
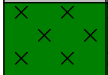
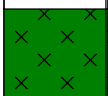
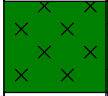
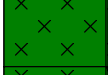




## **Appendix H**

### **Boring Logs**

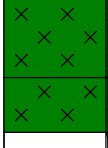
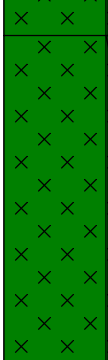
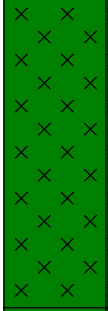
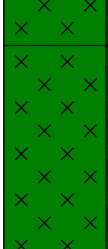
Boring logs for the remaining sample locations in Carteret Avenue collected via soil core are included in this appendix. Logs were not generated for grab samples collected during excavation activities, typically designated by “PB” or “SW” in the Location ID.

<div>ENSR   AECOM</div>		Client: PPG Industries		BORING ID: <b>114-MW22B</b>		
		Site: Site 114				
Start Date: 11/15/2006		Project: <b>Site Investigation</b>		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			
					

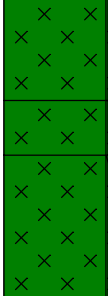
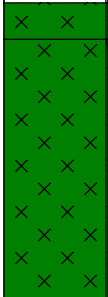
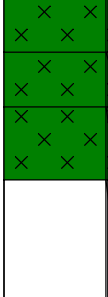
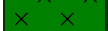
**NOTES:** Coordinates are provided in New Jersey State Plane NAD 1983 Feet.

<div>ENSR   AECOM</div>		Client: PPG Industries		BORING ID: <b>114-MW22B</b>		
		Site: Site 114				
Start Date: 11/15/2006		Project: <b>Site Investigation</b>		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

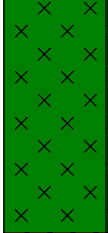
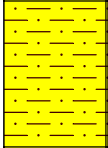

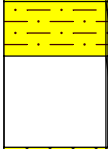
**NOTES:** Coordinates are provided in New Jersey State Plane NAD 1983 Feet.

<div>ENSR   AECOM</div>		Client: PPG Industries		BORING ID: <b>114-MW22B</b>		
		Site: Site 114				
Start Date: 11/15/2006		Project: <b>Site Investigation</b>		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		UND: Reddish Brown (5YR 4/4) very fine SAND, some Silt, Shale.	0.0 ppm		
		UND: Dark Reddish Brown (2.5YR 3/4) fine to medium SAND, trace Silt, wet. No odor.			
		UND: Dark Reddish Brown (2.5YR 3/4) and Yellow mottled silty SAND, some fine to medium Gravel, wet. No odor.			
18		NR: No Recovery	0.0 ppm	114-MW22BD (14.5-18.0)	Cr+6, TAL Metals
		UND: Very Dark Gray (Gley N3/0) CLAY, medium stiff, moist.			
		UND: Dusky Red (10R 3/4) silty SAND, some fine to coarse Gravel, Lime Green-stained CLAY interbedded, moist. No odor.			
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			
		UND: Olive Brown (2.5Y 4/3) silty CLAY, interbedded	0.0 ppm		

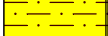
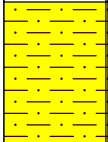
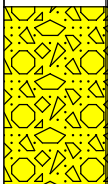
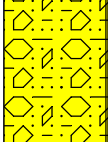
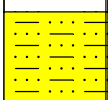
**NOTES:** Coordinates are provided in New Jersey State Plane NAD 1983 Feet.

		Client: PPG Industries		BORING ID: <b>114-MW22B</b>	
		Site: Site 114			
Start Date: 11/15/2006		Project: <b>Site Investigation</b>		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.

		Client: PPG Industries		BORING ID: <b>114-MW22B</b>	
		Site: Site 114			
Start Date: 11/15/2006		Project: <b>Site Investigation</b>		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.

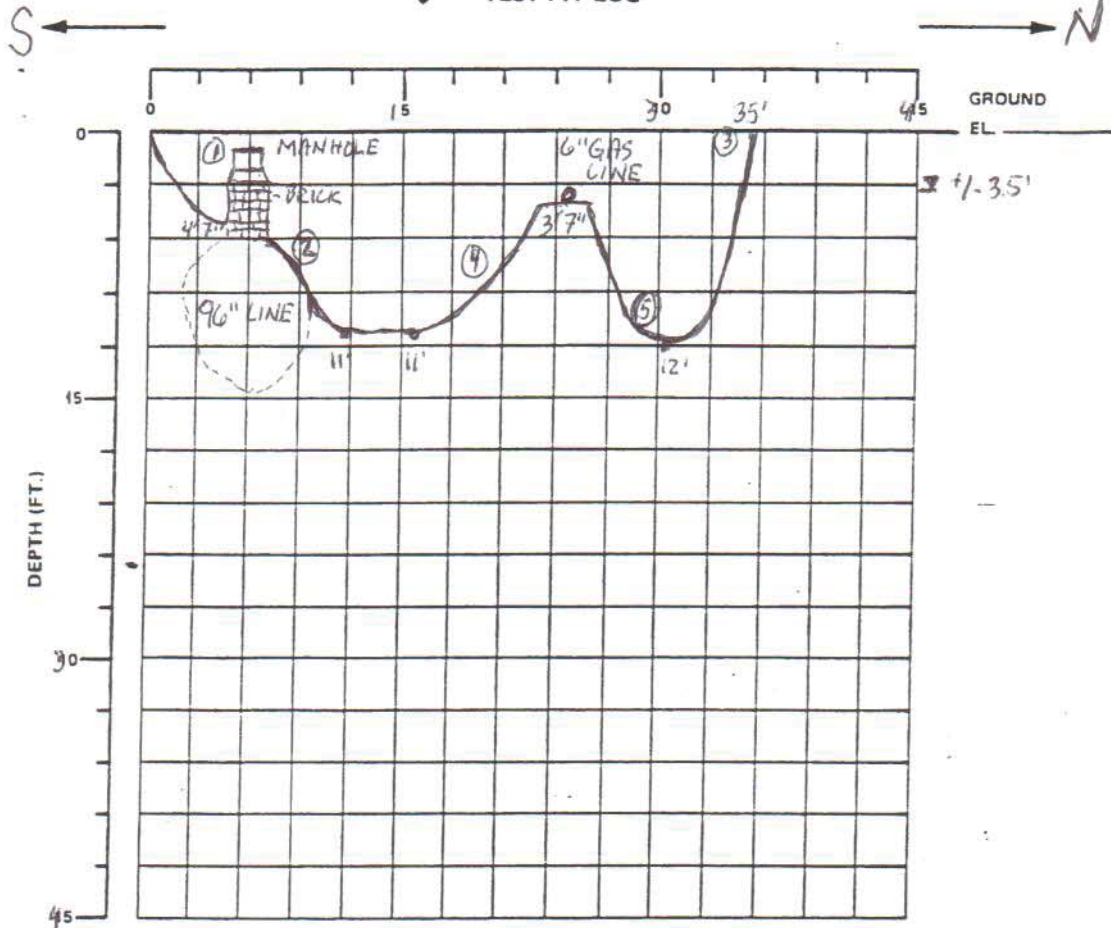
FIGURE 1. TEST PIT LOG

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	TEST PIT No. <u>1</u>
	DESCRIPTION <u>PPG Site 114</u>	FILE No. _____
	LOCATION <u>Carteret Ave, Jersey City</u>	DATE <u>11-1-11</u>

ENGINEER <u>Rita Papagian</u>	EXCAVATION EQUIPMENT		GROUND ELEV. _____
	CONTRACTOR <u>Entact</u>		TIME STARTED <u>10-31-11 0830</u>
	OPERATOR <u>Steve</u>		TIME COMPLETED <u>11-1-11 1130</u>
	MAKE <u>Takeuch</u> MODEL <u>mini-exc</u>		
WEATHER <u>56°F Sunny, Breezy</u>	CAPACITY _____	REACH <u>8' exc.</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: H<sub>2</sub>O 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.

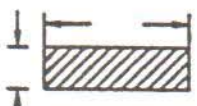
<b>TEST PIT PLAN</b>  NORTH VOLUME = _____ cu.yd.	<b>LEGEND:</b> <b>BOULDER COUNT</b> <table> <tr> <th>SIZE RANGE CLASSIFICATION</th> <th>LETTER DESIGNATION</th> </tr> <tr> <td>6"-18"</td> <td>A</td> </tr> <tr> <td>18"-36"</td> <td>B</td> </tr> <tr> <td>36" and Larger</td> <td>C</td> </tr> </table>	SIZE RANGE CLASSIFICATION	LETTER DESIGNATION	6"-18"	A	18"-36"	B	36" and Larger	C	<b>PROPORTIONS USED</b> TRACE (TR.) 0-10% LITTLE (LI.) 10-20% SOME (SO) 20-35% AND 35-50%	<b>ABBREVIATIONS</b> F-FINE M-MEDIUM C-COARSE F/M-FINE TO MEDIUM F/C-FINE TO COARSE V-VERY GR.-GRAY BN.-BROWN YEL.-YELLOW	<b>EXCAVATION EFFORT</b> 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											



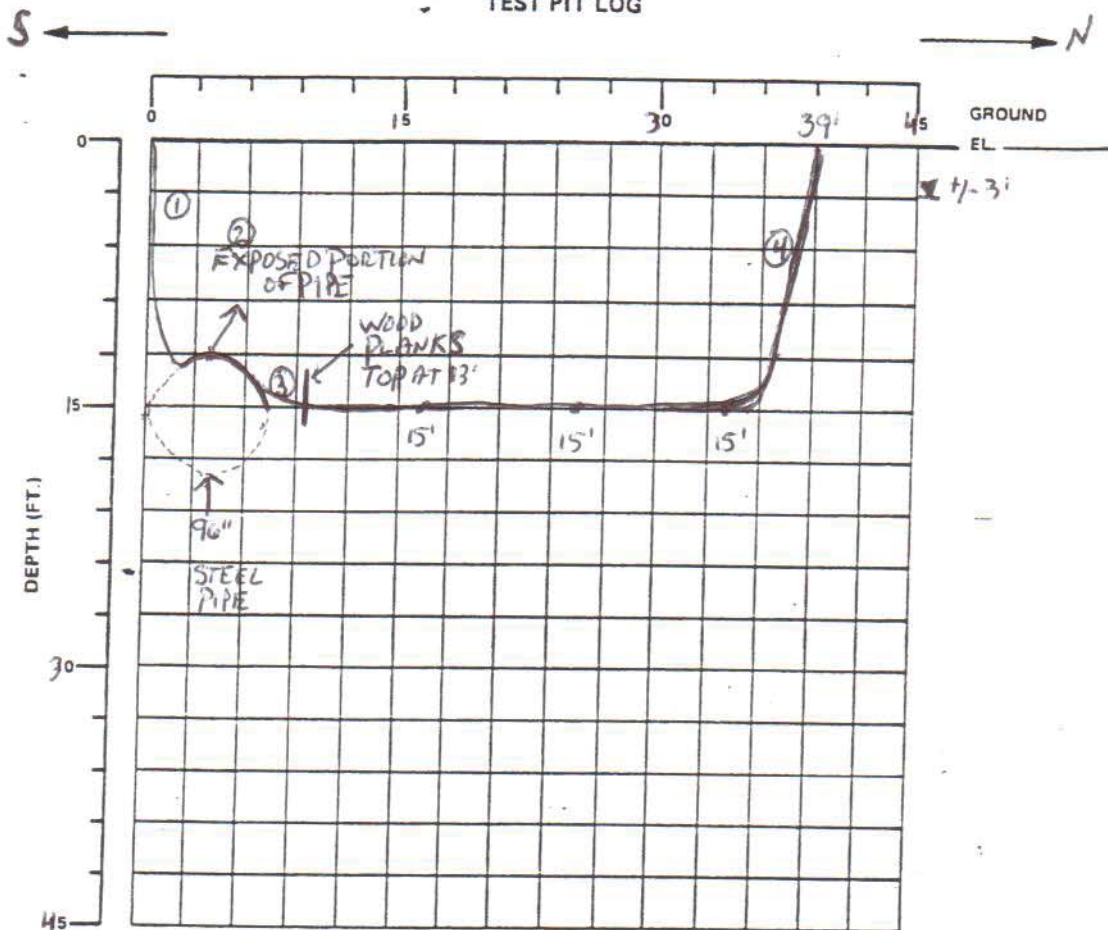
FIGURE 1. TEST PIT LOG

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 H		
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: H<sub>2</sub>O 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.

<b>TEST PIT PLAN</b> 	<b>LEGEND:</b> <b>BOULDER COUNT</b> <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	<b>PROPORTIONS USED</b> TRACE (TR.) 0-10% LITTLE (L.) 10-20% SOME (SO) 20-35% AND 35-50%	<b>ABBREVIATIONS</b> F-FINE M-MEDIUM C-COARSE F/M-FINE TO MEDIUM F/C-FINE TO COARSE V-VERY GR-GRAY BN-BROWN YEL-YELLOW	<b>EXCAVATION EFFORT</b> 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												

G:\WILCOCKS\TESTPIT



30 Knightsbridge Road, Piscataway, NJ 08854  
732.564.3200 office telephone

**Boring ID: 132-P3A-H15A**

Page: 1

<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> SGS North America	
<b>Project Number:</b> 60240739	<b>Drilling Method:</b> Geoprobe	<b>Coordinates (NJSPNAD83) x:</b> 610896.125
<b>Date Started Drilling:</b> 4/11/2013 1:45:00 PM	<b>Rig Type:</b>	<b>Coordinates (NJSPNAD83) y:</b> 683151.125
<b>Date Finished Drilling:</b> 4/12/2013 10:00:00 AM	<b>Core Size:</b> 3 in	<b>Boring Total Depth:</b> 16 ft
<b>Logged By:</b> MI	<b>Project Manager:</b> Chris Martell	<b>Depth to Water:</b> NA
<b>Physical Location:</b> Site 132 - H15A		<b>Surface Elevation:</b> 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 medium gravel, trace tar-like material, (7.5YR 2.5/1) black, non plastic, loose, dry slight tar odor, no staining.	
5	1.2	0.0	moist	FILL		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.	
6	1.3	0.0	slightly moist	FILL		NO RECOVERY	
7	1.3	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.	
8	1	0.0	slightly moist	FILL		fine to coarse GRAVEL, with ash, little brick, (7.5YR 4/1) dark gray, non plastic, loose, slightly moist, no odor, no staining.	
9	1	0.0	slightly moist	FILL		NO RECOVERY	
10	0.9	0.0	slightly moist	FILL		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
11	0.9	0.0	slightly moist	NR		NO RECOVERY	
12	0.6	0.0	slightly moist	FILL		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
13	0.6	0.0	slightly moist	NR		NO RECOVERY	
14	2	0.0	slightly moist	FILL		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
15	2	2.3	dry	PT		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
16							

**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.



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




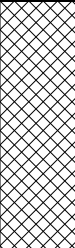
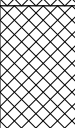
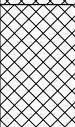

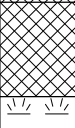
30 Knightsbridge Road, Piscataway, NJ 08854  
732.564.3200 office telephone

**Boring ID: 133-P3C-Z20AR**

Page: 1

<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> SGS	
<b>Project Number:</b> 60240739	<b>Drilling Method:</b> Geoprobe	<b>Coordinates (NJSPNAD83) x:</b> 611312.962
<b>Date Started Drilling:</b> 11/25/2014 10:00:00 AM	<b>Rig Type:</b>	<b>Coordinates (NJSPNAD83) y:</b> 682776.76
<b>Date Finished Drilling:</b> 11/25/2014 11:00:00 AM	<b>Core Size:</b> 3.0 in	<b>Boring Total Depth:</b> 20 ft
<b>Logged By:</b> SS	<b>Project Manager:</b> Scott Mikaelian	<b>Depth to Water:</b> NA
<b>Physical Location:</b> P3C - Z20AR		<b>Surface Elevation:</b> 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							
13	5						133-P3C-Z20AR-12.5-13.0
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.	




