Remedial Action Report – Site 137 North (AOC 137-1A and AOC 137-2A) and Site 143 (AOC 143-1) Soil Garfield Avenue Group PPG, Jersey City, New Jersey

Appendix G

Boring Logs

- G-1 Site 137 North
- G-2 Site 143

Boring logs for the remaining sample locations in Site 137 North and Site 143 collected via soil core are included in this package. Logs were not generated for grab samples collected during excavation activities, typically designated by "PB" or "SW" in the Location ID.

Remedial Action Report – Site 137 North (AOC 137-1A and AOC 137-2A) and Site 143 (AOC 143-1) Soil Garfield Avenue Group PPG, Jersey City, New Jersey

Appendix G-1

Site 137 North

ENCD AECOM	Client: PPG Industries	BORING ID:		
ENSR AECOM	Site: Site 137	137-B1		
Start Date:	Project: Site Investigation	Page: 1 of 3		
12/5/2006	Coordinates: X-610943.4 Y-682838.3	Depth of Boring: 32.00		
End Date:	Elevation: 15.53	Geologist: R. Firely		
12/7/2006	Drill Subcontractor: EB/TPI	Driller: Heath Kneller		
Depth (ft) Lithology Description PID		Sample ID Sample Parameters		
0				

	<u> </u>		'	'	`
. 0					
	X X	ASPHALT: Street level ASPHALT		137-B1A(0.4-0.6)	Cr+6, TAL Metals
2+	^	FILL: Dark Brown (10YR 3/3) fine to coarse GRAVEL, little fine Sand and Silt, trace Clay, loose, slightly moist.		137-117(0.4-0.0)	OTTO, TAL Metals
-	× × × × × × × × × × × × × × × × × × ×	FILL: Reddish Gray (5G 5/2) fine SAND and SILT, little medium to coarse Sand, slightly cohesive, slightly moist. (WASTE MUD)		137-B1B (2.5-3.0)	MS/MSD, Cr+6, TAL Metals
4—	× × × × × ×	FILL: Reddish Gray (5G 5/2) fine SAND and SILT, little medium to coarse Sand, slightly cohesive, saturated. (WASTE MUD)	0.0 ppm	137-B1C (4.5-5.0)	Cr+6, TAL Metals
6	× × × × × × × × × × × × × × × ×	FILL: Very Dark Gray (10YR 3/1) medium to coarse GRAVEL (ash and cinders), loose, saturated. FILL: Light Grayish Green SILT and CLAY, cohesive, moist. (WASTE MUD)		137-B1D (5.2-5.7)	Cr+6, TAL Metals
8	* * * * * * * * * * * * * * * * * * *	FILL: Dark Grayish Green, fine SAND, SILT and CLAY, coarse angular Gravel from 10.0-10.3 ft bgs, loose, saturated. (WASTE MUD)	0.5-2.5 ppm		
10 —	× × × × × × × × × ×	NR: No Recovery		137-B1E (9.2-9.7)	Cr+6, TAL Metals
1	1 1	1			•

ENIOD	15001	Client: PPG Industries			BORING ID:			
ENSR	Site: Site 137					37-B1		
Start Date: Project: Site Investigation						of 3		
12/5/200)6	Coordinates: X-610943.4 Y-68283	38.3			Boring: 32.00		
End Date	e:	Elevation: 15.53				t: R. Firely		
12/7/200	16	Drill Subcontractor: EB/TPI			Driller: H	leath Kneller		
(4)	-31				10	10,000		
Depth (ft)	Lithology	Description	PID	San	uble ID	Sample Parameters		
12—	× × × FII × × × × × × × × × × × × × × ×	L: Grayish Green fine SAND, SILT and CLAY, hesive, saturated. (WASTE MUD) L: Grayish Green coarse angular GRAVEL, loose, turated. L: Dark Grayish Green SILT, little Clay and fine and, cohesive, saturated. (WASTE MUD)	0.0-12.1 ppm		37-B1F .2-14.2)	MS/MSD, Cr+6, TAL Metals		
16—		L: Dark Grayish Green SILT, little Clay and fine nd, cohesive, saturated. (WASTE MUD)	33-52.4 ppm					
18—	× × × × × × × × × × × × × × × × × × ×			(17	87-B1G (.2-17.7)	Cr+6, TAL Metals		
	PE	EAT: Black (10YR 2/1) PEAT, moist.			87-B1H 9.2-19.7)	Cr+6, TAL Metals		
20 +	\	R: No Recovery	7.4-24.2					
	PE	EAT: Black (10YR 2/1) PEAT, moist.	ppm					
	CL	AY: Very Dark Gray (10YR 3/1) CLAY grading to AY and SILT, some fine Sand, trace to no Root aterial, cohesive, moist.			37-B1I .0-21.5)	Cr+6, TAL Metals		

ENCD AECON	Client: PPG Industries		BORING	
ENSR AECOM	Site: Site 137	137-B1		
Start Date: 12/5/2006 End Date: 12/7/2006	Project: Site Investigation Coordinates: X-610943.4 Y-68283 Elevation: 15.53	Geologist: R. Firely		
Depth (ft) Lithology	Drill Subcontractor: EB/TPI Description	PID	Driller: Hea	Sample Parameters
22 — NI S/ar GI	R: No Recovery AND AND SILT: Dark Gray (10YR 4/1) fine SAND and SILT, little medium to coarse Sand, trace coarse ravel, slightly cohesive, saturated. AND: Dark Reddish Brown (5YR 3/2) fine SAND ading to fine to medium SAND, some coarse Sand and fine to medium Gravel, loose, saturated.	0.0-5.2 ppm	137-B1J 25.0-26.0)	MS/MSD, Cr+6, TAL Metals
30 — SA	R: No Recovery AND: Dark Reddish Brown (5YR 3/2) fine to medium AND, some coarse Sand, trace fine to medium ravel, loose, saturated.		137-B1K 29.0-29.5)	Cr+6, TAL Metals
' 32 —	R: No Recovery			
NI	ULL: End of Boring at 32 ft.			

ENSR AECOM	Client: PPG Industries	BORING ID:	
ENSK AECOM	Site: Site 137	137-B2	
Start Date:	art Date: Project: Site Investigation Page: 1 of 3		
12/5/2006	Coordinates: X-610981.3 Y-682909.5	Depth of Boring: 32.00	
End Date:	Elevation: 15.66	Geologist: R. Firely	
12/7/2006	Drill Subcontractor: EB/TPI Driller: Heath K		
Depth (ft) Lithology	Description PID	Sample ID Sample Parameters	
0			

_	1 1	V	l l		V -
. 0		<u>v</u>			
		ASPHALT: Street level ASPHALT			
-	× × × × × × × × × × ×	FILL: Dark Brown (10YR 3/3) fine to coarse GRAVEL, little fine to coarse Sand and Silt, loose, slightly moist.		137-B2A(0.4-0.6)	Cr+6, TAL Metals
2—	× × × × × × × × × × × × × × × × × × ×	FILL: Yellowish Brown (10YR 5/8) and Very Bright Green fine SAND and SILT, little coarse Slag and Ash, dense, loose, dry.		137-B2B (2.0-2.5)	Cr+6, TAL Metals
4-	× × × × × × × ×	FILL: Black (10YR 2/1) fine to medium GRAVEL (ash and cinders), slag, loose, moist.	0.0 ppm	137-B2C (3.5-4.0)	Cr+6, TAL Metals
-	× × × × × × × × × × × × × × × × × × ×	FILL: Bright Green SILT, little Clay, trace fine Sand, cohesive, dense, moist. (WASTE MUD)		137-B2D (4.5-5.0)	Cr+6, TAL Metals
6+	× × × × × × × ×				
	× × × × × × × ×				
8+	×××	FILL: Brownish Green fine to coarse GRAVEL, some	0.0 ppm		
	× × × ×	sfine Sand and Silt, loose, saturated.		137-B2E (8.5-9.0)	Cr+6, TAL Metals
	XXX	FILL CILT little fine Cond trace fine to madium Cravel	12.0 ppm	137-B2F (9.0-9.5)	Cr+6, TAL Metals
10 —	× × × × × × × × × × × × × × × × × × ×	FILL: SILT, little fine Sand, trace fine to medium Gravel (translucent crystal-like Light Green material at 3.5 ft bgs), cohesive, moist.	518.0 ppm		

Site: Site 137 Start Date: Project: Site Investigation Page: 2 of 3 12/5/2006 Coordinates: X-610981.3 Y-682909.5 Depth of Boring: 32.00 End Date: Elevation: 15.66 Geologist: R. Firely 12/7/2006 Drill Subcontractor: EB/TPI Driller: Heath Kneller Poeth (10) Intel® Page: 2 of 3 106.0 ppm Pa	ENCD AFCOL	Client: PPG Industries		BORI	NG ID:
12/5/2006 Coordinates; X-610981.3 Y-682909.5 Depth of Boring: 32.00 End Date: Elevation: 15.66 Geologist: R. Firely 12/7/2006 Drill Subcontractor: EB/TPI Driller: Heath Kneller Properties Sample Properties Sam	ENSR AECO			1:	37-B2
12/5/2006 Coordinates: X-610981.3 Y-682909.5 Depth of Boring: 32.00	Start Date:	Project: Site Investigation		Page: 2 d	of 3
Elevation: 15.66 Drill Subcontractor: EB/TPI Detht (M) Drill Subcontractor: EB/TPI Driller: Heath Kneller Description PND Sannye (D) Sannye (D	12/5/2006	Coordinates: X-610981.3 Y-682909	9.5		
Depth (M) Limology Description Description	End Date:	Elevation: 15.66			
12 - X X X X X X X X X X X X X X X X X X	12/7/2006	Drill Subcontractor: EB/TPI		Driller: H	eath Kneller
12 - X X X X X X X X X X X X X X X X X X	Depth (ft) Lithology	Description	PID	Sample ID	Sample Sameters
NR: No Recovery FILL: Dark GrayIsh Green SILT, little Clay, cohesive, saturated. (WASTE MUD) NR: No Recovery FILL: Dark GrayIsh Green SILT, little Clay, cohesive, saturated. (WASTE MUD) NR: No Recovery FILL: Dark GrayIsh Green SILT, little Clay, cohesive, saturated. (WASTE MUD) 137-B2B (13.0-13.5) 137-B2H (17.0-17.5) PEAT: Black (10YR 2/1) PEAT, moist. PEAT: Very Dark Gray (10YR 3/1) CLAY, little Silt, decreasing Root Material (trace to none), cohesive, moist. NR: No Recovery NR: No Recovery PEAT: Very Dark Gray (10YR 3/1) CLAY, little Silt, little Root Material/Peat, cohesive, moist.	^ × ^ × × ×				
FILL: Dark Grayish Green SILT, little Clay, cohesive, saturated. (WASTE MUD) NR: No Recovery NR: No Recovery FILL: Dark Grayish Green SILT, little Clay, cohesive, saturated. (WASTE MUD) NR: No Recovery FILL: Dark Grayish Green SILT, little Clay, cohesive, saturated. (WASTE MUD) 137-B2H (17.0-17.5) 137-B2H (17.0-17.5) Cr+6, TAL Metals (17.6-18.1) PEAT: Very Dark Gray (10YR 3/1) CLAY, little Silt, decreasing Root Material (trace to none), cohesive, moist. NR: No Recovery PEAT: Very Dark Gray (10YR 3/1) CLAY, little Silt, little Root Material Peat, cohesive, moist.	×××				
saturated. (WASTE MUD) 137-B2G (13.0-13.5) NR: No Recovery FILL: Dark Grayish Green SILT, little Clay, cohesive, saturated. (WASTE MUD) 18- PEAT: Black (10YR 2/1) PEAT, moist. PEAT: Very Dark Gray (10YR 3/1) CLAY, little Silt, decreasing Root Material (trace to none), cohesive, moist. NR: No Recovery NR: No Recovery PEAT: Very Dark Gray (10YR 3/1) CLAY, little Silt, decreasing Root Material (trace to none), cohesive, moist. 20- NR: No Recovery PEAT: Very Dark Gray (10YR 3/1) CLAY, little Silt, little Root Material (trace to none), cohesive, moist.	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		0.0 ppm		
18 - NR: No Recovery PEAT: Black (10YR 2/1) PEAT, moist. PEAT: Very Dark Gray (10YR 3/1) CLAY, little Silt, decreasing Root Material (trace to none), cohesive, moist. NR: No Recovery NR: No Recovery NR: No Recovery PEAT: Very Dark Gray (10YR 3/1) CLAY, little Silt, little Root Material/Peat, cohesive, moist.	- × × × × × × × × × × × × × × × × × × ×	saturated. (WASTE MUD)	-		Cr+6, TAL Metals
NR: No Recovery FILL: Dark Grayish Green SILT, little Clay, cohesive, saturated. (WASTE MUD) PEAT: Black (10YR 2/1) PEAT, moist. PEAT: Very Dark Gray (10YR 3/1) CLAY, little Silt, decreasing Root Material (trace to none), cohesive, moist. NR: No Recovery PEAT: Very Dark Gray (10YR 3/1) CLAY, little Silt, little Root Material (trace to none), cohesive, moist. 20 NR: No Recovery PEAT: Very Dark Gray (10YR 3/1) CLAY, little Silt, little Root Material/Peat, cohesive, moist.	14			(10.0 10.0)	
FILL: Dark Grayish Green SILT, little Clay, cohesive, saturated. (WASTE MUD) 137-B2H (17.0-17.5) PEAT: Black (10YR 2/1) PEAT, moist. PEAT: Very Dark Gray (10YR 3/1) CLAY, little Silt, decreasing Root Material (trace to none), cohesive, moist. NR: No Recovery PEAT: Very Dark Gray (10YR 3/1) CLAY, little Silt, little Root Material (trace to none), cohesive, moist.	× × × × × × × ×				
FILL: Dark Grayish Green SILT, little Clay, cohesive, saturated. (WASTE MUD) 137-B2H (17.0-17.5) PEAT: Black (10YR 2/1) PEAT, moist. PEAT: Very Dark Gray (10YR 3/1) CLAY, little Silt, decreasing Root Material (trace to none), cohesive, moist. NR: No Recovery PEAT: Very Dark Gray (10YR 3/1) CLAY, little Silt, little Silt, little Root Material/Peat, cohesive, moist.	16 — XXX	NR: No Recovery			
PEAT: Black (10YR 2/1) PEAT, moist. PEAT: Very Dark Gray (10YR 3/1) CLAY, little Silt, decreasing Root Material (trace to none), cohesive, moist. NR: No Recovery PEAT: Very Dark Gray (10YR 3/1) CLAY, little Silt, little Root Material/Peat, cohesive, moist.	×××		0.0 ppm		
PEAT: Black (10YR 2/1) PEAT, moist. PEAT: Very Dark Gray (10YR 3/1) CLAY, little Silt, decreasing Root Material (trace to none), cohesive, moist. NR: No Recovery PEAT: Very Dark Gray (10YR 3/1) CLAY, little Silt, little Root Material/Peat, cohesive, moist. 2.3 ppm 137-B2J (20.0-20.5)	× × × ×			(17.0-17.5)	Cr+6, TAL Metals
PEAT: Very Dark Gray (10YR 3/1) CLAY, little Silt, decreasing Root Material (trace to none), cohesive, moist. NR: No Recovery PEAT: Very Dark Gray (10YR 3/1) CLAY, little Silt, little Root Material/Peat, cohesive, moist. 2.3 ppm 137-B2J (20.0-20.5)	18+	PEAT: Black (10YR 2/1) PEAT, moist.			Cr+6, TAL Metals
PEAT: Very Dark Gray (10YR 3/1) CLAY, little Silt, little Root Material/Peat , cohesive, moist. 2.3 ppm 137-B2J (20.0-20.5) (20.0-20.5)	- TT 1	decreasing Root Material (trace to none), cohesive,			
PEAT: Very Dark Gray (10YR 3/1) CLAY, little Silt, little Root Material/Peat , cohesive, moist.	20 +	NR: No Recovery	22 nnm	137-R2 I	Cr+6 TAI Matale
			2.3 ρριτι		OITO, IAL IVICIAIS

ENOR LEGG	Client: PPG Industries		BORI	NG ID:
ENSR AECO	Site: Site 137			37-B2
Start Date:	Project: Site Investigation		Page: 3	of 3
12/5/2006	Coordinates: X-610981.3 Y-68290	9.5	Depth of	Boring: 32.00
End Date:	Elevation: 15.66		Geologis	t: R. Firely
12/7/2006	Drill Subcontractor: EB/TPI		Driller: F	leath Kneller
Depth (#1) Lithology	Description	PID	Sample ID	Sample Parameters
22 —	CLAY AND SAND: Very Dark Gray (10YR 3/1) fine SAND and CLAY, some Silt, no Organic Material, cohesive, moist.		137-B2K (22.2-22.7)	Cr+6, TAL Metals
24	CLAY AND SAND: Very Dark Gray (10YR 3/1) fine SAND and CLAY, some Silt, no Organic Material, cohesive, moist.	0.0 ppm		
26 —	SAND: Dark Reddish Brown (5YR 3/3) fine SAND grading to fine to medium SAND, little coarse Sand and ine to medium Gravel, loose, saturated.		137-B2L (25.0-25.5)	Cr+6, TAL Metals
	SAND: Dark Reddish Brown (5YR 3/3) fine SAND, some medium Sand, little coarse Sand and fine Gravel, bose, saturated.	0.0 ppm	137-B2M (29.0-29.5)	Cr+6, TAL Metals
32				

NULL: End of Boring at 32 ft.

ENCD AECOM	Client: Pl	PG Industries				BORI	NG ID:
ENSR AECOM	Site: Si	te 137				13	87-B3
Start Date:	Project: Site	e Investigation				Page: 1 o	f 4
10/10/2006	10/10/2006 Coordinates: X-611004.1 Y-682794.8				Depth of Boring: 36.00		
End Date:	Elevation: 14.	94				Geologist: M. Merdinger	
10/10/2006	10/10/2006 Drill Subcontractor: TPI				Driller: Heath Kneller		
Depth (ft) Lithology		Description		PID	Sar	mple ID	Sample Parameters

0					
	× × × × × × × × × × × × × × × × × × ×	CONCRETE: Concrete floor.	0.0 ppm		
_	× × × × × × × × × × × × × × ×	FILL: Olive Gray (5Y 4/2) SILT, little Clay, 5% COPR, dry. No odor. (WASTE MUD)	0.0 ppm	137-B3A (0.5-1.0)	Cr+6, TAL Metals
2—	× × × × × × × ×		0.0 ppm		
	× × × × × × × ×	FILL: Olive Gray (5Y 4/2) SILTY CLAY, trace Gravel, Lime Green staining, 5% COPR, dry. No odor. (WASTE MUD)	9.1 ppm		
4—	× × × × × × × ×		0.0 ppm	137-B3B (4.0-4.5)	Cr+6, TAL Metals
6—	× × × × × ×	FILL: Dark Gray (5Y 4/1) GRAVEL, some Silt, wet. No odor. FILL: Olive Gray (5Y 4/2) CLAY, little Silt, Lime-green			
	× × × × × × ×	staining, 5% COPR, firm, moist. No odor. (WASTE MUD) FILL: Dark Gray (5Y 4/1) medium coarse GRAVEL,			
8-	××	NR: No Recovery	3.7 ppm	137-B3C	Cr+6, TAL Metals
	× × × × × ×	FILL: Dark Gray (5Y 4/1) medium coarse GRAVEL, little Silt, 5% COPR, wet. No odor. FILL: Olive Gray (5Y 4/2) SILTY CLAY, little very fine		(8.0-8.5)	
	× × × × × ×	Sand, interbedded Gray Gravel at 7.4 ft bgs, Limegreen staining, 50% COPR, wet. Yellow water. Odor. (WASTE MUD)	4.3 ppm		
10+	××		1.7 ppm		

ENCD AECONA	Client: PPG Industries		В	ORING ID:
ENSR AECOM	Site: Site 137			137-B3
Start Date:	Project: Site Investigation		Page	e: 2 of 4
10/10/2006	Coordinates: X-611004.1 Y-68279	4.8	· ·	h of Boring: 36.00
End Date:	Elevation: 14.94			ogist: M. Merdinger
10/10/2006	Drill Subcontractor: TPI		Drille	r: Heath Kneller
Debty (4)	Description	PID	Sample ID	sr: Heath Kneller Sample Parameters
× × × × × × × × × × × × × ×	:: No Recovery	-		
	L: Olive Gray (5Y 4/2) SILTY CLAY, little very fine nd, interbedded Gray Gravel at 7.4 ft bgs, Lime-	0.0 ppm	137-B3D (12.0-12.5)	Cr+6, TAL Metals
$ \hat{\times} \times $ gre	een staining, 50% COPR, wet. Yellow water. Odor. ASTE MUD)	0.0 ppm		
14 —		0.0 ppm 6.9 ppm		
16 — × × × × × × × × × × × × × × × × × ×		6.9 ppm		
× × × × × × × × × × × × × × × × × × ×		10.5 ppm		
18 —		15.0 ppm		
	AT: Reddish Black (10R 2.5/1) PEAT (Meadow t), Organics, firm, moist. Sulfur odor.	16.5 ppm	137-B3E (19.0-19.5)	Cr+6, TAL Metals

ENCD AECOM	Client: PPG Industries		BORING ID:
ENSR AECOM	Site: Site 137		137-B3
Start Date: Project: Site Investigation Page: 3 of 4			Page: 3 of 4
10/10/2006	Coordinates: X-611004.1	Depth of Boring: 36.00	
End Date:	Elevation: 14.94		Geologist: M. Merdinger
10/10/2006	10/10/2006 Drill Subcontractor: TPI		
Depth (ft) Lithology	Description	PID SE	Sample ID Sample Parameters

	# # # #		19.0 ppm	137-B3F (21.0-21.5)	Cr+6, TAL Metals
22—	4 4 4		50.1 ppm		
	4 4 4		40.0 ppm		
24 —			6.7 ppm		
_		CLAY: Dark Gray (Gley N4/0) CLAY, trace semi-round Gravel, moist. No odor.	4.0 ppm	137-B3G (24.5-25.0)	Cr+6, TAL Metals
26 —		SAND: Weak Red (10R 4/2) coarse SAND, some small round Gravel and Silt, wet. No odor.	3.5 ppm		
		NR: No Recovery			
28 —		SILTY SAND: Red (10R 4/6) very fine SILTY SAND, loose, wet. No odor.	0.0 ppm	137-B3H (28.0-28.5)	Cr+6, TAL Metals
			7.8 ppm		
30 —		SAND: Red (10R 4/6) very fine to fine SAND, trace Silt, firm, wet. No odor.			

ENSR AECO		Client: PPG Industries			BORI	NG ID:
		Site: Site 137			13	37-B3
Start Da	nte:	Project: Site Investigation			Page: 4 o	f 4
10/10/20	006	Coordinates: X-611004.1 Y-68279	4.8		Depth of E	Boring: 36.00
End Dat		Elevation: 14.94				M. Merdinger
10/10/20		Drill Subcontractor: TPI			Driller: He	eath Kneller
Depth (ft)	Lithology	Description	PID	Sar	nple ID	eath Kneller Sample Parameters
		R: No Recovery				
32 —	••••••••••••••••••••••••••••••••••••••	AND: Red (10R 4/6) very fine to fine SAND, trace Silt Red very fine SILTY SAND from 33.0-33.2 ft bgs), m, wet. No odor.			37-B3I .0-32.5)	Cr+6, TAL Metals
34 —						
36	N	R: No Recovery				
30	N	ULL: End of Boring at 36 ft.				

ENCD AECO	Client: PPG Industries			NG ID:
ENSR AECO	Site: Site 137		1:	37-B4
Start Date:	Project: Site Investigation		Page: 1 d	of 3
12/6/2006	Coordinates: X-610954.8 Y-68269	5.0		Boring: 32.00
End Date:	Elevation: 14.91			t: P. Kelly, R. Firely
12/8/2006	Drill Subcontractor: EB/TPI		Driller: H	leath Kneller
Depth (ft) Lithology	Description	PID	Sample ID	Sample Parameters
0				
× × × × × ×	FILL: Coarse GRAVEL with plastic Vapor Barrier at 0.9 ft bgs.			
- × × × × × ×	FILL: Dark Brown SILT with some Clay, little fine to medium Gravel, little Glass peices, moist.	0.0 ppm	137-B4A (0.9-1.4)	Cr+6, TAL Metals
× ×	FILL: Gray-green SILT, some fine Sand and fine	0.0 ppm		
2- × × × × × ×	Gravel, wet.		137-B4B(2.0-2.5) 137-B4BD(2.0-2.5)	Cr+6, TAL Metals
× × × ×				
× × × ×				
4		0.0 ppm		
× × × ×	FILL: Dark Grayish-Green Waste Mud, SILT, little Clay, saturated, cohesive.			
× × × × ×				
6— ×××			407 D40	
×××			137-B4C (6.0-6.5)	Cr+6, TAL Metals
- × × × ×				
×××				
8+ ×××	FILL: No Recovery			
× × × ×	FILL: Dark Grayish-Green Waste Mud, SILT, little Clay, saturated, cohesive.	0.0-0.2 ppm	137-B4D	Cr+6, TAL Metals
10 — X X X X X X X X X X X X X X X X X X	FILL: Dark Yellowish Brown (10YR 3/6) to Black (10YR 2/1) fine to coarse GRAVEL, ASH, and CINDERS, some fine Sand and Silt, trace waste mud (Grayish-Green fine Sand and Silt), saturated, loose.		(8.5-9.0)	
× × × × × ×				

ENION AECON	Client: PPG Industries		BORI	NG ID:	
ENSR AECOM	Site: Site 137		1:	37-B4	
Start Date:	Project: Site Investigation		Page: 2 d	of 3	
12/6/2006	Coordinates: X-610954.8 Y-68269	5.0	Depth of	Boring: 32.00	
End Date:	Elevation: 14.91		Geologist	:: P. Kelly, R. Firely	
12/8/2006	Drill Subcontractor: EB/TPI			Driller: Heath Kneller	
Depth (ft) Lithology	Description	PID	Sample ID	Sample	
12 -	LL: No Recovery LL: Very Dark Gray (10YR 3/1) to Dark Gray (10YR I) fine to medium GRAVEL, ASH, and CINDERS, le fine to medium Sand and Silt, saturated, loose. ght sheen and petro-like odors at 14.0-14.2 feet.	0.0 ppm	137-B4E (12.5-13.5)	Cr+6, TAL Metals	

12 —	× × × × × × × × × × × × × × × × × × ×	FILL: No Recovery FILL: Very Dark Gray (10YR 3/1) to Dark Gray (10YR 4/1) fine to medium GRAVEL, ASH, and CINDERS, little fine to medium Sand and Silt, saturated, loose. Slight sheen and petro-like odors at 14.0-14.2 feet.	0.0 ppm	137-B4E (12.5-13.5) 137-B4ED (12.5-13.5)	Cr+6, TAL Metals
14 —	* * * * * * * * * * * * * * * * * * *				
16 —	× × × × × × × × × × × × × × × × × × ×	FILL: No Recovery FILL: Dark Gray (10YR 4/1) fine to medium GRAVEL,	0.0 ppm		
_	× × × × × × × × × × × ×	ASH, and CINDERS, some fine Sand and Silt, saturated, loose.		137-B4F (16.5-17.0)	Cr+6, TAL Metals
18 —	# # # # # # # # # # # # # # # # # # #	PEAT: Black (10YR 2/1) PEAT		137-B4G (17.7-18.2)	Cr+6, TAL Metals
		NR: No Recovery			
20 —		PEAT: Very Dark Gray (10YR 3/1) PEAT, Black (10YR 2/1) increased organic material at 23.0-23.2 feet	0.7-0.2 ppm	137-B4H (20.0-20.5)	Cr+6, TAL Metals

ENICD AECOI	Client: PPG Industries			NG ID:
ENSR AECO	Site: Site 137	1:	137-B4	
Start Date:	Project: Site Investigation		of 3	
12/6/2006	Coordinates: X-610954.8 Y-68269	5.0		Boring: 32.00
End Date:	Elevation: 14.91			t: P. Kelly, R. Firely
12/8/2006	Drill Subcontractor: EB/TPI			leath Kneller
Depth (ft) Lithology	Description	PID	Sample ID	Sample Parameters
22 +		_	137-B4I (22.0-22.5)	Cr+6, TAL Metals
	NR: No Recovery SILT AND CLAY: Dark Gray (10YR 4/1) SILT and CLAY, trace fine Sand and Silt with little Clay, saturated, cohesive.	N/A	137-B4J (24.0-24.5)	Cr+6, TAL Metals
	NR: No Recovery SAND AND SILT: Dark Reddish Brown (5YR 3/3) fine SAND and SILT, some coarse Gravel, saturated, loose.	0.0 ppm	137-B4K (28.0-28.5)	Cr+6, TAL Metals
32	NR: No Recovery			
/1	NULL: End of Boring at 32 ft.			

ENCD LECON	Client: PPG Industries	BORING ID:	
ENSR AECOM	Site: Site 137	137-B5	
Start Date:	Project: Site Investigation	Page: 1 of 4	
10/10/2006	Coordinates: X-611049.0 Y-682746.2	Depth of Boring: 36.00	
End Date:	Elevation: 15.00	Geologist: M. Merdinger	
10/10/2006	Drill Subcontractor: TPI	Driller: Heath Kneller	
Depth (ft) Lithology	Description PID	Sample ID Sample Parameters	

0					
	× × × × × × × × × × × × × × × × × × ×	CONCRETE: Concrete floor (staining). No sample taken.	0.0 ppm	137-B5A	MS/MSD, Cr+6, TAL
-	^ x ^ x × x × x	FILL: Dark Reddish Brown (5YR 3/2) SILT, little Gravel, dry. No odor.	0.0 ppm	(0.5-1.0)	Metals
2-	× × × × × × × × × × × × × × × × × × ×	FILL: Lime Green SILTY CLAY, 20% COPR, dry. No odor.	0.0 ppm		
	× × × ×	FILL: Black (Gley N2.5/0) ROCK fragments, Slag, Rust and Lime Green staining, dry. No odor.	0.0 ppm		
4	× × × × × × × × × × × × × × × × × × ×	FILL: Olive Gray (5Y 5/2) CLAY, some Lime Green staining, little Silt, trace Gravel, 15% COPR, moist.	0.0 ppm	137-B5B(4.0-4.5) 137-B5BD(4.0-4.5)	Cr+6, TAL Metals
-	×^× × × × × × ×	FILL: Olive Gray (5Y 5/2) SILTY CLAY. Little fine Sand and Gravel, 15% COPR, wet. (WASTE MUD)	0.0 ppm		
6+		NR: No Recovery	0.0 ppm		
-			0.0 ppm		
8+	× × × ×	FILL: Olive Gray (5Y 5/2) SILTY CLAY. Little fine Sand and Gravel, 50-90% COPR, heavy Lime Green	0.0 ppm	137-B5C (8.0-8.5)	Cr+6, TAL Metals
_	^	staining, wet. Odor. (WASTE MÚD)	0.0 ppm		
10	× × × × × × × × × × ×		0.0 ppm		

ENCD AECON	Client: PPG Industries		BORI	NG ID:
ENSR AECOM	Site: Site 137		1:	37-B5
Start Date:	Project: Site Investigation		Page: 2 c	of 4
10/10/2006	Coordinates: X-611049.0 Y-68274	6.2		Boring: 36.00
End Date:	Elevation: 15.00		·	: M. Merdinger
10/10/2006	Drill Subcontractor: TPI		Driller: H	eath Kneller
Depth (ft) Lithology	Description	PID	Sample ID	Sample Parameters
Debr. Lithe	Descri	`	Sanif	Sa. Para.
× × × × × × × × × × ×		0.0 ppm		
12 × × × × × × × × × × × × × × × × ×		0.0 ppm		
× × ×			137-B5D (12.5-13.0)	Cr+6, TAL Metals
	L: Dark Gray (5Y 4/1) GRAVEL, some Silt, wet.	0.0 ppm		
14 - × × FII × × an	L: Olive Gray (5Y 5/2) SILTY CLAY, little fine Sand d Gravel, 50-90% COPR, wet. Ammonia odor.	0.0 ppm		
× × × × × × × × × × × × × × × × × × ×		0.0 ppm		
16 —		0.0 ppm	137-B5E (16.0-16.5)	Cr+6, TAL Metals
× ^ × ^ × × × × × × × × × × ×		0.0 ppm		
18 —		0.0 ppm		
× × × × × ×		0.0 ppm		
20 — × × × PE Or	AT: Very Dark Gray (5Y 3/1) PEAT (Meadow Mat), ganics, firm, moist. Sulfur odor.	0.0 ppm		
		0.0 ppm	137-B5F (21.0-21.5)	Cr+6, TAL Metals

ENCD AECON	Client: PPG Industries		BORIN	
ENSR AECOM	Site: Site 137		13	7-B5
Start Date:	Project: Site Investigation		Page: 3 of	4
10/10/2006	Coordinates: X-611049.0 Y-682746	5.2		oring: 36.00
End Date:	Elevation: 15.00		· · · · · · · · · · · · · · · · · · ·	M. Merdinger
10/10/2006	Drill Subcontractor: TPI		Driller: Hea	ath Kneller
Depth (ft) Lithology	Description	PID	ample ID	Sample Parameters
· · · · · · · · · · · · · · · · · · ·	·	•	<u> </u>	
22 +		0.9 ppm		
TT			137-B5G 23.0-23.5)	Cr+6, TAL Metals
24 - NF	R: No Recovery	0.0 ppm		
PE PE Or	EAT: Very Dark Gray (5Y 3/1) PEAT (Meadow Mat), ganics, firm, moist. Sulfur odor.		137-B5H :5.0-25.5)	Cr+6, TAL Metals
26 — — — —		0.0 ppm		
	AY: Dark Greenish Gray (5G 4/1) CLAY, little coarse and, firm, moist. No odor.		137-B5I 27.0-27.5)	Cr+6, TAL Metals
SII	LTY SAND: Weak Red (2.5YR 4/2) fine to coarse LT SAND, trace Gravel, wet. No odor.		11.0 21.0)	
28 + NF	R: No Recovery	0.0 ppm		
	RAVEL AND CLAY: Dark Gray (Gley N4/0) GRAVEL d interbedded CLAY, some fine Sand, wet. No odor.	0.0 ppm		
30 — THE THE SIL	LTY SAND: Red (10R 4/6) very fine to coarse SAND, me Silt, trace Gravel, wet. No odor.	0.0 ppm		
NF NF	R: No Recovery		137-B5J 80.5-31.0)	Cr+6, TAL Metals
32 — ——————————————————————————————————	LTY SAND: Red (10R 4/6) very fine SILTY SAND, ose, wet. No odor.	0.0 ppm		

FNICE	AFCCIA	Client: PPG Industries		BOR	ING ID:
ENSR	AECOM	Site: Site 137		1	37-B5
Start D	ate:	Project: Site Investigation		Page: 4	of 4
10/10/2	2006	Coordinates: X-611049.0 Y-682746	3.2	Depth of	Boring: 36.00
End Da	ate:	Elevation: 15.00		Geologis	t: M. Merdinger
10/10/2	2006	Drill Subcontractor: TPI			leath Kneller
Depth (ft)	Lithology	Description	PID	Sample ID	Sample Parameters
34 —		.ND: Red (10R 4/6) very fine to fine SAND, trace Silt, n, wet. No odor.	0.0 ppm 0.0 ppm 0.0 ppm	137-B5K	Cr+6, TAL Metals
36	NF.	R: No Recovery		(35.0-35.5)	
30 —	NL	JLL: End of Boring at 36 ft.			

