0.0	1512	N/A	N/A	Sample SB-54(10.0-10.5) collected at for TCL VOC, TCL SVOC, TAL Metals, Total and Amenable CN
		- -				2		0.0	0.0				
		- 11 -				2							
		- -				3							
14.0-20.7 Very dark greenish gray (GLEY1 3/1 10Y), organic CLAY (OH), less than 1% peat fibers		- 12 -		5	0.7	2	1512	0.0	0.0	1512	N/A	N/A	Anaerobic, swampy odors
		- -				3		0.0	0.0				
		- 13 -				2							
		- -				3							
		- 14 -		6	2.0	1	1525	3.7	0.0	1525	N/A	N/A	
		- -				1		3.0	0.0				
		- 15 -				1		1.0					
		- -				1		0.0					
		- 16 -		7	2.0	1	1526	1.0	0.0	1526	N/A	N/A	Anaerobic, swampy odors
		- -				1		3.2	0.0				
		- 17 -				1		0.0	0.0				
		- -				1		5.2	0.0				
		- 18 -		8	2.0	1	1533	8.1	0.0	1533	N/A	N/A	Anaerobic, swampy odors
		- -				1		9.7	0.0				
		- 19 -				1		4.2	0.0				
		- -				1		1.0	0.0				
		- 20 -											

AECOM Note: Ground surface elevation = 10.2 ft NAVD88

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LOG OF SOIL BORING SB-54

PROJECT LOCATION Halladay Street , Jersey City, NJ				GROUND ELEVATION (FT. MSL) 11.40				PROJECT NUMBER 020667601														
DRILLING CONTRACTOR Advanced Drilling, Inc.			FOREMAN Roger Logel		DATE STARTED 11/27/06			DATE COMPLETED 11/28/06														
DRILLING EQUIPMENT GEFCO SS 5 Drill Rig turning 4.25-inch hollow-stem augers					COMPLETION DEPTH (FT BGS) 56			ROCK DEPTH (FT) not encountered														
TYPE BIT Hollow-stem auger			SIZE AND TYPE CORE BARREL		NO. SAMPLES DIST. 26		UNDIST. N/A		CORE N/A													
CASING N/A			N/A		WATER DEPTH FIRST 4.8		COMPL. N/A		24HR N/A													
CASING HAMMER		WEIGHT N/A		DROP N/A		BORING LOCATION: Eastern shoulder of Carteret Avenue, 95 ft SE from the eastern corner of the Halladay Street / Carteret Avenue intersection.																
SAMPLER 2" diameter, 2' long split-spoon																						
SAMPLER HAMMER		WEIGHT 140 lbs.		DROP 30"		INSPECTOR Eric Gaulin																
DESCRIPTION			Sample Interval	Depth (ft bgs)	Water Table	Samples				PID READINGS					REMARKS							
						Number	Recov. (ft)	Penetr. BL/6in	Time	(PPM)												
										Sample	Ambient Air	Time	Head Space	Time Date								
14.0-20.7 Very dark greenish gray (GLE Y1 3/1 10Y), organic CLAY (OH), less than 1% peat fibers			-	20	-	9	1.7	1	1541	3.3	0.0	1541	N/A	N/A	Anaerobic, swampy odors							
20.7-24.8 Light gray fine SILTY SAND, 10% rounded gravel (SP)			-	21	-			3		n/a	0.0											
24.8-26.0 Reddish brown (2.5YR4/4) fine to medium SAND (SW), trace silt			-	22	-	10	1.6	4	1544	1.3	0.0	1544	N/A	N/A	Drilling ended here 11-27-06							
26.0-27.2 Greyish red fine to coarse SAND (SW), trace silt			-	23	-			5		4.0	0.0											
27.2-32.6 Dark reddish gray (5YR4/2) fine to medium SAND (SW), trace silt			-	24	-	11	1.2	2	0835	0.0	0.0	0835	N/A	N/A	Drilling resumed here 11-28-06							
			-	25	-			2		16.4	0.0											
			-	26	-	12	1.9	2	0843	12.7	0.0	0843	N/A	N/A	Extremely faint naphthalene-like odors, no sheen, no staining, no product							
			-	27	-			3		21.1	0.0											
			-	28	-			2		8.6	0.0											
			-	29	-			2		11.4	0.0											
			-	30	-	13	1.6	2	0855	10.6	0.0	0855	N/A	N/A	Extremely faint naphthalene-like odors, no sheen, no staining, no product							