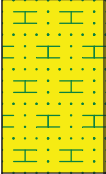
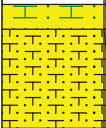

**Comments:** 1) 3 attempts were made to obtain best recovery 2) UND/MM confirmed to be 1 ft thick 3) No COPR or GGM present in any interval of this boring.

ENSR   AECOM		Client: PPG Industries			BORING ID: <b>135-B19</b>		
		Site: Site 135					
Start Date: 12/13/2006		Project: <b>Site Investigation</b>			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			
	x x x	FILL: Gray fine COBBLES.			
	x x x	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	x x x	FILL: Grey fine COBBLES	1.4 ppm	135-B19B (2.1-2.6)	Cr+6, TAL Metals
	x x x	FILL: Gray-Brown ASH, some fine Gravel, little woody organics. Heavy petroleum odor.			
	x x x	FILL: Red Brick pieces		135-B19C (3.3-3.8)	Cr+6, TAL Metals
4	x x x	FILL: Black-Gray ASH, some fine Gravel, little brick fragments.	0.0 ppm		
	x x x	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	x x x	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	x x x	FILL: Dark Grayish Brown (10YR 4/2) SAND CLAY, little Silt, wet, semi-firm. No odor.	0.0 ppm		
	x x x	FILL: Black medium SANDY SILT, Fill material, little interbedded Clay, wet, loose. No odor.	0.0 ppm		
10	x x x	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.


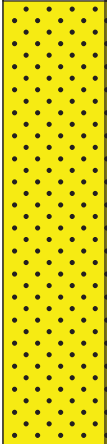
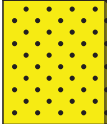

ENSR   AECOM		Client: PPG Industries			BORING ID: <b>135-B19</b>		
		Site: Site 135					
Start Date: 12/13/2006		Project: <b>Site Investigation</b>			Page: 2 of 3		
		Coordinates: X-611417.0 Y-682651.9			Depth of Boring: 32.00		
End Date: 1/2/2007		Elevation: 9.9 ft NAVD88			Geologist: P. Kelly, M. Merdinger		
		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.


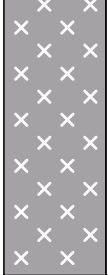
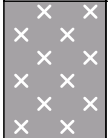

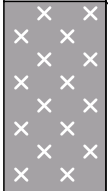

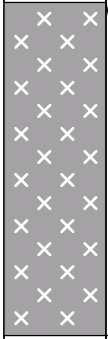
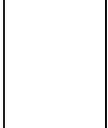



<div>ENSR   AECOM</div>		Client: PPG Industries		BORING ID: <b>135-B19</b>	
		Site: Site 135			
Start Date: 12/13/2006		Project: <b>Site Investigation</b>		Page: 3 of 3	
		Coordinates: X-611417.0 Y-682651.9		Depth of Boring: 32.00	
End Date: 1/2/2007		Elevation: 9.9 ft NAVD88		Geologist: P. Kelly, M. 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.			



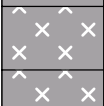

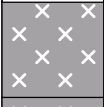
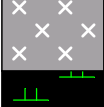
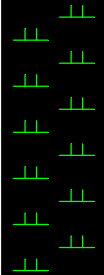

**NOTES:** Coordinates are provided in New Jersey State Plane NAD 1983 Feet.

		Client: PPG Industries		BORING ID: <b>143-B5</b>		
		Site: Site 143				
Start Date: 1/9/2007		Project: <b>Site Investigation</b>		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
		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
4		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					

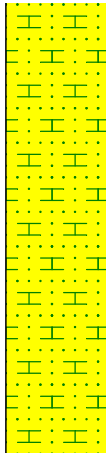
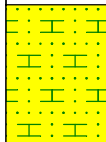
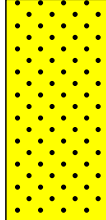
**NOTES:** Coordinates are provided in New Jersey State Plane NAD 1983 Feet.

		Client: PPG Industries		BORING ID: <b>143-B5</b>		
		Site: Site 143				
Start Date: 1/9/2007		Project: <b>Site Investigation</b>		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		FILL: Red-Black (2.5YR 2.5/1) coarse SAND, some Silt, little fine Gravel, trace glass fragments, no odor	0.7 ppm		
		FILL: Dark Gray (N31 gley) SILT/Ash, some fine Gravel little debris, no odor		143-B5I (12.6-13.1)	Cr+6, TAL Metals
		PEAT: Meadow Mat, dark Brown (2.5YR 2.5/2) CLAY, with Organics, no odor		143-B5J (13.1-13.9)	Cr+6, TAL Metals
14		NR: No Recovery	0.6 ppm		
			0.4 ppm		
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: <b>143-B5</b>		
		Site: Site 143				
Start Date: 1/9/2007		Project: <b>Site Investigation</b>		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
20		NR: No Recovery	0.0 ppm		
		SILT AND CLAY: Green Gray (5BG 5/1) with little Dark Rd (5YR 4/6) CLAY/SILT, little fine Sand, trace Dark Red (2.5YR 3/6) medium Gravel, no odor			
		SAND: Reddish Brown (2.5YR 4/6) coarse SAND, some fine to coarse Gravel, no odor			
22		NR: No Recovery	0.4 ppm		
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**

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<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> SGS North America	
<b>Project Number:</b> 60240739	<b>Drilling Method:</b> Soft Dig/Geoprobe	<b>Coordinates (NJSPNAD83) x:</b> 610681.8125
<b>Date Started Drilling:</b> 4/8/2013 8:30:00 AM	<b>Rig Type:</b>	<b>Coordinates (NJSPNAD83) y:</b> 683259
<b>Date Finished Drilling:</b> 4/8/2013 2:59:00 PM	<b>Core Size:</b> 3 in	<b>Boring Total Depth:</b> 21 ft
<b>Logged By:</b> MI	<b>Project Manager:</b> Chris Martell	<b>Depth to Water:</b> NA
<b>Physical Location:</b> Site 143 - A`15A		<b>Surface Elevation:</b> 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
				NR	NR		NO RECOVERY	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**

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<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> SGS North America	
<b>Project Number:</b> 60240739	<b>Drilling Method:</b> Geoprobe	<b>Coordinates (NJSPNAD83) x:</b> 610689.8125
<b>Date Started Drilling:</b> 4/1/2014 9:20:00 AM	<b>Rig Type:</b>	<b>Coordinates (NJSPNAD83) y:</b> 683255.1875
<b>Date Finished Drilling:</b> 4/1/2014 10:10:00 AM	<b>Core Size:</b> 2 in	<b>Boring Total Depth:</b> 20 ft
<b>Logged By:</b> MI	<b>Project Manager:</b> Chris Martell	<b>Depth to Water:</b> NA
<b>Physical Location:</b> Site 143 - A`15AR2		<b>Surface Elevation:</b> 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	
1		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.	
2		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.	
3				NR	NR		NO RECOVERY	
4	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
5				3	FILL		fine to medium silty SAND, trace ash, (10YR 5/4) yellowish brown, loose to dense, slightly moist, no odor, no staining.	
6				3	FILL		fine silty SAND, and ash, little fine gravel, trace ceramics, (7.5YR 5/1) gray, loose, slightly moist, no odor, no staining.	
7				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		0.0	moist to wet	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.	
9				NR	NR		NO RECOVERY	
10	5	0.0	moist to wet	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.	143-P3A-A`15A-R2-11.0-11.5
11		0.0	moist to wet	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.	143-P3A-A`15A-R2-11.5-12.0
12		0.0	moist to wet	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.	
13		0.0	moist to wet	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.	
14	4	0.0	moist to wet	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.	143-P3A-A`15A-R2-16.5-17.0
15		0.0	slightly moist	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.	143-P3A-A`15A-R2-17.0-17.5
16								143-P3A-A`15A-R2-17.5-18.0
17								143-P3A-A`15A-R2-18.0-18.5
18				NR	NR		NO RECOVERY	143-P3A-A`15A-R2-18.5-19.0
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

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



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



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**Boring ID: 143-P3A-C15A**

Page: 1

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

<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> SGS North America	
<b>Project Number:</b> 60240739	<b>Drilling Method:</b> Soft Dig/Geoprobe	<b>Coordinates (NJSPNAD83) x:</b> 610815.8125
<b>Date Started Drilling:</b> 4/9/2013 9:15:00 AM	<b>Rig Type:</b>	<b>Coordinates (NJSPNAD83) y:</b> 683191.625
<b>Date Finished Drilling:</b> 4/9/2013 11:45:00 AM	<b>Core Size:</b> 3 in	<b>Boring Total Depth:</b> 17 ft
<b>Logged By:</b> MI	<b>Project Manager:</b> Chris Martell	<b>Depth to Water:</b> NA
<b>Physical Location:</b> Site 143 - E15A		<b>Surface Elevation:</b> 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		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		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		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		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				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		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		0.0	moist	9	OL		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	7	PT		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		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.	
							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.



30 Knightsbridge Road, Piscataway, NJ 08854  
732.564.3200 office telephone

**Boring ID: 143-P3A-F15A**

Page: 1

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



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**Boring ID: 143-P3A-G15A**

Page: 1

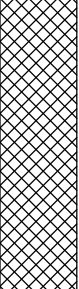














<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> SGS North America	
<b>Project Number:</b> 60240739	<b>Drilling Method:</b> Soft Dig/Geoprobe	<b>Coordinates (NJSPNAD83) x:</b> 610869.3125
<b>Date Started Drilling:</b> 4/9/2013 2:00:00 PM	<b>Rig Type:</b>	<b>Coordinates (NJSPNAD83) y:</b> 683164.625
<b>Date Finished Drilling:</b> 4/10/2013 8:30:00 AM	<b>Core Size:</b> 3 in	<b>Boring Total Depth:</b> 14 ft
<b>Logged By:</b> MI	<b>Project Manager:</b> Chris Martell	<b>Depth to Water:</b> NA
<b>Physical Location:</b> Site 143 - G15A		<b>Surface Elevation:</b> 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	0.0		FILL		fine SAND, trace silt with fill material, and brick, (7.5YR 3/2) dark brown, non plastic, loose.	
1	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	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	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	1	0.0	wet to moist	FILL		fine SAND, with silt and medium gravel, (7.5YR 3/2) dark brown, non plastic, loose.	
5		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	1.3			NR		NO RECOVERY	
7		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	1.6			NR		NO RECOVERY	
9		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	1.4			NR		NO RECOVERY	
11		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	2	0.0	moist	FILL		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
13		1.4	dry	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-12.0-12.5X
14	1	1.6		PT		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.	143-P3A-G15A-12.5-13.0

**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.

<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> Ameridrill	
<b>Project Number:</b> 60580814	<b>Drilling Method:</b> Geoprobe	<b>Coordinates (NJSPNAD83) x:</b> 610800
<b>Date Started Drilling:</b> 10/3/2005	<b>Rig Type:</b>	<b>Coordinates (NJSPNAD83) y:</b> 683259
<b>Date Finished Drilling:</b> 10/3/2005	<b>Core Size:</b> 2 inches	<b>Boring Total Depth:</b> 44 ft
<b>Logged By:</b> Richard Firely	<b>Project Manager:</b>	<b>Depth to Water:</b>
<b>Physical Location:</b> as drilled		<b>Surface Elevation:</b> 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							
4	2.8		saturated	FILL		Very dark gray (10YR 3/1) silt and fine sand, trace organics, trace gravel	
4			saturated	NULL			
5			saturated	FILL		End of Boring	
5				FILL		Yellowish brown (10YR 5/6) silt and gravel, loose	
5						Dark brown (7.5YR 3/2) silt, little fine sand and medium to coarse gravel, loose	
6				NR		No recovery	
7							
8			saturated	FILL		Black (7.5YR 2.5/1) gravel, little fine sand and silt, loose	
9			saturated	FILL		Black (7.5YR 2.5/1) fine sand and silt, trace gravel, loose	
10				FILL		Strong brown (7.5YR 3/2) fine sand and silt, trace gravel, loose	114-A4MW4VB10-10.5
11	2.2			FILL		Wood	
11				NR		No recovery	
12			saturated	FILL		Black (7.5YR 2.5/1) fine to coarse sand and gravel, loose	
12			moist	FILL		Dark brown (7.5YR 3/3) fine sand and silt, slight cohesive	
13			saturated	FILL		Gray (7.5YR 6/1) gravel, loose	A4MW-4VD
13			moist	FILL		Dark brown (7.5YR 3/3) silt, little fine sand and clay, slight cohesive	
14				NR		No recovery	
15							
16	2.2		moist	PEAT		Black (7.5YR 2.5/1) peat	114-A4MW4-VC-16-16.5
17			saturated	SILT		Dark gray (7.5YR 4/1) fine sand and silt, little clay, trace organics, slight cohesive	
18			moist	CLAY		Gray (7.5YR 5/1) clay, some silt, trace organics, cohesive	
19				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:

<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> Ameridrill	
<b>Project Number:</b> 60580814	<b>Drilling Method:</b> Geoprobe	<b>Coordinates (NJSPNAD83) x:</b> 610800
<b>Date Started Drilling:</b> 10/3/2005	<b>Rig Type:</b>	<b>Coordinates (NJSPNAD83) y:</b> 683259
<b>Date Finished Drilling:</b> 10/3/2005	<b>Core Size:</b> 2 inches	<b>Boring Total Depth:</b> 44 ft
<b>Logged By:</b> Richard Firely	<b>Project Manager:</b>	<b>Depth to Water:</b>
<b>Physical Location:</b> as drilled		<b>Surface Elevation:</b> 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				NR		No recovery	
37				NR		No recovery	
38				NR		No recovery	
39				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:






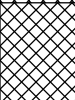
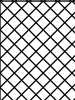
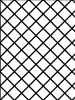
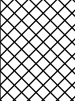

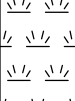

<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> Ameridrill	
<b>Project Number:</b> 60580814	<b>Drilling Method:</b> Geoprobe	<b>Coordinates (NJSPNAD83) x:</b> 610800
<b>Date Started Drilling:</b> 10/3/2005	<b>Rig Type:</b>	<b>Coordinates (NJSPNAD83) y:</b> 683259
<b>Date Finished Drilling: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