ENICE	A E COLL	Client: PPG Industries			BORII	NG ID:
ENSR AECON		Site: Site 137			137-B6	
Start Date		Project: Site Investigation			Page: 1 o	f 3
12/4/2006	3	Coordinates: X-611049.5 Y-68262	3.7		Depth of I	Boring: 28.00
End Date		Elevation: 14.79			Geologist	
12/6/2006		Drill Subcontractor: EB/TPI				eath Kneller
Debth (41)	Tithology	Description	PID	Sam	ple ID	Sample Parameters
0						
	AS	SPHALT: ASPHALT				
+	× × FII	LL: Dark Reddish Brown (5YR 3/4) medium to coarse			7-B6A 9-1.3)	MS/MSD, Cr+6, TAL Metals
	× × SA	SAND and fine to medium GRAVEL, slightly moist,		(0.8	7-1.3)	ivictals
	\times $^{\circ}$ \times $^{\circ}$ $^{\circ}$ $^{\circ}$	ose, 100% COPR.				
2+	×Ĵ×Ĵ					
	×××					
	×Û×Û FIL	LL: (10YR 3/3) fine to medium SAND and SILT, little			'-B6B 5-3.0)	Cr+6, TAL Metals
		e to coarse Gravel, trace brick fragments, slightly		,		
	×××	pist, slightly cohesive, loose.				
	×××					
4+			0.1 ppm			
	XXX FIL	LL: Dark Greenish Gray (5G 4/1) fine to medium]		7-B6C 2-4.7)	Cr+6, TAL Metals
	$^{\sim} \times ^{\sim} \times SA $	AND and SILT, little fine to coarse Gravel and		(4.2		
1	A A .	oncrete, saturated at 4.1 feet (100% waste mud), ose)			
	^x^x		/			
		LL: Dark Greenish Gray (5G 4/1) and (2.5YR 4/2) at 5-2.8 feet fine SAND and SILT, trace coarse Sand				
6—		d Grave, trace Clay, saturated, cohesive.				
	×××	,				
	×××					
	× ×		1			

FILL: Greenish Gray (5G 6/2) with (2.5YR 4/2) at 2.9-3.3 feet 100% waste MUD, fine SAND and SILT, trace

medium to coarse Sand, saturated, cohesive.

NR: No Recovery

8

10

0.0 ppm

137-B6D(8.2-8.7)

137-B6DD(8.2-8.7)

Cr+6, TAL Metals

TAICD A FOO	Client: PPG Industries		BORI	NG ID:
ENSR AECC	Site: Site 137		1:	37-B6
Start Date:	Project: Site Investigation		Page: 2 d	of 3
12/4/2006	Coordinates: X-611049.5 Y-68262	3.7		Boring: 28.00
End Date:	Elevation: 14.79			: R. Firely
12/6/2006	Drill Subcontractor: EB/TPI		Driller: H	eath Kneller
Depth (ft) Lithology	Description	PID	Sample ID	Sample Parameters
12 — X X X X X X X X X X X X X X X X X X	NR: No Recovery FILL: Greenish Gray (5G 6/2) with (2.5YR 4/2) at 2.9-3.3 feet 100% waste MUD, fine SAND and SILT, trace medium to coarse Sand, saturated, cohesive.	0.0 ppm _	137-B6E (12.2-12.7)	Cr+6, TAL Metals
× × × × × × × × × ×	FILL: Dark Reddish Brown (5YR 3/2) fine to coarse SAND and GRAVEL, saturated, loose.		137-B6F (14.5-15.0)	Cr+6, TAL Metals
	NR: No Recovery	1		
16 + × ^ ×	FILL: WASH	26.2 ppm		
	PEAT: Very Dark Gray (10YR 3/1) PEAT		137-B6G (16.3-16.8)	Cr+6, TAL Metals
18 - 44 44	NR: No Recovery			
20	CLAY: Very Dark Gray (10YR 3/1) CLAY, some Silt,	4.5-0.8 ppm	137-B6H (20.0-20.5)	Cr+6, TAL Metals

ENSR AECO	M Client: PPG Industries Site: Site 137			ING ID: 37-B6
Start Date: 12/4/2006	Project: Site Investigation	20.7	Page: 3	
End Date: 12/6/2006	Coordinates: X-611049.5 Y-68262 Elevation: 14.79 Drill Subcontractor: EB/TPI	23.7	Geologi	f Boring: 28.00 st: R. Firely Heath Kneller
Depth (ft) Lithology	Description	PID	Sample ID	Sample Parameters
26 —	trace Organics, moist, cohesive. CLAY: Very Dark Gray (10YR 3/1) CLAY, some Silt, trace Organics, moist, cohesive. SAND: Dark Reddish Brown (5YR 3/3) SAND, saturated, loose NR: No Recovery	6.1 ppm	137-B6I (24.0-24.5) 137-B6J (26.3-26.8)	Cr+6, TAL Metals Cr+6, TAL Metals
	NULL: End of Boring at 28 ft.	1		1

ENCD AECOM	Client: PPG Industrie	es	BORING ID:
ENSR AECOM	Site: Site 137		137-B7
Start Date:	Project: Site Investigat	tion	Page: 1 of 3
12/4/2006	Coordinates: X-611248.5	Y-682813.9	Depth of Boring: 28.00
End Date:	Elevation: 13.44		Geologist: R. Firely
12/6/2006	Drill Subcontractor: EB/TI	PI	Driller: Heath Kneller
Depth (ft) Lithology	Description	PID	Sample ID Sample Parameters

. 0_					
	^ ^ ×	ASPHALT: ASPHALT		137-B7A (0.2-0.7)	Cr+6, TAL Metals
-	× × ×	FILL: Very Dark Gray (10YR 3/1) fine to coarse GRAVEL, little fine Sand and Silt, dry, loose.		137-B7B (0.7-1.2)	MS/MSD, Cr+6, TAL Metals
2-	* * * * * * * * * * * * * * * * * *	FILL: Dark Reddish Brown (5YR 3/2) fine SAND and SILT, and Grayish Green (5G 5/2) CONCRETE pieces, some medium to coarse SAND, trace Gravel, dry, groundwater at 2.1 feet, loose.			
4-	- × × × × × × × × × × × ×		0.0 ppm		
-	× × × × × ×	FILL: Dark Greenish Gray (5G 4/1) SILT (waste mud), saturated, loose to slightly cohesive.		137-B7C (4.5-5.0)	Cr+6, TAL Metals
6-	-				
8-	× × × × × ×		0.0 ppm		
-	× × × × × × × × × × × × × × × × × × ×	FILL: Dark Greenish Gray (5G 4/1) SILT (waste mud), saturated, loose to slightly cohesive.	о.о ррпп	137-B7D (8.5-9.5)	MS/MSD, Cr+6, TAL Metals
10 -	- × × × × × ×				

ENCD	AFCOL	Client: PPG Industries				NG ID:
ENSR	AECON	Site: Site 137			1	37-B7
Start Dat	te:	Project: Site Investigation			Page: 2	of 3
12/4/200	6	Coordinates: X-611248.5 Y-68281	3.9			Boring: 28.00
End Date	e:	Elevation: 13.44			Geologis	t: R. Firely
12/6/200		Drill Subcontractor: EB/TPI				leath Kneller
Depth (ft)	Lithology	Description	PID	Sarr	nple ID	Sample Parameters
12 —	×××F	IR: No Recovery FILL: Dark Greenish Gray (5G 4/1) SILT (waste mud), aturated, loose to slightly cohesive.	0.0-2.6 ppm		7-B7E 5-13.0)	Cr+6, TAL Metals
	m a	FILL: Black (10YR 2/1) fine to coarse SAND and fine to nedium GRAVEL, saturated, loose. MGP-like odor and sheen. PEAT: Very Dark Gray (10YR 3/1) PEAT			37-B7F .5-15.0)	Cr+6, TAL Metals
16 —		NR: No Recovery	00440			
18 —		PEAT: Very Dark Gray (10YR 3/1) PEAT	3.0-116 ppm	13 (16.	7-B7G .5-17.0)	Cr+6, TAL Metals
20 —		PEAT: PEAT	6.3 ppm		7-B7H .2-20.7)	Cr+6, TAL Metals

ENSR AECOM	Client: PPG Industries Site: Site 137			NG ID: 37-B7
Start Date: 12/4/2006 End Date: 12/6/2006	Project: Site Investigation Coordinates: X-611248.5 Y-682813 Elevation: 13.44 Drill Subcontractor: EB/TPI	3.9	Geologis Driller: H	Boring: 28.00 t: R. Firely
Depth (ft) Lithology	Description	PID	Sample ID	Sample
22 — NR	AY: Dark Gray (10YR 4/1) CLAY grading to fine nd, Silt and Clay, saturated, cohesive. The second street is the second street in the second street is the second street in the second street in the second street is the second street in the second street in the second street is the second street in the second street in the second street is the second street in the second street in the second street is the second street in the se	0.0 ppm	137-B7I (24.0-24.5)	Cr+6, TAL Metals
Sal coh	nd, Silt and Clay with coarse Gravel, saturated, nesive. ND: Dark Reddish Brown (5YR 3/2) fine SAND adding to fine to medium Gravel and coarse Sand, curated, loose.		137-B7J (24.5-25.0)	Cr+6, TAL Metals
28 🗸 🗀	JLL: End of Boring at 28 ft.			

ENSR AECOM		Client: PPG Industries		BORING ID:		
ENSK	AECOM	Site: Site 137		137	7-B9	
Start Date:		Project: Site Investigation		Page: 1 of 3		
1/23/200	07	Coordinates: X-610859.4 Y-68272	3.5	Depth of Bori	ng: 28.00	
End Dat		Elevation: 16.55		Geologist: P		
1/23/200		Drill Subcontractor: Terra Probe Incorpora		Driller: Heath	n Kneller	
Depth (ft)	Lithology	Description	PID (ppm)	Sample ID	Sample Sample	
0						
	^×^×\ASF	PHALT: ASPHALT				
	× × FILI	L: Coarse GRAVEL Asphalt sub-base.				
-		L: Dark Yellowish Brown (10YR 4/4) medium		137-B9A (1.0-1.4)	Cr+6, TAL Metals	
		ND, little fine to medium Gravel and COPR (20%), ce woody organics, moist.				
2+	×××					
	× × SAN	L: Dark Reddish Brown (2.5YR 2.5/3) coarse ND, some fine gravel-sized COPR (40%), little fine				
	× × Gra	avel and Silt, trace woody organics.		137-B9B(3.2-3.4)	Cr+6, TAL Metals	
	×××					
4+		L: Dark Reddish Brown (2.5 YR 3/4) fine Gravel,	0.0 ppm			
	× × (10°	ne Sand and Silt, little fine gravel-sized COPR %).		137-B9E (4.6-5.1)	Cr+6, TAL Metals	
	× × × ×		0.1 ppm			
	× × FILI	L: Greenish Gray (5G 5/1) SILT (mottled with bright				
6+	× × gree	en fine Sand and Clay), trace fine Gravel, dense.	0.0 ppm			
	× × × ×			137-B9F (6.3-6.7)	Cr+6, TAL Metals	
-	×××					
	×××					
8—	×××					
		L: Greenish Gray (5G 5/1) SILTY CLAY, some fine nd, very dense.	0.0 ppm			
	×××		0.0.000			
	× x		0.0 ppm	137-B9G(9.2-9.5)	Cr+6, TAL Metals	

ENSR			BORIN 137	IG ID: 7-B9	
		Site: Site 137		137	-03
Start Da	ate:	Project: Site Investigation		Page: 2 of 3	
1/23/200		Coordinates: X-610859.4 Y-682723	.5	Depth of Borir	ng: 28.00
End Dat		Elevation: 16.55		Geologist: P	
1/23/200		Drill Subcontractor: Terra Probe Incorporat		Driller: Heath	Kneller
Depth (ft)	Lithology	Description	PID (PPM)	Sample ID	Sample Parameters
10 —	*	: No Recovery	0.0 ppm		
12 —		L: Greenish Gray (5G 5/1) SILTY CLAY, some fine nd, very dense.	0.0 ppm 0.0 ppm 2.0 ppm	137-B9H (12.5-13.2)	Cr+6, TAL Metals
14 —	$\times^{^{^{\prime}}}\times^{^{^{\prime}}}$ med	L: Very Dark Grayish Brown (10YR 3/2) fine to dium GRAVEL and ASH, little coarse Sand, Silt and amic pieces.	0.0 ppm		
16 —	×××× med	L: Very Dark Grayish Brown (10YR 3/2) fine to dium GRAVEL and ASH, little coarse Sand, Silt and amic pieces.	0.0 ppm	137-B9I(15.1-15.4)	Cr+6, TAL Metals
18 —	× × FILI med	L: Very Dark Grayish Brown (10YR 3/2) fine to dium GRAVEL and ASH, little coarse Sand, Silt and amic pieces. Black staining			
	IVK	: No Recovery			

NSR AECOM	Client: PPG Industries		BORIN	
ENSR AECOM	Site: Site 137		137	'-B9
Start Date:	Project: Site Investigation		Page: 3 of 3	
1/23/2007	Coordinates: X-610859.4 Y-682723	.5	Depth of Borir	ng: 28.00
End Date:	Elevation: 16.55		Geologist: P	. Kelly
1/23/2007	Drill Subcontractor: Terra Probe Incorporate		Driller: Heath	Kneller
Debith (41) Tithology	Description	PID (PPm)	Sample ID	Sample Parameters
	AT: Dark Brown (10YR 3/3) CLAY and ORGANICS eadow mat).	NA	137-B9J (20.0-20.5)	Cr+6, TAL Metals
- TT		44.6 ppm		
	ND AND SILT: Gray (5Y 5/1) fine SAND and SILT, me Clay, trace organics.	NA	137-B9K(22.5-22.9)	Cr+6, TAL Metals
- <u>::::::::</u> NR	2: No Recovery	_		
	ND AND SILT: Gray (5Y 5/1) fine SAND and SILT, me Clay, trace organics.	NA NA		
	RAVEL: Reddish Brown (2.5YR 4/3) fine to coarse RAVEL, some coarse Sand, wet.	0.0 ppm		
28 NR	2: No Recovery	_		
\ NU	ILL: End of Boring at 28 ft. Borehole collapsed to 18 fter last sample.			

ENICD	AECOM	Client: PPG Industries		BORIN	
ENSR	AECOM	Site: Site 137		137	'-B11
Start Date:		Project: Site Investigation		Page: 1 of 3	
1/23/200	7	Coordinates: X-610917.1 Y-682669	.1	Depth of Borir	ng: 27.00
End Date	e:	Elevation: 15.59		Geologist: P.	. Kelly
1/23/200		Drill Subcontractor: Terra Probe Incorporat		Driller: Heath	Kneller
Depth (ft)	Lithology	Description	PID (bbw)	Sample ID	Kneller Sample Parameters
0_					
	× × \ASI	PHALT: ASPHALT	/		
	× × FIL	L: Fine to coarse GRAVEL, asphalt sub-base.			
		L: Dark Yellowish Brown (10YR 4/4) medium ND, little fine to medium gravel-sized COPR (20%),		137-B11A (1.1-1.6)	Cr+6, TAL Metals
2+	× × × trac	ee woody organics.		137-B11B (1.6-2.1)	Cr+6, TAL Metals
	× × SAI	L: Dark Reddish Brown (2.5 YR 2.5/3) coarse ND, some fine gravel-sized COPR (40%), little fine AVEL and Light Greenish Gray (5YR 7/1) Silt in fine vel-sized conglomerated pieces.	_	137-B11C(2.5-2.8)	Cr+6, TAL Metals
	× ↓× ↓	L: Red (2.5 YR 4/6) SILT, some white (2.5 8/1) aglomerated Silte and fine Sand (hard), little graveled COPR (15%).	-	137-B11D (3.2-3.6)	Cr+6, TAL Metals
4—		L: Greenish Gray (5G 5/1) fine SAND and SILT, e Clay.	0.0 ppm	137-B11E (4.2-4.6)	Cr+6, TAL Metals
-	× × coa	L: Black (5YR 2.5/1) coarse SAND, some fien to arse Gravel, little Dark Red (10R 3/6) fine graveled slag.	_	137-B11F (4.6-5.0)	Cr+6, TAL Metals
6—	\times \times 3/1	L: Green Gray Mud, Lime Green with Gray (5YR) CLAY and SILT, some fine Sand, trace fine ivel.	1.0 ppm	137-B11E(5.5-6.4) 137-B11ED(5.5-6.4)	Cr+6, TAL Metals Cr+6, TAL Metals
	∵×∵× Gra	L: Green Gray Mud, Lime Green and some Dary by (Gley N/4) fine SAND, some Silt, little Clay, trace e Gravel.			
8—	× ^ × × × × × × × × × × × × × FIL × × × son	L: Black (10YR 2/1) stained Gray (10YR 6/1) ASH, ne matted Organics and fine Gravel, petroleum	6.0 ppm		
-	× × × she	een,wet.	0.1 ppm	137-B11F(8.9-9.6)	Cr+6, TAL Metals

ENCD AECOM	Client: PPG Industries			ING ID:	
ENSR AECOM	Site: Site 137		13	7-B11	
Start Date:	Project: Site Investigation		Page: 2 of 3		
1/23/2007	Coordinates: X-610917.1 Y-28266	9.1	Depth of Bo	ring: 27.00	
End Date:	Elevation: 15.59		Geologist:		
1/23/2007	Drill Subcontractor: Terra Probe Incorpora		Driller: Hea	Ala IZaallaa	
Depth (ft) Lithology	Description	PID (bbw)	Sample ID	Sample Parameters	
10 — X	: No Recovery	0.1 ppm			
× × sor	L: Dark Gray (5YR 4/1) fine GRAVEL and ASH, ne coarse Sand and woody Organics, petroleum een, wet.	0.1 ppm	407 D440	Cr. C. TAL Matela	
× × × ×			137-B11G (13.2-13.6)	Cr+6, TAL Metals	
14 — ^		0.0 ppm			
- NR	: No Recovery				
\ \ \ \ \ \ \ \ \ \ \ \ \ \ Sor	L: Dark Gray (5YR 4/1) fine GRAVEL and ASH, ne coarse Sand and woody Organics, petroleum een, wet.	3.3 ppm			
× × × × ×		0.0 ppm			
18 +			137-B11H (17.6-18.0)	Cr+6, TAL Metals	
×××		0.0 ppm			

ENSR AECOM Client	: PPG Industries			ING ID:
Site:	Site 137		13	7-B11
Start Date: Project	Site Investigation		Page: 3 of 3	
1/23/2007 Coordin	nates: X-610917.1 Y-6826	669.1	Depth of Bo	ring: 27.00
	on: 15.59		Geologist:	
	bcontractor: Terra Probe Incorpo		Driller: Hea	th Kneller
Debty (41) Tityology	Description	PID (ppm)	Sample ID	th Kneller Sample Parameters
- X X X X X X X X X X X X X X X X X X X				
20 × × FILL: Dark Gr	ay (5YR 4/1) fine GRAVEL and ASH, Sand and woody Organics, petroleum			
PEAT: Dark (ORGANICS (Olive Brown (2.5Y 3/3) CLAY and meadow mat).	2.0 ppm	137-B11I (21.5-22.0)	MS/MSD, Cr+6, TAL Metals
22 —		18.4 ppm		
	Dlive Brown (2.5Y 3/3) CLAY and meadow mat).			
CLAY: Gray (5Y 5/1) CLAY, trace organics, firm.	7.1 ppm		
		2.5 ppm	137-B11J (25.1-25.6)	Cr+6, TAL Metals
	sh Brown (2.5YR 4/4) coarse SAND, coarse Gravel and Clay	6.2 ppm		
NIIII · End of	Boring at 27 ft.			

Site: Site 137

Site Location: Jersey City, NJ

Geologist: P. Kelly, M. Merdinger

Drilling Company: Eichelbergers

Driller J. Malecki

Drilling Date: 12/11/2006

Well Completion Date: 3/15/2007

Elevation 14.71

State Plane X: 683020.2

Coordinates

Drilling Method: HSA/Mud Rotary



137-MW1C

Page: 1 of 9

Y: 611036.7

Depth (ft)	Well Construction Diagram	Well Construction Description and Sample Information	PID (ppm)	Blows/6"	Lithology	Lithologic Description
- - -1		2 in dia PVC Riser Bentonite-cement Grout 6 in and 10 in Steel Casings 137-1CA (0.8-1.3) Cr+6, TAL Metals	0.0		^ x ^ x ^ x	Asphalt Gray coarse GRAVEL (Sub-surface Macadam) Gray coarse GRAVEL (Sub-macadam)
-2					× × × × × × × × × × × × × × × × × × ×	Dark Brown coarse SAND, some fine Gravel, little fine gravel-sized COPR (10%). Dark Brown-Red medium SAND, fine gravel-sized COPR (40%), little woody organics, loose, dry. No odor.
_3 		137-1CB (2.6-3.1) Cr+6, TAL Metals	0.0		^	Red-brown coarse SAND, some fine gravel-sized COPR (30%), little fine Gravel. Brown coarse SAND, little fine to medium
—4 -		137-1CC (4.1-4.6) Cr+6, TAL Metals			× × × × × × × × × × × × × × × × × × ×	gravel-sized COPR (10%), loose, wet. No odor. Red and Green SILT and medium SAND, some fine gravel-sized COPR (25%), wet.
—5 -		137-1CC (5.0-5.5) Cr+6, TAL Metals	0.0	4 3	X X X X X X X X X X X X X X X X X X X	Gray coarse SAND, little fine to medium gravel- sized COPR (10%), loose, wet. No odor. Dark Reddish Gray (5YR 4/2) SILT and fine sub- angular GRAVEL, 70% COPR, wet, very loose. No odor.
—6 -				2	× × ×	No Recovery
_7 -			0.0	3	× × × × × × × × × × × × × × ×	Dark Reddish Gray (5YR 4/2) SILT and fine subangular GRAVEL, 75% COPR, wet, very loose. No odor.
8			0.0	3	××××	

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

Site: Site 137

Site Location: Jersey City, NJ

Geologist: P. Kelly, M. Merdinger

Drilling Company: Eichelbergers

Driller J. Malecki

Drilling Date: 12/11/2006

Well Completion Date: 3/15/2007

14.71 **Elevation**

State Plane X: 683020.2 **Y:** 611036.7

Coordinates

Drilling Method: HSA/Mud Rotary



137-MW1C

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Dillic	1 J. Walceki				1107 V Widd	Rotary 1 age. 2 of 7
Depth (ft)	Well Construction Diagram	Well Construction Description and Sample Information	PID (ppm)	Blows/6"	Lithology	Lithologic Description
		137-1CD (8.1-9.0)			Y Y Y	
-		Cr+6, TAL Metals 137-1CDD (8.1-9.0) Cr+6, TAL Metals		3	^ x ^ x ^ x ^ x	Grayish Brown (2.5Y 5/2) medium to coarse SAND, some Silt, little fine rounded Gravel, trace Clay. Black, Green and Teal staining, 50% medium gravel-sized COPR (green stained), wet, medium dense. No odor.
9			0.0	23	×^×^×	
		137-1CE (9.5-10.0) Cr+6, TAL Metals		14	× × × × × × × × × × × × × × × × × × ×	/ Mint Green SILT, little coarse Sand, trace Clay, moist, cohesive, very stiff. No odor. (100% Waste Mud)
- 10			0.0	7	^ x ^ x ^ x ^ x × x × x × x × x × x × x	Brown (7.5YR 5/2) coarse SAND, little fine angular Gravel and Silt, moist, loose. No odor.
_		137-1CF (10.3-10.7) Cr+6, TAL Metals	_	4	× × × × × ×	Bright Lime Green strong cemented SILT, little fine sub-angular Gravel, moist, loose. No odor. (100% Waste Mud)
- 11			0.0	2	× × × × × × × × × × × × × × × × × × ×	No Recovery
		137-1CG (11.5-12.0) Cr+6, TAL Metals		2	× × × ×	Olive Gray (5Y 5/2) with Lime Green staining SILT, little coarse Sand, trace Clay, moist,
 12			0.0	3	× × × × × × × × × × × × × × × × × × ×	cohesive, soft. Chemical/Sewage odor. (100% Waste Mud)
				3	× × × × × × × × × × × × × × × × × × ×	
- 13			0.1	WH	× × × ×	
_				WH	× × × × ×	Dark Reddish Brown (5YR 4/3) SILT, trace fine sub-angular Gravel, moist, very loose. Raw sewage odor.
— 14		137-1CH (14.0-14.5) Cr+6, TAL Metals	1.0	1		Black-stained PEAT, moist, cohesive, very soft. Sulfur odor.
				1		No Recovery
— 15			1.0	WH		Very Dark Gray (5Y 3/1) organic CLAY, trace Peat, cohesive, very soft, moist. Sulfur odor.
16						
		137-1Cl (16.0-17.0)	2.2			

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

Site: Site 137

Site Location: Jersey City, NJ

Geologist: P. Kelly, M. Merdinger

Drilling Company: Eichelbergers

Driller J. Malecki

Drilling Date: 12/11/2006

Well Completion Date: 3/15/2007

14.71 **Elevation**

State Plane X: 683020.2

Coordinates

Drilling Method: HSA/Mud Rotary



137-MW1C

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Y: 611036.7

Dille	r J. Maiecki		viemo	u.	nsa/wuu	Kotai y	rage. 3 01 9
Depth (ft)	Well Construction Diagram	Well Construction Description and Sample Information	PID (ppm)	Blows/6"	Lithology	Lithologic Description	
		MS/MSD, Cr+6, TAL Metals			TT		
- 17		137-1CJ (17.4-18.0) Cr+6, TAL Metals	1.0	1 1		No Recovery Very Dark Gray (5	Y 3/1) PEAT, organics,
— 18		137-1CJD (17.4-18.0) Cr+6, TAL Metals	0.0	WH		No Recovery	t, moist. Sulfur odor.
— 19 —			N/A	WH			
— 20 —							
— 21 —			N/A	N/A			
— 22 -							
- 23		137-1CK (23.0-23.5) Cr+6, TAL Metals	1.5	2		Very Dark Gray (5 organics, cohesive	SY 3/1) organic CLAY, trace e, soft, moist. Sulfur odor.
_ 24		137-1CL (23.5-24.3) MS/MSD, Cr+6, TAL Metals	1.1	3	-/-/-/-/-/ -7/-7/-7/-7 -7/-7/-7		./1) CLAY and fine to medium and Wood peices, wet, ulfur odor.
			1		_/ _/ _/		

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

Site: Site 137

Site Location: Jersey City, NJ

Geologist: P. Kelly, M. Merdinger

Drilling Company: Eichelbergers

Driller J. Malecki

Drilling Date: 12/11/2006

Well Completion Date: 3/15/2007

14.71 **Elevation**

State Plane X: 683020.2 **Y:** 611036.7

Coordinates

Drilling Method: HSA/Mud Rotary



Page: 4 of 9

Depth (ft)	Well Construction Diagram	Well Construction Description and Sample Information	PID (ppm)	Blows/6"	Lithology	Lithologic Description	
				3		No Recovery	
— 25			0.0	8	-7-7-7-7	Dark Gray (2.5Y 4/1) CLAY and fine to medium SAND, some Silt and Wood peices, wet, cohesive, soft. Sulfur odor.	
_ 26				10		Very Dark Grayish Brown (10YR 3/2) Silty CLAY, little fine to medium Sand, moist, cohesive, stiff. Sulfur odor.	
_ 20			4.1	12		Reddish Brown (2.5YR 4/4) very fine to fine SAND, some Silt and Gray COBBLES, trace fine rounded Gravel, moist, medium dense. No	
_ 27			0.0	8		Very Dark Grayish Brown (10YR 3/2) SILT, little Clay and fine Sand, Wood peices, wet, loose. No odor.	
-28		137-1CM (27.5-28.0) Cr+6, TAL Metals	0.0	10			
				10		Dusky Red (10R 3/4) and Gray fine to medium rounded GRAVEL, wet, loose. No odor. No Recovery	
— 29 -			0.0	1/18 in	······	Weak Red (2.5YR 4/2) medium to coarse SAND, little Silt, trace Clay, wet, very loose. No odor.	
- 30						No Recovery	
				2			
31		127 1CN (21 5 22 0)	0.0	1		Weak Red (2.5YR 4/2) medium to coarse SAND, little Silt, trace Clay, wet, very loose. No odor.	
— 32		137-1CN (31.5-32.0) Cr+6, TAL Metals	0.0	1 2			
				-		Weak Red (10R 4/4) SILT and very fine SAND, wet, very loose. No odor.	