LOG OF SOIL BORING SB-54

PROJECT LOCATION			GROUND ELEVATION (FT. MSL)		PROJECT NUMBER				
Halladay Street , Jersey City, NJ			11.40		020667601				
DRILLING CONTRACTOR		FOREMAN	DATE STARTED		DATE COMPLETED				
Advanced Drilling, Inc.		Roger Logel	11/27/06		11/28/06				
DRILLING EQUIPMENT			COMPLETION DEPTH (FT BGS)		ROCK DEPTH (FT)				
GEFCO SS 5 Drill Rig turning 4.25-inch hollow-stem augers			56		not encountered				
TYPE BIT	Hollow-stem auger	SIZE AND TYPE CORE BARREL	NO. SAMPLES	DIST.	26	UNDIST.	N/A	CORE	N/A
CASING	N/A	N/A	WATER DEPTH	FIRST	4.8	COMPL.	N/A	24HR	N/A
CASING HAMMER		WEIGHT N/A	DROP N/A	BORING LOCATION: Eastern shoulder of Carteret Avenue, 95 ft SE from the eastern corner of the Halladay Street / Carteret Avenue intersection.					
SAMPLER 2" diameter, 2' long split-spoon									
SAMPLER HAMMER		WEIGHT 140 lbs.	DROP 30"	INSPECTOR Eric Gaulin					

DESCRIPTION	Sample Interval	Depth (ft bgs)	Water Table	Samples				PID READINGS					REMARKS
				Number	Recov. (ft)	Penetr. Resist. BL/6in	Time	(PPM)					
								Sample	Ambient Air	Time	Head Space	Time Date	
27.2-32.6 Dark reddish gray (5YR4/2) fine to medium SAND (SW), trace silt		- 30 -		14	1.0	2	0908	11.8	0.0	0908	N/A	N/A	Faint naphthalene-like odors, no sheen, no staining, no product
		- -				1		20.3	0.0				
		- 31 -				2							
		- -				2							
32.6-32.7 Reddish brown (2.5YR5/4) fine SANDY SILT (ML)		- 32 -		15	1.6	2	0913	4.6	0.0	0913	N/A	N/A	Faint naphthalene-like odors, no sheen, no staining, no product
		- -				3		7.9	0.0				
		- 33 -				2		8.3	0.0				
		- -				2		0.0	0.0				
32.7-36.0 Reddish brown (2.5YR5/4) fine SILTY SAND (SM)		- 34 -		16	0.8	2	0922	3.2	0.0	0922	N/A	N/A	Faint naphthalene-like odors, no sheen, no staining, no product
		- -				2		7.0	0.0				
		- 35 -				2							
		- -				2							
36.0-38.0 Reddish brown (2.5YR5/4) fine SAND (SP), trace silt		- 36 -		17	1.2	2	0924	10.6	0.0	0924	N/A	N/A	Stronger naphthalene-like odors, no sheen, no staining, no product Sample SB-54(36.5-37.0) collected at 0928 for TCL SVOC, TCL VOC, TAL Metals, Total and Amenable CN
		- -				2		21.5	0.0				
		- 37 -				2		8.3	0.0				
		- -				2							
38.0-42.0 Reddish brown (2.5YR5/4) fine SANDY SILT (ML)		- 38 -		18	1.1	2	0933	10.2	0.0	0933	N/A	N/A	Naphthalene-like odors, no sheen, no staining, no product
		- -				1		15.3	0.0				
		- 39 -				2		33.2	0.0				
		- -				2							
		- 40 -											