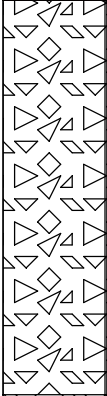
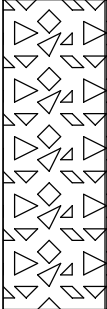
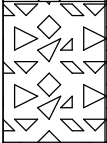
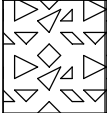
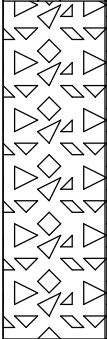
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<b>Project Number:</b> 60580814	<b>Drilling Method:</b> Hollow Stem Auger	<b>Coordinates (NJSPNAD83) x:</b> 610816.41
<b>Date Started Drilling:</b> 12/2/2003	<b>Rig Type:</b>	<b>Coordinates (NJSPNAD83) y:</b> 683245.47
<b>Date Finished Drilling:</b> 12/2/2003	<b>Core Size:</b> 4.25 inches	<b>Boring Total Depth:</b> 20 ft
<b>Logged By:</b> D. Sherman	<b>Project Manager:</b>	<b>Depth to Water:</b>
<b>Physical Location:</b>		<b>Surface Elevation:</b> 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							

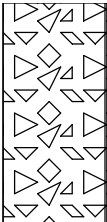
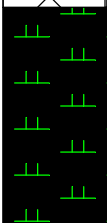

**Notes:**  
bgs - below surface grade    COPR - chromite ore processing residue    UNDno - non-organic undisturbed native deposits    MGP - manufactured gas plant  
MM - meadow mat    GGM - green grey mud    UNDorg - organic undisturbed native deposits    CCPW - chromate chemical production waste

Comments:

ENSR   AECOM		Client: PPG		BORING ID: <b>C3</b>		
		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
			0.0 ppm	C3 (1.5-2.0)	TAL Metals, Cr+6
2			0.0 ppm		
			0.0 ppm		
		FILL: COKE/SLAG, brick, wood	0.0 ppm		
4			0.0 ppm		
			0.0 ppm	C3 (5.0-5.5)	TAL Metals, SVOCs, PCBs, VOCs, Cyanide
			0.0 ppm		
6			0.0 ppm		
		FILL: Gray silt (green staining), fine, some fine sand	0.0 ppm		
			0.0 ppm		
8			0.0 ppm		
			0.0 ppm		
			0.0 ppm		
		FILL: COKE/SLAG	0.0 ppm		
			0.0 ppm		
			0.0 ppm		
			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		
			0.0 ppm	C3 (11.0-11.5)	TAL Metals, Cr+6
			0.0 ppm		
12					

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

12		FILL: Dark brown and black silt, fine, trace fine sand, cobble, brick	0.0 ppm		
			0.0 ppm		
			0.0 ppm		
			0.0 ppm		
14		PEAT: Brown, organic material (meadow mat)	0.0 ppm		
			0.0 ppm		
			0.0 ppm		
			0.0 ppm		
16		PEAT: Brown, organic material (meadow mat)	0.0 ppm		
			0.0 ppm		
NULL: End of Boring at 16 ft.					

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

<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> SGS North America	
<b>Project Number:</b> 60240739	<b>Drilling Method:</b> direct push	<b>Coordinates (NJSPNAD83) x:</b> 611350.91
<b>Date Started Drilling:</b> 6/13/2016 8:30:00 AM	<b>Rig Type:</b>	<b>Coordinates (NJSPNAD83) y:</b> 682789.21
<b>Date Finished Drilling:</b> 6/13/2016 9:30:00 AM	<b>Core Size:</b> 3.0 in	<b>Boring Total Depth:</b> 20 ft
<b>Logged By:</b> ES	<b>Project Manager:</b> Scott Mikaelian	<b>Depth to Water:</b> NA
<b>Physical Location:</b> Actual - CAR PDI		<b>Surface Elevation:</b> 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	0.0	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.





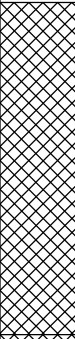
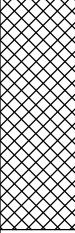
<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> SGS North America	
<b>Project Number:</b> 60240739	<b>Drilling Method:</b> direct push	<b>Coordinates (NJSPNAD83) x:</b> 611330.21
<b>Date Started Drilling:</b> 6/9/2016 11:05:00 AM	<b>Rig Type:</b>	<b>Coordinates (NJSPNAD83) y:</b> 682753.43
<b>Date Finished Drilling:</b> 6/9/2016 12:00:00 PM	<b>Core Size:</b> 3.0 in	<b>Boring Total Depth:</b> 20 ft
<b>Logged By:</b> ES	<b>Project Manager:</b> Scott Mikaelian	<b>Depth to Water:</b> NA
<b>Physical Location:</b> Actual - CAR PDI		<b>Surface Elevation:</b> 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		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
16			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
17	5						
18							
19			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.	
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.

<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> SGS North America	
<b>Project Number:</b> 60240739	<b>Drilling Method:</b> direct push	<b>Coordinates (NJSPNAD83) x:</b> 611363.12
<b>Date Started Drilling:</b> 6/10/2016 8:15:00 AM	<b>Rig Type:</b>	<b>Coordinates (NJSPNAD83) y:</b> 682749.54
<b>Date Finished Drilling:</b> 6/10/2016 9:00:00 AM	<b>Core Size:</b> 3.0 in	<b>Boring Total Depth:</b> 15 ft
<b>Logged By:</b> ES	<b>Project Manager:</b> Scott Mikaelian	<b>Depth to Water:</b> NA
<b>Physical Location:</b> Actual - CAR PDI		<b>Surface Elevation:</b> 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				CONCRETE		Concrete	
3			dry	FILL		fine to medium SAND, little ash, trace coal, (7.5YR 3/3) dark brown, medium dense, dry, no odor, no staining.	
4			dry	FILL		ASH, little coal, (5Y 4/1) dark gray, loose, dry, no odor, no staining.	
5				NR		NO RECOVERY	
6	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.	
7							
8							
9							
10							
11	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
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) No CCPW (COPR or GGM) present in any interval of this boring.



<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> SGS North America	
<b>Project Number:</b> 60240739	<b>Drilling Method:</b> direct push	<b>Coordinates (NJSPNAD83) x:</b> 611393.78
<b>Date Started Drilling:</b> 6/10/2016 9:10:00 AM	<b>Rig Type:</b>	<b>Coordinates (NJSPNAD83) y:</b> 682735.13
<b>Date Finished Drilling:</b> 6/10/2016 9:45:00 AM	<b>Core Size:</b> 3.0 in	<b>Boring Total Depth:</b> 15 ft
<b>Logged By:</b> ES	<b>Project Manager:</b> Scott Mikaelian	<b>Depth to Water:</b> NA
<b>Physical Location:</b> Actual - CAR PDI		<b>Surface Elevation:</b> 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							
7	3	12.2	wet	FILL		fine silty SAND, little fine gravel, (5YR 4/3) reddish brown, medium dense, wet, no odor, no staining.	
8							
9				NR		NO RECOVERY	
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.	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.

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

<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> SGS North America	
<b>Project Number:</b> 60240739	<b>Drilling Method:</b> direct push	<b>Coordinates (NJSPNAD83) x:</b> 611415.46
<b>Date Started Drilling:</b> 6/13/2016 9:40:00 AM	<b>Rig Type:</b>	<b>Coordinates (NJSPNAD83) y:</b> 682721.33
<b>Date Finished Drilling:</b> 6/13/2016 10:40:00 AM	<b>Core Size:</b> 3.0 in	<b>Boring Total Depth:</b> 15 ft
<b>Logged By:</b> ES	<b>Project Manager:</b> Scott Mikaelian	<b>Depth to Water:</b> NA
<b>Physical Location:</b> Actual - CAR PDI		<b>Surface Elevation:</b> 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.	CAR-PDI-DD20A-8.0-8.5
9				NR		NO RECOVERY	
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							CAR-PDI-DD20A-12.0-12.5
12							CAR-PDI-DD20A-12.5-13.0
13			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
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.


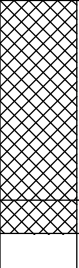
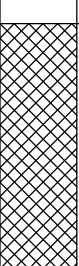
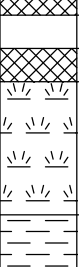
<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> SGS North America	
<b>Project Number:</b> 60240739	<b>Drilling Method:</b> direct push	<b>Coordinates (NJSPNAD83) x:</b> 611401.67
<b>Date Started Drilling:</b> 6/13/2016 10:45:00 AM	<b>Rig Type:</b>	<b>Coordinates (NJSPNAD83) y:</b> 682689.25
<b>Date Finished Drilling:</b> 6/13/2016 11:45:00 AM	<b>Core Size:</b> 3.0 in	<b>Boring Total Depth:</b> 15 ft
<b>Logged By:</b> ES	<b>Project Manager:</b> Scott Mikaelian	<b>Depth to Water:</b> NA
<b>Physical Location:</b> Actual - CAR PDI		<b>Surface Elevation:</b> 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				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.	CAR-PDI-DD21A-1.5-2.0
4			moist	FILL		fine silty SAND, little coal, trace ash, (7.5YR 4/3) brown, medium dense, moist, no odor, no staining.	CAR-PDI-DD21A-3.5-4.0
5	5	10.0		NR		NO RECOVERY	
6			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							
9	5	8.0	wet	FILL		SILT, little organics, (7.5YR 4/3) brown, soft, wet, strong MGP-like odor, product staining.	CAR-PDI-DD21A-9.5-10.0
10							
11							
12							CAR-PDI-DD21A-11.5-12.0
13	5	8.0	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
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.	CAR-PDI-DD21A-14.0-14.5
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.


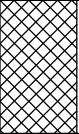
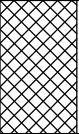
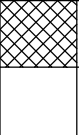
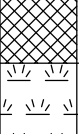

<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> SGS North America	
<b>Project Number:</b> 60240739	<b>Drilling Method:</b> Direct PUSH	<b>Coordinates (NJSPNAD83) x:</b> 611431.85
<b>Date Started Drilling:</b> 6/14/2016 7:50:00 AM	<b>Rig Type:</b>	<b>Coordinates (NJSPNAD83) y:</b> 682699.37
<b>Date Finished Drilling:</b> 6/14/2016 8:55:00 AM	<b>Core Size:</b> 3.0 in	<b>Boring Total Depth:</b> 20 ft
<b>Logged By:</b> HBB	<b>Project Manager:</b> Scott Mikaelian	<b>Depth to Water:</b> NA
<b>Physical Location:</b> Actual - CAR PDI		<b>Surface Elevation:</b> 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 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-0.3-0.8
2				FILL			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. NO RECOVERY	CAR-PDI-EE20A-4.0-4.5
4				NR			CAR-PDI-EE20A-6.0-6.5
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-8.0-8.5
6				FILL			CAR-PDI-EE20A-10.0-10.5
7			saturated	FILL		fine to medium sandy SILT, (7.5YR 4/2) brown, soft, saturated, no staining, slight gasoline-like odor, no staining. NO RECOVERY	CAR-PDI-EE20A-12.0-12.5
8				NR			CAR-PDI-EE20A-14.0-14.5
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-15.0-15.5
10				FILL			CAR-PDI-EE20A-15.5-16.0
11			wet	FILL		SILT, trace coal, (7.5YR 4/2) brown, medium stiff, wet, slight organic odor, no staining. 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-17.0-17.5
12				PT			CAR-PDI-EE20A-18.0-18.5
13	4	0.0	dry	PT		Organic SILT, 90% organic silt, 10% organic fibers, (5Y 5/1) gray, stiff, moist, slight organic odor, no staining. Soils consistent with UNDno.	CAR-PDI-EE20A-19.0-19.5
14				OL			CAR-PDI-EE20A-20.0-20.5
15			moist	OL		NO RECOVERY	CAR-PDI-EE20A-21.0-21.5
16				NR			CAR-PDI-EE20A-22.0-22.5

**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.

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

<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> SGS North America	
<b>Project Number:</b> 60240739	<b>Drilling Method:</b> direct push	<b>Coordinates (NJSPNAD83) x:</b> 611421.8
<b>Date Started Drilling:</b> 6/10/2016 10:25:00 AM	<b>Rig Type:</b>	<b>Coordinates (NJSPNAD83) y:</b> 682655.8
<b>Date Finished Drilling:</b> 6/10/2016 11:15:00 AM	<b>Core Size:</b> 3.0 in	<b>Boring Total Depth:</b> 15 ft
<b>Logged By:</b> ES	<b>Project Manager:</b> Scott Mikaelian	<b>Depth to Water:</b> NA
<b>Physical Location:</b> Actual - CAR PDI		<b>Surface Elevation:</b> 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 2 3 4 5	4.5	0.5		ASPHALT		Asphalt and gravel sub-base.	
				CONCRETE		Concrete	
			dry	FILL		fine to medium SAND, little fine gravel, (7.5YR 4/3) brown, medium dense, dry, no odor, no staining.	
			dry to moist	FILL		ASH, (5Y 5/1) gray, loose, dry to moist, no odor, no staining.	
				NR		NO RECOVERY	
6 7 8 9 10	2	0.3	moist	FILL		ASH, (5Y 4/1) dark gray, loose, moist, no odor, no staining.	CAR-PDI-EE22A-7.0-7.5
			moist	FILL		SILT, (7.5YR 3/3) dark brown, soft, moist no odor, no staining.	
			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.	
				NR		NO RECOVERY	
11 12 13 14 15	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
							CAR-PDI-EE22A-12.7-13.2
			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.	