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

Site: Site 137

Site Location: Jersey City, NJ

Geologist: P. Kelly, M. Merdinger **Drilling Company:** Eichelbergers

Driller J. Malecki

Drilling Date: 12/11/2006

Well Completion Date: 3/15/2007

Elevation 14.71

State Plane X: 683020.2 **Y:** 611036.7

Coordinates

Drilling Method: HSA/Mud Rotary



137-MW1C

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Dillic	1 J. Walceri	Di lining l			11571/11100	,	1 age. 5 of 7
Depth (ft)	Well Construction Diagram	Well Construction Description and Sample Information	PID (ppm)	Blows/6"	Lithology	Lithologic Description	
				1			
33			0.0	2			
_				2		No Recovery	
34				2			
_				2			
35			0.0	3		some to little Silt, t	/4) very fine to medium SAND, trace to none round Gravel,
				3		wet, very loose. N	lo odor.
36			0.0	4	••••••	No Recovery	
37				5			
			0.0	4		Weak Red (10R 4. SILT, wet, very loc	/4) very fine to fine SAND and ose. No odor.
— 38			0.0	4		Weak Red (10R 4, wet, very loose. N	/4) SILT, little very fine Sand,
			0.0	4	_ · _ · _ ·	No Recovery	
- 39			0.0	3	· · · · · · · <u>·</u>	WI-D-1/405 4	(A) OILT 1841- 1- 1 - 1 - 1 - 1 - 1 - 1
				3		Sand, wet, very lo	/4) SILT, little to trace very fine ose. No odor.
40			0.0	4			
				5		No Recovery	

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

Site: Site 137

Site Location: Jersey City, NJ **Geologist:** P. Kelly, M. Merdinger

Drilling Company: Eichelbergers

Driller J. Malecki

Drilling Date: 12/11/2006

Well Completion Date: 3/15/2007

14.71 **Elevation**

State Plane X: 683020.2 **Y:** 611036.7

Coordinates

Drilling Method: HSA/Mud Rotary



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Depth (ft)	Well Construction Diagram	Well Construction Description and Sample Information	PID (ppm)	Blows/6"	Lithology	Lithologic Description
			0.0	3	<u> </u>	Weak Red (10R 4/4) SILT, trace very fine Sand, wet, loose. No odor.
_				4		wet, 1888s. He east.
- 42			0.0	4		No Recovery
_				6		
- 43			0.0	3	<u></u>	Weak Red (10R 4/4) SILT, very loose, wet. No odor.
				4		oddi.
- 44				4		No Recovery
				4		
- 45			0.0	5	<u>· · · · · · · · · · · · · · · · · · · </u>	Weak Red (10R 4/4) SILT, little to trace very fine Sand, wet, loose. No odor.
-				5		cana, wet, 1888. No east.
 46			0.0	5		No Docevery
_				5		No Recovery
			0.0	3		Weak Red (10R 4/4) very fine SAND and SILT, wet, very loose. No odor.
				2		Reddish Brown (5YR 4/3) CLAY, trace
- 48			0.0	2		interbedded very fine Sand, cohesive, very soft, moist. No odor.
-				2		No Recovery

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

Site: Site 137

Site Location: Jersey City, NJ

Geologist: P. Kelly, M. Merdinger **Drilling Company:** Eichelbergers

Driller J. Malecki

Drilling Date: 12/11/2006

Well Completion Date: 3/15/2007

14.71 **Elevation**

State Plane X: 683020.2

Coordinates

Drilling Method: HSA/Mud Rotary



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Y: 611036.7

Depth (ft)	Well Construction Diagram	Well Construction Description and Sample Information	PID (ppm)	Blows/6"	Lithology	Lithologic Description
11 1	77. 77.		Ì	Ī	İ	
— 49			0.0	3		Reddish Brown (5YR 4/3) CLAY, some interbedded very fine Sand, cohesive, soft,
50			0.0	3		moist. No odor.
			0.0	3		
— 51				_		Gray (2.5Y 5/1) CLAY, cohesive, soft, moist. No odor.
			0.0	4		Gray (2.5Y 5/1) CLAY, some interbedded Reddish Brown (5YR 4/3) very fine Sand and Silt, moist, cohesive, soft. No odor.
				4		
- 52			0.0	4		
				4		Gray (2.5Y 5/1) CLAY and Reddish Brown (5YR
53			0.0	2		4/3) SILT interbedded, little very fine Sand, wet, cohesive, very soft. No odor.
				2		Reddish Brown (5YR 4/3) SILT, little very fine Sand, trace Clay, wet, very loose. No odor.
 54			0.0	2	#:#:# ::#:#:	Reddish Brown (5YR 4/3) SILT and CLAY, little interbedded Gray (2.5Y 5/1) Clay and very fine Sand, moist, cohesive, very soft. No odor.
				2	<u> </u>	No Recovery
- 55			0.0	5		Reddish Brown (5YR 4/3) SILT, trace Clay, interbedded with Reddish Brown very fine Sand
				5		(every 0.25 ft.) and Gray (2.5Y 5/1) Clay lenses, moist, cohesive, soft. No odor.
- 56			0.0	4		
				4		No Recovery

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

Site: Site 137

Site Location: Jersey City, NJ

Geologist: P. Kelly, M. Merdinger

Drilling Company: Eichelbergers

Driller J. Malecki

Drilling Date: 12/11/2006

Well Completion Date: 3/15/2007

14.71 **Elevation**

State Plane X: 683020.2 **Y:** 611036.7

Coordinates

Drilling Method: HSA/Mud Rotary



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Depth (ft)	Well Construction Diagram	Well Construction Description and Sample Information	PID (ppm)	Blows/6"	Lithology	Lithologic Description
			1		1	
<u> </u>			0.0	4		Reddish Brown (5YR 4/3) SILT, trace Clay, interbedded with Reddish Brown very fine Sand
				5		(every 0.25 ft.) and Gray (2.5Y 5/1) Ćlay lenses, moist, cohesive, medium. No odor.
— 58			0.0	6		
				7		No Recovery
- 59			0.0	4		Reddish Brown (5YR 4/3) very fine SAND, little Silt, moist, very loose. No odor.
_				4		Reddish Brown (5YR 4/3) SILT, little Clay, interbedded with trace very fine Sand, moist,
60			0.0	11		cohesive, medium. No odor.
				15		No Recovery
— 61 _			0.0	9		Reddish Brown (5YR 4/3) SILT, little Clay, interbedded with trace very fine Sand, wet, cohesive, medium. No odor.
62				11		Reddish Brown (5YR 4/3) SILT, trace very fine Sand, wet, medium dense. No odor.
			0.0	16		Reddish Brown (5YR 4/3) fine to coarse SAND and fine rounded GRAVEL, little Silt, trace Clay,
62				12		moist to wet, medium dense. No odor. No Recovery
63			0.0	10	<u></u>	Reddish Brown (5YR 4/3) SILT, some to little
				9		fine to coarse sub-angular Gravel, little very fine to medium Sand, trace Clay, moist, loose. No odor.
64				9		No Recovery
				10		Reddish Brown (5YR 4/3) SILT, some to little fine to coarse sub-angular Gravel, little very fine

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

Site: Site 137

Driller J. Malecki

Site Location: Jersey City, NJ

Geologist: P. Kelly, M. Merdinger

Drilling Company: Eichelbergers

Drilling Date: 12/11/2006

Well Completion Date: 3/15/2007

14.71 **Elevation**

State Plane X: 683020.2 **Y:** 611036.7

Coordinates

Drilling Method: HSA/Mud Rotary



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Depth (ft)	Well Construction Diagram	Well Construction Description and Sample Information	PID (ppm)	Blows/6"	Lithology	Lithologic Description
65			0.0	11		to medium Sand, trace Clay, moist, medium dense. No odor.
				14		No Recovery
66		#00 Sand Seal		12		
	<u> </u>			12		
- 67		#1 Sand Filter Pack	0.0	11		Reddish Brown (5YR 4/3) SILT, some fine to coarse Sand, little fine to medium sub-angular Gravel, trace Clay, wet, loose. No odor.
				11		No Recovery
— 68		2 in dia 10-Slot PVC Screen		7		
				4		
69			0.0	11		Reddish Brown (5YR 4/3) SILT, some fine to coarse Sand, little fine to coarse sub-angular Gravel, trace Clay, wet, loose. No odor.
				8		No Recovery
70				4		
				8		
— 71			0.0	23		Deddish Prove (FVD 4/2) OH T fire to
				32		Reddish Brown (5YR 4/3) SILT, some fine to coarse angular Gravel, trace coarse Sand, moist, dense to very dense. No odor.
— 72						
			0.0	41		No Recovery
				50/2		Refusal at 73 ft.
L ₇₃						Trefusal at 75 It.

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

Site: Site 137

Site Location: Jersey City, NJ

Geologist: P. Kelly, M. Merdinger

Drilling Company: Eichelbergers

Driller J. Malecki

12/5/2006 **Drilling Date:**

Well Completion Date: 3/1/2007

Elevation 15.62

State Plane X: 682801.3 **Y:** 610918.2

Coordinates

Drilling Method: HSA



137-MW2C

Page: 1 of 8

Depth (ft)	Well Construction Diagram	Well Construction Description and Sample Information	PID (ppm)	Blows/6"	Lithology	Lithologic Description
-0 -1 -2 -3 -4		2 in dia PVC Riser Bentonite-cement Grout 6 in and 10 in Steel Casings 137-MW2CA (0.4-0.6) Cr+6, TAL Metals 137-MW2CB (1.7-2.2) MS/MSD, Cr+6, TAL Metals	0.0		^	Asphalt Fine to coarse GRAVEL, little fine Sand and Silt, trace Clay, loose around 1.7, some black fabric, moist. Gray (5g, 4/2) fine SAND and SILT, little medium to coarse Sand, trace COPR (5YR, 3/3), (100% waste mud), slightly cohesive, moist. No Sample
- 5 - 6		137-2CE (5.0-5.5) Cr+6, TAL Metals	0.0	10 6 6 4	\(\chi \chi \chi \chi \chi \chi \chi \chi	Black fine to medium semi-round GRAVEL, little Silt, loose, wet. no odor. Greenish-Gray (5GY, 5/1) SILT and Black fine to medium, semi-round GRAVEL, trace coarse Sand, lime green staining, loose, moist. (50% wastes mud). No odor.
		137-2CF (7.5-8.0) Cr+6, TAL Metals	0.0	6 7 5 9	× × × × × × × × × × × × × × × × × × ×	No Recovery Mint Greenish-Gray SILT, trace Clay, cohesive, medium. No odor. (100% waste mud)
-9 - -10			0.0	3 3 4 9	× × × × × × × × × × × × × × × × × × ×	Mint Greenish-Gray SILT, trace coarse Sand and Clay, shell fragments, yellow staining, cohesive, medium. No odor. (100% waste mud)

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

Site: Site 137

Site Location: Jersey City, NJ

Geologist: P. Kelly, M. Merdinger

Drilling Company: Eichelbergers

Coordinates

Driller J. Malecki **Drilling Method: HSA**

Drilling Date:

Elevation

State Plane



137-MW2C

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Depth (ft)	Well Construction Diagram	Well Construction Description and Sample Information	PID (ppm)	Blows/6"	Lithology	Lithologic Description
					^ ^ ^	No Recovery
11			0.0	5	× × ×	Mint Geenish-Gray and Greenish-Gray (5GY, 5/1) mottled SILT, trace Clay and coarse Sand,
12		137-2CG (11.5-12.5) Cr+6, TAL Metals 137-2CGD (11.5-12.5)		5	××××	cohesive, medium. No odor. (100% waste mud)
		Cr+6, TAL Metals	0.0	6	x x x	No Recovery
— 13			0.0	7 5		
			0.0	3		
14			0.0	8		
				10		Olive Brown (2.5Y, 4/3) SILT, some coarse Sand and round fine to medium Gravel, loose, moist. no odor. (50% waste mud)
15			0.0	3	X X X	Mint Greenish-Gray SILT, trace Clay and coarse
		137-2CH (15.5-16.0) Cr+6, TAL Metals		4	xîxîxî xxxx	Sand, Lime Green staining, cohesive, soft to medium, moist to wet. no odor. (100% waste mud)
16			0.0	5	^x^x^;	
		407.001.447.0.47.5)		7	× × × ×	
		137-2Cl (17.0-17.5) Cr+6, TAL Metals	N/A	3	^	
18				3		
				2	TT TT	moist. Sulfur/MGP odor
19			N/A	2		Very Dark Gray (Gley N, 3/0) organic CLAY,
		137-2CJ (19.5-20.5) MS/MSD, Cr+6, TAL Metals		2		little organics and Peat, cohesive, soft, moist. Sulfur odor.
20		, , ,		3		
				3		
- 21			6.7	WH		

12/5/2006

Well Completion Date: 3/1/2007

15.62

X: 682801.3

Y: 610918.2

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

Site: Site 137

Site Location: Jersey City, NJ

Geologist: P. Kelly, M. Merdinger

Drilling Company: Eichelbergers

Driller J. Malecki

Drilling Date: 12/5/2006

Well Completion Date: 3/1/2007

Elevation 15.62

State Plane X: 682 Coordinates

X: 682801.3

Y: 610918.2

Drilling Method: HSA



137-MW2C

Page: 3 of 8

Depth (ft)	Well Construction Diagram	Well Construction Description and Sample Information	PID (ppm)	Blows/6"	Lithology	Lithologic Description
			1	1		
				2		
22		137-2CJ (22.0-23.0)	1.3	2		
		MS/MSD, Cr+6, TAL Metals		2		
_ 23			5.4	4		
			3.4			Very Dark Gray (Gley N, 3/0) organic CLAY, little organics and Peat, trace medium Sand,
_ 24				6		cohesive, soft, moist. Raw sewage odor.
		137-2CK (24.0-24.5) Cr+6, TAL Metals	1.0	11		Dark Gray (5Y, 4/1) medium SAND, little Silt
		137-2CKD (24.0-24.5) Cr+6, TAL Metals 137-2CL (24.5-25.0)	-	12		trace Clay and fine to coarse round Gravel, medium dense, moist. Slight odor.
25		Cr+6, TAL Metals	0.5	13		Weak Red (2.5YR, 4/2) fine to coarse SAND,
				14		trace Silt and fine round Gravel, medium dense, wet. no odor
_ 26			0.1	15		Weak Red (10R, 5/4) very fine to fine SAND,
				14	••••••	trace Red and Gray Mudstone Cobbles, trace Gray medium Sand at 25.5', medium dense,
_ 27			0.0	9	• • • • • •	wet. no odor.
				9		No Recovery
		407 OOM (00 0 00 5)				Weak Red (2.5YR, 4/3) fine to coarse SAND, some fine to medium round Gravel, trace Silt,
		137-2CM (28.0-28.5) Cr+6, TAL Metals	0.0	8		loose, moist. no odor.
				8	• • • • • • • •	No Recovery
29			0.0	2		Reddish Brown (2.5YR 4/3) very fine to fine
				3		SAND, some Silt, trace fine round Gravel, very loose, wet. no odor.
30				3		No Recovery
				3		
31			0.0	2	<u>· — · — · —</u>	Reddish Brown (2.5YR 4/3) and Reddish Yellow
				2	<u> </u>	(7.5YR,6/8) very fine to fine SANDY SILT, very
				_		loose, wet. no odor

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

Site: Site 137

Driller J. Malecki

Site Location: Jersey City, NJ

Geologist: P. Kelly, M. Merdinger

Drilling Company: Eichelbergers

Elevation

Drilling Date:

State Plane X: 682801.3

Well Completion Date: 3/1/2007

15.62

12/5/2006

Y: 610918.2

Coordinates

Drilling Method: HSA



Page: 4 of 8

Depth (ft)	Well Construction Diagram	Well Construction Description and Sample Information	PID (ppm)	Blows/6"	Lithology	Lithologic Description
 			l	۱ ـ		
			0.0	3		
		137-2CN (32.5-33.0) Cr+6, TAL Metals		3		
33			0.0	3		Weak Red (10R, 4/3) very fine SILT and SAND,
				2		very loose, wet. no odor
34			0.0	3		No Recovery
				2		
35			0.0	3	<u>· - · - · - · - · - · · · · · · · · · ·</u>	Weak Red (10R, 4/4) SILT, little very fine Sand,
				3		very loose, wet. no odor.
36				4		No Recovery
				5		
37			0.0	3		
			0.0			Weak Red (10R, 4/4) very fine SILT and SAND, very loose, wet. no odor.
38				3		
				4		No Recovery
— 39				5		Dody Croyddo Drown (2.5V, 4/2) coorse CAND
39			0.0	4		Dark Grayish Brown (2.5Y, 4/2) coarse SAND, some fine to medium round Gravel, trace Silt
				4	<u>······</u>	and Clay, very loose, wet. no odor.
40			0.0	4	<u> </u>	Weak Red (10R, 4/4) SILT, little very fine Sand, very loose, wet. no odor.
				4		No Recovery
41			0.0	4		Weak Red (10R, 4/4) SILT, little very fine Sand,
				5	· · · · · · · ·	loose, wet. no odor.
42			0.0	6		
						No Recovery

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

Site: Site 137

Driller J. Malecki

Site Location: Jersey City, NJ

Geologist: P. Kelly, M. Merdinger

Drilling Company: Eichelbergers

Drilling Date: 12/5/2006

Well Completion Date: 3/1/2007

15.62 **Elevation**

State Plane X: 682801.3 **Y:** 610918.2

Coordinates

Drilling Method: HSA



Page: 5 of 8

Depth (ft)	Well Construction Diagram	Well Construction Description and Sample Information	PID (ppm)	Blows/6"	Lithology	Lithologic Description
I I I			I	7	1	
43			0.0	7	• • • •	
			0.0			Reddish Brown(2.5YR, 5/4) very fine SAND, trace Silt, loose, wet. no odor.
 				5		
			0.0	6		No Recovery
				9		
45			0.0	4		Reddish Brown (5YR, 4/4) SILT and very fine
				6	-:-:-: -:-:-:-:	SAND, loose, wet. no odor
- 46				7		No Recovery
				6		
<u> </u>			0.0	4	<u> </u>	W 15 1405 40 0UT
				4	<u> </u>	Weak Red (10R, 4/4) SILT, some very fine Sand, loose, wet. no odor
 48			0.0			
			0.0	5		No Recovery
— 49				6		
49			0.0	3		Weak Red (10R, 4/4) SILT, some very fine
				4	<u>· · · · · · · · · · · · · · · · · · · </u>	Sand, very loose, wet. no odor
50				3		
				4		No Recovery
51			0.0	4		Dark Reddish Brown (2YR, 3/4) SILT and very
				5		fine SAND, loose, wet. no odor
<u> </u>			0.0	7	-:-:-:-	
			0.0			No Recovery
— 53			_	7		
"			0.0	6		Dark Reddish Brown (2YR, 3/4) SILT and very

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

Site: Site 137

Site Location: Jersey City, NJ

Geologist: P. Kelly, M. Merdinger

Drilling Company: Eichelbergers

Driller J. Malecki

Drilling Date: 12/5/2006

Well Completion Date: 3/1/2007

15.62 **Elevation**

State Plane X: 682801.3 **Y:** 610918.2

Coordinates

Drilling Method: HSA



Page: 6 of 8

Depth (ft)	Well Construction Diagram	Well Construction Description and Sample Information	PID (ppm)	Blows/6"	Lithology	Lithologic Description
 						fine SAND, loose, wet. no odor
— 54				8	<u>:::-</u>	No Recovery
				10		
 55			0.0	7		Reddish Brown (2.5YR, 4/4) SILT, little very fine
-				8		Sand, medium dense, wet. no odor
				11		No Recovery
				12		
57			0.0	8		Reddish Brown (2.5YR, 4/4) SILT, little very fine Sand, medium dense, moist. no odor
— 58				12		
				14 14		No Recovery
<u> </u>			0.0	8		Doddish Brown (2 EVD 4/4) CILT little van fine
				12		Reddish Brown (2.5YR, 4/4) SILT, little very fine Sand, medium dense, moist. no odor
60				14		No Recovery
-				15		
61			0.0	4		Reddish Brown (2.5YR, 4/4) very fine SAND, some Silt, little Clay, cohesive, soft, wet. no
- 62				4		odor. Reddish Brown (2.5YR 4/4) CLAY, little Silt,
			0.0	4		cohesive, soft, moist. no odor.
— 63			0.0	5 4		No Recovery
			0.0	4		Reddish Brown (2.5YR 4/4) CLAY, little Silt, cohesive, soft, wet. no odor.
				•		Reddish Brown (2.5YR 4/4) CLAY, cohesive,

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

Site: Site 137

Driller J. Malecki

Site Location: Jersey City, NJ

Geologist: P. Kelly, M. Merdinger

Drilling Company: Eichelbergers

Drilling Date: 12/5/2006

Well Completion Date: 3/1/2007

15.62 **Elevation**

State Plane X: 682801.3 **Y:** 610918.2

Coordinates

Drilling Method: HSA



Page: 7 of 8

Depth (ft)	Well Construction Diagram	Well Construction Description and Sample Information	PID (ppm)	Blows/6"	Lithology	Lithologic Description
64			0.0	8		medium, moist. no odor.
				7		No Recovery
- 65 -			0.0	5		Dark Reddish Gray (5YR, 4/2) CLAY, trace Silt, cohesive, medium, moist. no odor
— 66			0.0	5 6		Reddish Brown (2.5YR, 5/4) SILT, little Clay, cohesive, medium, moist. no odor.
_				6		Reddish Brown (2.5YR, 5/4) CLAY, little Silt, cohesive, medium, moist. no odor.
67			0.0	4		Reddish Brown (2.5YR, 5/4) CLAY, little trace Silt, cohesive, soft, moist to wet. no odor.
- 68			0.0	4		
				4		
- 69 -			0.0	4 5		Reddish Brown (2.5YR, 5/4) CLAY, little trace Silt, cohesive, soft, moist. no odor.
70			0.0	6		Gray (2.5Y, 5/1) CLAY, trace lenses of Reddish
- 71				6		Brown (2.5YR, 5/4) Silt, cohesive, medium, moist. no odor.
			0.0	4	-7-7-7-7 -7-7-7-7-7-7-7-7-7-7-7-7-7-7-7	Reddish Brown (5YR, 5/3) CLAY and very fine SAND, cohesive, soft, wet. no odor.
72			0.0	4		Gray (2.5Y, 5/1) CLAY, some Reddish Brown (2.5YR, 5/4) very fine Sand lenses, cohesive,
- 73				4		soft, moist. no odor
			0.0	5		Reddish Brown (5YR, 5/3) CLAY and SILT, cohesive, soft, wet. no odor.
— 74 —			0.0	6	-7-7-7-	Gray (2.5Y, 5/1) CLAY and Reddish Brown (2.5YR, 5/4) very fine SAND interbedded, cohesive, medium, moist. no odor.

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

Site: Site 137

Driller J. Malecki

Site Location: Jersey City, NJ

Geologist: P. Kelly, M. Merdinger

Drilling Company: Eichelbergers

Drilling Date: 12/5/2006

Well Completion Date: 3/1/2007

15.62 **Elevation**

State Plane X: 682801.3 **Y:** 610918.2

Coordinates

Drilling Method: HSA



Page: 8 of 8

Depth (ft)	Well Construction Diagram	Well Construction Description and Sample Information	PID (ppm)	Blows/6"	Lithology	Lithologic Description
		I	i		1	
				6	-7-7-7	
		#00 Sand Seal	0.0	5		Gray (2.5Y, 5/1) CLAY,trace interbedded Reddish Brown (2.5YR, 5/4) very fine SAND,
				5		cohesive, medium, wet to moist. no odor.
76		#1 Sand Filter Pack	0.0	5		Reddish Brown (5YR, 4/3) SILT with
				5	<u> </u>	interbedded very fine Sand and Gray Clay, cohesive, medium, moist. no odor.
- 77			0.0	4		Reddish Brown (5YR, 4/3) CLAY, some Silt, little
				4		trace inbedded very fine Sand, cohesive, soft, moist. no odor
-78		2 in dia 10-Slot PVC Screen	0.0	4		
				5		Dark Gray (5Y, 4/1) CLAY and SILT, trace interbedded very fine Reddish Brown Sand, cohesive, soft, moist. no odor.
79			0.0	8		Dark Gray (5Y, 4/1) CLAY , liitle Silt, trace very
				9		fine Reddish Brown Sand, cohesive, medium, moist. no odor.
80			0.0	10		
				10		Reddish Brown (5YR, 4/4) SILT, little interbedded very fine Sand, loose, moist. no
81			0.0	19		odor.
				20		
82			0.0	50/5		Reddish Brown (5YR, 4/4) medium angular
				N/A		GRAVEL, trace Silt and Clay and coarse Sand, very dense, wet. no odor. (Glacial Till)
83			0.0	20		No Recovery
			0.0			Reddish Brown (5YR, 4/4) medium angular
84				24		GRAVEL, trace Silt and Clay and coarse Sand, very dense, wet. no odor. (Glacial Till)
04			0.0	80/5		
				NULL		Refusal at 85 ft. Well set at 83 ft due to fall-in.

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



WELL ID 137-P3B-MW101I

Project Name: PPG Garfield Ave Project Number: 60240739 Drilling Date: 8/26/2015 11:40:00 AM Well Completion Date: 9/15/2015 12:00:00 PM Geologist: ES Physical Location: PBR Well P3B							Drille Drilli Elev	er: T. ing Me ation:	mpany: SGS North America Lynch Jr thod: HSA/Mud Rotary 11.0 nager: Scott Mikaelian	NJDEP Well Permit Number: E201508493		
ن DEPTH ک (ft bgs)	WATER LEVEL (ft)	SAMPLE NUMBER	RECOVERY (FT)	BLOW	PID READING (PPM)	GA Class	USCS	ПТНОГОСУ	Surface Cover a	nd Thickness:		ELL DIAGRAM
-4 -3 -2 -1			-		0.0	3	FILL	***	DGA(Ammended), fine to co	arse SAND, and gravel		— Top Cap (J-Pluς
2 3 4		1	-		0.0	3			(7.5YR 6/3) light brown,dry,n	o odor,no staining.		
6 - 7 - 8 - 9 - 10	- - - -	2	-		0.0	3	FILL		DGA(Ammended), fine to co 2.5/1) black,moist to wet,no 11'.	arse SAND,with,(7.5YR odor,no staining, wet @		— 8" Steel Casing
12 13 14 15 16		4 3	0.5		0.0	7 NR	PT NR		PEAT(70% organic fibers, 30 2.5/2) very dark brown,soft to staining,(Based on 137-P3B	o dense, moist,no odor,no 🖊		 Cement (bent-cement gr 4" Riser (PVC son 40)
18 19 20	_				0.0	9	OL		NO RECOVERY. UNDorg, 80% organic silt, 20 5/2) grayish brown, low plast organic odor,no staining.	0% organic fibers, (10YR		

AECOM 30 Knightsbridge Road, Piscataway, NJ

WELL ID 137-P3B-MW101I

Project Drillin Well C Geolo	ct Nur ng Dat comple ogist:	mber: e: 8/ tion Da ES	60 26/2 ate:	Garfield Av 240739 2015 11:40: 9/15/2015 12 PBR Well F	00 AM 2:00:00		Drille Drilli Eleva	er: T. ng Me ation:	npany: SGS North America ynch Jr nod: HSA/Mud Rotary 11.0 ager: Scott Mikaelian	NJDEP Well Permit Number: E201508493 Coordinates (NJSPNAD83) x: 611100.5 Coordinates (NJSPNAD83) y: 682952 Total Well Depth: 47 ft Depth to Water: 8.01 ft Date Gauged: 9/17/2015		
		SAMPLE NUMBER	RECOVERY (FT)		PID READING (PPM)	GA Class	uscs	LITHOLOGY	Surface Cover a		(Note bas = below	round surface) ELL DIAGRAM
20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35		5 6 7		7-12-16-15 (28)		8	SP		UNDno, fine to medium SAN material, medium dense,wet odor,sheen,(MGP Impacts on NO RECOVERY.	,moderate napthalene		— Annular seal (# Sand Seal)
37 38 39 40 41 42 43 44		8 9	1		0.0	8	SP SP		UNDno,fine to medium SAN brown,medium dense,wet,no	D, (5YR 4/3) reddish o odor,no staining.		 Filter Pack (#1 Filter Pack) 4" 10 Slot Scree (PVC sch 40)



WELL ID 137-P3B-MW101I

Project Name:	PPG Garfield A	Ave	Drillin	ng Company: SGS North America	NJDEP Well Permit Numb	PAGE 3 OF er: E201508493
Project Number:				r: T.Lynch Jr	Coordinates (NJSPNAD8	
Drilling Date: 8		0:00 AM		ng Method: HSA/Mud Rotary	Coordinates (NJSPNAD83	
Well Completion Da			Eleva	tion: 11.0	Total Well Depth: 47 ft	
Geologist: ES			Proje	ct Manager: Scott Mikaelian	Depth to Water: 8.01 ft	
Physical Locatio	n: PBR Well	P3B			Date Gauged: 9/17/2015	
	F	(1)				(Note bas = below ground surface)
(ft bgs) WATER LEVEL (ft) SAMPLE NUMBER	RECOVERY (FT BLOW COUNTS	PID READING (PPM) Class	uscs	Surface Cover	and Thickness:	WELL DIAGRAM
45	<u>~</u>	0.0 8	SP	UNDno, fine to medium SA	ND (EVP 4/2) roddiob	
40 - 40		0.0	J SF	brown,medium dense,wet,r	no odor.no staining.	
46 10 11	」1 │ │	- NR	NR	NO RECOVERY.		
	19		INIX	NO NEGOVERT.		
47	(32)					End Cap (PVC s



WELL ID 137-P3B-MW102I

Proje Drilli Well (Geol	ect Nung Da Omplogist	imber: ite: 8/ etion Da ES	602 /26/2 ate:	Garfield A 240739 015 7:30:0 9/11/2015 2	00 AM 2:00:00 F	PM	Drille Drilli Eleva	er: T. ng Me ation:	mpany: SGS North America Lynch Jr thod: HSA/Mud Rotary 11.1 nager: Scott Mikaelian	NJDEP Well Permit Numb Coordinates (NJSPNAD8 Coordinates (NJSPNAD83 Total Well Depth: 49 ft Depth to Water: 8.24 ft	3) x: 610954.2 3) y: 682651.6	90
Pnys	icai L	ocatio.	n: _	PBR Well I	P3B					Date Gauged: 9/15/2015	(Note bas = below are	ound surface)
، DEPTH ن (ft bgs)	WATER LEVEL (ft)	SAMPLE NUMBER	RECOVERY (FT	BLOW	PID READING (PPM)	GA Class	uscs	LITHOLOGY	Surface Cover a	nd Thickness:	WE	ELL DIAGRAM
-4 -3 -3 -1 0 1 2 -3 -4 -5 -7 -8 -7 -10 -11 -12 -13 -14		1			0.0	3	FILL		DGA(Ammended), fine to co gravel, (10YR 4/2) dark grayicodor, no staining, wet @ 15.*	sh brown,dry to wet,no		Top Cap (J-Plug
16 17 18	-	2 3 4	1.5		0.0	3 NR 9	FILL NR OL		gravel,(7.5YR 2.5/1) black,w DGA(Ammended),fine to coa gravel,(10YR 5/2) grayish bro odor,no staining. NO RECOVERY. UNDorg SILT (80% organic fibers),(7.5YR 5/1) gray,low moist,no odor,no staining, (E	arse SAND,some own,dense,moist,no silt, 20% organic plasticity soft,slightly based on		- Cement (bent-cement gro - 4" Riser (PVC so 40)
									137-P3B-MW102S lithology)	l.		10)
20								<u> </u>			V//1 V//1	

A=COM 30 Knightsbridge Road, Piscataway, NJ

WELL ID 137-P3B-MW102I

30 Knightsbridge Road, Piscataway, NJ 08854		WELL ID 137-P3B-MW102I
732.564.3200 office telephone		PAGE 2 OF 3
Project Name: PPG Garfield Ave	Drilling Company: SGS North America NJDEI	Well Permit Number: E201508496
Project Number: 60240739	Driller: T.Lynch Jr Coord	inates (NJSPNAD83) x: 610954.2
Drilling Date: 8/26/2015 7:30:00 AM	Drilling Method: HSA/Mud Rotary Coord	inates (NJSPNAD83) y: 682651.6
Well Completion Date: 9/11/2015 2:00:00 PM	Elevation: 11.1 Total V	Vell Depth: 49 ft
Geologist: ES	Project Manager: Scott Mikaelian Depth	to Water: 8.24 ft
Physical Location: PBR Well P3B	Date 0	Sauged: 9/15/2015
		(Note bas = below ground surface)
SA SA NULLECON NULLEC	Surface Cover and Thick	ness: WELL DIAGRAM
5		



WELL ID 137-P3B-MW102I

PAGE 3 OF 3

Project Name: Project Numb Drilling Date: Well Completion Geologist: E Physical Loca	er: 60 8/26/2 n Date:	2015 7:30:0 9/11/2015 2	0 AM :00:00 F	PM	Drilling Company: SGS North America Driller: T.Lynch Jr Drilling Method: HSA/Mud Rotary Elevation: 11.1 Project Manager: Scott Mikaelian			NJDEP Well Permit Number: E201508496 Coordinates (NJSPNAD83) x: 610954.2 Coordinates (NJSPNAD83) y: 682651.6 Total Well Depth: 49 ft Depth to Water: 8.24 ft Date Gauged: 9/15/2015 (Note bas = below ground surface)		
(ft bgs) WATER LEVEL (ft) SAMPLE	NUMBER RECOVERY (FT)	BLOW	PID READING (PPM)	GA Class	uscs	LITHOLOGY	Surface Cover a	nd Thickness:	WELL DIAGRAM	
46 8 9	1	20-19-18- 20	0.0	8	SP SP		UNDno, fine SAND, (5YR 4/3 dense, wet,no odor,no stainii NO RECOVERY.			
48 10	2	(37) 19-20-27- 23 (47)	0.0	8	SP		UNDno,fine to medium SANI reddish brown,medium dense	D,little silt,(5YR 4/3) e,wet,no odor,no staining.	End Cap (PVC so	