PSEG SC Former Halladay Street Gas Works Interim Data Submittal No.4						SCHOOR DEPALMA Page 5 of 6									
LOG OF SOIL BORING SB-54															
PROJECT LOCATION Halladay Street , Jersey City, NJ					GROUND ELEVATION (FT. MSL) 11.40		PROJECT NUMBER 020667601								
DRILLING CONTRACTOR Advanced Drilling, Inc.			FOREMAN Roger Logel		DATE STARTED 11/27/06		DATE COMPLETED 11/28/06								
DRILLING EQUIPMENT GEFCO SS 5 Drill Rig turning 4.25-inch hollow-stem augers					COMPLETION DEPTH (FT BGS) 56		ROCK DEPTH (FT) not encountered								
TYPE BIT Hollow-stem auger			SIZE AND TYPE CORE BARREL		NO. SAMPLES DIST. 26		UNDIST. N/A		CORE N/A						
CASING N/A			N/A		WATER DEPTH FIRST 4.8		COMPL. N/A		24HR N/A						
CASING HAMMER		WEIGHT N/A		DROP N/A		BORING LOCATION: Eastern shoulder of Carteret Avenue, 95 ft SE from the eastern corner of the Halladay Street / Carteret Avenue intersection.									
SAMPLER 2" diameter, 2' long split-spoon															
SAMPLER HAMMER		WEIGHT 140 lbs.		DROP 30"		INSPECTOR Eric Gaulin									
DESCRIPTION	Sample Interval	Depth (ft bgs)	Water Table	Samples				PID READINGS (PPM)					REMARKS		
				Number	Recov. (ft)	Penetr. Resist. BL/6in	Time	Sample	Ambient Air	Time	Head Space	Time Date			
38.0-42.0 Reddish brown (2.5YR5/4) fine SANDY SILT (ML)		- 40 -		19	0.4	2	0955	0.3	0.0	0955	N/A	N/A	Faint naphthalene-like odors, no sheen, no staining, no product		
		- - -													
		- 41 -													
		- - -													
	42.0-42.6 Reddish brown (2.5YR5/4) fine SILTY SAND (SM)		- 42 -		20	1.4	2	1006	12.9	0.0	1006	N/A	N/A	Faint naphthalene-like odors, no sheen, no staining, no product	
			- - -												
			- 43 -												
			- - -												
		42.6-46.3 Reddish brown (2.5YR5/4) fine SANDY SILT (ML)		- 43 -						0.3	0.0				Sample SB-54(42.5-43.0) collected at 1100 for TCL SVOC, TCL VOC, TAL Metals, Total and Amenable CN
				- - -											
				- 44 -											
				- - -											
46.3-48.0 Reddish brown (2.5YR5/4) SILTY CLAY (CL), trace fine sand				- 44 -		21	1.1	2	1036	0.0	0.0	1036	N/A	N/A	No odors this spoon
				- - -											
				- 45 -											
				- - -											
	48.0-52.0 Reddish brown (2.5YR5/4) fine SAND (SP), trace silt			- 45 -						0.0	0.0				No odors his spoon
				- - -											
				- 46 -											
				- - -											
		46.3-48.0 Reddish brown (2.5YR5/4) SILTY CLAY (CL), trace fine sand		- 46 -		22	0.8	2	1047	0.0	0.0	1047	N/A	N/A	No odors this spoon
				- - -											
				- 47 -											
				- - -											
48.0-52.0 Reddish brown (2.5YR5/4) fine SAND (SP), trace silt				- 47 -						0.0	0.0				No odors his spoon
				- - -											
				- 48 -											
				- - -											
	48.0-52.0 Reddish brown (2.5YR5/4) fine SAND (SP), trace silt			- 48 -		23	1.1	3	1100	0.0	0.0	1100	N/A	N/A	No odors his spoon
				- - -											
				- 49 -											
				- - -											
		48.0-52.0 Reddish brown (2.5YR5/4) fine SAND (SP), trace silt		- 49 -						0.0	0.0				No odors his spoon
				- - -											
				- 50 -											
				- - -											

PSEG SC Former Halladay Street Gas Works
Interim Data Submittal No.4
SCHOOR DEPALMA
Page 6 of 6
LOG OF SOIL BORING SB-54

PROJECT LOCATION Halladay Street , Jersey City, NJ				GROUND ELEVATION (FT. MSL) 11.40				PROJECT NUMBER 020667601							
DRILLING CONTRACTOR Advanced Drilling, Inc.			FOREMAN Roger Logel		DATE STARTED 11/27/06			DATE COMPLETED 11/28/06							
DRILLING EQUIPMENT GEFCO SS 5 Drill Rig turning 4.25-inch hollow-stem augers					COMPLETION DEPTH (FT BGS) 56			ROCK DEPTH (FT) not encountered							
TYPE BIT Hollow-stem auger			SIZE AND TYPE CORE BARREL		NO. SAMPLES DIST. 26		UNDIST. N/A		CORE N/A						
CASING N/A			N/A		WATER DEPTH FIRST 4.8		COMPL. N/A		24HR N/A						
CASING HAMMER		WEIGHT N/A		DROP N/A		BORING LOCATION: Eastern shoulder of Carteret Avenue, 95 ft SE from the eastern corner of the Halladay Street / Carteret Avenue intersection.									
SAMPLER 2" diameter, 2' long split-spoon					INSPECTOR Eric Gaulin										
SAMPLER HAMMER		WEIGHT 140 lbs.		DROP 30"											
DESCRIPTION			Sample Interval	Depth (ft bgs)	Water Table	Samples				PID READINGS					REMARKS
						Number	Recov. (ft)	Penetr. Resist. BL/6in	Time	(PPM)					
										Sample	Ambient Air	Time	Head Space	Time Date	
48.0-52.0 Reddish brown (2.5YR5/4) fine SAND (SP), trace silt			- 50 -			24	0.9	3	1123	0.0	0.0	1123	N/A	N/A	
			- -						3		0.0	0.0			
			- 51 -						2						
			- -						3						
			- 52 -			25	2.0	2	1125	0.0	0.0	1125	N/A	N/A	
			- -					3		0.0	0.0				
			- 53 -					3		0.0					
			- -					3		0.0					
			- 54 -			26	2.0	3	1127	0.0	0.0	1127	N/A	N/A	Sample SB-54(55.5-56.0) collected at 1127 for TCL VOC, TCL SVOC, TAL Metals, Total and Amenable CN
			- -					3		0.0	0.0				
			- 55 -					3		0.0	0.0				
			- -					3		0.0	0.0				
End of Boring at 56'			- 56 -												
			- -												
			- 57 -												
			- -												
			- 58 -												
			- -												
			- 59 -												
			- -												
			- 60 -												
			- -												