**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.







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

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID	
	4.5	0.0		ASPHALT		ASPHALT and gravel sub-base.		
1			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	3.5	6.7	dry	FILL		NO RECOVERY		
6			wet to saturated	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							CAR-PDI-FF21A-8.0-8.5	
9				NR		NO RECOVERY		
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	3	0.0	dry	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.	CAR-PDI-FF21A-13.5-14.0	
15				NR				
16			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	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.				
19								
20				NR		NO RECOVERY		

**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 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.

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

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

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


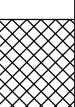
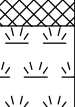
Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
23							
24							
25							

**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.

PPG - 2012-09 RA PPG LOGS\_A\_GDT - 9/20/16 16:55





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

<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> SGS North America	
<b>Project Number:</b> 60240739	<b>Drilling Method:</b> direct push	<b>Coordinates (NJSPNAD83) x:</b> 611268.1
<b>Date Started Drilling:</b> 6/15/2016 8:25:00 AM	<b>Rig Type:</b>	<b>Coordinates (NJSPNAD83) y:</b> 682823.83
<b>Date Finished Drilling:</b> 6/15/2016 9:30:00 AM	<b>Core Size:</b> 3.0 in	<b>Boring Total Depth:</b> 20 ft
<b>Logged By:</b> ES	<b>Project Manager:</b> Scott Mikaelian	<b>Depth to Water:</b> NA
<b>Physical Location:</b> Actual - HSN PDI		<b>Surface Elevation:</b> 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
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-12.0-12.5
14							
15				NR		NO RECOVERY	
16			wet	FILL		SILT, little fine gravel, (7.5YR 4/3) brown, soft, wet, strong MGP-like odor, product soaked.	CAR-PDI-X19A-14.0-14.5
17			wet	FILL		fine silty SAND, little fine gravel, (5YR 4/4) reddish brown, medium dense, wet, moderate MGP-like odor, product staining.	
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							CAR-PDI-X19A-16.0-16.5
20							CAR-PDI-X19A-17.5-18.0
							CAR-PDI-X19A-18.0-18.5

**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 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.

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



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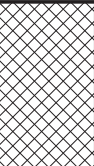
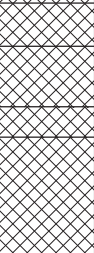
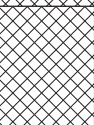




30 Knightsbridge Road, Piscataway, NJ 08854  
732.564.3200 office telephone

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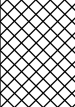










<b>Project Name:</b> PPG Soil RIWP	<b>Drilling Company:</b> SGS	
<b>Project Number:</b> 6015-4801	<b>Drilling Method:</b> Airknife/Geoprobe	<b>Coordinates (NJSPNAD83) x:</b> 611494.743
<b>Date Started Drilling:</b> 4/19/2011	<b>Rig Type:</b> Airknife/Geoprobe	<b>Coordinates (NJSPNAD83) y:</b> 682560.847
<b>Date Finished Drilling:</b> 4/20/2011	<b>Core Size:</b> 2 in	<b>Boring Total Depth:</b> 25 ft
<b>Logged By:</b> B. Daniels, M. Merdinger	<b>Project Manager:</b> Robert Cataldo	<b>Depth to Water:</b> 4 ft
<b>Physical Location:</b> Pacific and Carteret		<b>Surface Elevation:</b> 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						EF-B17_10.0			
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									
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.


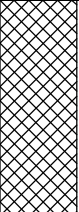
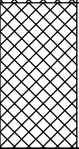
<b>Project Name:</b> PPG Soil RIWP	<b>Drilling Company:</b> SGS North America	
<b>Project Number:</b> 6015-4801	<b>Drilling Method:</b> Geoprobe	<b>Coordinates (NJSPNAD83) x:</b> 611399.447
<b>Date Started Drilling:</b> 5/25/2011	<b>Rig Type:</b>	<b>Coordinates (NJSPNAD83) y:</b> 682675.465
<b>Date Finished Drilling:</b> 5/25/2011	<b>Core Size:</b> 12 in	<b>Boring Total Depth:</b> 15 ft
<b>Logged By:</b> E. Acs, M. Merdinger	<b>Project Manager:</b> Robert Cataldo	<b>Depth to Water:</b> NA
<b>Physical Location:</b> Narula Property		<b>Surface Elevation:</b> 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		0	moist	VOID		No Recovery	
9	5	0	wet	FILL		Black-stained CINDERS and SILT, interbedded, loose. No odor.	EF-B49-12.0
10		0	wet	FILL		Black-stained SILT, little Clay, trace organics, soft. No odor.	
11		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.	EF-B49-12.0
12		0	moist	FILL			
13		0	moist	FILL			
14		0					
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.

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


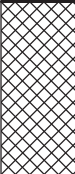

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
				ASPHALT		ASPHALT	
1	3	0.0	dry	FILL		ASH, and cinders little coal, (7.5YR 4/1) dark gray, dry, no odor, Little slag.	EF-B099-0.5-1.0
2		0.0	moist	FILL		silty SAND, little fine to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





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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 2 3	3			ASPHALT		ASPHALT	EF-B100-0.5-1.0
		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.	
		0.0	moist	FILL		ASH, and cinders trace ceramics, moist, no odor, Trace coal and glass.	EF-B100-2.5-3.0

Comments:

PPG - 2012-09 RA PPG\_LOGS\_A.GDT - 10/14/16 09:47

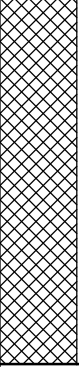
<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> SGS North America	
<b>Project Number:</b> 60240739	<b>Drilling Method:</b> NA	<b>Coordinates (NJSPNAD83) x:</b> 611482
<b>Date Started Drilling:</b> 12/13/2012 8:50:00 AM	<b>Rig Type:</b>	<b>Coordinates (NJSPNAD83) y:</b> 682642
<b>Date Finished Drilling:</b> 12/13/2012 9:00:00 AM	<b>Core Size:</b> 6 in	<b>Boring Total Depth:</b> 1 ft
<b>Logged By:</b> B. Daniels	<b>Project Manager:</b> Chris Martell	<b>Depth to Water:</b> NA
<b>Physical Location:</b> Corner of Carteret Ave and Pacific Ave		<b>Surface Elevation:</b> 8.9 ft NAVD88

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	EF-129-0.5-1.0
		0.0	dry	FILL		Dark brown (7.5YR 3/2) silty SAND, little fine to coarse angular Gravel, dry, no odor.	
1							

**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.

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

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

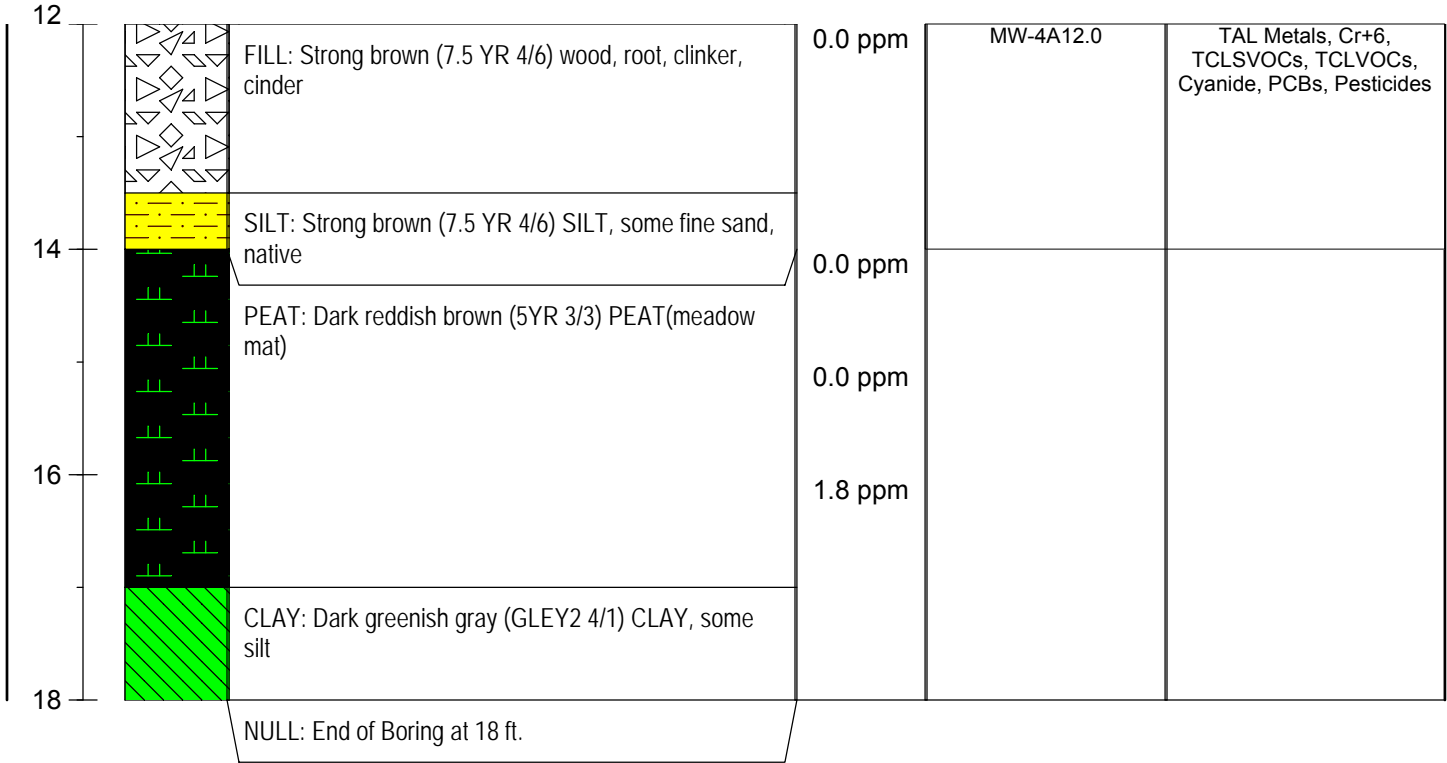


ENSR   AECOM		Client: PPG		BORING ID: <b>MW4A</b>		
		Site: PPG - Jersey City, NJ				
Start Date: 11/18/2003		Project: Site Investigation		Page: 1 of 2		
		Coordinates: X-610811.29      Y-683249.66		Depth of Boring: 18.00		
End Date: 11/18/2003		Elevation: 12.8		Geologist: D. Sherman		
		Drill Subcontractor: 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					

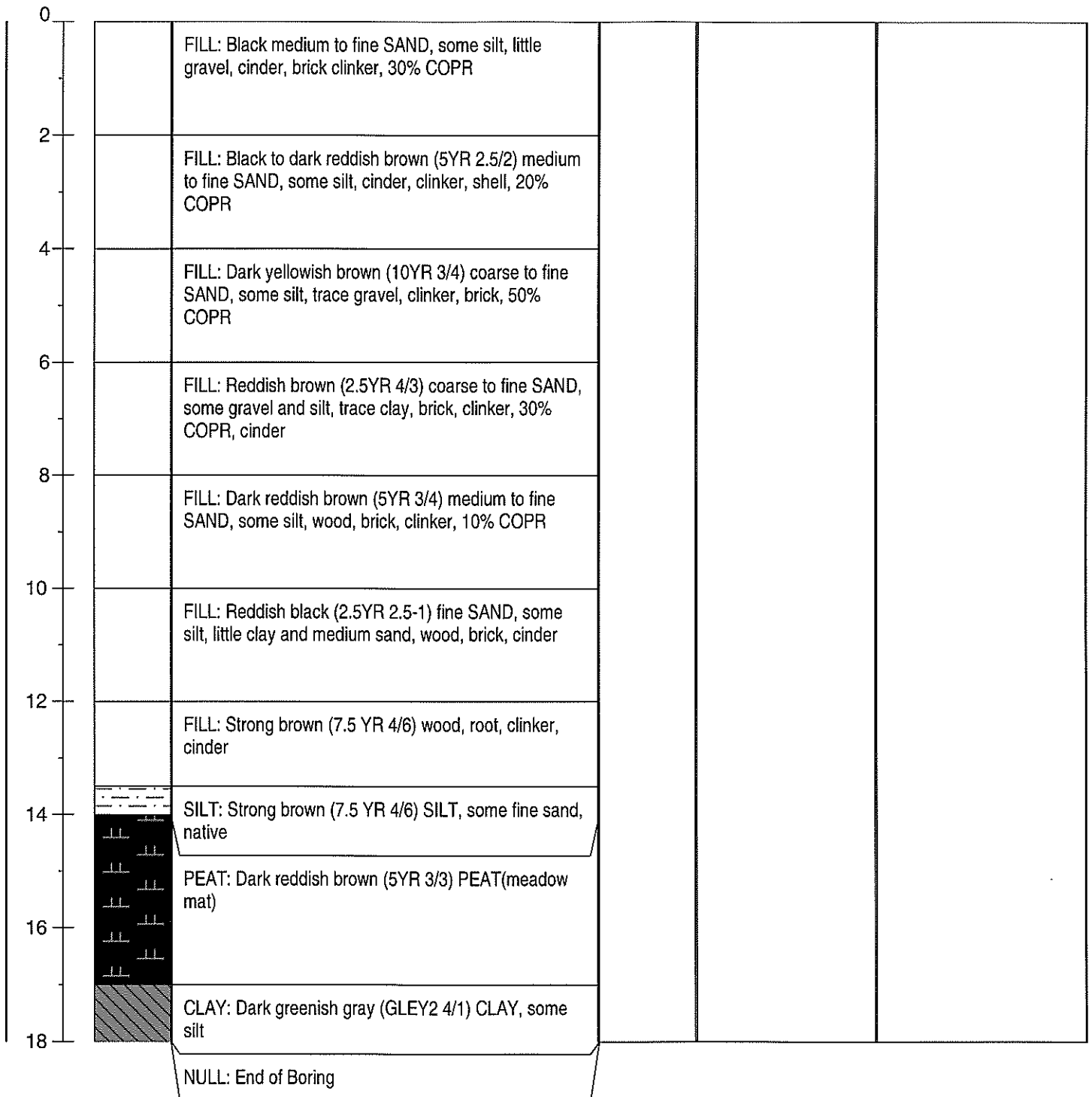
**NOTES:** Coordinates are provided in New Jersey State Plane NAD 1983 Feet.

<div> <div>ENSR</div> <div>AECOM</div> </div>		Client: <b>PPG</b>	<div> <div>BORING ID:</div> <div>MW4A</div> </div>		
		Site: <b>PPG - Jersey City, NJ</b>			
<div> <div>Start Date:</div> <div>11/18/2003</div> </div>		Project: <b>Site Investigation</b>	Page: 2 of 2		
		Coordinates: X-610811.29      Y-683249.66	Depth of Boring: 18.00		
<div> <div>End Date:</div> <div>11/18/2003</div> </div>		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.

	<b>Client:</b> PPG		<b>BORING ID:</b> <b>MW4A</b>		
	<b>Site:</b> PPG - Garfield, NJ				
Start Date: 11/18/2003	Project: <b>Site Investigation</b>		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



**NOTES:**

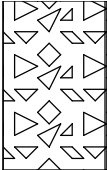

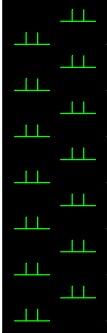
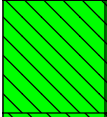

Coordinates are provided in New Jersey State Plane NAD 1983 Feet.  
Elevation is provided in feet above mean sea level - NAVD 1988.

<div>ENSR   AECOM</div>		Client: PPG		BORING ID: <b>MW4B</b>		
		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					

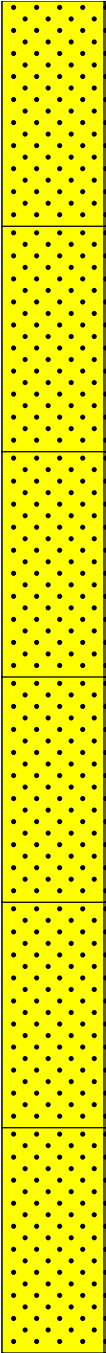
**NOTES:** Coordinates are provided in New Jersey State Plane NAD 1983 Feet.