30 Knightsbridge Road, Piscataway, NJ 08854

Boring ID: 137-P3B-N16A

Project Date St		60240 ing: 7	0739 7/15/2013 7	7:45:00 AM		Drilling Company: SGS North America Drilling Method: Geoprobe Rig Type:	Coordinates (NJSPNA	AD83) x: 61033.28125 AD83) y: 683038.375
		lling:	7/15/2013	3 10:45:00 AN		Core Size: 3 in	Boring Total Depth:	16 ft
	By: JF	o. Cit	e 137 - N16	2.4		Project Manager: Chris Martell	Depth to Water: NA	
riysica	ai Locatioi	1: SIE	2 137 - N I	DA .			(Note	bgs = below ground surface)
Depth Range t bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thic	kness:	Sample ID
		0.0		ASPHALT		ASPHALT		
\exists		0.0	dry	FILL	$\times\!\!\times\!\!\times$	FILL MATERIAL, with asphalt and co		
-1	2	0.0	dry	FILL		3/1) very dark gray, non plastic, densidry, no odor, no staining. COPR, with fine sand and silt, (5YR 4	1/3) reddish brown,	
-2 -3	2	0.0	dry	FILL		non plastic, loose, dry to moist, no od COPR, with fine sand and silt, (5YR 4 non plastic, medium dense to loose, o odor, no staining.	l/3) reddish brown,	
-4- -5- 	1.5	0.0	dry	FILL		COPR, with fine sand and silt, (5YR 4 non plastic, medium dense to loose, odor, no staining.		
		0.0		NR		NO RECOVERY		
-6 -7	2	0.0	dry	FILL		COPR, with fine sand and silt, (5YR 4 non plastic, medium dense to loose, odor, no staining.		
-8-	2	0.0	dry	FILL		COPR, with fine sand and silt, (5YR 4 non plastic, medium dense to loose, or		
-9	2	0.0		FILL		odor, no staining. GGM, with fine sand and trace fine gr olive green, non plastic, loose, heavy		
-10 - -11	2	0.0		FILL		at 10'. GGM, with fine sand and trace fine grolive green, non plastic, loose, heavy at 10'.		
-12 - -13 -	2	0.0		FILL		GGM, with fine sand and trace fine gr olive green, non plastic, loose, heavy at 10'.		
-14 - -15 -	2	1.5	moist to wet dry to	ML PT		Soils consistent with UNDorg.	icity, medium stiff to odor, no staining.	137-P3B-N16A-14.0-14 137-P3B-N16A-14.5-15 137-P3B-N16A-14.5-15 137-P3B-N16A-15.0-15
16			moist			fragments and 25% silt, (7.5YR 2.5/1 soft to stiff, dry to moist, moderate or staining. Soils consistent with MM.) black, non plastic,	



PPG LOGS.GDT - 7/9/13 10:39

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

Boring ID: 137-P3B-P20A

Page: 1

Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Drilling Method: Geoprobe Coordinates (NJSPNAD83) x: 611042.9375 Date Started Drilling: 7/1/2013 10:00:00 AM Coordinates (NJSPNAD83) y: 682909.25 Rig Type: Date Finished Drilling: 7/1/2013 2:40:00 AM Core Size: 3 in Boring Total Depth: 20.5 ft

Depth to Water: NA Logged By: MI Project Manager: Chris Martell Physical Location: Site 137 - P20A (Note bgs = below ground surface) Depth Recovery PID GΑ Moisture Graphic Sample Range **USCS** Surface Cover and Thickness: (ft/ft) (ppm) Content Class Log ID (ft bgs) 0.0 0.5 CONCRETE 0.0 1 CONCRET crushed CONCRETE 137-P3B-P20A-0.7-1.2 dry GGM, little fine sand, trace fine to medium gravel, (5GY 0.0 FILL 2 4/4) olive green, low plasticity, stiff, dry, no odor, green 0.0 **FILL** GGM, little fine sand, trace coal and fine to medium dry 5 137-P3B-P20A-2.7-3.2 gravel, (5GY 4/4) olive green, low plasticity, stiff, dry, no 2 odor, green staining. 0.0 **FILL** GGM, little COPR and fine sand, trace coal and fine to dry 5 137-P3B-P20A-4.7-5.2 medium gravel, (5GY 4/4) olive green, low plasticity, 2 stiff, dry, no odor, green staining. 0.0 GGM, with cinders and coal, little coal and fine to dry 5 **FILL** 137-P3B-P20A-6.7-7.2 medium gravel, (5GY 4/4) olive green, (5G_/2) 4/2 grayish green, low plasticity, stiff, dry, no odor, green 1.6 staining. NO RECOVERY NR NR dry FILL GGM, with cinders and coal, little coal and fine to 5 137-P3B-P20A-8.7-9.2 9 medium gravel, (5GY 4/4) olive green, (5G_/2) 4/2 0.0 slightly 5 FILL 2 grayish green, low plasticity, stiff, dry, no odor, green moist 10 GGM, some fine to medium sand, trace COPR, (5G_/2) 4/2 grayish green, low plasticity, stiff, slightly moist, no 0.0 5 **FILL** slightly 137-P3B-P20A-10.7-11.2 odor, green staining. moist GGM, with fine to medium sand and fine to medium 2 gravel, (5Y 6/6) olive yellow, low plasticity, stiff, slightly 12moist, no odor, green staining. 0.0 FILL GGM, with fine sand, little fine gravel, (5Y 6/6) olive slightly 5 137-P3B-P20A-12.7-13.2 13 yellow, low plasticity, stiff, slightly moist, no odor, green moist 2 0.0 **FILL** GGM, with fine sand, little fine gravel, (5Y 6/6) olive slightly 5 137-P3B-P20A-14.7-15.2 yellow, low plasticity, stiff, slightly moist, no odor, green moist 2 staining. 16 0.0 slightly 5 **FILL** GGM, with fine sand, little fine gravel, (5Y 6/6) olive 137-P3B-P20A-16.7-17.2 17 moist yellow, (5G /2) 4/2 grayish green, low plasticity, stiff, 2 slightly moist, no odor, green staining. 18 0.0 moist 6 **FILL** SILT, some clay, trace coal, (7.5YR 3/2) dark brown, 137-P3B-P20A-18.7-19.2 19 soft, stiff, moist, no odor, no staining, roots. 137-P3B-P20A-19.2-19.7 2 1.8 slightly 9 OL UNDorg SILT, 90% organic silt, 10% organic fiber, moist (10YR 5/2) grayish brown, stiff, slightly moist, moderate 20 organic odor, no staining. Soils consistent with UNDorg.

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Boring ID: 137-P3B-P24A

Page: 1

Project Name:PPG Garfield AveDrilling Company:SGS North AmericaProject Number:60240739Drilling Method:GeoprobeCoordinates (NJSPNAD83) x:610988.875Date Started Drilling:8/8/2013 5:50:00 PMRig Type:Coordinates (NJSPNAD83) y:682802.125

Date Finished Drilling: 8/8/2013 7:00:00 PM Core Size: 3 in Boring Total Depth: 21 ft

Logged By: MI Project Manager: Chris Martell Depth to Water: NA

Depth	Recovery	PID	Moisture		Graphic	0.6.0	Sample
Range ft bgs)	(ft/ft)	(ppm)	Content	USCS	Log	Surface Cover and Thickness:	ID
		0.0		CONCRETE	PAAP	CONCRETE	
-1 -2	_	0.0	slightly moist	FILL		GGM, little ash, cinders, little fine sand, trace asphalt, (5GY 4/4) olive green, low plasticity, soft, slightly moist, no odor, green staining.	137-P3B-P24A-0.5-1.0
-3- -4-	5						137-P3B-P24A-2.5-3.0
-5-		0.0	moist	FILL		GGM, little fine to medium sand, little salt precipitate, low	137-P3B-P24A-4.5-5.0
-6-						plasticity, soft to stiff, moist, no odor, green staining.	
-7- -8-	5						137-P3B-P24A-6.5-7.0
-9							137-P3B-P24A-8.5-9.0
-10 - -11 - -12		0.0	slightly moist	FILL		GGM, trace fine sand, (5GY 4/4) olive green, non plastic, stiff, slightly moist, no odor, green staining.	137-P3B-P24A-10.5-11
-13 - -14 -	5						137-P3B-P24A-12.5-13
-15 - -		0.0	wet	FILL		GGM, little coarse gravel, little salt precipitate, (5GY 5/2) grayish green, non plastic, loose to soft, wet, no odor,	
-16 -		0.0	wet	FILL		green staining. medium to coarse SAND, with cinders, little coal ash,fine gravel, non plastic, dense, wet, no odor, no staining.	137-P3B-P24A-16.5-17
-17 - -18	5	0.0	dry	FILL		GGM, little fine sand, trace salt precipitate, (5GY 4/4) olive green, low plasticity, stiff, dry, no odor, green staining.	
_19 		0.0	dry	FILL		fine to medium SAND, some coal, little cinders, (5YR	137-P3B-P24A-18.5-19 137-P3B-P24A-19.0-19
4		1.2	moist	OL		√ 4/3) reddish brown, non plastic, hard, dry, no odor, no //	137-P3B-P24A-19.5-20
-20 <u>-</u>	1	1.6	moist	OL		\staining. UNDorg SILT, 90% organic silt, 20% organic fibers, low plasticity, soft, moist, moderate organic odor, no staining.	
-21						Soils consistent with UNDorg. UNDorg SILT, 90% organic silt, 20% organic fibers, low plasticity, soft, moist, moderate organic odor, no staining. Soils consistent with UNDorg.	

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Boring ID: 137-P3B-P29A

Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Drilling Method: Geoprobe Coordinates (NJSPNAD83) x: 610921.375 Date Started Drilling: 7/11/2013 10:38:00 AM Rig Type: Coordinates (NJSPNAD83) y: 682668.1875 Date Finished Drilling: 7/11/2013 11:30:00 AM Core Size: 3 in Boring Total Depth: 22 ft Depth to Water: Logged By: EW Project Manager: Chris Martell Physical Location: Site 137 - P29A

	I						
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
		0.0	dry	ASPHALT		ASPHALT	-
,	2	0.0	a.y	FILL		crushed GRAVEL, with fine to medium sand and some	
-1-	-	0.0	dry	FILL		silt, (7.5YR 4/4) brown, non plastic, loose to medium dense, dry, slight HC odor, hydrocarbon staining, tar-like	1
-			to			aromatic odor, similar to hydrocarbons.	-
-2-		0.0	moist	FILL		COPR, with fine sand and trace fine gravel, (5YR 3/4)	1
		0.0	moist	FILL	 	dark reddish brown, non plastic, loose to medium dense,	
	2	0.0	dry	FILL		dry to moist, no odo, no staining.	
-3-	2	0.0	to	FILL		GGM, (5GY 5/4) light olive green, non plastic, loose,	
-		0.0	moist	1166		moist, no odor, green staining.	
4			dry			COPR, with fine sand and trace fine gravel, (5YR 3/4)	
.		0.0	to	FILL		dark reddish brown, non plastic, loose to medium dense,	
٦	_		moist		\bowtie	dry to moist, no odor, no staining.	
-5-	2		moist			COPR, with fine sand and trace fine gravel, (5YR 3/4)	
4			moist			dark reddish brown, non plastic, loose to medium dense,	
6						dry to moist, no odor, no staining.	
-6-		0.0	moist	FILL	\otimes	GGM, (5GY 5/4) light olive green, non plastic, loose,	
\dashv	_					moist, no odor, green staining.	
-7-	2	0.0	moist	FILL		GGM, (5GY 5/4) light olive green, non plastic, loose,	-
			moist		\bowtie	moist, no odor, green staining, ash material and white	137-P3B-P29A-7.3-7.
		0.0	moist	FILL		chromium precipitate at 4.0 - 6.0 ' GGM, (5GY 5/4) light olive green, non plastic, loose,	107 1 02 1 207 (7.0 7.0
-8-		0.0	moist	FILL		moist, no odor, green staining, ash material and white	137-P3B-P29A-8.0-8.
\dashv			to			chromium precipitate at 4.0 - 6.0 '.	
-9-	2		wet		\otimes	medium to coarse FILL MATERIAL, with ash and coarse	
•						gravel, (7.5YR 5/1) gray, (5GY 5/4) light olive green, non	
٦					\bowtie	plastic, loose, moist, no odor, green staining, visible	
-10		0.0	moist	FILL		chromium staining throughout interval.	137-P3B-P29A-10.0-10
4		0.0	to	I ILL	\otimes	medium to coarse FILL MATERIAL, with ash and coarse	107 1 02 1 207 (10:0 10
-11	2		wet			gravel, (7.5YR 5/1) gray, (5GY 5/4) light olive green, non	
''			WCt		\bowtie	plastic, loose, moist, no odor, green staining, chromium	
\neg						staining stops at beginning of this interval.	
-12 		0.0	moint	FILL		medium to coarse FILL MATERIAL, with ash and	137-P3B-P29A-12.0-12
4		0.0	moist	FILL	\bowtie	cinders, trace ceramics and wood fibers, (7.5YR 4/1)	137-F3D-F29A-12.0-12
40	2		to wet			dark gray, non plastic, medium dense, moist to wet, no	
-13	_		wei			odor, no staining.	
\dashv					\bowtie	medium to coarse FILL MATERIAL, with ash and	
-14						cinders, trace ceramics and glass fragments, (7.5YR 2.5/2) very dark brown, non plastic, medium dense, moist	107 DOD DOOM 110 11
		0.0	moist	FILL	\otimes	to wet, no odor, no staining.	137-P3B-P29A-14.0-14
	2		to .			medium to coarse FILL MATERIAL, with ash and	
-15	_		wet		\bowtie	cinders, trace ceramics and glass fragments, (7.5YR	
\dashv						2.5/2) very dark brown, non plastic, medium dense, moist	
-16						to wet, no odor, no staining.	10-00-00-00-00-00-00-00-00-00-00-00-00-0
		0.0	moist	FILL	\bowtie	medium to coarse FILL MATERIAL, with ash and	137-P3B-P29A-16.0-16
7	11		to			cinders, trace ceramics and glass fragments, (7.5YR	
-17	1.4		wet			2.5/2) very dark brown, non plastic, medium dense, moist	
\dashv	ł	0.0		NR	<u>r~~~</u>	to wet, no odor, no staining.	1
-18						medium to coarse FILL MATERIAL, with fine to coarse	
.5	T	0.0	moist	FILL		gravel, some ash and cinders with fine to medium sand,	137-P3B-P29A-18.0-18
\dashv	_		to		\bowtie	\(\((10\text{YR 5/2}\)\)\ grayish brown, non plastic, loose to medium	
-19	2		wet			dense, moist to wet, no odor, no staining.	
						NO RECOVERY	
20					\bowtie	medium to coarse FILL MATERIAL, with fine to coarse gravel, some ash and cinders with fine to medium sand.	137-P3B-P29A-19.5-20
20		0.3	moist	MH		gravel, some asn and cinders with fine to medium sand, (10YR 5/2) gravish brown, non plastic, loose to medium	137-P3B-P29A-20.0-20
\dashv						dense, moist to wet, no odor, no staining.	
-21	1.6					SILT, with wood fragments, (7.5YR 3/1) very dark gray,	
_						high plasticity, medium stiff to stiff, moist, no odor, no	
7				NR	* * * * * *	staining. Soils consistent with UNDno.	1
-22-				1411		NO RECOVERY	
- 1							

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



PPG LOGS.GDT - 7/9/13 13:08

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

30 Knightsbridge Road, Piscataway, NJ 08854

Boring ID: 137-P3B-R18A

Page: 1

Project Name:PPG Garfield AveDrilling Company:SGS North AmericaProject Number:60240739Drilling Method:GeoprobeCoordinates (NJSPNAD83) x:611123.5Date Started Drilling:6/27/2013 11:00:00 AMRig Type:Coordinates (NJSPNAD83) y:682935.8125

Date Finished Drilling: 6/27/2013 2:10:00 PM Core Size: 3 in Boring Total Depth: 19 ft Depth to Water: NA Logged By: MI Project Manager: Chris Martell Physical Location: Site 137 - R18A (Note bas = below ground surface) Depth Recovery PID GΑ Moisture Graphic Sample Range **USCS** Surface Cover and Thickness: (ft/ft) (ppm) Content Class Log ID (ft bgs) 0.0 1 ASPHALT ASPHALT dry crushed CONCRETE, with coarse gravel, (9.5/2.5Y_/1) 0.0 FILL 137-P3B-R18A-0.5-1.0 2 dry FILL white, non plastic, loose to hard, dry, no odor, no 0.0 fine SAND, little fine gravel, trace silt, (10YR 5/6) 0.0 FILL slightly 5 yellowish brown, non plastic, loose, dry, no odor, slight 0.0 moist 5 FILL slightly 137-P3B-R18A-2.5-3.0 GGM, some fine sand, little cinders, (5GY 4/4) olive 2 moist green, low plasticity, soft, slightly moist, no odor, green GGM, some fine sand, little cinders, (5GY 4/4) olive 0.0 FILL slightly 5 green, low plasticity, soft, slightly moist, no odor, green moist staining. 137-P3B-R18A-4.5-5.0 2 GGM, some fine sand, little cinders, (5GY 4/4) olive green, low plasticity, soft, slightly moist, no odor, green staining. 0.0 **FILL** GGM, some fine sand, little cinders, (5GY 4/4) olive slightly 5 green, low plasticity, soft, slightly moist, no odor, green moist 137-P3B-R18A-6.5-7.0 2 staining. 0.0 slightly 5 FILL GGM, some fine sand, little cinders, (5GY 4/4) olive green, low plasticity, soft, slightly moist, no odor, green moist 137-P3B-R18A-8.5-9.0 2 0.0 slightly 5 **FILL** GGM, some fine sand, (5GY 4/4) olive green, low moist plasticity, soft, slightly moist, no odor, green staining. 137-P3B-R18A-10.5-11.0 2 GGM, some fine sand, (5GY 4/4) olive green, low 0.0 **FILL** slightly 5 moist plasticity, soft, slightly moist, no odor, green staining. 137-P3B-R18A-12.5-13.0 2 137-P3B-R18A-12.5-13.0X 0.0 FILL slightly 5 GGM, some fine sand, (5GY 4/4) olive green, low plasticity, soft, slightly moist, no odor, green staining moist 137-P3B-R18A-14.5-15.0 0.0 2 3 **FILL** moist SILT, some wood fragments, little roots, trace clay. (7.5YR 2.5/2) very dark brown, medium plasticity, soft, moist, no odor, no staining 16 137-P3B-R18A-16.0-16.5 0.0 FILL SILT, some roots, trace fill clay, (10YR 4/2) dark grayish 3 moist brown, medium plasticity, soft, moist, no odor, no 137-P3B-R18A-16.5-17.0 0.0 moist 9 **FILL** 12 2.2 7 PT dry UNDorg SILT, 90% organic silt, 10% organic fibers. NR NR (7.5YR 3/2) dark brown, low plasticity, soft, moist, 18 moderate organic odor, no staining. Soils consistent with 11/ 11/ 2.4 7 PT drv 1 UNDora 1, 11, 1 PEAT (degraded vegetated material), (7.5YR 3/2) dark 19 brown, non plastic, stiff, dry, strong organic odor, no staining. Soils consistent with MM NO RECOVERY PEAT (degraded vegetated material), (7.5YR 3/2) dark brown, non plastic, stiff, dry, strong organic odor, no staining. Soils consistent with MM.



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Boring ID: 137-P3B-R21A

Page: 1

Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Drilling Method: Geoprobe Coordinates (NJSPNAD83) x: 611083 Date Started Drilling: 8/7/2013 5:50:00 PM Rig Type: Coordinates (NJSPNAD83) y: 682855.5 Date Finished Drilling: 8/7/2013 7:20:00 PM Boring Total Depth: 20 ft Core Size: 3 in Logged By: MI Depth to Water: NA Project Manager: Chris Martell

Depth	_	DID					
Range t bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
		0.0		CONCRETE	D 7 4 D	CONCRETE	
-1 -2		0.0	slightly moist	FILL		GGM, little fine gravel, trace cinders, ash, (5GY 4/4) olive green, low plasticity, soft to stiff, slightly moist, no odor, green staining.	e 137-P3B-R21A-0.5-1.0
-3	5	0.0	dry	FILL		fine to medium SAND, some asphalt, some cinders, little gravel, (7.5YR 2.5/1) black, non plastic, loose, dry, no odor, no staining.	137-P3B-R21A-2.5-3.0
-4- -		0.0	slightly moist	FILL		GGM, little fine sand, trace cinders, ash, COPR, (5GY 4/4) olive green, low plasticity, soft to stiff, slightly moist, no odor, green staining.	137-P3B-R21A-4.5-5.0
-5— - -6—		0.0	slightly moist	FILL		GGM, little fine sand, trace cinders, ash, COPR, (5GY 4/4) olive green, low plasticity, soft to stiff, slightly moist, no odor, green staining.	
-7- -8-	5						137-P3B-R21A-6.5-7.0
-9-							137-P3B-R21A-8.5-9.0
-10 - -11		0.0	slightly moist	FILL		GGM, little fine sand, trace cinders, ash, COPR, (5GY 4/4) olive green, low plasticity, soft to stiff, slightly moist, no odor, green staining.	137-P3B-R21A-10.5-11
-12 -13 -14	5						137-P3B-R21A-12.5-13
-15 -		0.0	slightly moist	FILL		GGM, little fine sand, trace cinders, ash, COPR, (5GY 4/4) olive green, low plasticity, soft to stiff, slightly moist,	137-P3B-R21A-14.5-15
-16 - -17						no odor, green staining.	137-P3B-R21A-16.5-17
-18	5	0.0	dry moist	FILL FILL		fine to medium SAND, some fine gravel, trace silt, (5YR 4/3) reddish brown, non plastic, hard, dry, no odor, no	
-19 -		2.1	moist	OL		\staining. SILT, some clay, trace fine sand, (7.5YR 2.5/1) black, low plasticity, soft, moist, no odor, no staining. UNDorg SILT, 90% organic silt, 10% organic fibers, low	137-P3B-R21A-18.5-19 137-P3B-R21A-19.0-19
-20						plasticity, soft, moist, moderate organic odor, no staining Soils consistent with UNDorg.	



Boring ID: 137-P3B-S18A

Project	t Name: F	PPG Ga	arfield Ave			Orilling Company: SGS North America			
	Number:					Orilling Method: Geoprobe	Coordinates (NJSP)	NAD83) x: 611145.3125	
				11:30:00 AM		Rig Type:	1	IAD83) y: 682917.375	
				3 2:30:00 PM		Core Size: 3 in	Boring Total Depth:		
	d By: JF					Project Manager: Chris Martell	Depth to Water:		
		n: Site	e 137 - S18	8A					
							(No	te bgs = below ground surface)	
Depth Range t bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thic	kness:	Sample ID	
		0.0	dry	ASPHALT	XXXX	ASPHALT			
_	2	0.0	<u> </u>	FILL	\bowtie	crushed well-graded GRAVEL, with tr			
-1	_	0.0	dry to	FILL	\bowtie	\no staining	c loose, dry flo odol		
_			moist		\bowtie	GGM, with trace fine sand, (5GY 4/4)	olive green, non		
-2		0.0	dry	FILL		plastic, medium stiff, dry to moist, no	odor, green /	-	
_		0.0	to	1 1 1 1 1	\bowtie	staining, heavy chromium staining fou	ind throughout.		
-3	2		moist			GGM, with trace fine sand, (5GY 4/4)			
_					\bowtie	plastic, medium stiff, dry to moist, no	odor, green		
, –					\bowtie	staining, heavy chromium staining fou	ina unougnout.		
4		0.0	dry	FILL		GGM, with trace fine sand, (5GY 4/4)	olive green, non		
_			to		\bowtie	plastic, medium stiff, dry to moist, no	odor, green		
5	2		moist		\bowtie	staining, heavy chromium staining fou	ind throughout.		
_					\bowtie				
6									
•		0.0	dry	FILL	\bowtie	GGM, with trace fine sand, (5GY 4/4)			
	1 1		to		\bowtie	plastic, medium stiff, dry to moist, no	odor, green		
7-	'		moist	NR		staining, heavy chromium staining fou NO RECOVERY	iriu throughout.	1	
_						NO RECOVERT			
8 —		0.0	alm.	FIL I	XXXXX	COM with trace fine and (FOV 4/4)		_	
_		0.0	dry to	FILL	\bowtie	GGM, with trace fine sand, (5GY 4/4) plastic, medium stiff, dry to moist, no	olive green, non		
9—	2		moist		\bowtie	staining, heavy chromium staining for			
9			1110101			Stanning, fieary officiniant stanning for	ina tinoagnoat.		
					\bowtie				
0-		0.0	dry	FILL		GGM, with trace fine sand, (5GY 4/4)	olive green non	-	
_			to		\bowtie	plastic, medium stiff, dry to moist, no			
11	2		moist		\bowtie	staining, heavy chromium staining for	ind throughout.		
_		0.0	wet	FILL		FILL MATERIAL, with cinders, ash an			
2			to		\bowtie	gravel with some fine to medium sand	l, (7.5YR 3/4) dark		
12—		0.0	saturated	FILL		brown, non plastic, loose to medium of			
	2		dry		\bowtie	\saturated, no odor, green staining, ch \on ash and cinders.	romium precipitate		
13—			to moist		\bowtie	GGM, with trace fine sand, (5GY 4/4)	olive green non		
_			1110181		\bowtie	plastic, medium stiff, dry to moist, no			
4		0.0		F /		staining, heavy chromium staining for	ind throughout.	-	
_		0.0	dry	FILL	\bowtie	GGM, with trace fine sand, (5GY 4/4)	olive green, non		
15	2		to moist		\bowtie	plastic, medium stiff, dry to moist, no			
15—	_		1110151			staining, heavy chromium staining fou	ind throughout		
_	1								
16—		0.0	dry	FILL		GGM, with trace fine sand, (5GY 4/4)	olive green non	†	
-	-	J. J	to		\bowtie	plastic, medium stiff, dry to moist, no			
17	2	0.0	moist	B 41	 XXXX	staining, heavy chromium staining for	ind throughout.	-	
_		0.3	slightly	ML		sandy SILT, with traces of wood fragn	nents, (10YR 3/1)	407 808 8484 15 5 15	
18 –			moist			very dark gray, medium plasticity, stiff		137-P3B-S18A-17.5-18.0	
10		0.4	moist	OL	H	slightly moist to moist, moderate orga UNDorg, 80% organic silt, 20% organ	IIIC OGOF.	137-P3B-S18A-18.0-18.5	
	1.4		to			dark gray, low plasticity, medium stiff			
-19	1.4		wet			wet, strong organic odor, no staining.	,		
_				NR		NO RECOVERY		1	
20-									
				I	1			I .	
						M/UND confirmed to be 1 ft thick.			



30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: 137-P3B-S21A

Page: 1

 Project Name:
 PPG Garfield Ave
 Drilling Company:
 SGS North America

 Project Number:
 60240739
 Drilling Method:
 Geoprobe
 Coordinates (NJSPNAD83) x:
 611109.8125

 Date Started Drilling:
 8/8/2013 10:10:00 PM
 Rig Type:
 Coordinates (NJSPNAD83) y:
 682842

Date Finished Drilling: 8/8/2013 11:30:00 PM Core Size: 3 in Boring Total Depth: 20 ft

Logged By: MI Project Manager: Chris Martell Depth to Water: NA

							(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		CONCRETE	PAAP	CONCRETE	
-1- -1- 	5	0.0	saturated			GGM, trace fine sand, trace coal, (5GY 4/4) olive green, low plasticity, soft to stiff, saturated, no odor, green staining.	137-P3B-S21A-0.5-1.0
-3- -4-	Ü						137-P3B-S21A-2.5-3.0
-5- -6-		0.0	saturated	FILL		GGM, trace fine sand, trace COPR, coal, (5GY 4/4) olive green, low plasticity, soft to stiff, saturated, no odor, green staining.	137-P3B-321A-4.3-3.0
-7— -8—	5						137-P3B-S21A-6.5-7.
-9 9 10		0.0		511			137-P3B-S21A-8.5-9.
	5	0.0	saturated	FILL		GGM, trace fine sand, trace coal, (5GY 4/4) olive green, low plasticity, soft to stiff, saturated, no odor, green staining.	137-P3B-S21A-10.5-11
-13 14 14	5						137-P3B-S21A-12.5-13
15		0.0	wet	FILL		GGM, with cinders, little ash, (5GY 4/4) olive green, non	137-P3B-S21A-14.5-15
-15 - - -16 -		0.0	wet	FILL		plastic, loose soft, wet, no odor, green staining. CINDERS, with GGM, little ash, (5GY 4/4) olive green, non plastic, loose to soft, wet, no odor, green staining.	
-17 - -18	5						137-P3B-S21A-16.5-17
		0.0	dry	FILL		fine to medium SAND, little coal, little silt, (5YR 4/3)	137-P3B-S21A-18.5-19
19 		0.9	moist	OL		reddish brown, non plastic, hard, dry, no odor, no staining. UNDorg SILT, 90% organic silt, 10% organic fibers, low plasticity, soft to stiff, moist, moderate organic odor, no	137-P3B-S21A-19.0-19
						staining. Soils consistent with UNDorg.	



30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: 137-P3B-S31A

Project Name: PPG Garfield Ave

Project Number: 60240739

Drilling Method: Geoprobe

Coordinates (NJSPNAD83) x: 610974.75

Date Started Drilling: 7/3/2013 8:20:00 AM

Rig Type:

Core Size: 3 in

Boring Total Depth: 22 ft

Logged By: EW

Project Manager: Chris Martell

Depth to Water: NA

			11312013	10:35:00 AM			Boring Total Depth:	
	By: EW					Project Manager: Chris Martell	Depth to Water: NA	Λ
Physica	al Location	n: Site	e 137 - S3	1A				
							(Not	te bgs = below ground surface)
Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphi Log	Surface Cover and Thickne	ess:	Sample ID
it bgs)								
	0.3	0.0		ASPHALT	XXXX	ASPHALT, with coarse gravel		
- 7	0.4	0.0	moist	FILL	XXXX	fine to medium SAND, trace silt and fine		-
-1-L	1	0.0	moist	FILL	\bowtie	gravel, (7.5YR 4/1) dark gray, non plastion odor no staining	c dense, moist	
	0					COPR, with silt and fine sand, (5YR 3/4)	dark reddish —	
-2-	0.6	0.0	ماس ر	FILL	XXXX	brown, non plastic soft, moist no odor no		-
[1.1	0.0	dry to	FILL	\bowtie	NO RECOVERY	/	
3 <u></u>		0.0	moist	FILL		COPR, with fine sand and fine gravel, (5		
. "]	•		moist		\bowtie	brown, non plastic loose to soft, dry to m	ioist no odor no	
	0 0.8	0.0		FILL	\bowtie	crushed COPR, and silt, (5YR 3/2) dark	reddish brown	-
-4-	0.0	0.0	wet	FILL	 	\\non plastic soft, moist no staining, petrol		
[0.5				$\otimes \otimes \otimes$	NO RECOVERY	/	
-5-	0.3	0.0	moist	FILL	\bowtie	ASH, with silt and fine sand, (7.5YR 4/1)		
[0.0	0.0	dry	FILL		\tag{plastic loose, wet no staining, petroleum} medium to coarse SAND, and cinders so	-like odor]
-6-	2	0.0		FILL	\bowtie	medium to coarse SAND, and cinders so \(\)\(\)\(\)\(\)\(\)\(\)\(\)\(\)\(\)\(\		-
		0.0	wet	FILL	\bowtie	staining, petroleum-like odor	//	
-7-					\bowtie	fine to medium SAND, with fine gravel, (
'					\bowtie	yellowish brown, non plastic loose, dry, p	petroleum-like	
					\bowtie	√ ∥odor NO RECOVERY		
-8-		15.6	wet	FILL		ASH, with fine sand and ceramics, (7.5Y	'R 5/1) gray non	
		11.3	moist	FILL	$\otimes \otimes$	\plastic loose, wet no staining, petroleum		
−9 −	1.5				\bowtie	ASH, with fine sand and ceramics, with v	wood fragments,	
		10.2	moist	FILL	XXXX	(7.5YR 5/1) gray, non plastic, loose, wet	, no staining, /	
-10		0.0		NR		\ \ \ \ \ \ \ \ \ \ \ \ \	monte (7.5VD	
. "]		0.0	moist	FILL		2.5/1) black, non plastic, soft, moist, she		
11	1.5					petroleum-like odor.	//	
-11					\bowtie	SILT, with fine to medium gravel and fill		
· T				NR		2.5/1) black, non plastic, soft, moist, she	en,	
-12		0.0	moist	FILL	XXXX	petroleum-like odor. NO RECOVERY		
			to			ASH, with fine to medium gravel and cer	ramics. wood	
-13	2	0.0	wet	FILL		∏ fragments and fine to medium sand, (5Y	R 4/1) dark gray, ∥	
			moist		\bowtie	non plastic, loose, moist, no odor, no sta	nining.	
_ 14 		0.0			\bowtie	NO RECOVERY fine to medium GRAVEL, with glass frag	monte little fine	
. 4		0.0	moist	FILL	\bowtie	sand, (7.5YR 2.5/1) black, non plastic, lo		
-15	2				\otimes	wet, no odor, no staining.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
13						ASH, with fine to medium gravel and cer	ramics, wood	
٠٦		0.0	moist	FILL		fragments and fine to medium sand, (5Y		
-16		0.0	moist	FILL		\text{\langer} \frac{\langer}{\langer} non plastic, loose, moist, no odor, no start ASH, with fine to medium gravel and cer		1
	_	0.0	to	FILL		fragments and fine to medium sand, (5Y)		1
-17	2		wet		\bowtie		nining.	
- 4			moist		\bowtie	fine to medium SAND, with GGM and fin		
_18		0.0		FIL.		3/1) very dark gray, (10Y 4/4) olive, non moist, no odor, green staining.	piastic, loose,	-
- 4		0.0	moist	FILL		GGM, with fine sand, (10Y 5/4) light olive	e. non plastic	
-19	2				\bowtie	soft to hard, moist to wet, no odor, greer	n staining.	
5 _						ASH, with fine to medium gravel and cer	ramics, wood	
		0.0	slightly	FILL		fragments and fine to medium sand, (5Y		1
-20		0.0	moist	FILL		non plastic, loose, moist, no odor, no sta		
	2	0.0	moist	FILL		fragments and fine to medium sand, (5Y		407 DOD 0044 00 7 04
-21	2	0.0	moist	FILL		non plastic, loose, moist, no odor, no sta	nining.	137-P3B-S31A-20.7-21
- 4		1.3	to wet	PT		III GGIVI, IIIIIE IIIIE Sailu II ace calciui ii leaci	nate, (5GY 5/4)	137-P3B-S31A-21.2-21
-22			moist		1, 11,		ntiy moist, no	
			moist			odor, green staining. GGM, little fine sand, (5GY 4/4) olive gre	en non plastic	
						soft, moist, no odor, green staining.	Jon, non plastio,	
						ASH, with fine to medium sand and fine		
						4/1) dark gray, non plastic, loose, moist	to wet, no odor,	
	to: 1\ 2 atta	mnto wo	re made to	htain hest reco	overy 2) N	M/UND confirmed to be 1 ft thick.	11.4	