<div>ENSR   AECOM</div>		Client: PPG		BORING ID: <b>MW4B</b>		
		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 (GLE Y2 4/1) CLAY, some silt			
18		CLAY: Greenish gray (GLE Y2 5/1) CLAY, some silt, little fine sand at 19.5" bgs	0.0 ppm		
20		CLAY: Dark greenish gray (GLE Y1 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: <b>MW4B</b>		
		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>ENSR   AECOM</div>		Client: PPG		BORING ID: <b>MW4B</b>		
		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.

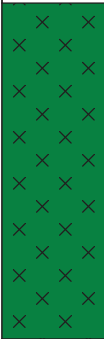



		Client: PPG Industries			BORING ID: <b>OSB/XOSB-10</b>	
		Site: Site OSB				
Start Date: 7/20/2006		Project: <b>Site Investigation</b>			Page: 1 of 3	
		Coordinates: X-610903.4 Y-683195			Depth of Boring: 26.00	
End Date: 9/14/2006		Elevation: OSB-10 = 12.5; XOSB-10 = 12.4 ft NAVD88			Geologist: M. Abdelaziz	
		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		


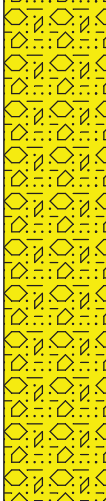


**NOTES:** Coordinates are provided in New Jersey State Plane NAD 1983 Feet.  
XOSB location is offset from original OSB location due to presence of stormwater drain.

		Client: PPG Industries			BORING ID: <b>OSB/XOSB-10</b>	
		Site: Site OSB				
Start Date: 7/20/2006		Project: <b>Site Investigation</b>			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: <b>OSB/XOSB-10</b>	
		Site: Site OSB				
Start Date: 7/20/2006		Project: <b>Site Investigation</b>			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.				




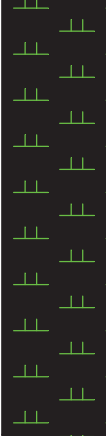

**NOTES:** Coordinates are provided in New Jersey State Plane NAD 1983 Feet.  
XOSB location is offset from original OSB location due to presence of stormwater drain.

<div> <div>ENSR</div> <div>AECOM</div> </div>	Client: PPG Industries	BORING ID: <b>OSB-22</b>
	Site: Site 133	
Start Date: 7/18/2006	Project: <b>Site Investigation</b>	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					
4		FILL: Light brownish gray (2.5Y6/2) fine SAND, some Slag and medium Gravel, little Clay and Silt, wet. >10% COPR.	N/A	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 (7.5YR6) CINDERS, some Glass and coarse to medium Sand, little Silt, wet.			
		NR: No Recovery			
8					
10		FILL: Very dark gray (7.5YR3) CINDERS, some Glass and coarse to medium Sand, little Silt, wet.	N/A		
		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: <b>OSB-22</b>
	Site: Site 133	
Start Date: 7/18/2006	Project: <b>Site Investigation</b>	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.



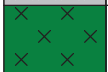

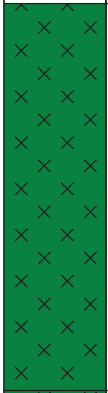
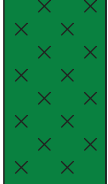
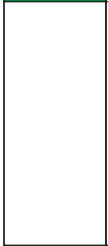
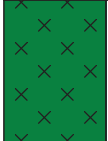
<div> <div>ENSR</div> <div>AECOM</div> </div>	Client: PPG Industries	BORING ID: <b>OSB-22</b>
	Site: Site 133	
Start Date: 7/18/2006	Project: <b>Site Investigation</b>	Page: 3 of 3
	Coordinates: X-611312.6 Y-682776	Depth of Boring: 30.00
End Date: 7/25/2006	Elevation: 10.9 ft NAVD88	Geologist: M. Abdelaziz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

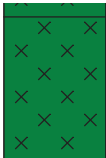


<div>ENSR   AECOM</div>		Client: PPG Industries		BORING ID: <b>OSB/XOSB-9</b>	
		Site: Site OSB			
Start Date: 7/21/2006		Project: <b>Site Investigation</b>		Page: 1 of 3	
		Coordinates: X-610809.6 Y-683242.5		Depth of Boring: 26.00	
End Date: 9/20/2006		Elevation: OSB-9 = 12.9; XOSB-9 = 13.7 ft NAVD88		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: <b>Site Investigation</b>	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


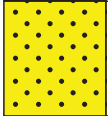

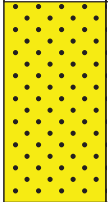
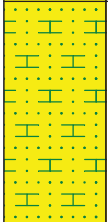
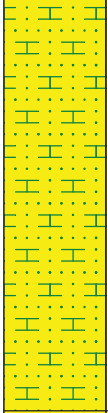

Elevation: OSB-9 = 12.9; XOSB-9 = 13.7 ft NAVD88

Geologist: M. Abdelaziz

Drill Subcontractor: ADI




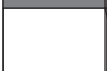


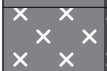

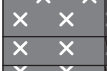


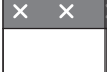

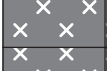


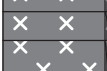

Driller:

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: <b>OSB/XOSB-13</b>
	Site: Site 133	
Start Date: 7/20/2006	Project: <b>Site Investigation</b>	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: <b>OSB/XOSB-13</b>
	Site: Site 133	
Start Date: 7/20/2006	Project: <b>Site Investigation</b>	Page: 2 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
10			0.0	XOSB-13E(10.0-10.5)	Cr+6, TAL Metals
		FILL: Dark gray (5Y4/1) Clayey SILT and coarse to fine SAND, trace Gravel, moist.			
12		NR: No Recovery	5.6		
14		FILL: Olive gray (5Y4/2) SILTY SAND, little to trace Clay, wet.		XOSB-13F(13.5-14.0)	Cr+6, TAL Metals
		PEAT: PEAT.	0.0	XOSB-13G(14.0-14.5)	Cr+6, TAL Metals
16			0.0		
18			0.0		
				XOSB-13H(18.5-19.0)	Cr+6, TAL Metals
		NR: No Recovery			


NOTES:


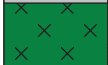



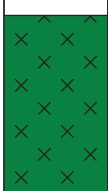
Coordinates are provided in New Jersey State Plane NAD 1983 Feet.

<div> <div>ENSR</div> <div>AECOM</div> </div>	Client: PPG Industries	BORING ID: <b>OSB/XOSB-13</b>
	Site: Site 133	
Start Date: 7/20/2006	Project: <b>Site Investigation</b>	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		<div>SILTY CLAY: Black (2.5YR 2.5/1) SILTY CLAY and medium to fine SAND.</div> <div>CLAYEY SAND: Black (2.5YR 2.5/1) CLAYEY SAND, trace Organics.</div> <div>SILTY SAND: Very dark grayish brown (10YR 3/2) SILTY SAND, little to trace Clay.</div> <div>SAND: Dark reddish brown (5YR3/3) coarse to fine SAND, trace Silt and fine Gravel.</div>	0.0		
26			0.0		
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: <b>OSB/XOSB-17</b>	
		Site: Site OSB				
Start Date: 7/19/2006		Project: <b>Site Investigation</b>			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		

OSB-17 was advanced on 7/19/2006 to 4.7' in Grid S17A


XOSB-17 was advanced on 9/12/2006 from 4.7' to 28' in Grid S16A as a step-out from OSB-17.


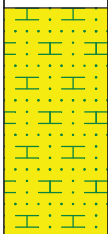
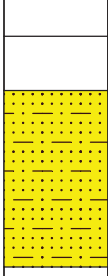
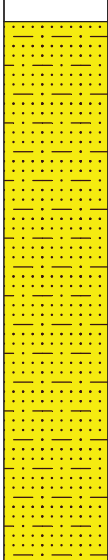

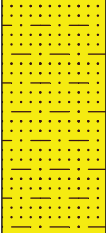
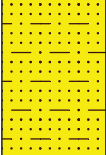
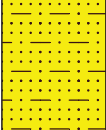
**NOTES:** Coordinates are provided in New Jersey State Plane NAD 1983 Feet.  
XOSB location is offset from original OSB location due to presence of stormwater drain.

		Client: PPG Industries			BORING ID: <b>OSB/XOSB-17</b>	
		Site: Site OSB				
Start Date: 7/19/2006		Project: <b>Site Investigation</b>			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		NR: No Recovery	0.6 ppm	10		
				8		
				4		
				8	XOSB-17G(14.2-14.7)	Cr+6, TAL Metals
16		FILL: Reddish brown (5YR4/4) fine SAND and SILT, trace Clay, wet.	10.0 ppm	12		
				70		
				5		
				3	XOSB-17H(16.0-16.5)	Cr+6, TAL Metals
18		PEAT: PEAT, moist.	2.2 ppm	4		
				4		
				4		
				3		
				2		
				2		



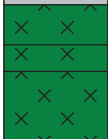



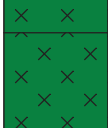
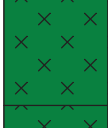

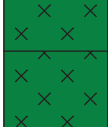
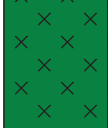

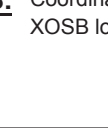
**NOTES:** Coordinates are provided in New Jersey State Plane NAD 1983 Feet.  
XOSB location is offset from original OSB location due to presence of stormwater drain.

		Client: PPG Industries			BORING ID: <b>OSB/XOSB-17</b>	
		Site: Site OSB				
Start Date: 7/19/2006		Project: <b>Site Investigation</b>			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		
		NR: No Recovery		3		
				5		
				8		
				11		
22		NR: No Recovery	51.4 ppm	10		
				8		
		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.		4		
				6		
				4		
				6		
24		NR: No Recovery	11.4 ppm	4		
				4		
		SAND AND SILT: Dark reddish brown (5YR3/3) fine SAND and SILT, wet. MGP like odor and sheen.		4		
				4		
				4		
				4		
26			3.2 ppm	4	XOSB-17L(26.0-27.0)	Cr+6, TAL Metals
				3	XOSB-17LD(26.0-27.0)	Cr+6, TAL Metals
				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.

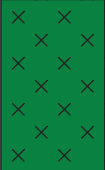

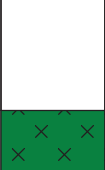


		Client: PPG Industries			BORING ID: <b>OSB/XOSB-19</b>	
		Site: Site OSB				
Start Date: 7/18/2006		Project: <b>Site Investigation</b>			Page: 1 of 3	
		Coordinates: X-611217.1 Y-682922.8			Depth of Boring: 28.00	
End Date: 9/11/2006		Elevation: OSB-19 = 11.7; XOSB-19 = 11.9 ft NAVD88			Geologist: M. 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		
				3		
			19.6 ppm	2	OSB-19D(9.2-9.7)	Cr+6, TAL Metals

**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.


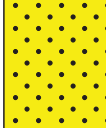

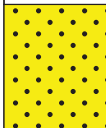
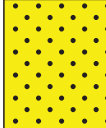
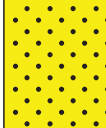
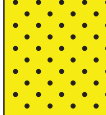
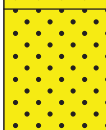
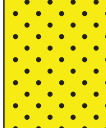


<div>ENSR   AECOM</div>		Client: PPG Industries			BORING ID: <b>OSB/XOSB-19</b>	
		Site: Site OSB				
Start Date: 7/18/2006		Project: <b>Site Investigation</b>			Page: 2 of 3	
		Coordinates: X-611217.1 Y-682922.8			Depth of Boring: 28.00	
End Date: 9/11/2006		Elevation: OSB-19 = 11.7; XOSB-19 = 11.9 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		
		FILL: Very Dark Gray (2.5YR N3) silty CLAY, some fine to very fine Sand, trace fine Gravel, wet. Petroleum odor and sheen.	5.6 ppm	7		
				7		
		FILL: Rotted WOOD. Petroleum odor and sheen.		8		
				9		
		PEAT: PEAT, dry.	5.3 ppm	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.		3		











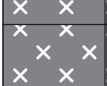



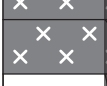

**NOTES:** Coordinates are provided in New Jersey State Plane NAD 1983 Feet.  
XOSB location is offset from original OSB location due to presence of stormwater drain.

<div>ENSR   AECOM</div>		Client: PPG Industries			BORING ID: <b>OSB/XOSB-19</b>	
		Site: Site OSB				
Start Date: 7/18/2006		Project: <b>Site Investigation</b>			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.					





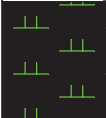

**NOTES:** Coordinates are provided in New Jersey State Plane NAD 1983 Feet.  
XOSB location is offset from original OSB location due to presence of stormwater drain.

<div> <div>ENSR</div> <div>AECOM</div> </div>	Client: PPG Industries	BORING ID: <b>OSB/XOSB-21</b>
	Site: Site 133	
Start Date: 7/18/2006	Project: <b>Site Investigation</b>	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			
		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
2		NR: Soft Dig - No Recovery	0.1		
		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			
4		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.			
		NR: 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.			
		FILL: Brown (7.5YR4/2) medium SAND, some Silt, little fine Gravel, trace Clay, moist.			
8		NR: No Recovery	0.4		
		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.			
10		NR: No Recovery	12.8		

**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: <b>OSB/XOSB-21</b>
	Site: Site 133	
Start Date: 7/18/2006	Project: <b>Site Investigation</b>	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			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: <b>OSB/XOSB-21</b>
	Site: Site 133	
Start Date: 7/18/2006	Project: <b>Site Investigation</b>	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.



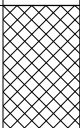

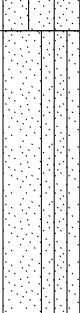
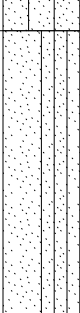
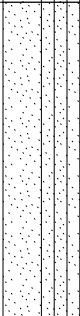
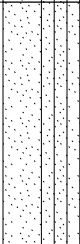
30 Knightsbridge Road, Piscataway, NJ 08854  
732.564.3200 office telephone

**Boring ID: P4-A`14A**

Page: 1

<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> SGS North America	
<b>Project Number:</b> 60240739	<b>Drilling Method:</b> Geoprobe	<b>Coordinates (NJSPNAD83) x:</b> 610701
<b>Date Started Drilling:</b> 3/10/2014 11:20:00 AM	<b>Rig Type:</b>	<b>Coordinates (NJSPNAD83) y:</b> 683297
<b>Date Finished Drilling:</b> 3/10/2014 11:50:00 AM	<b>Core Size:</b> 2 in	<b>Boring Total Depth:</b> 25 ft
<b>Logged By:</b> MI & FM	<b>Project Manager:</b> Chris Martell	<b>Depth to Water:</b> NA
<b>Physical Location:</b> A`14A- Carteret Ave.		<b>Surface Elevation:</b> 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	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.	P4-A`14A-10.0-10.5	
11			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-12.0-12.5	
12											P4-A`14A-14.0-14.5	
13												
14												
15	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.						
16							P4-A`14A-16.0-16.5					
17												
18												
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-18.0-18.5					
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





30 Knightsbridge Road, Piscataway, NJ 08854  
732.564.3200 office telephone

**Boring ID: P4-A14A**

Page: 1

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

Page: 1

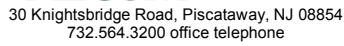
<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> SGS North America	
<b>Project Number:</b> 60240739	<b>Drilling Method:</b> Geoprobe	<b>Coordinates (NJSPNAD83) x:</b> 610753
<b>Date Started Drilling:</b> 3/11/2014 9:16:00 AM	<b>Rig Type:</b>	<b>Coordinates (NJSPNAD83) y:</b> 683270
<b>Date Finished Drilling:</b> 3/11/2014 10:00:00 AM	<b>Core Size:</b> 2.0 in	<b>Boring Total Depth:</b> 25 ft
<b>Logged By:</b> MI & FM	<b>Project Manager:</b> Chris Martell	<b>Depth to Water:</b> NA
<b>Physical Location:</b> B14A - Carteret Ave.		<b>Surface Elevation:</b> 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							P4-B14A-12.0-12.5
11							P4-B14A-12.5-13.0
12		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-13.0-13.5
13	5	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-14.0-14.5
14		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-16.0-16.5
15							
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-18.0-18.5
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.	
18							
19							
20		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-20.0-20.5
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



PPG - PPG\_LOGS.GDT - 4/15/14 17:43

<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> SGS North America	
<b>Project Number:</b> 60240739	<b>Drilling Method:</b> Direct Push	<b>Coordinates (NJSPNAD83) x:</b> 611366.605
<b>Date Started Drilling:</b> 12/9/2014 9:30:00 AM	<b>Rig Type:</b> Geoprobe	<b>Coordinates (NJSPNAD83) y:</b> 682752.926
<b>Date Finished Drilling:</b> 12/9/2014 11:00:00 AM	<b>Core Size:</b> 3.0 in	<b>Boring Total Depth:</b> 20 ft
<b>Logged By:</b> SP	<b>Project Manager:</b> Scott Mikaelian	<b>Depth to Water:</b> N/A
<b>Physical Location:</b> Carteret Avenue		<b>Surface Elevation:</b> 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							P4-BB20A-8.0-8.5
8	3					NO RECOVERY.	
9		0.0		NR			
10							
11	5	13.6	saturated	FILL		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.	P4-BB20A-12.0-12.5
12							
13							P4-BB20A-14.0-14.5
14	5	0.0	moist	FILL		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.	P4-BB20A-15.0-15.5
15		0.0	slightly moist	PT			P4-BB20A-15.5-16.0
16							
17	5	0.0	slightly moist	OL		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.	
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-C14A**

Page: 1

<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> SGS North America	
<b>Project Number:</b> 60240739	<b>Drilling Method:</b> Geoprobe	<b>Coordinates (NJSPNAD83) x:</b> 610780
<b>Date Started Drilling:</b> 3/11/2014 9:20:00 AM	<b>Rig Type:</b>	<b>Coordinates (NJSPNAD83) y:</b> 683256
<b>Date Finished Drilling:</b> 3/11/2014 10:05:00 AM	<b>Core Size:</b> 2 in	<b>Boring Total Depth:</b> 25 ft
<b>Logged By:</b> MI & FM	<b>Project Manager:</b> Chris Martell	<b>Depth to Water:</b> NA
<b>Physical Location:</b> C14A- Carteret Ave.		<b>Surface Elevation:</b> 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-14.0-14.5
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-16.0-16.5
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-20.0-20.5
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**

Page: 1

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

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

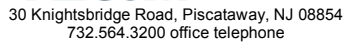
(Note bgs = below ground surface)

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		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	5						
10		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
11							
12							
13	5	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							
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-14.0-14.5
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-14.5-15.0
17	5	0.0	dry to 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-15.0-15.5
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-16.0-16.5
20							
21	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-18.0-18.5
22							
23		0.0	dry	SP		fine to coarse SAND, with coarse gravel, (5YR 4/3) reddish	P4-D14A-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 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-E14A**

Page: 1

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

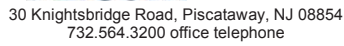
(Note bgs = below ground surface)

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



<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> SGS North America	
<b>Project Number:</b> 60240739	<b>Drilling Method:</b> Direct Push	<b>Coordinates (NJSPNAD83) x:</b> 611433.137
<b>Date Started Drilling:</b> 12/10/2014 10:10:00 AM	<b>Rig Type:</b> Geoprobe	<b>Coordinates (NJSPNAD83) y:</b> 682678.79
<b>Date Finished Drilling:</b> 12/10/2014 11:30:00 AM	<b>Core Size:</b> 3.0 in	<b>Boring Total Depth:</b> 20 ft
<b>Logged By:</b> SS	<b>Project Manager:</b> Scott Mikaelian	<b>Depth to Water:</b> N/A
<b>Physical Location:</b> Carteret Avenue		<b>Surface Elevation:</b> 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
	5	0.0		ASPHALT		ASPHALT.	
1		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		fine silty SAND,little ash,little fine to medium gravel,(5YR 2.5/1) black,loose,wet to saturated,slight petroleum odor,sheen.	P4-EE21A-8.0-8.5
9							
10	4			NR		NO RECOVERY.	
11		0.0	wet	FILL		medium GRAVEL,little fine sand,(7.5YR 2.5/1) black,loose,wet,strong petroleum odor,sheen.	P4-EE21A-11.0-11.5
12							P4-EE21A-12.0-12.5
13		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	5	0.0	slightly moist	PT		PEAT (degraded vegetated material),(50% organic silt, 50% organic fibers),(7.5YR 4/3) brown,medium stiff,slightly moist,moderate organic odor,no staining. Soils consistent with MM.	P4-EE21A-15.0-15.5
17							
18		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.	
19							
20							

**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

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





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**Boring ID: P4-FF22A**

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<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> SGS North America	
<b>Project Number:</b> 60240739	<b>Drilling Method:</b> Direct Push	<b>Coordinates (NJSPNAD83) x:</b> 611444.244
<b>Date Started Drilling:</b> 12/10/2014 9:10:00 AM	<b>Rig Type:</b> Geoprobe	<b>Coordinates (NJSPNAD83) y:</b> 682640.07
<b>Date Finished Drilling:</b> 12/10/2014 10:00:00 AM	<b>Core Size:</b> 3.0 in	<b>Boring Total Depth:</b> 15 ft
<b>Logged By:</b> SP	<b>Project Manager:</b> Scott Mikaelian	<b>Depth to Water:</b> N/A
<b>Physical Location:</b> Carteret Avenue		<b>Surface Elevation:</b> 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	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
11							
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

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

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<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> SGS North America	
<b>Project Number:</b> 60240739	<b>Drilling Method:</b> Geoprobe	<b>Coordinates (NJSPNAD83) x:</b> 611283.761
<b>Date Started Drilling:</b> 9/25/2014 9:10:00 AM	<b>Rig Type:</b>	<b>Coordinates (NJSPNAD83) y:</b> 682791.299
<b>Date Finished Drilling:</b> 9/25/2014 9:55:00 AM	<b>Core Size:</b> 3.0 in	<b>Boring Total Depth:</b> 20 ft
<b>Logged By:</b> SP	<b>Project Manager:</b> Scott Mikaelian	<b>Depth to Water:</b> NA
<b>Physical Location:</b> Halliday		<b>Surface Elevation:</b> 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						
5		0.0	moist	FILL		CINDERS, trace ceramics, trace wood fragments, trace gravel, (10YR 5/1) gray, non plastic, loose, moist, no odor.	P4-HAL-Y20A-6.0-6.5
6							
7							
8							
9	5	27.1	moist	FILL		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
10		0.5	saturated	FILL			P4-HAL-Y20A-10.0-10.5
11							
12							
13	5						
14							
15		0.0	wet	FILL		fine to medium silty SAND, trace gravel, (5YR 3/4) dark reddish brown, non plastic, soft, wet, no odor.	P4-HAL-Y20A-12.0-12.5
16							P4-HAL-Y20A-14.0-14.5
17	5						
18		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-16.0-16.5
19							P4-HAL-Y20A-17.0-17.5
20							P4-HAL-Y20A-17.5-18.0

PPG - PPG\_LOGS.GDT - 11/17/14 10:21

**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: P4-I14A**

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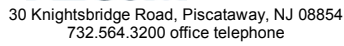
<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> SGS North America	
<b>Project Number:</b> 60240739	<b>Drilling Method:</b> Geoprobe	<b>Coordinates (NJSPNAD83) x:</b> 610940
<b>Date Started Drilling:</b> 3/14/2014 10:50:00 AM	<b>Rig Type:</b>	<b>Coordinates (NJSPNAD83) y:</b> 683174
<b>Date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

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





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Boring ID: P4-J14A

Page: 1

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

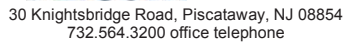
(Note bgs = below ground surface)

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		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.	
14		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.	
15	5	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
16							
17							
18							
19	5	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
20							
21							
22							
23	5	0.0	wet	SP		UNDno fine to medium SAND, little coarse gravel, (2.5YR 4/3) reddish brown, medium dense, wet, no odor, no	
24							

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.

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**Boring ID: P4-K14A**

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<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> SGS North America	
<b>Project Number:</b> 60240739	<b>Drilling Method:</b> Geoprobe	<b>Coordinates (NJSPNAD83) x:</b> 610994
<b>Date Started Drilling:</b> 3/14/2014 9:00:00 AM	<b>Rig Type:</b>	<b>Coordinates (NJSPNAD83) y:</b> 683147
<b>Date Finished Drilling:</b> 3/14/2014 9:20:00 AM	<b>Core Size:</b> 2.0 in	<b>Boring Total Depth:</b> 25 ft
<b>Logged By:</b> SS	<b>Project Manager:</b> Chris Martell	<b>Depth to Water:</b> NA
<b>Physical Location:</b> K14A- Carteret Ave.		<b>Surface Elevation:</b> 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							
17	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.	P4-K14A-15.5-16.0
18		0.0	dry to moist	OL			P4-K14A-16.0-16.5
19							
20							
21	5	0.0	dry to moist	OL		UNDorg SILT, 90% organic silt, 5% organic fibers, trace wood fragments, (5YR 4/1) dark gray, low plasticity, soft to medium dense, dry to moist, no odor, no staining. Soils consistent with UNDorg.	P4-K14A-18.0-18.5
22							
23							
24	5	0.0	wet	SM		UNDno fine to medium SAND, (2.5Y 6/1) gray, low plasticity, medium dense, wet, no odor, no staining. Soils consistent with UNDno.	P4-K14A-20.0-20.5
25							
26							
27	5	0.0	moist	SP		UNDno medium SAND, (2.5YR 3/6) dark red, dense, moist, no odor, no staining. Soils consistent with UNDno.	
28							

**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-M14A**

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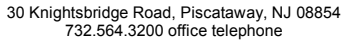
<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> SGS North America	
<b>Project Number:</b> 60240739	<b>Drilling Method:</b> Geoprobe	<b>Coordinates (NJSPNAD83) x:</b> 611047
<b>Date Started Drilling:</b> 3/6/2014 11:15:00 AM	<b>Rig Type:</b>	<b>Coordinates (NJSPNAD83) y:</b> 683118
<b>Date Finished Drilling:</b> 3/6/2014 12:15:00 PM	<b>Core Size:</b> 2 in	<b>Boring Total Depth:</b> 25 ft
<b>Logged By:</b> MI	<b>Project Manager:</b> Chris Martell	<b>Depth to Water:</b> NA
<b>Physical Location:</b> M14A - Carteret Ave.		<b>Surface Elevation:</b> 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							
15							
16	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.	P4-M14A-14.0-14.5
17							
18							
19	5						
20		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.	P4-M14A-16.0-16.5
21							
22	5	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-18.0-18.5
23							
24							

**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-M15A**

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<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> SGS North America	
<b>Project Number:</b> 60240739	<b>Drilling Method:</b> Geoprobe	<b>Coordinates (NJSPNAD83) x:</b> 611014
<b>Date Started Drilling:</b> 3/7/2014 8:50:00 AM	<b>Rig Type:</b>	<b>Coordinates (NJSPNAD83) y:</b> 683079
<b>Date Finished Drilling:</b> 3/7/2014 9:15:00 AM	<b>Core Size:</b> 2 in	<b>Boring Total Depth:</b> 25 ft
<b>Logged By:</b> MI	<b>Project Manager:</b> Chris Martell	<b>Depth to Water:</b> NA
<b>Physical Location:</b> M15A- Carteret Ave.		<b>Surface Elevation:</b> 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			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.	
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							
27	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-20.0-20.5
28			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.

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.



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**Boring ID: P4-N15A**

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

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



<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> SGS North America	
<b>Project Number:</b> 60240739	<b>Drilling Method:</b> Geoprobe	<b>Coordinates (NJSPNAD83) x:</b> 611056
<b>Date Started Drilling:</b> 3/10/2014 9:30:00 AM	<b>Rig Type:</b>	<b>Coordinates (NJSPNAD83) y:</b> 683025
<b>Date Finished Drilling:</b> 3/10/2014 10:50:00 AM	<b>Core Size:</b> 2 in	<b>Boring Total Depth:</b> 25 ft
<b>Logged By:</b> MI	<b>Project Manager:</b> Chris Martell	<b>Depth to Water:</b> NA
<b>Physical Location:</b> 016A- Carteret Ave.		<b>Surface Elevation:</b> 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		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.	
9		0.0	slightly moist	FILL		GGM, little fine sand, trace cinders, COPR, (5GY 4/4) olive green, stiff, slightly moist, no odor, 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							
12	5	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
13		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
14							
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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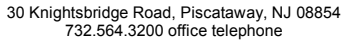
<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> SGS North America	
<b>Project Number:</b> 60240739	<b>Drilling Method:</b> Geoprobe	<b>Coordinates (NJSPNAD83) x:</b> 611115
<b>Date Started Drilling:</b> 3/7/2014 10:30:00 AM	<b>Rig Type:</b>	<b>Coordinates (NJSPNAD83) y:</b> 683053
<b>Date Finished Drilling:</b> 3/7/2014 11:20:00 AM	<b>Core Size:</b> 2.0 in	<b>Boring Total Depth:</b> 25 ft
<b>Logged By:</b> MI	<b>Project Manager:</b> Chris Martell	<b>Depth to Water:</b> NA
<b>Physical Location:</b> P15A - Carteret Ave.		<b>Surface Elevation:</b> 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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<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> SGS North America	
<b>Project Number:</b> 60240739	<b>Drilling Method:</b> Geoprobe	<b>Coordinates (NJSPNAD83) x:</b> 611080.495
<b>Date Started Drilling:</b> 3/14/2014 9:00:00 AM	<b>Rig Type:</b>	<b>Coordinates (NJSPNAD83) y:</b> 683010.017
<b>Date Finished Drilling:</b> 3/14/2014 10:40:00 AM	<b>Core Size:</b> 2 in	<b>Boring Total Depth:</b> 25 ft
<b>Logged By:</b> MI & FM	<b>Project Manager:</b> Chris Martell	<b>Depth to Water:</b> NA
<b>Physical Location:</b> P16A- Carteret Ave.		<b>Surface Elevation:</b> 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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<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> SGS North America	
<b>Project Number:</b> 60240739	<b>Drilling Method:</b> Geoprobe	<b>Coordinates (NJSPNAD83) x:</b> 611138
<b>Date Started Drilling:</b> 3/7/2014 11:30:00 AM	<b>Rig Type:</b>	<b>Coordinates (NJSPNAD83) y:</b> 683008
<b>Date Finished Drilling:</b> 3/7/2014 12:00:00 PM	<b>Core Size:</b> 2.0 in	<b>Boring Total Depth:</b> 25 ft
<b>Logged By:</b> MI	<b>Project Manager:</b> Chris Martell	<b>Depth to Water:</b> NA
<b>Physical Location:</b> Q16A - Carteret Ave.		<b>Surface Elevation:</b> 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		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	moist to wet	FILL			
3		0.0	moist to wet	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		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		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		FILL			
10		0.0		FILL			
11	5	0.0	moist to saturated	FILL		fine to medium silty SAND, little coarse gravel, little brick, trace ceramics, (10YR 4/4) dark yellowish brown, medium dense, moist to saturated.	
12		0.0		FILL			
13		0.0		FILL			
14	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. PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (10YR 4/2) dark grayish brown, low plasticity, medium soft, moist to wet. Soils consistent with MM.	P4-Q16A-14.0-14.5
15		0.0	moist to wet	PT			P4-Q16A-14.5-15.0
16		0.0		PT			P4-Q16A-16.0-16.5
17		0.0		PT			P4-Q16A-18.0-18.5
18	5	0.0	moist to wet	PT		PEAT (degraded vegetated material), (10YR 3/3) dark brown, low plasticity, medium soft, moist to wet. Soils consistent with MM. fine to medium silty SAND, trace fine gravel, (10YR 6/1) gray, medium dense, moist to wet. Soils consistent with UNDno.	
19		0.0	moist to wet	PT			
20		0.0	moist to wet	PT			
21		0.0	moist to wet	PT			
22	5	0.0	moist	SP-SM		fine to medium silty SAND, some coarse gravel, (7.5YR 4/3) brown, medium dense, moist. Soils consistent with UNDno.	
23		0.0	moist	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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**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-R17A**