Project Name: PPG Garfield Ave

Project Number: 60240739

Boring ID: 137-P3B-S31A

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Coordinates (NJSPNAD83) x: 610974.75
Coordinates (NJSPNAD83) y: 682574.125
Boring Total Depth: 22 ft

Date Finished Drilling: "Zen" 1,32013 (1) 35:00 AM Core Size: 3 in Boring Total Depth: 22 ft"		arted Drill			:20:00 AM	Rig Type:		IAD83) y: 682574.125
Depth Range (ft bgs) Recovery (ft/ft) PID (ppm) Moisture Content USCS Graphic Log Surface Cover and Thickness: Sample ID	Date Fi	nished Dr	illing:	7/3/2013	10:35:00 AM	Core Size: 3 in		
Depth Range (ft bgs) Recovery (ft/ft) PID Moisture Content USCS Graphic Surface Cover and Thickness: Sample ID Ino staining. SILT, with wood fragments, (7.5YR 2.5/1) black, non plastic, soft, moist, no odor, no staining. PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (7.5YR 2.5/3) very dark brown, non plastic, stiff, moist, slight organic odor, no						Project Manager: Chris Martell		
Depth Range (ft bgs) Recovery (ft/ft) PID (ppm) Moisture Content USCS Graphic Log Surface Cover and Thickness: Sample ID Solution Surface Cover and Thickness: Sample ID Surface Cover and Thickness: Sample ID Surface Cover and Thickness: Sample ID Silt, with wood fragments, (7.5YR 2.5/1) black, non plastic, soft, moist, no odor, no staining. PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (7.5YR 2.5/3) very dark brown, non plastic, stiff, moist, slight organic odor, no	Physic	al Locatio	n: Site	e 137 - S <mark>3</mark>	1A			
Range (ft bgs) (ft/ft) (ppm) (content USCS Log Surface Cover and Thickness: ID							(No	te bgs = below ground surface)
SILT, with wood fragments, (7.5YR 2.5/1) black, non plastic, soft, moist, no odor, no staining. PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (7.5YR 2.5/3) very dark brown, non plastic, stiff, moist, slight organic odor, no	Range	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS		kness:	Sample ID
Comments: 1) 3 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick.						SILT, with wood fragments, (7.5YR 2 plastic, soft, moist, no odor, no staini PEAT (degraded vegetated material) fibers and 20% organic silt, (7.5YR 2 brown, non plastic, stiff, moist, slight staining. Soils consistent with MM.	ng. , with 80% organic 5/3) very dark	

Drilling Company: SGS North America

Drilling Method: Geoprobe

PPG - PPG_LOGS.GDT - 8/16/13 08:51



30 Knightsbridge Road, Piscataway, NJ 08854

Boring ID: 137-P3B-V19A

Project	Number:	60240		3:23:00 AM				IAD83) x: 611212.1875 AD83) y: 682850.0625
				10:00:00 AM		-	Boring Total Depth:	
	I By : AB	illing.	1/12/2013	10.00.00 AI			Depth to Water:	2011
		a. Cit	e 137 - V19	24		Project Manager: Chins Marten	Depth to water:	
riysica	ai Locatioi	1. SILE	2 137 - V IS	9A			(Not	e bgs = below ground surface)
41-							,	
Depth Range t bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphi Log	Surface Cover and Thickne	ess:	Sample ID
		0.0	dry	ASPHALT	XXXX	ASPHALT, some fine sand and trace gla	ass fragments /	
		0.0	dry	FILL	\bowtie	∖ and silt, (7.5YR 4/2) brown (10YR 4/1) d	lark gray, non $/\!\!\!\!/$	
-1	2	0.0	dry	FILL		\plastic, loose, dry, no odor, no staining.	/	
-		0.0	dry	FILL	\bowtie	crushed GRAVEL, some fine sand and t fragments and silt, (7.5YR 4/2) brown (1		
-2-						gray, non plastic, loose, dry, no odor, no		
		0.0	dry	FILL	\bowtie	SILT, with fine to medium gravel, and sa		
	2				\bowtie	(2.5YR 2.5/4) dark reddish brown, non p		
-3	_				\bowtie	medium dense, dry, no odor, no staining	g.	
\dashv					\bowtie	GGM, trace fine to medium gravel, (5GY		
-4-		0.0	dr.	- FU I		non plastic, loose to medium dense, dry		
\dashv		0.0	dry	FILL	\bowtie	staining, heavy chromium staining at 3.5		
-5-	2				\bowtie	GGM, trace gravel, (5GY 4/4) olive green loose, dry, no odor, green staining, heav		
5					\bowtie	staining at 4.5'.	y ornormani	
					\bowtie	GGM, trace gravel, (5GY 4/4) olive gree	n. non plastic.	
-6-		0.0	dry	FILL		loose, dry, no odor, green staining.	,, ,, , , , , , , , , , , , ,	
\dashv		0.0	ury	I ILL	\bowtie	GGM, trace gravel, (5GY 4/4) olive gree	n, non plastic,	
_7	2				\bowtie	loose, dry, no odor, green staining.		
′					\bowtie			
					\bowtie			
-8-		0.0	dry	FILL		GGM, trace gravel, (5GY 4/4) olive gree	n non plastic	
\dashv			4.,		\bowtie	loose, dry, no odor, green staining, heav		
-9	2				\bowtie	staining.	.,	
					\bowtie			
40					\bowtie			
-10		0.0	slightly	FILL		WEATHERED BRICK, with GGM, (5R 5	5/6) red, (5GY	
\dashv		0.0	moisť	FILL		4/4) olive green, non plastic, soft, slightly		
-11	2		dry		\bowtie	\no staining, heavy chromium staining.		
- 4					\bowtie	fine to medium SAND, with ash, some c		
-12					\bowtie	coal, (10YR 4/2) dark grayish brown, nordry, no odor, no staining.	n piastic ioose,	
		0.0	dry	FILL	\bowtie	fine to medium SAND, with ash, some c	inders trace	
40	1.5	0.0				coal, (10YR 4/2) dark grayish brown, nor		
- 13 	1.0	0.0	slightly	FILL	\bowtie	dry, no odor, no staining.		
\dashv			moist	NR	\sim	GGM, trace sand, (5GY 5/2) grayish gre		
-14		0.0	d		XXXX	loose, slightly moist, no odor, no staining	g/	
_		0.0	dry	FILL	\bowtie	NO RECOVERY GGM, trace sand, (5GY 4/4) olive green.	non plactic	
-15	2				\bowtie	loose, dry, no odor, ggreen staining at 1	5 2 ft trace	
10					\bowtie	COPR throughout.	o n, naoc	
¬					\bowtie	3 - 1 - 3 - 1 - 3 - 1 - 1 - 1 - 1 - 1 -		
-16		0.0	dry	FILL		GGM, some sand, trace COPR, (5GY 4/	/4) olive green	
\dashv			۰.,		\bowtie	non plastic, loose, dry, no odor, green st		
-17	1.1	0.0	dry	FILL		COPR throughout.		
\exists		0.7	moist	FILL		COPR, trace sand, (2.5YR 4/1) dark red	ldish gray, non	
_19				NR	L	\plastic, loose, dry, no odor, no staining.	(7.5VD 0.5/0)	
-18		0.7	moist	FILL		SILT, some roots, little wood fragments,		
\dashv		1.6	moist	MH		very dark brown, low plasticity, very soft moist to saturated, moderate organic od		137-P3B-V19A-18.5-19
-19 	2	2.9	moist	PT	<u> </u>		///	137-P3B-V19A-19.0-19
4		۷.5	1110151	FΙ		CILT come roots little wood fragments	(7.5YR 2.5/3)	101-1 0D-V 10A-10.U-13
_20					1, 11,	∖\very dark brown, low plasticity, very soft	to medium stiff,	
						moist to saturated, moderate organic od	lor. 	
						UNDorg, 90% organic silt, 10% organic to	tibers, (7.5YR	
						2.5/3) very dark brown (10YR 2/1) black		
						plasticity, soft to stiff, moist, moderate of consistent with UNDorg.	rganic odor. Solls	
						PEAT (degraded vegetated material), wi	ith 85% woody	
						fibers and 15% silt, (7.5YR 2.5/2) very d		
						2/1) black, non plastic medium dense to		
						wet, strong organic odor. Soils consister		
			ı		ı			



30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: 137-P3B-W22A

<u>Project</u>	t Name: F	PG G	arfield Ave			Orilling Company: SGS North America		
Project	t Number:	60240	0739			Orilling Method: Geoprobe	Coordinates (NJSPN	AD83) x: 611194.875
				8:50:00 AM		Rig Type:		AD83) y: 682758.1875
				3 10:00:00 AM		Core Size: 3 in	Boring Total Depth:	
	d By: MI					Project Manager: Chris Martell	Depth to Water: NA	
	al Location	n: Site	e 137 - W2	22A				
							(Note	bgs = below ground surface)
Depth	Poss	DID	Maiatore		Crark!			Comple
Range			Moisture Content	USCS	Graphic	Surface Cover and Thick	ness:	Sample ID
ft bgs)	(1011)	(ppm)	Content		Log			וט
		0.0		ACDUALT		ASPHALT		
		0.0	moist	ASPHALT CONCRETE	0 4 4 0		(a) (7.5VD 5/1)	
1	2	0.0	slightly	FILL		gray, non plastic, loose to hard, moist.		
.]	0.0	moist			COPR, some silt, little fine to medium		
_		0.0		EILI		yellowish red, non plastic, loose to soft		
-2		0.0	slightly moist	FILL FILL		∖odor, no staining.	//	
_		0.0	slightly	1 166	\bowtie	COPR, some silt, little fine to medium		
-3	1.8		moist		\bowtie	4/6) yellowish red, non plastic, loose to	sort, slightly	
_						moist, no odor, green staining. GGM, little COPR trace salt precipitate	(5GY 4/4) olivo	
_1				ND		green, low plasticity, soft to stiff, slightl		
4		0.0	slightly	NR FILL	$\langle \rangle \rangle \langle	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	,	
_	1 ,		moisť	1 166		\NO RECOVERY	/	
-5	2					GGM, some COPR, little cinders, trace		
_					\bowtie	(5YR 5/2) reddish gray, low plasticity, s	soft to stiff, slightly	
-6						moist, no odor, green staining.		
J]	0.0	slightly	FILL	\bowtie	GGM, little salt precipitate, (5GY 4/4) of		
] 2		moist			plasticity, soft to stiff, slightly moist, no	odor, green	
-7	4					staining.		
_								
-8		0.0			\bowtie			
_]	0.0	slightly	FILL	\bowtie	GGM, with COPR, little cinders, trace s		
_] 2		moist		\bowtie	(5YR 5/2) reddish gray, low plasticity, s	soft to stiff, slightly	
-9						moist, no odor, green staining.		
_	†	0.0	slightly	FILL		ASH, with cinders, coal, some GGM, (
-10		0.0	moist	F., ,	\bowtie	dark grayish green, non plastic, loose,	slightly moist, no	
_	.	0.0	slightly	FILL	\bowtie	odor, green staining.	/	
_11	2		moist		\bowtie	GGM, some cinders, little COPR, trace (5GY 5/2) grayish green, low plasticity,		
-11					\bowtie	slightly moist, no odor, green staining.	SOIL IO SUII,	
_	1				\bowtie	Singing moiot, no odor, green stailing.		
-12		0.0	slightly	FILL		GGM, little fine sand, (5GY 4/4) olive g	ireen low	
_		0.0	moist	1 166		plasticity, soft to stiff, slightly moist, no		
-13	2		1110101			staining.	Suoi, giodii	
						······g·		
–]				\bowtie			
-14		0.0	slightly	FILL		GGM, little fine sand little ash, salt pre-	cipitate. (5GY 5/2)	
_		-	moist	'	\bowtie	grayish green, low plasticity, soft to stif	ff, slightly moist, no	
-15 	2				\bowtie	odor, green staining.	. 5 , ,	
_								
16								
-16		0.0	slightly	FILL		GGM, little fine sand little ash, salt pre-		
_	1 ,		moisť		\bowtie	grayish green, low plasticity, soft to stif		
-17	2	1.3	moist	OL	<u>kxxxx</u>	odor, green staining.		137-P3B-W22A-17.0-1
_	- I	3.1	dry	PT	11/11/	UNDorg SILT, 90% organic silt, 10% o	rganic tibers,	
-18 			ury		1,,,,,,	(7.5YR 2.5/2) very dark brown, low pla		137-P3B-W22A-17.5-1
10	1	2.4	dry	PT	17 17	moderate organic odor, no staining. Sc UNDorg.	onsistent with	137-P3B-W22A-18.0-1
_	1 '				1/ 1//	PEAT (degraded vegetated material), 8	80% organic fibers	
–19 –						20% organic silt, (7.5YR 3/2) dark brow		
						stiff, dry to moist, strong organic odor,		
						consistent with MM.	· // /	
						PEAT (degraded vegetated material), 8	80% organic fibers,	
						20% organic silt, (7.5YR 3/2) dark brow		
						stiff, dry to moist, strong organic odor,	no staining. Solls	
						consistent with MM.		
			I	L				
omma	nte: 1\ 2 a#-	mnta ···-	ro made to	ahtain bact -a	WOR, 0\ *	M/UND confirmed to be 1 ft thick.		

AECOM

0 Knightsbridge Road, Piscataway, NJ 08854

Boring ID: EF-56

Page: 1 Project Name: PPG Soil RIWP Drilling Company: SGS Project Number: 6015-4801 Drilling Method: Airknife/Geoprobe Coordinates (NJSPNAD83) x: 610978.338 Date Started Drilling: 5/23/2011 Rig Type: Airknife/Geoprobe Coordinates (NJSPNAD83) y: 682980.614 Date Finished Drilling: 5/23/2011 Core Size: 2 in Boring Total Depth: 25 ft Project Manager: Robert Cataldo Depth to Water: 3/20.5 ft Logged By: M. Merdinger GROUP OF SITES.GP. Physical Location: Driveway of Site 132 (Note bgs = below ground surface) Depth Recovery PID Moisture Graphic GA Sample Range **USCS** Surface Cover and Thickness: Content (ft/ft) (ppm) Class Log Number (ft bgs) moist 2 Fill ASPHALT (4 in) and Brown (7.5YR 4/3) SILT and coarse Sand, JERSEY/GARFIELD AVENUE GROUP OF SITES/GARFIELD AVENUE 0 some medium angular Gravel and Slag, loose. No odor. 4B Fill moist Dark Brown (7.5YR 3/2) SILT, some Brick, little fine and coarse 0 2 Sand (25% COPR), trace Fill Material (ceramics, wood, ash), EF-B56 2.5 loose. No odor. 0 3 Dark Brown (7.5YR 3/2) to Dark Reddish Brown (2.5YR 3/4) wet 4B Fill 0 4 SILT and medium to coarse SAND (75% COPR), little fine rounded Gravel, trace Lime Green staining, loose. No odor. 0 5 0 6 0 Light Reddish Brown (2.5YR 7/3) to Very Dark Gray (7.5YR 3/1) SILT, some medium Sand, soft. No odor. moist 3 Fill EF-B56 7.5 29 8 moist 3 Fill No Recovery 9 0 10 Fill Greenish Gray (Gley 6/1) and Lime Green-stained SILT (100% wet 5 0 11 GGM), trace calcifications, chalky texture, soft. Chemical odor. 0 12 EF-B56 12.0 3.7 0 STD US LAB.GDT - 9/21/11 12:04 - C:\DOCUMENTS AND SETTINGS\STANCHAKM\MY DOCUMENTS\MY EQUIS WORK\PPG 13 14 Black-stained CLAY (Canal Bottom), little-trace Silt, trace moist Canal organics, cohesive, soft to medium stiff. Coal tar odor. Dark Brown (7.5YR 3/2) PEAT, Organics, little Silty Clay, **Bottom** 14 moist 7 PT moist РΊ semi-cohesive. No odor. 15 No Recovery 11/ 71 1 7 PT moist 15-20 interval: No Recovery - Sleeve filled with fall-in 16 1, 11, 11, 17 11/ 11/ 1 0 1, 11, 11, 18 <u>/// /// //</u> 19 11/ 11/ 0 20 OH Dark Gray (5Y 4/1) CLAY, some Silt, trace organics, medium moist 0 EF-B56_21.0 21 10 SP-SM stiff. No odor. wet Weak Red (10YR 4/3) fine to medium SAND, little Silt, trace 22 coarse Sand, loose. No odor. 2 SP-SM 10 No Recovery 23 24 25 End of boring at 25 ft. 26 27 28 29 30 31 32 33 34 GINT Comments: COPR identified from 0.8-6.7 ft bgs. GGM identified from 10.0-12.6 ft bgs.

A=COM

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone **Boring ID: EF-61**

Project Name: PPG Soil RIWP Drilling Company: SGS
Project Number: 6015-4801 Drilling Method: Airknife/Geoprobe Coordinates (NJSPNAD83) x: 610999.128
Date Started Drilling: 6/2/2011 Rig Type: Airknife/Geoprobe Coordinates (NJSPNAD83) y: 683016.955
Date Finished Drilling: 6/2/2011 Core Size: 2 in Boring Total Depth: 20 ft
Logged By: A. Salazar, B.Daniels Project Manager: Robert Cataldo Depth to Water: 5.0 ft

Physical Location: Driveway of Site 132.

Physical	Location:	Drive	eway of Sit	te 132.	-		(Note has a helew ground o	urface)
							(Note bgs = below ground s	urtace)
Depth Range (ft bgs) 1	Recovery (ft/ft)	PID (ppm)	Moisture Content	GA Class	USCS	Graphic Log	Surface Cover and Thickness:	Sample Number
9 -		0	dry dry	2 4B	Fill Fill	-	Black Asphalt Dark Brown (7.5YR 3/3) fine to medium SAND, some	_
N -		0	ury	40	FIII		subangular to angular Gravel (<5% COPR) and Brick, trace Silt	
A 2			moist	3	Fill		and Fill (slag, glass), loose. No odor. Very Dark Brown (10YR 2/2) fine to medium Silty SAND, some	
월 3		0.3					Fill (slag, glass, brick, rubber), loose. No odor.	
4		0		4	F:::			EF-B61_4.5
5_5		0	moist	1	Fill		Concrete - Airknife refusal	EF-B01_4.5
b 6 −			wet	4B	Fill		Dark Reddish Brown (2.5YR 3/3) fine to coarse Gravelly SAND (COPR 80%), little crushed Fill, loose. No odor.	EF-B61_6.0
02 - 7 -							(COFN 60 %), little crashed fill, loose. No odor.	
	3.3			_	-: :::		Dela Oliva (40VD C/4) COM (000/) tarting of fine to goods	EF-B61_7.5
8			wet	5	Fill		Pale Olive (10YR 6/4) GGM (80%), texture of fine to coarse Sand and little fine to medium angular Gravel, medium dense.	EF-B61_8.0
9 -							Slight metallic odor.	
III - 10 -		0						EF-B61_10.0
[11 -								
12 12								EF-B61 12.0
- II	5							EF-B61_12.5
13			wet	12	Fill Canal		Dark Olive Brown (2.5YR 2.5/1) fine to medium SAND, some Silt, little fine to medium angular Gravel, medium dense. No	
Ž 14			WCt		Bottom		\odor /	EF-B61_14.0
<u>§</u> 15		0	moist	7	PT	<u> </u>	Black (5YR/2.5/1) CLAY, stiff. Organic odor. (Canal Bottom) Black PEAT, Organics, little Silty Clay, medium stiff. Sulfur	
[16 -						<u> </u>	odor.	
E 17						1/ 1// 1// 1		EF-B61 17.5
	3					71/ 71/ 71 A A A A A		LI -B01_17.5
9d 13			moist	7	PT	71/ 71/ 7	No Recovery	
<u>19</u>						1, 11, 11,		
20						11/11/11		
전 - 21							End of boring at 20 ft.	
NAT - 52 -								
23								
25 - 26 - 27 - 27 - 28 - 28 - 28								
26								
5 _ <u>27</u>								
Ö 28 –								
46								
29								
30								
31								
9 _ 32								
33 -								
101 - 34								
<u> </u>								
. 00			.6			- 6 1 -		
Commen	s: COPF	dent	itied from	0.5-1.0	and 5.0-7.	5 ft bgs, G	GM identified from 7.5-12.5 ft bgs.	

ENICD A ECOM	Client: PPG Industries			BORIN		
ENSR AECOM	Site: Site 133		OSB-14			
Start Date:	Project: Site Investigation		f 3			
9/28/2006	Coordinates: X-611022.5 Y-682998	.5	_			
End Date:	Elevation: 14.75			Geologist:	M. Abdelaziz	
9/28/2006	Drill Subcontractor:			Driller:	TPI	
Debty (41)	Description	PID	Sam	pleID	Sample Parameters	
1 0 ⊤	SPHALT: Asphalt	0.0				
x x FIL	L: Grayish brown (2.5Y5/2) coarse SAND and arse to medium GRAVEL, some to little Silt, moist.		OSB-14	PA(0.4-0.9)	Cr+6, TAL Metals	
2-	L: Dark reddish brown (5YR3/3) coarse to medium		OSB-14	B(2.0-2.5)	Cr+6, TAL Metals	
X X SA	ND, some Silt, little medium to fine Gravel, wet. COPR.					
NF.	R: No Recovery					
X X SA	L: Dark reddish brown (5YR3/3) coarse to medium ND, some Silt, little medium to fine Gravel, wet. % COPR.	0.0	OSB-14	C(4.0-4.5)	Cr+6, TAL Metals	
6- × × × × × × × × × × × × × × × × × × ×						
- × × × ×	R: No Recovery					
8				ID (0.0.0.7)	0.10 TAL M	
X X FIL	L: Olive Yellow (5Y6/6) coarse to medium SAND d fine GRAVEL, some Silt, trace Clay(-), wet.	0.0	OSB-14	D(8.0-8.5)	Cr+6, TAL Metals	
10 -						

ENCD LECON	Client: PPG Industries	В	BORING ID:			
ENSR AECOM	Site: Site 133		OSB-14			
Start Date:	Project: Site Investigation		Pag	e: 2 of 3		
9/28/2006	Coordinates: X-611022.5 Y-682998.	5	Dep	th of Boring: 30.00		
End Date:	Elevation: 14.75			logist: M. Abdelaziz		
9/28/2006	Drill Subcontractor:		Drille	er: TPI		
Depth (ft) Lithology	Description	PID	Sample ID	Sample		
12 —		0.0	OSB-14E(12.0-	12.5) Cr+6, TAL Metals		
	AT: PEAT.	14.7	OSB-14F(16.0-	16.5) Cr+6, TAL Metals		
20 —	R: No Recovery	7.1				

ENCD AECOM	Client: PPG Industries		NG ID:			
ENSR AECOM	Site: Site 133	O	OSB-14			
Start Date:	Project: Site Investigation	Page: 3 c	Page: 3 of 3			
9/28/2006	Coordinates: X-611022.5 Y-682998.8	5	Depth of	Boring: 30.00		
End Date:	Elevation: 14.75		Geologist	: M. Abdelaziz		
9/28/2006	Drill Subcontractor:		Driller:	TPI		
Debty (4) Tithology	Description .	PID	Sample ID	Sample Parameters		
22 - SIL fine SAN som	TY CLAY: Black (7.5YR2.5/1) SILTY CLAY, some to very fine Sand, wet to moist. ND: Black (7.5YR2.5/1) fine to very fine SAND, me Silt, little Clay and medium Sand, wet.					
24 - SAN	ND: Dark reddish brown (5YR3/3) coarse to medium ND, some fine Sand and Silt, wet.	0.0				
26 +						
NR:	: No Recovery					
SAN	ND: Dark reddish brown (5YR3/3) coarse to medium ND, some fine Sand and Silt, wet.	0.0				
30 +				1		

ENICD A ECON	Client: PPG Industries			BORIN	IG ID:
ENSR AECOM	Site: Site 133	OSB-18			
Start Date:	Project: Site Investigation	Page: 1 of 3			
9/28/2006	Coordinates: X-611131.1 Y-682870.	5		Depth of E	Boring: 28.00
End Date:	Elevation: 14.91			Geologist:	M. Abdelaziz
9/28/2006	Drill Subcontractor:			Driller:	TPI
Depth (ft) Lithology	Description	PID	Sar	nple ID	Sample Parameters
× × × CC	ONCRETE: Concrete, yellowish staining. 90% OPR. LL: Pale olive (5Y6/4) coarse to medium SAND, me Silt, trace medium to fine Gravel, moist.	0.0	OSB-1	8A(0.4-0.9)	Cr+6, TAL Metals
	LL: Pale olive (5Y6/4) coarse to medium SAND, me Silt, trace medium to fine Gravel, wet.	0.0	OSB-1	8B(4.0-4.5)	Cr+6, TAL Metals
× ^ x ^ Sil × × × × × × × × × × × ×	L: Pale olive (5Y6/4) fine to very fine SAND, some t and Clay, trace medium Sand, wet.		OSB-1	8C(6.0-6.5)	Cr+6, TAL Metals
8-		0.0	OSB-18	D(10.0-10.5)	Cr+6, TAL Metals

ENCD AECON	Client: PPG Industries	ВС	BORING ID:				
ENSR AECOM	Site: Site 133			OSB-18			
Start Date:	Project: Site Investigation		Page:	2 of 3			
9/28/2006	Coordinates: X-611131.1 Y-682870.	.5		of Boring: 28.00			
End Date:	Elevation: 14.91		gist: M. Abdelaziz				
9/28/2006	Drill Subcontractor:	ı	Driller	: TPI			
Debty (41)	Description	PID	Sample ID	Sample Parameters			
12 — × × × × × × × × × × × × × × × × × ×		0.0					
	ILL: Reddish brown (5YR4/3) coarse SAND and fine RAVEL, some medium Sand, trace Silt, wet.		OSB-18E(13.0-13	B.5) Cr+6, TAL Metals			
	ILL: Pale olive (5Y6/4) medium to fine SAND, some ilt, trace Clay(-), wet.	9.1	OSB-18F(15.5-16	6.0) Cr+6, TAL Metals			
18 — X X X X X X X X X X X X X X X X X X	EAT: PEAT.		OSB-18G(18.5-19	9.0) Cr+6, TAL Metals			
20 — — — — — — — — — — — — — — — — — — —		N/A					

Start Date: 9/28/2006	ENSR AECOM	Client: PPG Industries Site: Site 133			BORIN	IG ID: SB-18
Depth (ft) Lythology Description PID Sample ID Sample Sample	9/28/2006 End Date:	Coordinates: X-611131.1 Y-682870.9 Elevation: 14.91	5		Depth of E	Boring: 28.00 M. Abdelaziz
22 — SAND: Black (2.5Y2.5/1) fine to very fine SAND, some Silt, trace Clay, wet. N/A OSB-18H(21.0-21.5) Cr+6, TAL Metals N/A OSB-18I(25.0-25.5) Cr+6, TAL Metals		Description	PID	Sa	mple ID	Sample Parameters
NULL: End of boring at 28 feet.	22 — SA SIII	AND: Black (2.5Y2.5/1) fine to very fine SAND, some lt, trace Clay, wet.	N/A	OSB-18	8H(21.0-21.5)	Cr+6, TAL Metals Cr+6, TAL Metals

ENICE AECON	Client: PPG Industries			BORIN	IG ID:
ENSR AECOM	Site: Site 133			O:	SB-20
Start Date:	Project: Site Investigation			Page: 1 of	f 3
9/28/2006	Coordinates: X-611200.8 Y-682784.	6		Depth of E	Boring: 30.00
End Date:	Elevation: 13.48			Geologist:	M. Abdelaziz
9/28/2006	Drill Subcontractor:			Driller:	TPI
Depth (ft) Lithology	Description	PID	Sarr	ible ID	Sample Parameters
	DNCRETE: Concrete	0.3			
2- x x FIL x x x me	LL: Dark reddish brown (2.5YR3/4) coarse to edium SAND, some fine Gravel, little to trace Silt, bist. 80% COPR. LL: Greenish gray (gley16/1) SILTY SAND, some edium Sand and very fine Gravel, moist. LL: Light brown (7.5YR6/3) coarse to medium SAND, me Silt and very fine Gravel, moist to wet.	0.0	OSB-2	0A(0.4-1.0) 0B(1.0-1.5) BD(1.0-1.5)	MS/MSD, Cr+6, TAL Metals Cr+6, TAL Metals Cr+6, TAL Metals
$6+ \times \times me$	LL: Light brown (7.5YR6/3) CLAYEY SILT, some edium to fine Sand, trace of greenish gray (gley16/1) arse Sand, wet.	0.0		OC(5.0-5.5)	Cr+6, TAL Metals Cr+6, TAL Metals

ENCD LECON	Client: PPG Industries	BORIN	IG ID:		
ENSR AECOM	Site: Site 133			0	SB-20
Start Date:	Project: Site Investigation			Page: 2 of	3
9/28/2006	Coordinates: X-611200.8 Y-682784.	6		Depth of E	Boring: 30.00
End Date:	Elevation: 13.48				M. Abdelaziz
9/28/2006	Drill Subcontractor:			Driller:	TPI
Depth (ft) Lithology	Description	PID	Sar	mple ID	Sample Parameters
× × × × × × × × × × × × × × × × × × ×	LL: Gray (2.5Y6/1) coarse SAND and fine GRAVEL, le Silt, trace medium Sand, wet.	0.0		DE(13.5-14.0)	Cr+6, TAL Metals
14 — × × NF	R: No Recovery				
- × × FII	LL: Gray (2.5Y6/1) coarse SAND and fine GRAVEL, le Silt, trace medium Sand, wet. LL: Gray (7.5YR6/1) SILTY CLAY, some fine Sand, ace medium Sand, wet.	45.6			
18 — PE	EAT: PEAT, wet.	163.0	OSB-20	0F(17.9-18.4)	Cr+6, TAL Metals
TT TT		103.0			

ENCD AF	COM	Client: PPG Industries			NG ID:
ENSR AE	COM	Site: Site 133			SB-20
Start Date:		Project: Site Investigation		Page: 3	of 3
9/28/2006			682784.6		Boring: 30.00
End Date:		Elevation: 13.48			t: M. Abdelaziz
9/28/2006		Drill Subcontractor:		Driller:	TPI
Depth (ft) Lithol	100,	Description	PID	Sample ID	Sample Parameters
- #	SAI son	.ND: Dark gray (gley14/1) fine to very fine Same Silt, little Clay, wet.			
26 —	SAI fine	ND: Gray (gley16/1) coarse to medium SANe Gravel and Silt, little to trace fine Sand, we	ID, some t.		
28 —	NR	R: No Recovery	N/A		
1 30 ⊥ ∟	NU	JLL: End of boring at 30 feet.			