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<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> SGS North America	
<b>Project Number:</b> 60240739	<b>Drilling Method:</b> Geoprobe	<b>Coordinates (NJSPNAD83) x:</b> 611121
<b>Date Started Drilling:</b> 3/11/2014 11:15:00 AM	<b>Rig Type:</b>	<b>Coordinates (NJSPNAD83) y:</b> 682958
<b>Date Finished Drilling:</b> 3/11/2014 11:45:00 AM	<b>Core Size:</b> 2 in	<b>Boring Total Depth:</b> 25 ft
<b>Logged By:</b> MI	<b>Project Manager:</b> Chris Martell	<b>Depth to Water:</b> NA
<b>Physical Location:</b> R17A- Carteret Ave.		<b>Surface Elevation:</b> 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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**Boring ID: P4-S17A**

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<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> SGS North America	
<b>Project Number:</b> 60240739	<b>Drilling Method:</b> Geoprobe	<b>Coordinates (NJSPNAD83) x:</b> 611145
<b>Date Started Drilling:</b> 3/13/2014 10:25:00 AM	<b>Rig Type:</b>	<b>Coordinates (NJSPNAD83) y:</b> 682943
<b>Date Finished Drilling:</b> 3/13/2014 10:45:00 AM	<b>Core Size:</b> 2 in	<b>Boring Total Depth:</b> 25 ft
<b>Logged By:</b> MI & FM	<b>Project Manager:</b> Chris Martell	<b>Depth to Water:</b> NA
<b>Physical Location:</b> S17A- Carteret Ave.		<b>Surface Elevation:</b> 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.	
14							P4-S17A-14.0-14.5
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.	
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-16.0-16.5
17	5						
18							P4-S17A-18.0-18.5
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.	

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**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.





<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> SGS North America	
<b>Project Number:</b> 60240739	<b>Drilling Method:</b> Geoprobe	<b>Coordinates (NJSPNAD83) x:</b> 611206
<b>Date Started Drilling:</b> 3/7/2014 9:15:00 AM	<b>Rig Type:</b>	<b>Coordinates (NJSPNAD83) y:</b> 682941
<b>Date Finished Drilling:</b> 3/7/2014 10:15:00 AM	<b>Core Size:</b> 2.0 in	<b>Boring Total Depth:</b> 25 ft
<b>Logged By:</b> MI	<b>Project Manager:</b> Chris Martell	<b>Depth to Water:</b> NA
<b>Physical Location:</b> T17A - Carteret Ave.		<b>Surface Elevation:</b> 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	
2				FILL		fine to medium silty SAND, some fine gravel, little GGM, (10YR 4/2) dark grayish brown, very dense.	
3			wet	FILL		GGM, (10Y 5/2) grayish olive, medium dense, wet.	
4	5						
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			moist	FILL		SILT, little fine sand, (10YR 2/1) black, medium plasticity, soft, moist, slight naphthalene odor.	
9			wet	FILL		fine to medium SAND, little silt, (10YR 4/3) brown, non plastic, medium dense, moist, slight naphthalene odor.	
10	5	1.2					
11			moist to wet	FILL		fine to medium silty SAND, little fine gravel, little roots, (10YR 5/3) brown, non plastic, loose, wet, moderate naphthalene odor, sheen.	
12							
13	5	6.6					
14			moist	PT		fine to medium silty COBBLES, little fine gravel, (7.5YR 4/3) brown, non plastic, medium dense, moist to wet, slight naphthalene odor, sheen.	
15							
16	5	4.2					
17			moist	SP-SM		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.	
18							
19	5	1.0					
20			moist to wet	SP-SM		fine silty SAND, (10YR 5/2) grayish brown, non plastic, medium dense, moist, slight sulfur odor. Soils consistent with UNDno.	
21						fine to medium silty SAND, little gravel, little roots, (10YR 5/1) gray, non plastic, medium dense, moist to wet. Soils consistent with UNDno.	
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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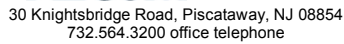
<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> SGS North America	
<b>Project Number:</b> 60240739	<b>Drilling Method:</b> Geoprobe	<b>Coordinates (NJSPNAD83) x:</b> 611189
<b>Date Started Drilling:</b> 3/11/2014 1:00:00 PM	<b>Rig Type:</b>	<b>Coordinates (NJSPNAD83) y:</b> 682869
<b>Date Finished Drilling:</b> 3/11/2014 1:25:00 PM	<b>Core Size:</b> 2 in	<b>Boring Total Depth:</b> 25 ft
<b>Logged By:</b> MI	<b>Project Manager:</b> Chris Martell	<b>Depth to Water:</b> NA
<b>Physical Location:</b> U19A- Carteret Ave.		<b>Surface Elevation:</b> 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						
14		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.	
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.	
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.	P4-U19A-20.0-20.5
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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(Note bgs = below ground surface)

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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.



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**Boring ID: P4-V18A**

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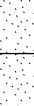

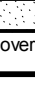
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**Boring ID: P4-W18A**

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<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> SGS North America	
<b>Project Number:</b> 60240739	<b>Drilling Method:</b> Geoprobe	<b>Coordinates (NJSPNAD83) x:</b> 611264
<b>Date Started Drilling:</b> 3/13/2014 11:00:00 AM	<b>Rig Type:</b>	<b>Coordinates (NJSPNAD83) y:</b> 682867
<b>Date Finished Drilling:</b> 3/13/2014 1:20:00 PM	<b>Core Size:</b> 2 in	<b>Boring Total Depth:</b> 25 ft
<b>Logged By:</b> MI & FM	<b>Project Manager:</b> Chris Martell	<b>Depth to Water:</b> NA
<b>Physical Location:</b> W18A- Carteret Ave.		<b>Surface Elevation:</b> 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							
16	5	0.0	dry	FILL		fine to medium SAND, some coarse gravel, (5YR 4/3) reddish brown, medium dense, dry, no odor, no staining.	
17		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
18							P4-W18A-16.5-17.0
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.	
		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.

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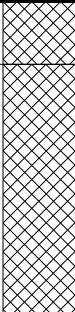
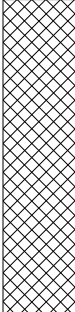
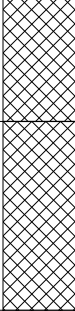
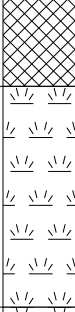
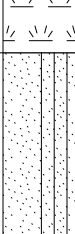
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**Boring ID: P4-W19A**

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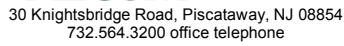
<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> SGS North America	
<b>Project Number:</b> 60240739	<b>Drilling Method:</b> Geoprobe	<b>Coordinates (NJSPNAD83) x:</b> 611232
<b>Date Started Drilling:</b> 3/5/2014 11:40:00 AM	<b>Rig Type:</b>	<b>Coordinates (NJSPNAD83) y:</b> 682835
<b>Date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

**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



<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> SGS North America	
<b>Project Number:</b> 60240739	<b>Drilling Method:</b> Geoprobe	<b>Coordinates (NJSPNAD83) x:</b> 611270.755
<b>Date Started Drilling:</b> 12/12/2014 9:10:00 AM	<b>Rig Type:</b>	<b>Coordinates (NJSPNAD83) y:</b> 682827.642
<b>Date Finished Drilling:</b> 12/12/2014	<b>Core Size:</b> 3.0 in	<b>Boring Total Depth:</b> 20.5 ft
<b>Logged By:</b> SS	<b>Project Manager:</b> Scott Mikaelian	<b>Depth to Water:</b> NA
<b>Physical Location:</b> X19A - Carteret Ave.		<b>Surface Elevation:</b> 11.9 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	
2		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
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-2.0-2.5
4	5						P4-X19A-4.0-4.5
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		0.0	wet	FILL		GGM (70%), little fine gravel, (5GY 5/2) grayish green, loose, wet, no odor, no staining.	
7	5						
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
13	2						P4-X19A-12.0-12.5
14							
15		0.5	saturated	FILL		fine to medium silty SAND, (10YR 5/1) gray, soft, saturated, no odor, no staining.	
16	3.5	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		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.



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**Boring ID: P4-X19A**

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

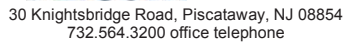
(Note: bgs = below ground surface)

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	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.	
6		0.0	moist	FILL			
7							
8							
9	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.	
10		0.0	slightly moist	FILL			
11		0.0	slightly moist	FILL			
12		0.0	slightly moist	FILL			
13	5					GGM, some sand, (10YR 4/3) brown, medium plasticity, soft, wet.	P4-X19A-14.0-14.5
14				NR			
15		0.0	wet	FILL			
16							
17	5	0.0	moist	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-16.0-16.5 P4-X19A-16.5-17.0 P4-X19A-17.0-17.5
18							
19							
20							
21	5	0.0	moist	PT		PEAT (degraded vegetated material), (10YR 3/3) dark brown, low plasticity, medium dense, moist, slight sulfur odor. Soils consistent with MM. fine silty SAND, some clay, (10YR 5/1) gray, low plasticity, soft, wet. Soils consistent with UNDno.	P4-X19A-18.0-18.5
22		0.0	wet	SP-SM			
23							
24							
25	5	0.0	moist	SP-SM		fine to medium silty SAND, some gravel little clay, (5YR 5/2) reddish gray, low plasticity, dense, moist, (TILL). Soils	P4-X19A-20.0-20.5
26							

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.

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





30 Knightsbridge Road, Piscataway, NJ 08854  
732.564.3200 office telephone

**Boring ID: P4-Y19A**

Page: 1

<b>Project Name:</b> PPG Garfield Ave	<b>Drilling Company:</b> SGS North America	
<b>Project Number:</b> 60240739	<b>Drilling Method:</b> Direct Push	<b>Coordinates (NJSPNAD83) x:</b> 611303.112
<b>Date Started Drilling:</b> 12/8/2014 12:40:00 PM	<b>Rig Type:</b> Geoprobe	<b>Coordinates (NJSPNAD83) y:</b> 682811.3
<b>Date Finished Drilling:</b> 12/8/2014 1:30:00 PM	<b>Core Size:</b> 3.0 in	<b>Boring Total Depth:</b> 17 ft
<b>Logged By:</b> SS	<b>Project Manager:</b> Scott Mikaelian	<b>Depth to Water:</b> N/A
<b>Physical Location:</b> Carteret Avenue		<b>Surface Elevation:</b> 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							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		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 (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		-				2		0.0					
0.6-3.0' FILL: Dark greenish gray (GLEY1 4/1) fine to medium SAND, trace silt, tight		- 1 -				2		0.0					
		-				2		0.0					
		-				3		0.0					
		- 2 -		2	1.2	4	0850	0.0	0.0	0850	N/A	N/A	
3.0-3.2' FILL: Bright green / yellow sand, suspected Chromate Ore Processing Residue (COPR)		-	11			2		0.0					
		- 3 -				3							
		-				10							
		- 4 -		3	2.0	4	0857	0.0	0.0	0857	N/A	N/A	
4.0-6.0' FILL: Dark gray (5YR4/1) fine to medium SAND, trace silt, wood fragments, gravel, glass fragments		-				5		0.0					
		- 5 -				5		0.0					
		-				6		0.0					
		- 6 -		4	2.0	11	0900	0.0	0.0	0900	N/A	N/A	
6.0-7.5' FILL: Dark gray to black fine to medium SAND, with 50% angular gravel (1/4"), loose		-				13		0.0					
		- 7 -				10		0.0					
7.5-8.0' FILL: Bright green, fine SILTY SAND, COPR		-				12		0.0					
		- 8 -		5	1.0	3	0913	0.0	0.0	0913	N/A	N/A	
8.0-9.0' FILL: Greyish green (GLEY1 5/2) tight fine SANDY SILT, little coal fragments		-				2		0.0					
		- 9 -				2							
		-				1							
		- 10 -											