A=COM

Boring ID: P4-M16A

	Name: P						ng Company: SGS North America		
	Number:						ng Method: Geoprobe	Coordinates (NJSPNAD8	
	arted Drill					Rig T		Coordinates (NJSPNAD8	
	nished Dri	lling:	3/7/2014	<u>10:10:0</u>	0 AM		Size: 2.0 in	Boring Total Depth: 25	ft
	By: MI					Proje	ct Manager: Chris Martell	Depth to Water: NA	
hysica	al Location	n: M16	A - Carter	et Ave.					
								(Note bgs =	below ground surface)
Depth Range ft bgs)	Recovery (ft/ft) PID Moisture (ppm) Moisture (content Class USCS Graphic Log Surface Cover and Thickness:						nickness:	Sample ID	
		0.0		1	FILL		ASPHALT		
_		0.0	slightly	3	FILL		fine to medium SAND, some fine to		
– 1 —		0.0	moist moist	4B	FILL		2.5/3) very dark brown, loose, slightl	y moist, no odor, no	
-2 -3	5		moist				\staining. fine to medium SAND, some COPR, (5YR 4/3) reddish brown, loose, moi		
_ -4-		0.0		40	-		0000 1111 5	57/2 (/0)	
_ -5		0.0	slightly moist	4A	FILL		COPR, little fine to medium sand, (2 hard, slightly moist, no odor, no stair	ning.	
_ -6		0.0	slightly moist	4A	FILL		COPR, little fine to medium sand, (2 hard, slightly moist, no odor, no stair	ning.	
- -7		0.0	moist	4A	FILL		COPR, some GGM, (2.5YR 4/6) red green staining.		
-8— -9—	5	0.0	moist	5	FILL		GGM, some fine sand, (5GY 4/4) oli soft, moist to wet, no odor, green sta		
-10 -11 - -12 -	5	0.0	moist	5	FILL		GGM, some fine sand, (5GY 4/4) oli soft, moist to wet, no odor, green sta		
-13 - -14 		0.0	moist	3	FILL		CLAY, some silt, (7.5YR 2.5/1) black soft, moist, no odor, no staining.	k, medium plasticity,	P4-M16A-13.0-13.
		0.0	slightly	7	PT	<u> </u>	PEAT (degraded vegetated material)	, 80% organic fibers.	
-15		0.0	moist	7	PT	<u>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</u>	20% organic silt, stiff, slightly moist,	strong organic odor, no	
_		0.0	slightly	9	OL		¬ \staining. Soils consistent with MM.	//	
-16 -17 -18	5	3.3	moist moist		JL.		PEAT (degraded vegetated material) 20% organic silt, stiff, slightly moist, staining. Soils consistent with MM. UNDorg, 80% organic silt 20%, orga grayish brown, low plasticity, soft to organic odor, no staining. Soils cons	strong organic odor, no nic fibers, (10YR 5/2) stiff, moist, moderate	P4-M16A-16.0-16.
-19 - -20		0.0	moist	8	SM		UNDno SILT, little organics, (10YR 4		P4-M16A-20.0-20.
-21 -22 -22	5						plasticity, soft to stiff, moist, no odor consistent with UNDno.		
-23 - -24		0.0	moist	8	SM		UNDno fine SAND, some silt, trace to gray, moist, no odor, no staining. So UNDno.	ils consistent with	
-25 		0.0	slightly moist	8	SM		UNDno fine to coarse SAND, some (2.5YR 5/8) red, loose to hard, slight staining. Soils consistent with UNDn	ly moist, no odor, no	

A=COM

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: P4-Q17A

Page: 1

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	-
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 611094
Date Started Drilling: 3/6/2014 12:20:00 PM	Rig Type:	Coordinates (NJSPNAD83) y: 682971
Date Finished Drilling: 3/6/2014 1:21:00 PM	Core Size: 2 in	Boring Total Depth: 25 ft
Logged By: MI	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: Q17A - Carteret Ave.		

Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	GA Class	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
		0.0		2	ASPHALT		ASPHALT	
-1 - -2	5	0.0	moist tp wet	3	FILL		fine to medium silty SAND, some gravel, some cinders, little GGM, (10YR 4/2) dark grayish brown, non plastic, dense, moist to wet.	
-3 -4		0.0	wet	5	FILL		GGM, trace gravel, (5Y 6/3) pale olive, non plastic, medium dense, wet.	
-5 — -6 — -7 — -8 — -9 —	. 5	0.0	wet	5	FILL		GGM, (5Y 5/2) olive gray, non plastic, medium dense, wet.	
-10 -11 -12 -13 -14	5	0.0	wet	5	FILL		GGM, little COPR, (2.5Y 5/2) grayish brown, non plastic, dense, wet.	
-15 -16 -17 	. 5	0.0	wet	5	FILL		GGM, (10YR 5/2) grayish brown, non plastic, dense, wet.	
-18		0.0	moist	5	FILL		GGM, some silt little fine sand, (7.5YR 3/3) dark brown, non plastic, dense, moist.	
-19 -20		0.0	moist	7	PT	<u>\(\frac{\fir}{\fin}}}}}}}{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\fir}}}{\frac{\frac{\frac{\frac{\frac{\frac}}}}}{\frac{\f{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\fra</u>	PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (10YR 2/2) very dark brown, medium plasticity, soft, moist, strong sulfur odor. Soils consistent with MM.	P4-Q17A-18.5-19.
-21 21 	5	0.0	moist	7	PT		PEAT (degraded vegetated material), 50% organic fibers, 50% organic silt, (10YR 4/1) dark gray, high plasticity, soft, moist, strong sulfur odor. Soils consistent with MM.	P4-Q17A-20.0-20.
-23 24 		0.0	moist	8	SP-SM		fine to medium silty SAND, some gravel, (10YR 4/1) dark gray, non plastic, very dense, moist. Soils consistent with UNDno.	

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: P4-T18A

Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America

Project Number: 60240739 Drilling Method: Geoprobe Coordinates (NJSPNAD83) x: 611159 Date Started Drilling: 3/6/2014 11:05:00 AM Rig Type: Coordinates (NJSPNAD83) y: 682904 Date Finished Drilling: 3/6/2014 12:00:00 PM Core Size: 2 in Boring Total Depth: 25 ft

hysica	al Location	1: T18/	A - Cartere	t Ave.				(Note bgs =	below ground surface)
epth ange t bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	GA Class	USCS	Graphic Log	Surface Cover and Th	ickness:	Sample ID
		0.0			ASPHALT		ASPHALT		
- 1 — - 2 — - 3 — - 4 —	. 5	0.0	dry to sl moist moist to wet	5	FILL FILL		fine to medium silty SAND, some gragrayish brown, non plastic, dense, drugger GGM, little COPR, (5Y 6/3) pale oliver moist to wet.	to slightly moist.	
5 — 6 — - 7 — - 8 — - 9 —	5	0.0	wet	5	FILL		GGM, little COPR trace glass, (5GY) green, non plastic, medium dense, w		
10 		0.0	wet	5	FILL		fine to medium GRAVEL, some GGM brown, non plastic, medium dense, w		
11— - 12— 13— - 14—	5	0.0	wet	5	FILL		GGM, (5Y 6/2) light olive gray, non pl wet.	astic, medium dense,	
15 -		0.0	wet	5	FILL		GGM, some sand, (10YR 4/6) dark ye plastic, medium dense, wet.	ellowish brown, non	
16— 17— 18—	5	0.0	moist	7	PT		PEAT (degraded vegetated material), 50% organic silt, (10YR 3/2) very dar medium plasticity, soft, moist, modera consistent with MM.	k gravish brown,	P4-T18A-16.0-16
19 — 19 — 20 —						<u>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</u>			P4-T18A-18.0-18
20 21		0.0	moist	7	PT	<u> </u>	PEAT (degraded vegetated material), 50% organic silt, (10YR 3/2) very dar medium plasticity, soft, moist, modera	k grayish brown,	P4-T18A-20.0-20
22— 22— — 23—	5	0.0	wet	8	SP-SM		consistent with MM. fine silty SAND, (10YR 5/1) gray, nor dense, wet. Soils consistent with UNI	plastic, medium	
24— — 25—		0.0	moist	10	SP-SM		fine to medium silty SAND, some gra reddish gray, non plastic, dense, mois with UNDno.	vel, (5YR 4/2) dark st. Soils consistent	

LOG OF SOIL BORING SB-39

			LOG	C)F SC	OIL E	3OR	ING S	SB-3	9						
PROJECT LOCATION								GROUNI) FI FVAT	ΓΙΟΝ (FT.	MSL)	PROJEC	T NUMBE	:R		
Halladay Street , Jersey	v Citv. NJ							14.82				020667601				
DRILLING CONTRACTOR	, - ,, -		FOREMAI	N.												
Advanced Drilling, Inc.			Roger Logel						11/2	20/06			11	/21/06		
DRILLING EQUIPMENT			rtoger Loger						11/20/06 COMPLETION DEPTH (FT BGS)							
	turning 4.25-inch hollow-stem augers								48	(300)	ROCK DEPTH (FT) not encountered				
	stem auger		SIZE AND	TY	PE CORE	BARRE	EL	NO. SAM		DIST.	22	UNDIST.			RE	N/A
CASING N/A	3.			N/				WATER		FIRST	2.5	COMPL.	N/A		HR	N/A
CASING HAMMER	WEIGHT N/A		DROP		N/A									of Carteret		
	neter, 2' long split-spoon	_	D. NO.		. 47.1			1						eret Ave. in		
SAMPLER HAMMER	WEIGHT 140 lbs.		DROP		30"			INSPECT		Eric Ga		anaday c	ou, round	0.00.7.00	101000110	
O/IIII EEITTI IIIII	TE ISSE		Ditto:			Samples			<u> </u>		READI	NGS				
		nterva		rable		Our	Penetr.				(PPM)	1100				
DI	ESCRIPTION	Sample Interval	Depth	/ater T	Number	Recov.	Resist.	Time	Sample	Ambient		Head	Time	İ	RFM	ARKS
Di		San	(ft bgs)	>		(ft)	BL/6in	711110	Sample	Air	111110	Space	Date	ĺ		
through asphalt; F brown sand, chror	digging to 4'; boring Fill consisted of reddish mate ore processing including reddish ore pellets		- 0 - - 1 -													
			- 2 -	∑I-												
4.0-6.5 FILL: gree suspected COPR			- 4 - - 5 -		1	1.8	3 5	1436	0.0	0.0	1436	N/A	N/A			
							4		0.0	0.0						
			- 6 -		2	1.5	3	1437	0.0	0.0	1437	N/A	N/A			
			- 7 -				4		0.0	0.0						
			-				4		0.0	0.0						
6.5-16.4 FILL: Regreenish gray CC	eddish gray silt, with DPR interspersed		- 8 -		3	2.0	2	1446	0.0	0.0	1446	N/A	N/A			
			- 9 -				2		0.0	0.0						
							1		0.0	0.0						
			- 10 -				ļ ˈ					ļ		.		

Interim Data Subr	nittai No.4		LOG	0	F SC	OIL E	BOR	ING S	SB-39	9				Page 2 of 5
PROJECT LOCATION								GROUNI	D ELEVAT	ION (FT.	MSL)	PROJEC	T NUMBE	ER .
Halladay Street , Jersey	City, NJ									.82	,			020667601
DRILLING CONTRACTOR	- 7, -		FOREMAN	١				DATE ST				DATE CO	OMPLETE	
Advanced Drilling, Inc.			Roger Logel						11/20/06					/21/06
DRILLING EQUIPMENT									TION DE		BGS)	ROCK D	EPTH (FT	
	urning 4.25-inch hollow-stem auger	rs							48	(,			countered
	stem auger		SIZE AND	TYI	PE CORE	BARRE	L	NO. SAM		DIST.	22	UNDIST.		
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	LOCATIO	N: 59 ft b	ehind c	urb on w	est side	of Carteret Avenue, 300 ft NW
SAMPLER 2" diame	eter, 2' long split-spoon							from th	e wester	n corner	of the H	lalladay S	St. / Cart	eret Ave. intersection.
SAMPLER HAMMER	WEIGHT 140 lbs.		DROP		30"			INSPEC		Eric Ga				
		a				San	nples			PID	READI	NGS		
		Sample Interval		Table			Penetr.				(PPM)			
DE	ESCRIPTION	mple	Depth	Vater	Number	Recov.	Resist.	Time	Sample	Ambient	Time	Head	Time	REMARKS
		S	(ft bgs)	^		(ft)	BL/6in			Air		Space	Date	
6.5-16.4 FILL: Re greenish gray CO	ddish gray silt, with PR interspersed		- 10 -		4	1.3	0.5	1450	0.0	0.0	1450	N/A	N/A	Fishy, ammonia-like odors through out
			- 11 -				0.5		0.0	0.0				
							0.5		0.0	0.0				
			- 12 -		5	1.8	1	1453	0.0	0.0	1453	N/A	N/A	Fishy, ammonia-like
							1		0.0	0.0				odors through out
			- 13 -				1		0.0	0.0				
			- 14 -				2		0.0	0.0				
					6	1.6	3	1503	1.4	0.0	1503	N/A	N/A	Fishy, ammonia-like odors through out
			- 15 -				4		1.0	0.0				-
							2		2.0	0.0				
			- 16 -				1							
16.4-16.6 Brown of black staining	organic matter, with				7	1.1	1	1520	1.2	0.0	1520	N/A	N/A	Sample SB-39(16.5- 17.0) collected at 1514 for TCL VOC, TCL
3			- 17 -				6		4.3	0.0				SVOC, TAL Metals, Total and Amenable CN
	rk greenish gray organic CLAY (OH),						3		3.9	0.0				Anaerobic, swampy odors
1% peat fibers			- 18 -		8	1.8	1	1523	7.4	0.0	1523	N/A	N/A	Anaerobic, swampy odors
			10				1		8.3	0.0				Oudis
			- 19 -				1		13.4	0.0				
			- 20 -				1		13.7	0.0				
				_			·			·			1	

CASING HAMMER	veight N/A		DROP		N/A			BORING	LOCATIO	N: 59 ft t	behind ci	urb on we	est side o	of Carteret Avenue, 300 ft NW
SAMPLER 2" diamete	er, 2' long split-spoon							from the	e wester	n corner	of the H	alladay S	St. / Carte	eret Ave. intersection.
SAMPLER HAMMER V	VEIGHT 140 lbs.		DROP		30"			INSPECT	OR	Eric Ga	aulin			
		val		ө		San	nples			PID	READI	NGS		
		Sample Interval		Tabl			Penetr.				(PPM)			
DES	SCRIPTION	ample	Depth	Nate	Number	Recov.	Resist.	Time	Sample	Ambient	Time	Head	Time	REMARKS
		Š	(ft bgs)			(ft)	BL/6in			Air		Space	Date	
40.0.04.0.\/	d		- 20 -											
16.6-24.0 Very dark greenish gray (GLEY1 3/1 10Y) organic CLAY (OH), 1% peat fibers					9	1.4	1	1531	9.9	0.0	1531	N/A	N/A	Anaerobic, swampy odors
			- 21 -				1		3.9	0.0				
							1							
			- 22 -		10	1.5	1	1536	2.6	0.0	1536	N/A	N/A	No odors this spoon
			-				1		0.0	0.0				·
			- 23 -											
							1		0.0	0.0				
04.0.05.4 Dank and			- 24 -				1							
5G) fine SANDY SI	enish gray (GLEY1 4/1 LT (ML), very tight				11	1.4	2	1543	0.7	0.0	1543	N/A	N/A	No odors this spoon
			- 25 -				3		2.4	0.0				
			- 25 -				3		0.8	0.0				
	brown (2.5YR4/4) fine to //), trace fine gravel, 1/4"													
well rounded	,, g g ,		- 26 -				2							
26.4-26.8 Gravish r	ed (2.5YR4/4) fine to				12	1.2	3	1545	0.0	0.0	1545	N/A	N/A	No odors this spoon
medium SILTY SAN							4		0.0	0.0				Sample SB-39(26.5- 27.0) collected at 1545
	brown (2.5YR4/4) fine to V), trace fine gravel, 1/4"		- 27 -				4		0.0	0.0				for TCL VOC, TCL SVOC, TAL Metals, Total and Amenable CN
			- 28 -		13	1.1	4	1550	0.0	0.0	1550	 N/A	N/A	No odors this spoon
							3	230	0.0	0.0	-30			
			- 29 -				3		0.0	0.0				
							3							Drilling ended here 11-20-06
	01\5-Reports\2007-11 RIR\Append		- 30 -	Ш			1							11/29/2007 14::

- 38

39

18 1.6 2 0859

2

0.0

0.0

0.0

0.0

0.0 0859

0.0

0.0

0.0

N/A

N/A

Sample SB-39(36.0-

37.0) and SB-39(36.0-37.0)D collected at

0852 for TCLVOC,TCL

SVOC, TAL Metals,

and Total and Amenable CN

Interim Data Subn	nittal No.4		LOG	0	F SC	OIL E	BOR	ING S	SB-39	9				Page 5 of 5
PROJECT LOCATION								GROUNI) ELEVAT	ION (FT.	MSL)	PROJEC	T NUMBE	ir I
Halladay Street , Jersey	City, NJ									.82	,			020667601
DRILLING CONTRACTOR	•		FOREMAN					DATE ST	ARTED			DATE CO	MPLETE	D
Advanced Drilling, Inc.			Roger Lo	ge	el				11/2	20/06			11/	/21/06
DRILLING EQUIPMENT								COMPLE	TION DE	PTH (FT E	BGS)	ROCK DE	PTH (FT))
GEFCO SS 5 Drill Rig tu	urning 4.25-inch hollow-stem augers								48				not end	countered
TYPE BIT Hollow-S	stem auger		SIZE AND T	ΥF	E CORE	BARRE	L	NO. SAM	IPLES	DIST.	22	UNDIST.	N/A	core N/A
CASING N/A			١	1 //	Ą			WATER	DEPTH	FIRST	2.5	COMPL.	N/A	24HR N/A
CASING HAMMER	WEIGHT N/A		DROP		N/A			BORING	LOCATIO	N: 59 ft b	oehind c	urb on we	est side o	of Carteret Avenue, 300 ft NW
SAMPLER 2" diame	eter, 2' long split-spoon							from th	e wester	n corner	of the H	alladay S	St. / Carte	eret Ave. intersection.
SAMPLER HAMMER	WEIGHT 140 lbs.		DROP		30"			INSPECT	FOR	Eric Ga	aulin			
		ıval		D		San	nples			PID	READI	NGS		
		e Interval	F	la B			Penetr.				(PPM)			
DE	SCRIPTION	Sample	Depth	walt	Number	Recov.	Resist.	Time	Sample	Ambient	Time	Head	Time	REMARKS
		0)	(ft bgs)	_		(ft)	BL/6in			Air		Space	Date	
20 0 44 0 Poddick	h brown (2.5Y4/4) fine		- 40 -											
SANDY SILT (ML					19	1.8	2	0926	0.0	0.0	0926	N/A	N/A	
	,								ĺ					
		М					3		0.0	0.0				
		١	- 41 -											
							3		0.0	0.0				
							3		0.0	0.0				
			- 42 -											
					20	2.0	3	0928	0.0	0.0	0928	N/A	N/A	
		١					3		0.0	0.0				
		Ш	- 43 -											
		Н					3		0.0	0.0				
							3		0.0	0.0				
44.0.49.0 Boddiob	brown (2 EV4/4) fine		- 44 -											
SILTY SAND (SM)	brown (2.5Y4/4) fine				21	1.6	3	0935	0.0	0.0	0935	N/A	N/A	
CILIT OF WILD (CIVI)		١												
		М					4		0.0	0.0				
		П	- 45 -											
							4		0.0	0.0				
							4		0.0	0.0				
			- 46 -											
					22	2.0	3	0940	0.0	0.0	0940	N/A	N/A	Sample SB-39(47.5-
		١												48.0) collected at 0944
		М					4		0.0	0.0				for TCL VOC, TCL
		Н	- 47 -											SVOC, TAL Metals, Total
							3		0.0	0.0				and Amenable CN
							5		0.0	0.0				
			- 48 -											
END OF BORING	AT 48 Feet bgs													
	-								ĺ					
			- 49 -											
									ĺ					
			- 50 -						ļ					

9

2

0.0

0.0

0.0

0.0

0.0

0.0

contamination

LOG OF SOIL BORING SB-56

			LOG	C)F SC	OIL I	3OR	ING S	SB-5	6					
PROJECT LOCATION								GROUNI	D ELEVAT	TION (FT.	MSL)	PROJECT NUMBER			
Halladay Street , Jersey	y City, NJ								13	3.21				020667601	
RILLING CONTRACTOR			FOREMA	AN				DATE ST	TARTED			DATE CO	OMPLETE	:D	
dvanced Drilling, Inc.			Roger		ol			11/20/06							
			Rogei	LUG	еі							11/20/06			
RILLING EQUIPMENT											ROCK DEPTH (FT)				
	turning 4.25-inch hollow-stem auger	rs	SIZE AND TYPE CORE BARREL			32			not encountered						
	stem auger		SIZE AN			BARRI	L	NO. SAM		DIST.	14	UNDIST.	N/A		
ASING N/A	1			N/				WATER		FIRST	1.6	COMPL.	N/A	-	
ASING HAMMER	WEIGHT N/A		DROP		N/A			BORING	LOCATIO	ON: 20 ft l	behind c	urb on w	est side	of Halladay Street, 63 ft SW	
AMPLER 2" diam	eter, 2' long split-spoon							from th	e wester	rn corner	of the H	alladay S	St. / Cart	eret Ave. intersection.	
SAMPLER HAMMER	WEIGHT 140 lbs.		DROP		30"			INSPEC	TOR	Eric G	aulin				
		-ka		Ф		Sar	nples			PID	READI	NGS			
		Interval		Tabl			Penetr.				(PPM)				
DI	ESCRIPTION	Sample	Depth	Vater	Number	Recov	Resist.	Time	Sample	Ambient	Time	Head	Time	REMARKS	
		Sa	(ft bgs) >		(ft)	BL/6in			Air		Space	Date		
			- 10	-											
4.0-12.8 FILL: gra	ayish silty sand, COPR,				4	2.0	2	0952	0.0	0.0	0952	N/A	N/A	No evidence of MGP	
	own fine silty sand,	1			•	2.0	_	0002	0.0	0.0	0002			contamination	
occassional white	e nodules, some bright	1	-												
yellow nodules							2		0.0	0.0					
			- 11												
							3		0.0	0.0					
							2		0.0	0.0					
			- 12	-											
					5	2.0	1	1005	0.0	0.0	1005	N/A	N/A	No evidence of MGP	
				.										contamination; fishy,	
							2		0.0	0.0				septic-like odors	
12.8-13.4 FILL: b	lack gravel, clinker		- 13				_		0.0	0.0					
material (CM)			- 13				_		0.0	0.0					
12	Bright green COPR, with						2		0.0	0.0					
some gravel mixe				1											
Some graver mix	sa tinoagnoat						2		0.0	0.0					
			- 14	-											
					6	1.6	1	1009	0.0	0.0	1009	N/A	N/A	No evidence of MGP	
														contamination	
		1					2		0.0	0.0					
			- 15	-											
							1		0.0	0.0					
			 				Ι.			0.0					
		F]				2		0.0	0.0				Black staining, with	
			40				-		0.0	0.0				tobacco/cigar-like odors	
			- 16		l		1 .			1	4	l	ļ	16.5-17.0; no free	
16 4-16 7 Brown	PEAT (PT), with black				7	1.9	1	1013	0.0	0.0	1013	N/A	N/A	product; Sample SB-	
staining	LAT (FT), WILLIDIACK													56(16.5-17.0) collected	
,iii							1		4.3	0.0				at 1020 for TCL VOC,	
			- 17	-										TCL SVOC, TAL Metal	
							1		7.0	0.0				Total and Amenable Clanaerobic swampy	
	fibrous PEAT (PT), with			.										odors below	
ace clay							1		9.8	0.0				53515 2510W	
			- 18 ·				L	<u> </u>		3.0		<u> </u>			
			- 10			2.0]	1005	40	0.0	1005	N1/A	N1/A	Angorobio automati	
					8	2.0	1	1025	46	0.0	1025	N/A	N/A	Anaerobic, swampy odors	
							1		118	0.0				Sample SB-56(19.0-	
			- 19	-										19.5) collected at 1030	
							2		108	0.0				for TCL VOC, TCL SVOC, TAL Metals,	
			-	-										Total and Amenable C	
							2		101	0.0				Total and Americane Of	
			- 20			ļ	ļ				L				

Interim Data Submittai No.4		LOG	C	F SC	OIL E	BOR	ING S	SB-5	6				Page 3 o	
PROJECT LOCATION							GROUNI	D ELEVAT	ΠΟΝ (FT.	MSL)	PROJEC	PROJECT NUMBER		
Halladay Street , Jersey City, NJ							OROGIN		3.21	WOL)	ROULO	THOMBE	020667601	
DRILLING CONTRACTOR		FOREMAN	v.				DATE ST				DATE CO	OMPLETE		
		Roger L		ol			DATE OF		20/06		DATE OF		/20/06	
Advanced Drilling, Inc.		Roger L	.og	ы			COMPLE			200)	DOOK D			
					COMPLE		PTH (FT E	3GS)	ROCK D	EPTH (FT				
GEFCO SS 5 Drill Rig turning 4.25-inch hollow-stem augers	1	SIZE AND		DE 00DE			NO. SAM	32	DIST.	14	UNDIST.	not end	countered	
CASING N/A		SIZE AND			BARKI	EL .				1.6		N/A		
			N/				WATER		FIRST		COMPL.		-	
ASING HAMMER WEIGHT N/A	!	DROP		N/A			1						of Halladay Street, 63 ft SW	
AMPLER 2" diameter, 2' long split-spoon											lalladay S	st. / Cart	eret Ave. intersection.	
SAMPLER HAMMER WEIGHT 140 lbs.	П	DROP	1	30"			INSPEC ⁻	TOR	Eric Ga				1	
	Interval		ple		San	nples	l		PID	READI	NGS			
	le Int		er Ta			Penetr.			1	(PPM)	1	1		
DESCRIPTION	Sample	Depth	Wat	Number	Recov.	Resist.	Time	Sample	Ambient	Time	Head	Time	REMARKS	
	+	(ft bgs)			(ft)	BL/6in			Air		Space	Date		
16.7-20.7 Brown fibrous PEAT (PT), with		- 20 -						· · · · · ·	1					
trace clay				9	1.3	1	1032	25.3	0.0	1032	N/A	N/A	Anaerobic, swampy	
													odors	
						1		12.1	0.0					
20.7-22.4 Very dark greenish gray (GLEY1		- 21 -												
3/1 10Y) organic CLAY (OH), 5% peat fibers						2		8.9	0.0					
						2								
		- 22 -									ļ			
				10	1.4	2	1033	3.4	0.0	1033	N/A	N/A	Anaerobic, swampy	
	N												odors	
22.4-24.5 Dark gray (GLEY1 4/N) fine SILTY						5		6.8	0.0					
SAND (SM) with trace silt		- 23 -				3		0.0	0.0					
		- 23 -				7		7.4	0.0					
		ı				7		7.1	0.0					
						_								
						6								
		- 24 -												
24.5-24.8 Dark gray (GLEY1 4/N) GRAVEL,	M			11	1.3	5	1045	5.7	0.0	1045	N/A	N/A	No odors this spoon	
1" to 1/4" (GW), trace sand, trace clay	N													
						6		1.3	0.0					
24.8-26.1 Dark greenish gray (GLEY1 4/1		- 25 -												
5G) fine SILTY SAND (SM), trace fine 1/8"						6		1.0	0.0					
gravel, little clay, very tight														
						7								
26.1-26.4 Olive gray (5Y4/2) SILT (MH), trace		- 26 -												
clay, very firm				12	1.3	6	1052	0.0	0.0	1052	N/A	N/A	No odors this spoon	
•	N												'	
26.4.29.6 Dark gravish brown (2.5V4/2) fina						8		0.0	0.0					
26.4-28.6 Dark grayish brown (2.5Y4/2) fine to medium SAND (SW), trace silt, trace		- 27 -						0.0	0.0					
coarse sand, trace fine gravel		- 21 -				8		0.0	0.0					
,		1				0		0.0	0.0					
						10								
		- 28 -						l ·	1				N	
				13	1.7	6	1106	0.0	0.0	1106	N/A	N/A	No odors this spoon	
28.6-28.9 Reddish brown (2.5Y4/4) fine														
SILTY SAND (SM)						7		0.0	0.0					
		- 29 -												
28.9-30.0 Weak red (2.5YR4/2) fine to						7		0.0	0.0					
medium SAND (SW), trace gravel, trace														
coarse sand						8		0.0	0.0					
		- 30 -				ļ		ļ			.			

PSEG SC Former Halladay Street Gas Works CMX Remedial Investigation Page 1of 5 LOG OF SOIL BORING SB-67 Elevation (FT. NAVD88) PROJECT LOCATION PROJECT NUMBER Halladay Street, Jersey City, NJ 13.86 020667601 DRILLING CONTRACTOR FOREMAN DATE STARTED DATE COMPLETED Advanced Drilling, Inc. Roger Logel 08/28/07 08/28/07 DRILLING EQUIPMENT COMPLETION DEPTH (FT BGS) ROCK DEPTH (FT) GEFCO SS 5 Drill Rig turning 4.25-inch inside diameter hollow-stem augers not encountered SIZE AND TYPE CORE BARREL TYPE BIT Hollow-stem auger NO. SAMPLES DIST. 23 UNDIST. N/A N/A CASING N/A N/A WATER DEPTH FIRST N/A N/A WEIGHT N/A N/A BORING LOCATION: Western interior of the Rudolf Bass Building, located at CASING HAMMER DROP 2" diameter, 2' long split-spoon 45 Carteret Avenue, Jersey City, New Jersey SAMPLER HAMMER WEIGHT 140 lbs DROP 30" Eric Gaulin INSPECTOR Samples PID READINGS (PPM) DESCRIPTION Depth REMARKS Sample Time Resis Head Ambie (ft bgs) (ft) BL/6ir Date - 0 0.0-0.5' Concrete, wire mesh Boring through concrete floor in Rudolf Bass 0.5-7.5' FILL: olive green to bright green fine building sandy SILT, suspected chromate processing waste mud, wet from 4', firm This boring was hand cleared to 4' bgs using a hand auger - 2 Sample SB-67 (1.5-2.0) collected at 1546 for TCL VOC, TCL SVOC 3 No odor, no staining; no observable evidence of MGP contamination 4 -2.0 2 1550 0.0 0.0 1550 N/A N/A No odor, no staining; no observable evidence of MGP contamination 3 0.0 0.0 0.0 0.0 Ammonia-like odors 5 0.0 0.0 6 2 2.0 3 1555 0.0 0.0 1555 N/A N/A No odor, no staining; no observable evidence of MGP contamination 5 0.0 0.0 0.0 5 0.0 7.5-8.5 FILL: black fine GRAVEL and clinker material (CM), wet, loose 7 0.0 0.0 3 2.0 5 1605 0.0 0.0 1605 N/A N/A No odor, no staining; no observable evidence of 8.5-18.0' FILL: gray to green sandy SILT, MGP contamination 5 0.0 0.0 suspected chromium processing waste mud, moist, medium stiff 0.0 0.0 6 0.0 0.0

PSEG SC Former Halladay Street Gas Works СМХ Remedial Investigation Page 2 of 5 LOG OF SOIL BORING SB-67 PROJECT LOCATION levation (FT. NAVD88) PROJECT NUMBER Halladay Street , Jersey City, NJ 13.86 020667601 FOREMAN DRILLING CONTRACTOR DATE STARTED DATE COMPLETED Advanced Drilling, Inc. Roger Logel 08/28/07 08/28/07 DRILLING EQUIPMENT COMPLETION DEPTH (FT BGS) ROCK DEPTH (FT) GEFCO SS 5 Drill Rig turning 4.25-inch inside diameter hollow-stem augers not encountered Hollow-stem auger TYPE BIT SIZE AND TYPE CORE BARREL 23 N/A N/A NO SAMPLES DIST UNDIST ASING N/A N/A WATER DEPTH N/A N/A CASING HAMMER BORING LOCATION: Western interior of the Rudolf Bass Building, located at 2" diameter, 2' long split-spoon SAMPLER 45 Carteret Avenue, Jersey City, New Jersey 140 lbs. 30" SAMPLER HAMMER WEIGHT INSPECTOR Eric Gaulin DROP Samples PID READINGS (PPM) Penet DESCRIPTION REMARKS Depth Time Time Resist Sample Ambier Time Head (ft bgs) Date BL/6in Space 10 8.5-18.0' FILL: gray to green sandy SILT, 1.5 6 1612 0.0 0.0 1612 N/A N/A No odor, no staining; no suspected chromium processing waste mud, observable evidence of moist, medium stiff MGP contamination 6 0.0 0.0 0.0 0.0 7 12 5 1.0 5 1615 0.0 0.0 1615 N/A N/A No odor, no staining; no observable evidence of MGP contamination 6 0.0 0.0 13 6 6 2.0 3 1620 0.0 0.0 1620 N/A N/A No odor, no staining; no observable evidence of MGP contamination 0.0 0.0 15 4 0.0 0.0 4 0.0 0.0 16 7 0.0 N/A 2.0 3 1626 0.0 N/A No odor, no staining; no 1626 observable evidence of MGP contamination 0.0 0.0 17 3 0.0 0.0 0.0 0.0 18 18.0-18.5' Black (5Y 2.5/1) organic silt and No staining; no CLAY, 10% peat fibers (PT), moist, medium 8 2.0 3 1639 6.7 0.0 1639 N/A N/A observable evidence of MGP contamination 0.0 14.8 18.5-25.2' Very dark gray (5Y 3/1) organic silt swampy, anaerobic 19 CLAY (OH), moist, stiff odors noted 5 14.9 0.0 1645 SB-67(19.5-20.0)

collected for TCL VOC,

TCL SVOC

8.2 0.0

- 29

20

23

28.3-30.5' Reddish brown (2.5YR 4/4) fine to medium SAND (SW), little silt, wet, dense

PSEG SC Former Halladay Street Gas Works CMX Interim Data Submittal No.4 Page 5 of 5 LOG OF SOIL BORING SB-67 PROJECT LOCATION Elevation (FT. NAVD88) PROJECT NUMBER Halladay Street, Jersey City, NJ 13.86 020667601 DRILLING CONTRACTOR FOREMAN DATE STARTED DATE COMPLETED Advanced Drilling, Inc. Roger Logel 08/28/07 08/28/07 COMPLETION DEPTH (FT BGS) DRILLING EQUIPMENT ROCK DEPTH (FT) GEFCO SS 5 Drill Rig turning 4.25-inch inside diameter hollow-stem augers not encountered Hollow-stem auger SIZE AND TYPE CORE BARREL TYPE BIT NO. SAMPLES 23 UNDIST. CORE CASING N/A N/A WATER DEPTH FIRST 4 N/A N/A COMPL CASING HAMMER WEIGHT N/A N/A BORING LOCATION: Western interior of the Rudolf Bass Building, located at DROP 2" diameter, 2' long split-spoon 45 Carteret Avenue, Jersey City, New Jersey SAMPLER HAMMER WEIGHT DROP INSPECTOR Eric Gaulin Samples PID READINGS (PPM) DESCRIPTION Depth REMARKS Resist. Ambie Head Time (ft bgs) BL/6in Space Date 40 36.1-50.0' Reddish brown (2.5YR 4/4) silty 19 1.0 5 1956 0.0 0.0 1956 N/A N/A No odor, no staining; no fine SAND (SM), wet observable evidence of MGP contamination 5 0.0 0.0 41 5 7 42 20 2.0 20 2003 0.0 0.0 2003 N/A N/A No staining; no observable evidence of MGP contamination 11 0.0 0.0 43 17 0.0 0.0 24 0.0 0.0 44 21 1.5 5 2018 0.0 0.0 2018 N/A N/A No staining; no observable evidence of MGP contamination 7 0.0 0.0 45 9 0.0 0.0 11 46 22 2.0 5 2026 0.0 0.0 2026 N/A N/A No staining; no observable evidence of MGP contamination 9 0.0 0.0 47 0.0 0.0 8 0.0 0.0 48 23 2.0 12 2040 0.0 0.0 2040 N/A N/A No staining; no observable evidence of MGP contamination 5 0.0 0.0 49 2042 Sample SB-0.0 0.0 8 67(49.5-50.0) for TCL VOC, TCL SVOC 0.0 0.0

END OF BORING AT 50' BGS

Remedial Action Report – Site 137 North (AOC 137-1A and AOC 137-2A) and Site 143 (AOC 143-1) Soil Garfield Avenue Group PPG, Jersey City, New Jersey

Appendix G-2

Site 143

ENSR AECOM			BORIN 143	IG ID: B-B1
	Site: Site 143		170	,-D i
Start Date:	Project: Site Investigation		Page: 1 of 2	
1/10/2007	Coordinates: X-610657.4 Y-68319	2.0	Depth of Borir	ng: 20.00
End Date:	Elevation: 13.99		Geologist: P	
1/10/2007	Drill Subcontractor: Terra Probe Incorpora		Driller:	
Depth (fit) Lithology	Description	PID (PPM)	Sample ID	Sample Parameters
× × Gr	LL: Black (7.5YR 2.5/1) coarse SAND, some fine avel, little woody organics, trace fine gravel sized DPR (5%), no odor		143-B1A (0.1-1.0)	Cr+6, TAL Metals
	LL: Red Brown (2.5YR 4/3) fine SAND, some Clay d Silt, little fine to coarse Gravel, no odor	0.3 ppm	143-B1B (1.0-1.5)	Cr+6, TAL Metals
2- ×××	R: No Sample	0.0 ppm		
	LL: Red Brown (2.5YR 4/3) fine SAND, some Clay d Silt, little fine to coarse Gravel, no odor			
	LL: Dark Brown (7.5YR 3/1) coarse SAND, come ay, brick fragments, fine Gravel, no odor		143-B1C (5.0-5.5)	Cr+6, TAL Metals
6— NF	R: No Recovery			
8 - ××× FII	LL: Dark Brown (7.5YR 3/1) coarse SAND, come			
^×^×	ay, brick fragments, fine Gravel, no odor LL: Black (10YE 2/1) fine SAND, some fine Gravel,		143-B1D (8.6-9.1)	Cr+6, TAL Metals
no	odor	0.0 ppm	143-B1E(9.1-10.6) 143-B1ED(9.1-10.6)	Cr+6, TAL Metals Cr+6, TAL Metals
	AND: Dark Gray (10YR 3/1) fine SAND, some Silt d Clay, no odor			

ENSR AECOM	Client: PPG Industries Site: Site 143			ing id: 3-B1
Start Date:	Project: Site Investigation		Page: 2 of 2	
1/10/2007	Coordinates: X-610657.4 Y-683192	? N	Depth of Bo	
End Date:	Elevation: 13.99		Geologist:	
1/10/2007	Drill Subcontractor: Terra Probe Incorpora	ted	Driller:	
Debth (4)	Description	biD (bbw)	Sample ID	Sample Parameters
12 +	2: No Recovery	_		
14 —	ND: Dark Gray (10YR 3/1) fine SAND, some Silt d Clay, no odor	2.0 ppm		
SA Cla	RAVEL: White/Pink Feldspar, medium Gravel, no or ND: Orange Brown (10YR 4/4) fine SAND, some ay and Silt, little coarse Gravel, dense, no odor R: No Recovery ND: Red (10YR 3/4) coarse SAND, some fine to arse Gravel, little Clay, no odor			
18 —	2: No Recovery	0.0 ppm		
20	:: No Recovery LLL: End of Boring			

FNICD	AFCOM	Client: PPG Industries			NG ID:
ENSR	AECOM	Site: Site 143		14	3-B2
Start Da	te:	Project: Site Investigation		Page: 1 of 2	
1/10/200)7	Coordinates: X-610636.0 Y-683137	.2	Depth of Bor	ing: 20.00
End Dat	e:	Elevation: 14.02		Geologist: I	P. Kelly
1/10/200		Drill Subcontractor: Terra Probe Incorporat		Driller: Heat	h Kneller
Depth (ft)	Lithology	Description	PID (bbw)	Sample ID	h Kneller Sample Parameters
0_					T
	× × ASI	PHALT: ASPHALT		143-B2A (0.2-0.7)	Cr+6, TAL Metals
	× × CO	L: Dark Reddish Brown (5YR 3/2) SILT, some PR (40%), little medium to coarse Sand, trace dium angular Gravel, fill material (coal, glass, brick), se, dry. No odor.		(6.2 6.1)	
2—	× × × × × ×				
	× × × × × × × × × ×	L: COBBLES and rail road timber.			
4-	$\hat{\times} \times \hat{\times}$ little	L: Dark Yellowish Brown (10YR 4/4) clayey SILT, e fine to coarse Sand, trace semi-round fine Gravel COPR (1%), loose, wet. No odor.		143-B2B (3.8-4.3)	Cr+6, TAL Metals
_		L: Black (5Y 2.5/1) coarse SAND, some Silt and y, little fine Gravel, medium density, wet. No odor.	0.0 ppm	143-B2E (5.0-5.5)	MS/MSD, Cr+6, TAL Metals
6+	× × × × × ×		0.0 ppm		
-	^ x ^ x		0.0 ppm		
	NR	: No Recovery			
8+	son	T AND CLAY: Brown (7.5YR 3/1) SILT and CLAY, ne fine Sand, little Black fine Sand nodes bughout, trace fine Gravel, wet.	0.0 ppm	143-B2F (8.1-8.6)	Cr+6, TAL Metals
			0.0 ppm		
10 +			0.0 ppm		

NICE AFCO	Client: PPG Industries		BORI	NG ID:
ENSR AECO	Site: Site 143		14	3-B2
Start Date:	Project: Site Investigation		Page: 2 of 2	
1/10/2007	Coordinates: X-610636.0 Y-683137	2	Depth of Bor	ing: 20.00
End Date:	Elevation: 14.02		Geologist: F	P. Kelly
1/10/2007	Drill Subcontractor: Terra Probe Incorporate		Driller: Heat	h Kneller
Depth (ft) Lithology	Description	PID (bbw)	Sample ID	Sample Parameters
<u> </u>	NR: No Recovery			
	SILT: Gray Brown (2.5YR3/2) SILT, some Clay mottled with olive (5YR 4/4), moist.	0.0 ppm	143-B2G (12.0-12.6)	Cr+6, TAL Metals
		0.0 ppm		
14 +		0.0 ppm		
-	SILT AND CLAY: Olive (5Y 4/2) mottled with Bluish Gray (5B 4/0) and little Yellowish Brown CLAY and SILT, trace Red (10R 3/4) fine Gravel, wet.			
	NR: No Recovery			
<u> </u>	SILT AND CLAY: Olive (5Y 4/2) mottled with Bluish Gray (5B 4/0) and little Yellowish Brown CLAY and SILT, trace Red (10R 3/4) fine Gravel, wet.	0.0 ppm		
	SAND: Red (10YR 3/4) Coarse SAND, some fine to coarse Gravel, little Clay, wet.	0.0 ppm		
18+		0.0 ppm		
	NR: No Recovery			
20 —	NULL: End of Boring at 20 ft.			L

ENSR	AECOM	Client: PPG Industries			ING ID: 3-B3
		Site: Site 143		14	3 - D3
Start Dat	te:	Project: Site Investigation		Page: 1 of 3	
1/9/2007	•	Coordinates: X-610716.0 Y-683076	5.5	Depth of Bo	ring: 24.00
End Date	e :	Elevation: 14.12		Geologist:	P. Kelly
1/11/200		Drill Subcontractor: Eichelberger/Terra Pro		d Driller: Heat	th Kneller
epth (ft)	Lithology	Description	PID (bbw)	Sample ID	th Kneller Sample Parameters
0_	۸۹	SPHALT: Asphalt			
	× × \	п плет. дзрпак	1	143-B3A (0.2-0.7)	Cr+6, TAL Metals
		L: Black (10YR 2/1) coarse SAND, some fine to arse Gravel, trace glass fragments, no odor		· · · · · · ·	
	× × FII	L: Waste Fill (auto parts), petrotoleum odor			
		L: Black (5Y 2.5/1) coarse SAND, some fine to arse Gravel, little Clay, strong petroleum odor		143-B3B (1.5-1.9)	Cr+6, TAL Metals
2—	×××	, ,,	20.6 ppm		
		L: Dark Red-Brown (5YR 5/1) CLAY and SILT, me fine Gravel, trace green/gray (5G 5/1) Clay and		143-B3C (2.4-2.8)	Cr+6, TAL Metals
-	× × 5%	6 COPR, strong petroleum odor and petroleum een			
		L: Dark Red-Brown (5YR 3/1) woody organics, little e Gravel, Clay and Silt, strong petroleum odor		143-B3D (3.5-4.0)	Cr+6, TAL Metals
4+	× × × × × × × ×		130 ppm		
		L: Black (10YR 3/1) fine SAND, some fine medium avel, little brick and glass fragment, no odor	1.2 ppm		
6-	× × × × × ×		0.3 ppm		
	^ × × × ×			143-B3E (6.4-6.9)	Cr+6, TAL Metals
	× × × × × × × × × × × × × × × × × × ×		0.2 ppm		
8—	NF	R: No Recovery	0.0 ppm		

ENCD AFCOM	Client: PPG Industries		BORIN	
ENSR AECOM	Site: Site 143		143	3-B3
Start Date:	Project: Site Investigation		Page: 2 of 3	
1/9/2007	Coordinates: X-610716.0 Y-683076	.5	Depth of Borir	ng: 24.00
End Date:	Elevation: 14.12		Geologist: P.	Kelly
1/11/2007	Drill Subcontractor: Eichelberger/Terra Pro	be Incorporated	Driller: Health	Kneller
Debth (4) Tithology	Description	PID (bbw)	Sample ID	Kneller Sample Parameters
	L: Dark Gray (5YR 4/1) coarse SAND, some fine d medium gravel, little brick and glass fragment, no or	0.0 ppm		
^ × ^ × × × × ×			143-B3F (9.3-10.1)	Cr+6, TAL Metals
10 — NR	:: No Recovery			
		0.0 ppm		
	L: Dark Gray (5YR 4/1) coarse SAND, some fine d medium gravel, little brick and glass fragment, no	-		
	L: Dark Brown (10YR 3/2) CLAY, some Silt, little otlets, no odor	0.0 ppm	143-B3G (12.8-13.4)	Cr+6, TAL Metals
	AY: Dark Brown (2.5YR 2.5/2) CLAY/Organics lfur, meadow mat odor)		143-B3H (13.9-14.5)	Cr+6, TAL Metals
NR	t: No Recovery			
16 - CL	AY: Dark Brown (2.5YR 2.5/2) CLAY/Organics			

18 — SIL Sar	Site: Site 143 Project: Site Investigation Coordinates: X-610716.0 Y-683076. Elevation: 14.12 Drill Subcontractor: Eichelberger/Terra Prol		Page: 3 of 3 Depth of Borir Geologist: P. ated Driller: Heath	. Kelly
1/9/2007 End Date: 1/11/2007 Depth (ft) Lithology SIL Sar	Coordinates: X-610716.0 Y-683076. Elevation: 14.12 Drill Subcontractor: Eichelberger/Terra Prol Oescription Oescription T: Dary Gray (5 gley/NY) SILT, some Clay, little fine	be Incorpora	Depth of Borin Geologist: P. ated Driller: Heath Sample ID	. Kelly
End Date: 1/11/2007 Depth (ft) Lithology SIL San	Elevation: 14.12 Drill Subcontractor: Eichelberger/Terra Prol Description Description Iffur, meadow mat odor) T: Dary Gray (5 gley/NY) SILT, some Clay, little fine	be Incorpora	Geologist: P. ated Driller: Heath	. Kelly
1/11/2007 Depth (ft) Lithology (su	Drill Subcontractor: Eichelberger/Terra Prologescription Description Ulfur, meadow mat odor) T: Dary Gray (5 gley/NY) SILT, some Clay, little fine	PID (bbw)	oted Driller: Heath	Knoller
Depth (ft) Lithology (su	Description Ilfur, meadow mat odor) T: Dary Gray (5 gley/NY) SILT, some Clay, little fine	PID (bbw)	Sample ID	Kneller Sample Parameters
18 — SIL San	ulfur, meadow mat odor) T: Dary Gray (5 gley/NY) SILT, some Clay, little fine			Sample Parameters
18 — SIL Sar	ulfur, meadow mat odor) T: Dary Gray (5 gley/NY) SILT, some Clay, little fine	4.0 ppm		
18 — Sar		4.0 ppm	143-R3I	
18 — Sar			(17.0-17.5)	Cr+6, TAL Metals
NR			143-B3J(18.2-18.8) 143-B3JD(18.2-18.8)	Cr+6, TAL Metals Cr+6, TAL Metals
	2: No Recovery			
20 - SIL	T: Dary Gray (5 gley/NY) SILT, some Clay, little fine nd, medium stiff, roots, no odor			
• • • •	ND: Reddish Brown (2.5YR 4/6) coarse SAND, me fine to coarse Gravel, no odor	0.0 ppm		
- ND). Na Dagguery	0.0 ppm		
24 NN	2: No Recovery			

ENICD	AECON	Client: PPG Industries			NG ID:
ENSR	AECOM	Site: Site 143		14	3-B4
Start Da	te:	Project: Site Investigation		Page: 1 of 3	
2/9/2007	7	Coordinates: X-610753.6 Y-68315	58.1	Depth of Boo	ring: 28.00
End Dat	e:	Elevation: 14.16		Geologist:	M. Merdinger
2/9/2007		Drill Subcontractor: Terra Probe Incorpor		Driller: Bria	n
Depth (ft)	Lithology	Description	PID (ppm)	Sample ID	Sample Parameters
0	××				
	XXX FIL	L: CONCRETE, no staining, dry.	0.0 ppm		
_	$\times \times \times$ Sa	L: Very Dark Brown (7.5YR 2.5/2) SILT, little fine nd, Fill material (class, brick, wood), 50% COPR,	0.1 ppm	143-B4A (0.5-1.0)	Cr+6, TAL Metals
	× × loo	se, dry. No odor.	J. 1 ppill		
2—		L: Red Brown to Black SILT, trace fine rounded avel, Fill material (coal, brick), loose, moist. No		143-B4B (1.5-2.0)	Cr+6, TAL Metals
_	× × × × × × × ×		0.1 ppm		
-	×××		0.1 ppm		
	N R	R: No Sample			
4+		L: Dark Brown (7.5YR 3/2) SILT and coarse	0.1 ppm		
		RAVEL, little Clay, some goldenrod - green staining, ist.	0.3 ppm	143-B4C (4.6-5.1)	Cr+6, TAL Metals
	X X Bla	L: Dark Brown (7.5YR 3/2) and partially stained ack SILT and coarse GRAVEL, little Clay, some			
6—		ldenrod - green staining, loose, wet. Fill material cod).			
	NR	R: No Recovery			
-					
8—		L: Very Dark Gray (10YR 3/1) fine to medium sand T, little fine semi-angular Gravel, loose, wet. No	0.0 ppm	143-B4D (8.0-8.5)	Cr+6, TAL Metals
	ode	· · · · · · · · · · · · · · · · · · ·			
1	l NR	R: No Recovery			

INCD	AECON	Client: PPG Industries			ING ID:
ENSR	AECOM	Site: Site 143		14	3-B4
Start Da	ite:	Project: Site Investigation		Page: 2 of 3	
2/9/2007	7	Coordinates: X-610753.6 Y-6831	58.1	Depth of Bo	ring: 28.00
End Dat	e:	Elevation: 14.16		Geologist:	M. Merdinger
2/9/2007		Drill Subcontractor: Terra Probe Incorpo		Driller: Bria	n
oepth (ft)	Lithology	Description	PID (ppm)	Sample ID	Sample Parameters
10 —					
12 —	× × me	LL: Very Dark Brown (10YR 2/2) coarse SAND and edium semi-angular GRAVEL, some Silt, loose, well o odor.		143-B4E (12.0-12.5)	Cr+6, TAL Metals
14 —		EAT: Very Dark Grayish Brown (10YR 3/2) organic	0.5 ppm	143-B4F (13.6-14.1)	Cr+6, TAL Metals
-	THE PE	LAY, trace organics, medium stiff, moist. Sulfur odc EAT: PEAT, organics, medium stiff, moist. Sulfur dor,	7. 3.1 ppm		
16 —		R: No Recovery		143-B4G	Cr+6, TAL Metals
-	Br	LTY CLAY: Dark Grayish Brown (2.5Y 4/2) and Oliv rown (2.5Y 4/3) silty CLAY, trace fine Sand, medium iff, moist. No odor.		(16.0-16.5)	CITO, TAL INICIAIS
18 —		AND AND SILT: Grayish Brown (2.5Y 45/2) SILT an terbedded very fine SAND, moist. No odor.	d		

NSR	AECOM	Client: PPG Industries	Client: PPG Industries		BORING ID:	
NON	AECUIV	Site: Site 143		143-B4		
Start Da	ate:	Project: Site Investigation		Page: 3 of 3		
2/9/2007 Coordinates: X-610753.6 Y-683158		3.1	Depth of Boring: 28.00			
End Dat		Elevation: 14.16			M. Merdinger	
2/9/2007		Drill Subcontractor: Terra Probe Incorpora		Driller: Brian	n	
Jepth (ft)	Lithology	Description	PID (DPM)	Sample ID	Sample Parameters	
	NR	R: No Recovery				
20 —	 (10	T: Grayish Brown (10YR 5/2) and Yellowish Brown OYR 5/6) mottled SILT, trace fine to medium Gravel, nse, moist. No odor.	0.0 ppm	143-B4H (20.0-20.5)	MS/MSD, Cr+6, TAL Metals	
		T: Brown (7.5YR 5/4) SILT, trace fine to medium avel and medium Sand, medium dense, moist. No or.	0.0 ppm			
22 —	4/4	ND: Strong Brown (7.5YR 5/6) and Brown (7.5YR l) medium to coarse SAND, some Silt, trace fine avel, wet, loose. No odor.	0.0 ppm			
-		R: No Recovery				
24 —	SA	ND: Reddish Brown (5YR 4/4) medium to coarse ND and fine to coarse Gravel, trace Silt, loose, wet. odor.	N/A	143-B4I (24.0-24.5)	Cr+6, TAL Metals	
26 —		ND: Red (2.5YR 4/6) very fine SAND, trace Silt, ise, wet. No odor.				
	NR	R: No Recovery				
28⊥	NU	JLL: End of Boring at 28 ft.				

ENSR	AECOM	Client: PPG Industries Site: Site 143		BORING ID: 143-B5	
1/9/2007 Coordinates: X-610774.0 Y-683208.0		3.0	Depth of Boring: 24.00		
End Date: Elevation: 14.23			Geologist: P. Kelly		
1/11/200		Drill Subcontractor: Eichelberger/Terra Pro	be Incorporated	Driller: Heath	Kneller
Debth (ft)	Lithology	Description	PID (bbw)	Sample ID	Sample Parameters
0_	×××× FIL	PHALT: Asphalt L: Black (5YR 2.5/1) fine SAND, some fine Gravel Silt, little brick fragments and coarse Gravel, no or	0.0 ppm	143-B5A (1.0-1.5)	Cr+6, TAL Metals
2—	× × fine	L: Dark Brown (7.5YR 2.5/1) coarse SAND, some e Gravel, and little fine gravel sized COPR (10%), ce brick fragments, no odor	0.0 ppm	143-B5B (2.0-2.5)	Cr+6, TAL Metals
		L: White (7.5YR 8/1) SILT/CLAY, some black ining, no odor	0.0 ppm	143-B5C (2.9-3.4)	Cr+6, TAL Metals
4-	× ^ × ^ coa	L: Brown (7.5YR 4/3) CLAY, some silt, little fine to arse Gravel and medium gravel sized Slag, black YR 2/1), no odor	0.0 ppm	143-B5D (3.5-4.1)	Cr+6, TAL Metals
	-^- ^- \ FIL	L: Cobbles			
	××× NR	: No Sample			
6—		L: Red-Brown (2.5YR 3/4) SILT/CLAY, some fine vel, trace glass pieces, no odor	0.1 ppm		
	*			143-B5E (6.5-7.0)	Cr+6, TAL Metals
	NR	: No Recovery			
8+	××				

ENCD AECON	Client: PPG Industries Site: Site 143			BORING ID: 143-B5	
ENSR AECOM			143		
Start Date: Project: Site Investigation			Page: 2 of 3	Page: 2 of 3	
1/9/2007	3.0	Depth of Boring: 24.00			
End Date: Elevation: 14.23			Geologist: P. Kelly		
1/11/2007	Drill Subcontractor: Eichelberger/Terra Pro	•	ated Driller: Heath	Kneller	
Depth (fit) Lithology	Description	PID (bbw)	Sample ID	Sample Parameters	
	L: Red-Brown (2.5YR 3/4) SILT/CLAY, some fine avel, trace glass pieces, no odor				
	L: Dark Brown (7.5YR 2.5/2) SILT, some fine avel, little woody organics, no odor	0.7 ppm	143-B5F (8.8-9.5)	Cr+6, TAL Metals	
	L: White (5Y 8/1) SILT/CLAY, very soft, some		143-B5G (9.5-9.9)	Cr+6, TAL Metals	
$10 + \frac{}{} \times \times $ Brown	own (5YR 2.5/1) Silt and fine Sand, no odor	<i>/</i>	143-B5H(9.9-10.6)	Cr+6, TAL Metals	
	L: Red-Black (2.5YR 2.5/1) coarse SAND, some t, little fine Gravel, trace glass fragments, no odor		143-B5HD(9.9-10.6)	Cr+6, TAL Metals	
NF	R: No Recovery				
	L: Red-Black (2.5YR 2.5/1) coarse SAND, some t, little fine Gravel, trace glass fragments, no odor		440 DEL	Out TALMAL	
- × × FIL - × × Gr	L: Dark Gray (N31 gley) SILT/Ash, some fine avel little debris, no odor	0.7 ppm	143-B5I (12.6-13.1)	Cr+6, TAL Metals	
	EAT: Meadow Mat, dark Brown (2.5YR 2.5/2) CLAY, h Organics, no odor		143-B5J (13.1-13.9)	Cr+6, TAL Metals	
14 —		0.6 ppm			
- NF	R: No Recovery	- 0.4 ppm			
16 - SII	_T AND CLAY: Green Gray (5BG 5/1) with little Dark				

ENCD AECOM	Client: PPG Industries Site: Site 143		BORING ID: 143-B5	
ENSR AECOM				
Start Date:	Project: Site Investigation		Page: 3 of 3	
1/9/2007	Coordinates: X-610774.0 Y-683208.0		Depth of Boring: 24.00	
End Date:	Elevation: 14.23		Geologist: P. Kelly	
1/11/2007	Drill Subcontractor: Eichelberger/Terra Probe Incorporated		Driller: Heath Kneller	
Debty (41) rithology	Description	PID (bbw)	Sample ID	Kneller Sample Parameters
	(5YR 4/6) CLAY/SILT, little fine Sand, trace Dark d (2.5YR 3/6) medium Gravel from 18.1' to 19.1', no	0.4 ppm	143-B5K (17.1-17.9)	Cr+6, TAL Metals
NR:	: No Recovery	- 0.0 ppm		
 	T AND CLAY: Green Gray (5BG 5/1) with little Dark (5YR 4/6) CLAY/SILT, little fine Sand, trace Dark d (2.5YR 3/6) medium Gravel, no odor			
	ND: Reddish Brown (2.5YR 4/6) coarse SAND, ne fine to coarse Gravel, no odor	0.4 ppm		
NR:	: No Recovery			
24 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	LL: End of Boring			

ENSR	AECOM	Client: PPG Industries		BORING ID:				
NON	ALCOM	Site: Site 143	143	143-B6				
Start Da	te:	Project: Site Investigation		Page: 1 of 3				
1/9/2007	,	Coordinates: X-610799.8 Y-683134	1.3	Depth of Bori	Depth of Boring: 28.00			
End Date	e:	Elevation: 13.83		Geologist: P	. Kelly			
1/12/200	7	Drill Subcontractor: Eichelberger/Terra Pro	d Driller: Heath	Kneller				
Debth (tt)	Lithology	Description	PID (DPM)	Sample ID	Sample Sample			
0					Ī			
	× × \ AS	PHALT: Asphalt		143-B6A	Cr+6, TAL Metals			
	× × FII	L: Black (10YR 2.5/1) coarse SAND, some fine		(0.2-0.8)				
		avel, no odor						
	××		0.0 ppm	440 DOD	Onio Talian			
		L: Dark Red Brown (5YR 3/2) coarse SAND, some		143-B6B (1.3-1.7)	Cr+6, TAL Metals			
	X X fine	e Gravel and Clay, trace COPR 5%, no odor						
2—	X X FIL	L: Concrete	0.0 ppm					
	× × FIL	L: Wood						
	× × × Sai	L: Black (5YR 2.5/1) fine GRAVEL, some coarse nd, little coarse Gravel and Clay, trace woody anics, no odor		143-B6C (2.9-3.4)	Cr+6, TAL Metals			
4	×××		0.0 ppm					
		L: Dark Brown (7.5YR 3/2) CLAY with Silt, some e Gravel, trace green/gray (5Y 5/1) Clay, no odor		143-B6D (4.4-4.9)	Cr+6, TAL Metals			
	×××	L: Cobbles						
6—	$\times^{\sim}\times^{\sim}$ trac	L: Brown (10YR 4/3), SILT with little fine Sand, ce fine Gravel, some dark Brown (2.5YR 3/1) nodes,	0.1 ppm	143-B6E (5.5-6.0)	Cr+6, TAL Metals			
	× × no	odor	0.1 ppm					
		L: Brown (10YR 4/3) and Gray (10YR 7/1) mottled y, little Silt, fine Gravel, trace Red (10R 3/4)		143-B6F (6.5-6.9)	Cr+6, TAL Metals			
		ganics, and medium Gravel at 7.2 to 7.4 feet, no	0.0 ppm	143-B6G(7.4-7.7)	Cr+6, TAL Metals			
8—		L: Dark Reddish Brown (5YR 3/2) silty CLAY, some ody Organics, no odor	0.0 ppm					
	×××× NR	: No Recovery		143-B6H(8.5-9.1) 143-B6HD(8.5-9.1)	Cr+6, TAL Metals Cr+6, TAL Metals			
		L: Gray (gley N5) coarse SAND, ash, some fine to dium gravel, shells, little woody organics, loose, no or	0.0 ppm		2. 2, <u>2</u> 3.0			

ENSR	AECOM	Client: PPG Industries		BORING ID:			
LINSIN	ALCOIV	Site: Site 143		143	3-B6		
Start Date	e:	Project: Site Investigation		Page: 2 of 3			
1/9/2007		Coordinates: X-610799.8 Y-683134	.3	Depth of Bori	ng: 28.00		
End Date:	:	Elevation: 13.83		Geologist: F	-		
1/12/2007	•	Drill Subcontractor: Eichelberger/Terra Pro		ed Driller: Heath	n Kneller		
Depth (ft)	Lithology	Description	PID (bbw)	Sample ID	Sample Parameters		
10 —	× × × × × × × × × × × × × × × × × × ×	R: No Recovery	0.0 ppm				
12 3		L: Gray (gley N5) coarse SAND, ash, some fine to edium gravel, shells, little woody organics, loose, no or					
14 —	sul	AT: Meadow Mat, Brown (5YR 3/3) CLAY Organics, fur odor		143-B6I (13.7-14.4)	Cr+6, TAL Metals		
		AT: Meadow Mat, Brown (5YR 3/3) CLAY Organics, fur odor	10.1 ppm				
			16.9 ppm	143-B6J (17.5-18.0)	Cr+6, TAL Metals		
18 —			14.3 ppm				
		AV 0 / 1 N// 01AV	 	143-B6K	Cr+6, TAL Metals		
4	CL	AY: Gray (glay N/6) CLAY, some silt, little fine		(18.7-19.3)			

NCD AECOM	Client: PPG Industries	BORING ID:				
ENSR AECOM	Site: Site 143		143-B6			
Start Date:	Project: Site Investigation		Page: 3 of 3			
1/9/2007	Coordinates: X-610799.8 Y-683134	Depth of Bori	ng: 28.00			
End Date:	Elevation: 13.83		Geologist: F	P. Kelly		
1/12/2007	Drill Subcontractor: Eichelberger/Terra Pro	obe Incorporated	d Driller: Heath	n Kneller		
Debity (tt)	Description .	PID (bbw)	Sample ID	Sample Parameters		
20 — grav	vel, trace roots, no odor					
	ND: Red (2.5YR 4/8) medium SAND, little fine to rse Gravel, no odor	0.0 ppm				
26 —		0.0 ppm				

ENSR	AECO	Client: PPG Industries		BORIN 1/13	ig id: 8 -B7				
		Site: Site 143		143)-D <i>1</i>				
Start Da	ate:	Project: Site Investigation		Page: 1 of 3	Page: 1 of 3				
1/9/200	7	Coordinates: X-610791.8 Y-683	3056.5	Depth of Bori	ng: 24.00				
End Da		Elevation: 14.07							
1/11/20		Drill Subcontractor: Eichelberger/Terra		ted Driller: Heath	Kneller				
Depth (ft)	Lithology	Description	PID (bbw)	Sample ID	Kneller Sample Parameters				
0_	^ ^ \								
	×^×	TLL: Coarse Gravel							
		FILL: Black (2.5YR 2.5/1) fine SAND, some fine to oarse Gravel, loose, no odor		143-B7A(0.4-0.8) 143-B7AD(0.4-0.8)	Cr+6, TAL Metals Cr+6, TAL Metals				
	× × F	TLL: Cobbles	0.0 ppm						
	^			143-B7B	Cr+6, TAL Metals				
2+		TLL: Black (2.5YR 2.5/1) fine SAND, little fine grave	el 0.0 ppm	(1.8-2.4)	OF O, TAL Wetais				
	× × × × × × × × × × × × × × × × × × ×	ized COPR (10%), no odor		143-B7C (2.2-3.5)	Cr+6, TAL Metals				
1	×^×^		0.0 ppm						
4—		FILL: Green-gray (2.5Y 3/1) coarse SAND, some fir Gravel and COPR (20%), little coarse Gravel, no oc							
	\ F	TLL: Coarse cobbles							
		IR: No Recovery							
		TLL: Black (10YR 2/1) fine SAND, some Silt, little oarse Gravel, no odor	0.7 ppm						
6—	× × × × × × ×		0.2 ppm	143-B7E (5.9-6.6)	Cr+6, TAL Metals				
	×××	:	ine						
		Gravel, no odor	0.0 ppm	143-B7F (6.9-7.4)	Cr+6, TAL Metals				
	N	IR: No Recovery							
8—									

ENCD AFCO	Client: PPG Industries			NG ID: 3-B7				
ENSR AECO	Site: Site 143	Site: Site 143						
Start Date:	Project: Site Investigation		Page: 2 of 3					
1/9/2007	Coordinates: X-610791.8 Y-683056	.5	Depth of Bori					
End Date:	Elevation: 14.07	Geologist: F	P. Kelly					
1/11/2007	Drill Subcontractor: Eichelberger/Terra Pro	d Driller: Heath	n Kneller					
Depth (ft) Lithology	Description	PID (ppm)	Sample ID	Sample Parameters				
	FILL: Dark Gray (N3/gley) coarse SAND, some fine to coarse Gravel, loose, no odor							
× × × ×	Joanse Graver, 100se, 110 oddi		143-B7G (8.5-10.3)	Cr+6, TAL Metals				
× × × × × × × ×		6.0 ppm						
10 -		0.0 ppm						
	NR: No Recovery							
		0.0 ppm						
	FILL: Dark Gray (N3/gley) coarse SAND, some fine to coarse Gravel, loose, no odor							
	PEAT: Meadow Mat, dark Brown (2.5YR 2.5/2) CLAY/Organics, strong odor	0.0 ppm —	143-B7H (13.1-13.7)	Cr+6, TAL Metals				
14 —		0.0 ppm						
		0.0 ppm						
16 —								

ENSR AECOM	Client: PPG Industries	BORING ID:				
ALCON	Site: Site 143		143-B7			
Start Date:	Project: Site Investigation		Page: 3 of 3			
1/9/2007	Coordinates: X-610791.8 Y-683056	3.5	Depth of Bor	ring: 24.00		
End Date:	Elevation: 14.07		Geologist:	⊃. Kelly		
1/11/2007	Drill Subcontractor: Eichelberger/Terra Pro	obe Incorporated	Driller: Heat	h Kneller		
Debth (41) Lithology	Description	PID (bbw)	Sample ID	Sample		
- 11 11 11 11 11 11 11 11 11 11 11 11 11		5.1 ppm				
	T: Dark Gray (gley N4) SILT, some Clay, little fine nd, medium stiff, no odor	34.0 ppm	143-B7I (18.0-18.9)	Cr+6, TAL Metals		
- NR	2: No Recovery	2.8 ppm				
Sa ::::::::::::::::::::::::::::::::::::	AY: Dark Bluish Gray (5B 4/1) CLAY, some Silt, ce roots, no odor	0.6 ppm				
NR	l: No Recovery	0.6 ppm				

Ground surface elevation = 10.662 ft NAVD88

30	Knightsbr	idge Roa	CO d, Piscata	M way, NJ 0	8854		Boring ID:	B104	
			office tel				The second	Sheet 1 of 1	
Projec	t: PPG	Site 14	13			Drilling Company: SGS Type of Surface M.		terial:	
Project Number:						Drilling Method: OKO DVODE	Patching Material:		
			11/10/			Rig Type:	Drilling Water Leve		
			ng: 11/		14	Core Size: 3 Inch	Boring Total Depth		
Physic	al Loca	ition: I	PG Site	e 143			Logged By: S.P	AIGE	
Depth Range (ft)	Recovery (ft)	PID (ppm)	Moisture	GA Class.	uscs	United S	oil Classification System	09:30 AM	
Ran	Rec	PID	§ 3	GA	-	Ground Surface Cover and Thickness:		Sample Name:	
0-2	2.0	0.0	dry	Fill	FILL	D6A		DGA	
2-25	0.5	0.0	dry	fill.	fill	crustual conciete		CONCRETE (crushad	
2549	2.0	0.7	dry	fill	Fill	DGA		DGA	
4.5- 5.0	0.5	0.0	moist	fill	fill	trave coal, trave grovel, trave fine med dense, no order no star trave osh, trave wood fragment fragments, trave de bris, med.	e-med-sand, losse to	Ash	
5.0-	5.0	F.0	fziam	fill	fill	trace ash, trace wood fragments, trace do bris, med.	nts, frausheu 1996	fine to medisity SAND	
- 1	Stratig	raphic	Unit Int	ervals:		6.5-7.0 (2)802'50 4.5-5.0 (2) 802	comments:		
1.)	_		4.)			45.50 1220	(3) 2010		
2.)			5.)			7.3. 3.0 (2) 802	yar, (5) encere		
3.)			6.)						