<b>PSEG SC Former Halladay Street Gas Works Site</b> <b>Supplemental Remedial Investigation</b>						<b>SCHOOR DEPALMA</b> <b>Page 2 of 6</b>								
<b>LOG OF SOIL BORING SB-28</b>														
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														
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		
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	
		- - -												
		- 11 -												
			- - -											0930 Sample SB-28(10.5-11.0) for TCL VOC, TCL SVOC, TAL Metals, CN
		- 11 -												
		- - -												
			- 12 -		7	2.0	4	0928	0.0	0.0	0928	N/A	N/A	No staining or odors noted in this spoon
		- - -												
		- 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		
		- - -												
		- 15 -												
			- - -											
		- 16 -												
		- - -												
			- 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 -												
	16.8-18.5' Dark yellowish brown (10YR3/4) PEAT, very fibrous and firm		- 17 -											
		- - -												
		- 18 -												
			- - -											
		- 18 -												
		- - -												
			- 18 -		10	1.5	2	0947	0.0	0.0	0947	N/A	N/A	
		- - -												
		- 19 -												
18.5-23.0' Very dark bluish gray (GLE2 3/1) bands (1" to 1.5") of PEAT and organic CLAY (OH)			- 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						
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	
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						
					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)	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
		- - -											
		- 33 -					4		0.0				
		- - -					4		0.0				
		- 34 -					3		0.0				
		- - -											
32.9-33.4' Reddish brown (2.5YR4/4) fine SANDY SILT (SM)	-	- 33 -											
		- - -											
		- 34 -	18	2.0	1	1119	10.4	0.0	1119	N/A	N/A	Oil material (OM) from 34.5 to 38.0, naphthalene like odors; positive dye test at 36'	
		- - -											
		- 35 -			1		87.0						
		- - -			3		72.0						
		- 36 -			4		118.0						
		- - -											
		- 37 -											
		- - -											
		- 38 -											
		- - -											
- 39 -													
- - -													
33.4-33.7' Dark reddish gray (2.5YR3/1) fine SANDY SILT (SM)	-	- 34 -											
		- - -											
		- 35 -	19	2.0	3	1138	94.0	0.0	1138	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	
		- - -											
		- 36 -			3		58.0						
		- - -			2		284.0						
		- 37 -			1		62.0						
		- - -											
		- 38 -											
		- - -											
		- 39 -											
		- - -											
- 40 -													
- - -													
34.0-38.0' Dark reddish brown (2.5YR3/4) fine SILTY SAND (SM)	-	- 38 -	20	2.0	1	1152	1.0	0.0	1152	N/A	N/A	Sheen and odors noted from 38.0' to 42.7'	
		- - -											
		- 39 -			2		1.0						
		- - -			2		1.0						
		- 40 -			1		1.0						
		- - -											
		- 41 -											
		- - -											
		- 42 -											
		- - -											
		- 43 -											
		- - -											

AECOM Note: Ground surface elevation = 12.0 ft NAVD88

PSEG SC Former Halladay Street Gas Works Site Supplemental Remedial Investigation										SCHOOR DEPALMA Page 5 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. 2.7		UNDIST. N/A		CORE N/A				
CASING N/A			N/A		WATER DEPTH 2.5'		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			
38.0-42.7' Dark reddish brown (2.5YR3/4) fine SANDY SILT (SM)	- 40 -			21	2.0	3	1209	14.2	0.0	1209	N/A	N/A	Sheen and odors noted from 38.0' to 42.7'		
	- - -					4		14.7							
	- 41 -					4		44.3							
	- - -					5		8.7							
	- 42 -			22	2.0	3	1211	0.0	0.0	1211	N/A	N/A		1217 Sample SB-28 (43.5-44.0) for TCL VOC, TCL SVOC, TAL Metals, Total and Amenable CN	
	- - -					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 -			24	2.0	6	1342	0.0	0.0	1342	N/A	N/A				
- - -					8		0.0								
- 47 -					7		0.0								
- - -					6		0.0								
- 48 -			25	2.0	5	1410	0.0	0.0	1410	N/A	N/A				
- - -					7		0.0								
- 49 -					8		0.0								
- - -					8		0.0								
- 50 -															


**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 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"									
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	
48.25-51.8' Dark reddish brown (2.5YR3/4) loose fine SILTY SAND (SM)		- 50 -											1456 Sample SB-28 (50.5-51.0) for TCL VOC, TCL SVOC, TAL Metals, Total and Amenable CN
- -		26	2.0	9	1452	0.0	0.0	1452	N/A	N/A			
- 51 -				10		0.0							
51.8-52.0' Dark reddish brown (2.5YR3/4) bands of SAND SILTY and SILTY CLAY, wet		- -			12		0.0						
- 52 -				11		0.0							
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)		- -	27	0.5	10	1455	0.0	0.0	1455	N/A	N/A	Running sands jamming rods	
- -				11									
- 53 -				12									
- -				13									
- 54 -													
End of Boring at 54'		- -											
- -													
- 55 -													
- -													
- 56 -													
- -													
- 57 -													
- -													
- 58 -													
- -													
- 59 -													
- -													
- 60 -													

[illegible]

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		WATER DEPTH		FIRST		3'					
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					REMARKS
						Number	Recov. (ft)	Penetr. 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
15.0-15.3' Gravel 1" to 2" in diameter, subangular to subrounded			-	11		7	2.0	5	1003	0.0	0.0	1003	N/A	N/A	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
15.3-15.5' Very dark gray (10YR3/1) fine SILTY SAND (SM)			-	12											
15.5-17.2' Dark brown (10YR3/3) PEAT, very fibrous and firm			-	13											
17.2-17.5' Dark reddish gray (2.5YR4/1) organic CLAY, with a single piece of gravel (coarse grained metamorphic, peppery colored)			-	14		9	0.5	10	1157	0.0	0.0	1157	N/A	N/A	
			-	15											
			-	16											
			-	17											
			-	18											
			-	19											
			-	20											

**AECOM Note: Ground surface elevation = 11.7 ft NAVD88**

**PSEG SC Former Halladay Street Gas Works Site  
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**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. BL/6in	Time	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 (GLE2 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 (GLE2 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 (GLE2 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					
		- 25 -				8		0.0					
24.9-25.0' Reddish brown (2.5YR4/4) fine to medium SAND (SW)		- -				11							
25.0-27.0' Reddish brown (2.5YR4/4) fine SILTY SAND (SM)		- 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					
28.0-28.7' Reddish brown (2.5YR4/4) coarse to fine SAND and gravel (GP)		- -				4							
		- 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					
	- -					11		0.0					
		- 40 -											

**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 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"											
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	
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

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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. 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

<b>PSEG SC Former Halladay Street Gas Works Site</b> <b>Supplemental Remedial Investigation</b>						<b>SCHOOR DEPALMA</b> <b>Page 7 of 9</b>					
<b>LOG OF SOIL BORING SB-29</b>											
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	
CASING 4" steel casing to 34'				N/A		WATER DEPTH		FIRST 3'		COMPL. 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)	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 -			6		0.0						
	- -			10		0.0						
	- 62 -			12		0.0						
	- -											
	- 63 -											
	- -											
	- 64 -											
	- -											
62.0-70.0' No Sample Collected	- 65 -											
	- -											
	- 66 -											
	- -											
	- 67 -											
	- -											
	- 68 -											
	- -											
	- 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						
<b>LOG OF SOIL BORING SB-29</b>												
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	
		- - -										
		- - -										
		- - -										
		- - -										
		- - -										
		- - -										
		- - -										
		- - -										
		- - -										
71.5-72.0' Reddish brown (5YR5/3) very soft CLAY and SILTY CLAY, with 10% angular 1/4" gravel	-	- 71 -			7		0.0					
		- - -										
		- - -										
		- - -										
		- - -										
		- - -										
		- - -										
		- - -										
		- - -										
		- - -										
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	
		- - -										
		- - -										
		- - -										
		- - -										
		- - -										
		- - -										
		- - -										
		- - -										
		- - -										
74.0-78.0' No Sample Collected	-	- 73 -			8		0.0					
		- - -										
		- - -										
		- - -										
		- - -										
		- - -										
		- - -										
		- - -										
		- - -										
		- - -										
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

<b>PSEG SC Former Halladay Street Gas Works Site</b> <b>Supplemental Remedial Investigation</b>						<b>SCHOOR DEPALMA</b> <b>Page 9 of 9</b>									
<b>LOG OF SOIL BORING SB-29</b>															
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"											
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

Page 1 of 6

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		
SAMPLER		2" diameter, 2' long split-spoon		southern corner of the Halladay Street / Carteret Avenue intersection.		
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		No odors or other evidence of contamination
		- -				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  
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
CASING			N/A		N/A		UNDIST.	N/A	CORE
CASING HAMMER			WEIGHT		N/A		24HR	N/A	N/A
SAMPLER			2" diameter, 2' long split-spoon		DROP		BORING LOCATION: Western shoulder of Carteret Avenue, 88 ft SE from the southern corner of the Halladay Street / Carteret Avenue intersection.		
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	
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											
		- 14 -		6	0.9	2	1339	0.0	0.0	1339	N/A	N/A	
		3				0.0	0.0						
		3											
		3											
16.0-16.4 Very dark greenish gray (GLE Y1 3/1 10Y) PEAT (PT)		- 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
		2				10.3	0.0						
		1				10.0	0.0						
		2											
16.4-18.4 Very dark greenish gray (GLE Y1 3/1 10Y) organic CLAY (OH), with 10% peat fragments		- 17 -				2							Anaerobic, swampy odors
		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						



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 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			N/A		N/A								
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
20.8-24.0 light gray, SILTY CLAY (CL)		- - -				2		5.2	0.0				
		- 21 -				3		98.8	0.0			Sample SB-52(21.0-21.5) collected at 0919 for TCL SVOC, TCL VOC, TAL Metals, Total and Amenable CN	
		- - -				3							
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	
24.9-25.2 angular gravel/cobble fragments, 1/4" in diameter		- - -				5		20	0.0				
		- 23 -				6		14.3	0.0				
		- - -				6							
25.2-26.0 Reddish brown (2.5YR4/4) fine to medium SAND (SW), trace silt		- 24 -		11	2.0	4	0928	0.0	0.0	0928	N/A	N/A	
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		- - -				5		0.0	0.0				
		- 25 -				7		0.0	0.0				
		- - -				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		- 26 -		12	1.2	6	0933	0.0	0.0	0933	N/A	N/A	
29.4-30.0 Reddish brown (2.5YR4/4) fine SILTY SAND (SM)		- - -				7		0.0	0.0				
		- 27 -				7		0.0	0.0				
		- - -				7							
29.4-30.0 Reddish brown (2.5YR4/4) fine SILTY SAND (SM)		- 28 -		13	2.0	7	0942	0.0	0.0	0942	N/A	N/A	
		- - -				6		0.0	0.0				
		- 29 -				7		0.0	0.0				
		- - -				6		0.0	0.0				
		- 30 -											

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  
Interim Data Submittal No.4

SCHOOR DEPALMA  
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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					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	
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
			- -												
			- 41 -												
			- -												
			- 42 -											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	
			- -												
			- 43 -												
			- -												
			- 44 -											No odors noted in this spoon	
			- -												
- 45 -															
- -															
- 46 -											No odors noted in this spoon				
- -															
- 47 -															
- -															
- 48 -											No odors noted in this spoon				
- -															
- 49 -															
- -															
48.8-50.6 Reddish brown (2.5YR5/4) fine SANDY SILT (ML), with silty clay			- 50 -												

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		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	
48.8-50.6 Reddish brown (2.5YR5/4) fine SANDY SILT (ML), with silty clay		- 50 -		24	1.2		1139	0.0	0.0	1139	N/A	N/A	No odors noted in this spoon
		- -						0.0	0.0				
		- 51 -											
		- -											
50.6-52.0 Reddish brown (2.5YR5/4) fine SILTY SAND (SM)		- 52 -											
		- -											
		- 53 -											
		- -											
52.0-55.2 dark reddish brown (2.5YR3/3) fine to medium SAND (SW), trace silt		- 54 -		25	1.7		1143	0.0	0.0	1143	N/A	N/A	No odors noted in this spoon
		- -						0.0	0.0				
		- 53 -						0.0					
		- -						0.0					
		- 54 -		26	1.2		1155	0.0	0.0	1155	N/A	N/A	Sample SB-54(55.5-56.0) collected at 1157 for TCL VOC, TCL SVOC, TAL Metals, Total and Amenable CN
		- -						0.0	0.0				
		- 55 -						0.0	0.0				
		- -						0.0	0.0				
End of Boring at 56'		- 56 -											
		- -											
		- 57 -											
		- -											
		- 58 -											
		- -											
		- 59 -											
		- -											
		- 60 -											
		- -											

<b>PSEG SC Former Halladay Street Gas Works</b> <b>Interim Data Submittal No.4</b>						<b>SCHOOR DEPALMA</b> <b>Page 1 of 6</b>									
<b>LOG OF SOIL BORING SB-54</b>															
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 N/A		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"		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															
4.0-4.2 FILL: black fill, silt, wood  4.2-6.0 FILL: white gray ash material (AM), clinker															No odors or other evidence of contamination
6.0-6.9 Black fine SAND with silty clay, highly plastic (SP)  6.9-8.4 Disturbed brownish peat (PT) and organic matter															No odors or other evidence of contamination
8.4-10.0 Reddish grayish SILTY SANDY CLAY (CL)															No odors or other evidence of contamination

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

**SCHOOR DEPALMA**  
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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. Resist. BL/6in	Time	(PPM)					
										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									
			- 12 -	5	0.7	2	1512	0.0	0.0	1512	N/A	N/A			
			- -			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							
14.0-20.7 Very dark greenish gray (GLEY1 3/1 10Y), organic CLAY (OH), less than 1% peat fibers			- 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			
			- -			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

PSEG SC Former Halladay Street Gas Works										SCHOOR DEPALMA																
Interim Data Submittal No.4										Page 3 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 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: 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			N/A		N/A																					
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														
14.0-20.7 Very dark greenish gray (GLE1 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	-	10	1.6	4	1544	1.3	0.0	1544	N/A	N/A	Drilling ended here 11-27-06													
24.8-26.0 Reddish brown (2.5YR4/4) fine to medium SAND (SW), trace silt	-	22	-	11	1.2	2	0835	0.0	0.0	0835	N/A	N/A	Drilling resumed here 11-28-06													
26.0-27.2 Greyish red fine to coarse SAND (SW), trace silt	-	23	-	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													
27.2-32.6 Dark reddish gray (5YR4/2) fine to medium SAND (SW), trace silt	-	24	-	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													
	-	25	-																							
	-	26	-																							
	-	27	-																							
	-	28	-																							
	-	29	-																							
	-	30	-																							

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 -											



AECOM Note: Ground surface elevation = 10.2 ft NAVD88

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 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: 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		
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	
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	
42.6-46.3 Reddish brown (2.5YR5/4) fine SANDY SILT (ML)	-	43	-			2		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	
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	
46.3-48.0 Reddish brown (2.5YR5/4) SILTY CLAY (CL), trace fine sand	-	45	-			2		0.0	0.0					
48.0-52.0 Reddish brown (2.5YR5/4) fine SAND (SP), trace silt	-	46	-	22	0.8	2	1047	0.0	0.0	1047	N/A	N/A	No odors this spoon	
48.0-52.0 Reddish brown (2.5YR5/4) fine SAND (SP), trace silt	-	47	-			3		0.0	0.0					
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	
48.0-52.0 Reddish brown (2.5YR5/4) fine SAND (SP), trace silt	-	49	-			3		0.0	0.0					
48.0-52.0 Reddish brown (2.5YR5/4) fine SAND (SP), trace silt	-	50	-			3		0.0	0.0					

AECOM Note: Ground surface elevation = 10.2 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-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		DROP		BORING LOCATION: Eastern shoulder of Carteret Avenue, 95 ft SE from the		
N/A		N/A		N/A		eastern corner of the Halladay Street / Carteret Avenue intersection.		
SAMPLER		2" diameter, 2' long split-spoon		INSPECTOR		Eric Gaulin		
SAMPLER HAMMER		WEIGHT		DROP				
140 lbs.		30"						

[illegible]