30	Knightsbi	ridge Roa	CO d, Piscata	M wav. NJ 0	8854	Во	ring ID:	B105
(732) 564-3200 office telephone								Sheet 1 of 1
Project: PPG Site 143 Drilling Company: SGS							of Surface Ma	terial:
Projec	Project Number:					Drilling Method: Que probe Patch	ning Material:	
			11/10/			Rig Type: O Drillin	ng Water Leve	:
Date I	Date Finished Drilling: 11/10/2014 Core Size: 3 mch Boring Total Depi							
Physical Location: PPG Site 143							ed By: S. PA	いいせ
Depth Range (ft)	Range (ft) (ft) (ft) Moisture Content GA Class.			Class.	SCS	United Soil Classificat	ion System	09:55 _{AM}
	Rec	GIA	Gor Moi	gA	Š	Ground Surface Cover and Thickness:		Sample Name:
0.0- 4.5	4.5	2.7	dry	fill	fill	DGA		DGA
4.5 - 5.0	05	0.0	rnoist	fill	fill	some own, trace grave, trace coal, loc dense, no odor, no staining, 107' trace grave, trace wood fragments, trace	K8-1 R8-1	fine to med. SAND
5.0 - 8.5	3.5	0.0	moist	fill	fill	Idense, no odor, no stouning, luye 3	3-2	finetomed SAND
8.5- 10.0	1.5	0.0	moist	fill	fill	trave debris, trave coal, trave shell fr trave gravel, loose, love 4-1, no odor,	ragments, , <u>no stauning</u>	ASH
					•			
			<u> </u>					
						and Additional Control of the Contro		
	,							
						:		
					-			
					-			
							-	
					••••			
						sainp(0)		

Stratigraphic Unit Intervals:

1.)

4.)

2.)

5.)

6.)

Comments:

4.5-5.0

(2.) 802 jar (3.) encores

			CO	M			Boring ID:	B109
30			id, Piscata O office tel		18854			Sheet 1 of 1
Proie	ct: PPG	Site 1	43			Drilling Company: Sas	terial:	
	Project Number:					Drilling Company: SGS Drilling Method: queprope	Patching Material:	
	Date Start Drilling: 11/10/2014					Rig Type:	Drilling Water Leve	l:
			ing: 11/		14	Core Size: 3 Inch	Boring Total Depth	
Physic	cal Loc	ation:	PPG Sit	e 143	···		 	HOF
	1	1	1		1			
Depth Range (ft)	Recovery (ft)	PID (ppm)	Moisture	GA Class.	nscs	United Soil Cla	ssification System	10:32 AM
f	Re	<u> </u>	≥ 3	₽ G G		Ground Surface Cover and Thickness:		Sample Name:
0.0- 50	5.0	0.0	gry	fill	Fill	DGA		DGA
50- 53	0.3	0~B	dry	fill	fill	DGA		DGA
5.3° 7.5	2,2	0.0	moist	Fill	fill	trau gravel, med. Junse, no odor, 1048 3-2	•	fine to med. SAND
7.5- 8.0	0.5	0.0	moist towet	fill	fill	trace debris, trace gravel, trace of	ook, traverushed	ASH
7.5- 8.0 8.0- 8.5	0.5	0.0	meist towet	fill	fill	trace debris, trace gravel, trace of snew, loose no stanning no trace gravel, med dense, no odor, 10 YR 3-2	nostauning,	fire to med SAND
8.5- 10.0	1.5	0.0	moist	Fill	Fill	trace gravel, trace ceramics, trace crushed shell, 100se, no odor	A A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
							, J	, n.y)
							,	
				•				
	Stratig	raphic	Unit Inte	ervals:		Com	ıments:	4,
1.)			4.)			5.3-5.82 (2) 802 jar 7.3-7.8 (3) encore	•	
1.) 2.)			5.)			72-7 A (3) enrove		
3.)			6.)			1.5 1.0 J C-7 CIRCHE		

Γ				8.4				
	<i></i>			M			Boring ID:	ИI
30	-	-	d, Piscata office tel		8854			Sheet 1 of 1
Projec	ct: PPG	Site 14	13			Drilling Company: 565	terial:	
Projec	Project Number: Drilling Method: Patching Materi							
Date :	Start D	rilling:	11/10/	2014		rig type:	Drilling Water Leve	l:
Date	Finishe	d Drilli	ng: 11/	10/201	14	Core Size: 3 th(h	Boring Total Depth	(bgs):
Physic	cal Loca	ntion: F	PPG Site	e 143			Logged By: 5,₽	AIGF
	Ι_	Γ_	T	Ι.	1			1 8
Depth ange (ft	Yer,	턃	ture	lass	USCS	United Soil Cla	ssification System	11:43 _{AM}
Depth Range (ft)	Recovery (ft)	PID (ppm)	Moisture Content	GA Class.	Sn	Ground Surface Cover and Thickness:		Sample Name:
6.6- 5.0	5.0	0.0	914	All	fil)	DGA		DGA
5.0~ 10.0	5.0	0.0	dry	fill	fill	trave glass, trave coal, trave gravel, ador, no staining, 10XR 3-2	med dense, no	fine to med, SAND
						,		

								· · · · · · · · · · · · · · · · · · ·
	Stratig	raphic	<u>Unit Int</u>	ervals:		5-5.5 (2) 802 , $9.5-10.0$ (3) end	iments:	
1.}			4.}			$\left(\begin{array}{cccccccccccccccccccccccccccccccccccc$	jar	
2.)			5.)			9.5-10.0 \ (3) end	ore	
3.)			6.)					



Boring ID: 143-P3A-A`16A

Page: 1

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 610668.25
Date Started Drilling: 4/18/2013 8:45:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 683232.3125
Date Finished Drilling: 4/18/2013 1:30:00 PM	Core Size: 3 in	Boring Total Depth: 18 ft
Logged By: MI	Project Manager: Chris Martell	Depth to Water: NA
Dhysical Lagation, City 142, A146A		

							(NOE)	gs = 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
		0.0			ASPHALT		ASPHALT	
- 1 	2	0.0	slightly moist	3	FILL		fine to medium silty SAND, with coarse gravel, trace cinders, ash, (5YR 4/3) reddish brown, non plastic, loose, slightly moist, no odor, no staining.	143-P3A-A`16A-0.5-1
-2 -3	1.2	0.0	slightly moist	3	FILL		fine to medium silty SAND, with coarse gravel, trace cinders, ash, brick, (5YR 4/3) reddish brown, non plastic, loose, slightly moist, no odor, no staining.	143-P3A-A`16A-2.5-3 143-P3A-A`16A-2.5-3.
				NR	NR		NO RECOVERY	140 1 0/1/1 10/1 2.0 0.
- 5 	1.6	0.0	slightly moist	3	FILL		fine to medium silty SAND, with coarse gravel, trace cinders, ash, (5YR 4/3) reddish brown, non plastic, loose, slightly moist, no odor, no staining.	143-P3A-A`16A-4.5-5
−6−		0.0		NR	NR	· · · · · · · · · · · · · · · · · · ·	NO RECOVERY	_
_		0.0	slightly moist	3	FILL		fine to medium silty SAND, with coarse gravel, trace cinders, ash, (5YR 4/3) reddish brown, non plastic,	440 504 41404 0 5 5
-7 8	2	0.0	moist	3	FILL		loose, slightly moist, no odor, no staining. SILT, with fine sand, little coal, (7.5YR 3/4) dark brown, non plastic, soft, moist, no odor, no staining.	143-P3A-A`16A-6.5-7
 9	1	0.0	moist	3	FILL		SILT, with fine sand, (7.5YR 3/4) dark brown, low plasticity, soft, moist, no odor, no staining.	143-P3A-A`16A-8.5-9
- 9				NR	NR		NO RECOVERY	
-10		0.0	moist	3	FILL		SILT, with fine sand, (7.5YR 3/4) dark brown, low	_
	2	0.0	moist	3	FILL		plasticity, soft, moist, no odor, no staining. fine SAND, trace roots, (10YR 5/6) yellowish brown, non plastic, loose, moist, no odor, no staining.	143-P3A-A`16A-10.5-1
40							p	
12 	2	0.0	moist	3	FILL		fine SAND, no coarse gravel, (10YR 4/6) dark yellowish brown, non plastic, loose, moist, no odor, no staining.	143-P3A-A`16A-12.5-1
- 14		0.0	moist moist	3	FILL		fine to medium SAND, with coarse gravel, (2.5YR 4/3) reddish brown, non plastic, loose, moist, no odor, no	
	2	0.0	moist	3	I ILL		staining. fine to medium SAND, with medium gravel, (2.5YR 4/3) reddish brown, non plastic, loose, moist, no odor, no staining.	143-P3A-A`16A-14.5-1
-16 		0.0	moist	3	FILL		fine to medium SAND, with medium gravel, (2.5YR 4/3) reddish brown, non plastic, loose, moist, no odor, no	143-P3A-A`16A-16.3-1
17 18	2	0.0	moist	10	SM		staining. UNDno fine to coarse SAND, with fine to coarse gravel, (2.5YR 4/8) red, non plastic, loose, moist, no odor, no	143-P3A-A`16A-16.8-1
10							staining. Soils consistent with UNDno.	

Boring ID: 143-P3A-A`17A

Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Drilling Method: Geoprobe Coordinates (NJSPNAD83) x: 610654.75 Date Started Drilling: 4/18/2013 1:35:00 PM Rig Type: Coordinates (NJSPNAD83) y: 683205.5625 Date Finished Drilling: 4/19/2013 11:13:00 AM Core Size: 3 in **Boring Total Depth:** 20.5 ft Logged By: MI Project Manager: Chris Martell Depth to Water: NA

	I By: MI al Location	n: Site	143 - A'1	7A					
,	1		,					(Note bo	s = below ground surface)
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content		USCS	Graphic Log	Surface Cover and Th	ickness:	Sample ID
		0.0	dry		ASPHALT	XXXXX	ASPHALT		
_	2	0.0	to	6	FILL	\bowtie	fine to medium silty SAND, some fi	ne to coarse gravel,	
- 1 - -	1 -		sl.				little cinders, coal, ash, (5YR 2.5/2) non plastic, loose, dry to slightly mo	vist no odor no	
_	-		moist				staining.	nst, no odor, no	
- 2 - 		0.0	dry	4B	FILL		fine to medium SAND, with COPR,	little fine to medium	
_		0.0	dry	6	FILL		gravel, (5YR 4/3) reddish brown, no	in plastic loose dry	
-3- -	. 1	0.0	to			$\times\!\!\times\!\!\times\!\!\times$	\neg \no odor, no staining.	In plastic, loose, ary,	
_			sl.	NR	NR		fine to medium silty SAND, some fi	ne to coarse gravel,	
			moist]			little cinders, coal, ash, (5YR 2.5/2)		
– 4 ––		0.0	moist	3	FILL	\bowtie	non plastic, loose, dry to slightly mo	oist, no odor, no	
_	4.4						\staining. \NO RECOVERY	//	
− 5 −−	1.4	0.0	dry	3	FILL		SILT, with fine to medium sand, littl	e coarse gravel.	
_			to	NR	NR	******	wood fragments, (5YR 4/3) reddish		
-6- -		0.0	sl.			××××	\soft, moist, no odor, no staining.		
_		0.0	moist	6	FILL		fine to medium silty SAND, some w		
_ 7 —	1.4		dry to				(7.5YR 3/2) dark brown, non plastic moist, no odor, no staining.	, loose, ary to slightly	
,			sl.			$\times\!\!\times\!\!\times$	NO RECOVERY		
_			moist	NR	NR		fine to medium silty SAND, some c	oal, little ash,	
−8 −−		0.0	moist	6	FILL		\cinders, wood fragments, (7.5YR 3)	2) dark brown, non //	
			1110100			\bowtie	plastic, loose, dry to slightly moist,	no odor, no staining.	
_ 9 <i></i>	1.2						NO RECOVERY SILT, with fine sand, little coal, (7.5	VD 4/2) brown non	
_				NR	FILL		plastic, soft, moist, no odor, no stai		
 10							NO RECOVERY	y.	
10		0.0	moist	6	FILL	$\times\!\!\times\!\!\times\!\!\times$	SILT, with fine sand, little coal, (7.5	YR 4/3) brown, non	
	0.7			ND	ND	\bowtie	plastic, soft, moist, no odor, no stai	ning.	
 11	0.7			NR	NR		NO RECOVERY		
-									
- 12		0.0	slightly	3	FILL		SILT, with fine sand trace roots, (10	VD 5/8) vollowich	
_	-	0.0	moist	3	I ILL	\bowtie	brown, low plasticity, soft, slightly m		143-P3A-A`17A-12.5-1
- 13	2		1110100			\bowtie	staining.	iolot, no odor, no	143-P3A-A 17A-12.5-1
						\bowtie	G		
- 14		0.0	moist	3	FILL		fine to coarse SAND, with fine to co	arse gravel, (2.5YR	
14		0.0	moist	3	FILL	\bowtie	3/4) dark reddish brown, non plastic	c, loose, moist.	143-P3A-A`17A-14.0-1
	2	0.0	dry	10	SM		fine to coarse SAND, with fine to co	arse gravel, (5YR	143-P3A-A`17A-14.0-14
—15 —							6/3) light reddish brown, non plastic UNDno fine to coarse SAND, with f	ne to coarse gravel	143-P3A-A`17A-14.5-1
_							(2.5YR 4/8) red, non plastic, loose,	dry no odor no	
 16 		0.0	ر سالم	10	CM		staining. Soils consistent with UND		
_		0.0	dry	10	SM		UNDno fine to coarse SAND, with f		440 000 4 4474 40 5 4
-17	2						(2.5YR 4/8) red, non plastic, loose,		143-P3A-A`17A-16.5-1
							staining. Soils consistent with UND	10.	
40									
–18 ––		0.0	dry	10	SM		UNDno fine to coarse SAND, with f	ne to coarse gravel.	
_							(2.5YR 4/8) red, non plastic, loose,		143-P3A-A`17A-18.5-1
—19 —	. 2						staining. Soils consistent with UND	10.	
-	-								
-20	0.5	0.0		10	C1.		LINDag Carl Carl Carl Carl Carl Carl Carl Carl		140 00 4 4 4 7 4 00 0 0
_	0.5	0.0	dry	10	SM		UNDno fine to coarse SAND, with f		143-P3A-A`17A-20.0-2
							(2.5YR 4/8) red, non plastic, loose, staining. Soils consistent with UND	10.	
							Carried Consistent With OND		
				1		1			İ



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

Road, Piscataway, NJ 08854

Boring ID: 143-P3A-A`18A

Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Drilling Method: Geoprobe Coordinates (NJSPNAD83) x: 610649.3125 Date Started Drilling: 4/17/2013 11:45:00 AM Coordinates (NJSPNAD83) y: 683174.6875 Rig Type: Date Finished Drilling: 4/17/2013 2:30:00 PM Core Size: 3 in Boring Total Depth: 14 ft Depth to Water: NA Logged By: MI Project Manager: Chris Martell Physical Location: Site 143 - A'18A (Note bgs = below ground surface) Depth Recovery PID GΑ Moisture Graphic Sample Range **USCS** Surface Cover and Thickness: (ft/ft) (ppm) Content Class Log ID (ft bgs) 0.0 2 ASPHAL1 ASPHALT dry 6 fine to medium SAND, some fine to coarse gravel, little 0.0 FILL 2 coal, cinders, ash, (5YR 4/4) reddish brown, non plastic loose, dry, no odor, no staining. 0.0 6 FILL fine silty SAND, some fine to coarse gravel, little ash, dry cinders, (2.5YR 4/3) reddish brown, non plastic, loose to 1 soft, slightly moist, no odor, no staining. NR NR NO RECOVERY 0.0 FILL fine to medium silty SAND, some fine to coarse gravel. 6 dry little coal, cinders, ash, trace glass, (2.5YR 4/3) reddish 1.4 brown, non plastic, loose to soft, dry, no odor, no staining.
NO RECOVERY NR NR 0.0 6 **FILL** SILT, with fine sand, some, fine to coarse gravel trace moist ash, coal, (7.5YR 3/3) dark brown, non plastic, soft, 1.7 moist, no odor, no staining 0.0 WOOD FRAGMENTS, little fine gravel, coal, (7.5YR **FILL** slightly 6 6 FILL 2.5/1) black, non plastic, loose, slightly moist, no odor, 0.0 moist NR NR no staining. 143-P3A-A`18A-8.0-8.5 moist 0.0 SILT, with fine sand, some, fine to coarse gravel, trace moist 3 FILL 1.6 ash, coal, (7.5YR 3/3) dark brown, non plastic, soft, moist, no odor, no staining. NO RECOVERY NR NR SILT, with fine to medium sand, (7.5YR 4/2) brown, low 0.0 moist 3 **FILL** plasticity, soft, moist, no odor, no staining. 143-P3A-A`18A-10.4-10.9 2 0.0 SILT, with fine to medium sand, (7.5YR 4/2) brown, low 143-P3A-A`18A-10.9-11.4 moist 9 OL plasticity, soft, moist, no odor, no staining. UNDorg SILT, 95% organic silt, 5% organic fibers, (7.5YR 2.5/3) very dark brown, low plasticity, soft to stiff, 0.0 slightly 10 MH moist, slight organic odor. Soils consistent with UNDorg. moist 16 UNDno SILT, little roots, little fine sand, (10YR 5/4) 13 yellowish brown, low plasticity, stiff, slightly moist, no odor, no staining. Soils consistent with UNDno. NR NR NO RECOVERY

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.

A=COM

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: 143-P3A-A`19A

Project Name: PPG Garfield Ave Drilling Company: SGS North America
Project Number: 60240739 Drilling Method: Geoprobe Coordinates (NJSPNAD83) x: 610635.8125

 Date Started Drilling:
 4/2/2014 10:30:00 AM
 Rig Type:
 Coordinates (NJSPNAD83) y:
 683147.9375

 Date Finished Drilling:
 4/2/2014 11:20:00 AM
 Core Size: 2 in
 Boring Total Depth:
 20.5 ft

Logged By: MI Project Manager: Chris Martell Depth to Water: NA

) a makin									
Depth Range t bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	GA Class	USCS	Graphic Log	Surface Cover and Thic	kness:	Sample ID
- -1 -		0.0	moist to wet	3	FILL		sandy SILT, trace cinders, ash, (7.5YR moist to wet, no odor, no staining.	R 4/2) brown, soft,	143-P3A-A`19A-0.2-0
-3 -4	5								143-P3A-A`19A-2.2-2
5 —		0.0	moist	3	FILL		fine to medium silty SAND, trace, (7.5)	YR 3/2) dark brown	143-P3A-A`19A-4.2-4
6 —			to wet		1 122		dense, moist to wet, no odor, no stainir	ng.	140 500 0.400 0.00
7 —	5								143-P3A-A`19A-6.2-6
8 —									143-P3A-A`19A-7.8-8
9 —		0.0	moist	10	SP-SM		UNDno fine SAND, some silt, (10YR 6 gray, dense, moist, no odor, no staining with UNDno.	/2) light brownish g. Soils consistent	143-P3A-A`19A-8.3-8
10		0.0	moist	10	SP-SM		UNDno fine to medium SAND, some s fragments, gravel, (10YR 4/2) dark gra	vish brown, dense.	143-P3A-A`19A-10.2-
11— — 12—		0.0	moist to	10	SP-SM		moist, no odor, no staining, slight teal s impacted soil due to groundwater. UNDno fine to coarse SAND, with fine	/	
13— 13— 14—	5		wet				trace silt, loose to hard, moist to wet, n Soils consistent with UNDno.	o odor, no staining.	143-P3A-A`19A-12.2-
15		0.0	moist	10	SP		UNDno fine to coarse SAND, with fine	to coarse gravel,	143-P3A-A`19A-14.2-
 16—			to wet				trace silt, loose to hard, moist to wet, n Soils consistent with UNDno.	o odor, no staining.	
_ 17—	_						esile soriciterit with evibile.		143-P3A-A`19A-16.2-
_ 18 	5								
19									
20—									



Boring ID: 143-P3A-A16A

Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Drilling Method: Geoprobe Coordinates (NJSPNAD83) x: 610695.0625 Date Started Drilling: 8/28/2013 8:05:00 AM Rig Type: Coordinates (NJSPNAD83) y: 683219 Date Finished Drilling: 8/28/2013 9:00:00 AM Core Size: 3 in Boring Total Depth: 20 ft Depth to Water: NA Logged By: EW Project Manager: Chris Martell

Physica	al Location	ı: Site	143 - A16	6A			(Note bo	s = below ground surface)
D 41-							11302 29	s - peloti giodila sullace,
Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content		USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
		0.0		1 C	ONCRET	E A A P	CONCRETE	
_ 1 _		0.0	dry	3	FILL		medium to coarse SAND, with fine to coarse gravel,	
_ '		0.0	dry	4B	FILL		(7.5YR 7/1) light gray, non plastic, loose, dry, no odor, no staining.	
<u> </u>							fine to medium SAND, with some COPR, (5YR 3/3) dark	
	4.5	0.0	dry	3	FILL		reddish brown, non plastic, soft to loose, dry, no odor, no staining.	143-P3A-A16A-2.0-2.5
— 3 —							medium SAND, little silt and fine gravel, (10YR 3/4) dark	
							yellowish brown, non plastic, soft, dry to moist, no odor, no staining.	
<u> 4 </u>							no staining.	143-P3A-A16A-4.0-4.5
				NR	NR	*****	NO RECOVERY	143-P3A-A16A-4.0-4.5
— 5 —		0.0	dry	3	FILL		medium SAND, little silt and fine gravel, (10YR 3/4) dark	
		0.0	ury	3	FILL		yellowish brown, non plastic, soft, dry to moist, no odor,	
<u> </u>							no staining.	143-P3A-A16A-6.0-6.5
		0.0	dry	3	FILL		fine to medium SAND, trace fine gravel, (5YR 4/3)	
— 7 —	4.4	0.0	moist	3	FILL		\ reddish brown, non plastic, soft, dry, no odor, no \ /	
	4.1						\staining. fine SAND, and silt, trace very fine gravel, (7.5YR 5/1)	
— 8 —							gray, non plastic, soft, moist to wet, no odor, no staining.	143-P3A-A16A-8.0-8.5
		0.0						
— 9 —		0.0	wet	NR	FILL NR	,xxxxx	fine to medium SAND, with silt, little fill material, (7.5YR 3/1) very dark gray, non plastic, soft, wet, no odor, no	
				'	INIX		\staining. /	
 10		0.0	moist	3	FILL		NO RECOVERY fine SAND, and silt, trace very fine gravel, (7.5YR 4/1)	143-P3A-A16A-10.0-10
11							dark gray, non plastic, soft, moist.	
_ '' _								
—12—								
_	4.5							143-P3A-A16A-12.0-12.
—13 —								
 14		0.0	moist	3	FILL		SILT, trace fine sand, (7.5YR 5/1) gray, non plastic, soft, moist to wet, no odor, no staining.	143-P3A-A16A-14.0-14.
				NR	NR		NO RECOVERY	140-1 3A-A10A-14.0-14.
 15		0.0	moist	3	FILL		SILT, trace fine sand, (7.5YR 5/1) gray, non plastic, soft,	
			1110100				moist to wet, no odor, no staining.	
 16								143-P3A-A16A-16.0-16
—17—	4.6	0.0	dry	3	FILL		medium SAND, with angular gravel, (10YR 5/4)	
10	4.0						yellowish brown, non plastic, soft, dry to moist, no odor, no staining.	143-P3A-A16A-17.5-18
—-18—- -		0.0	moist	9	ML-SM		UNDno medium to coarse SAND, with fine to medium	143-P3A-A16A-18.0-18
—19—							gravel, (5YR 5/3) reddish brown, non plastic, soft to	
							loose, moist to wet, no odor, no staining. Soils consistent with UNDno.	
20				NR	NR		NO RECOVERY	
	I		I	1		1		



Boring ID: 143-P3A-A17A

Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Drilling Method: Geoprobe Coordinates (NJSPNAD83) x: 610681.5 Date Started Drilling: 4/17/2013 9:45:00 AM Rig Type: Coordinates (NJSPNAD83) y: 683192.0625 Date Finished Drilling: 4/17/2013 11:35:00 AM Core Size: 3 in Boring Total Depth: 15 ft

	d By: MI al Location	ı: Site	143 - A17	Ά		,ojc	tt Manager: Chris Martell Depth to Water: N	
								Note bgs = below ground surface)
Depth Range ft bgs)	Recovery	PID (ppm)	Moisture Content	GA Class	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
		0.0	, alm i		ASPHALT	×××××	ASPHALT	
1	1.6	0.0	dry dry	3 4B	FILL		fine silty SAND, with fine to coarse gravel, trace glass, non plastic, loose, dry, no odor, no staining.	
' _		0.0	slightly	4B	FILL	\bowtie	fine to medium SAND, with COPR and brick, little fine to	
-2-			moist	NR	NR	~~~~	coarse gravel, brick, (2.5YR 4/3) reddish brown, non	
		0.0	dry	3	FILL		\ \ \ \ \ \ \ \ \ \ \ \ \	J
-3	1.8					\bowtie	(7.5YR 2.5/3) very dark brown, non plastic, loose to soft	143-P3A-A17A-2.5-3
_							\slightly moist, no odor, no staining. \NO RECOVERY	4
-4 		0.0		NR	NR		fine SAND, some fine to coarse gravel, little coal,	140 000 4474 40
_		0.0	dry	6	FILL		cinders, brick, trace wood fragments, (7.5YR 2.5/3) very dark brown, non plastic, loose, dry, no odor, no staining.	
-5-	2						NO RECOVERY	-//
_	_						fine SAND, some fine to coarse gravel, little coal,	
-6- -		0.0		6	FILL		cinders, brick, trace wood fragments, (7.5YR 2.5/3) very dark brown, non plastic, loose, dry, no odor, no staining.	
-	-	0.0		0	I ILL		fine silty SAND, some fine to coarse gravel, little	143-P3A-A17A-6.5-7
-7 <i>-</i> -	1.1	0.0	slightly	6	FILL		cinders, coal,wood fragments, brick, (10YR 4/2) dark grayish brown, non plastic, loose to soft.	
-	-		moist	NR	NR		SILT, and wood fragments, trace cinders, (10YR 4/2)	
-8-		0.0	slightly	3	FILL		\dark grayish brown, non plastic, loose, slightly moist, no \odor, no staining.	
_	1 1		moist				\NO RECOVERY	143-P3A-A17A-8.5-9
- 9 	1 '			NR	NR	XXXXX	fine silty SAND, (7.5YR 5/3) brown, non plastic, loose to soft, slightly moist, no odor, no staining.	
-							NO RECOVERY	
-10		0.0	moist	3	FILL		SILT, trace fine sand, (7.5YR 4/3) brown, low plasticity,	
- 11	2		to saturated				soft to stiff, moist to saturated, no odor, no staining.	143-P3A-A17A-10.5-1
'' -			Saturated					
-12								440 504 4454 40 0
	1	0.0	moist to	3	FILL	\bowtie	SILT, trace fine sand, (7.5YR 4/3) brown, low plasticity, soft to stiff, moist to saturated, no odor, no staining.	143-P3A-A17A-12.0-1
-13	1.3	0.0	saturated	9	OL		UNDorg SILT, 95% organic silt, 5% organic fibers,	143-P3A-A17A-12.5-1
-	-	0.0	moist dry	10 NR	MH NR		(7.5YR 2.5/3) very dark brown, low plasticity, soft, moist slight organic odor, no staining. Soils consistent with	
-14		0.0	dry	10	MH		\\UNDorg.	
-	1 1	0.0	ury	10	IVIII		UNDno sandy SILT, trace roots, (10YR 5/4) yellowish brown, non plastic, loose to soft, dry, slightly moist, no	
-15							\ \odor, no staining. Soils consistent with UNDno.	∬
							NO RECOVERY UNDno sandy SILT, trace roots, (10YR 5/4) yellowish]
							brown, non plastic, loose to soft, dry, slightly moist, no	
							odor, no staining. Soils consistent with UNDno.	J
omme	nts: 1) 3 atter	npts wer	re made to o	btain be	est recovery	2) MM/UN	Confirmed to be 1 ft thick.	



Boring ID: 143-P3A-A18A

Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Drilling Method: Geoprobe Coordinates (NJSPNAD83) x: 610668 Date Started Drilling: 4/16/2013 1:40:00 PM Rig Type: Coordinates (NJSPNAD83) y: 683165.1875 Date Finished Drilling: 4/17/2013 9:30:00 AM Core Size: 3 in Boring Total Depth: 14 ft

Ratige (fit bgs) (fl/ft) (ppm) Content Class Usuary U	y: MI					Proje	ct Manager: Chris Martell Depth to Water: NA
Depth Range (ft/ft) (ppm) Recovery (PiD) (ppm) 1.8	_ocation: _S	Site 14	43 - A18	Α			(Note has = helper ground surface)
1.8					USCS		Sample
1.8 0.0 dry 3 FiLL very dark gray, non plastic, loose to hard, dry, no odor, no staining. 2			dny				
1.8 0.0 slightly 0.0 moist slightly moi	10 —			3	FILL		very dark gray, non plastic, loose to hard, dry, no odor, no staining. crushed CONCRETE, some fine sand, (9/10YR_/1)
1.8	0.	0.0	slightly	$\overline{}$	FILL		
1.2 0.0 moist 3 FILL 1.4 0.0 moist 3 FILL 1.5 0.0 moist	1.8		slightly				NO RECOVERY fine to medium GRAVEL, little fine sand, trace cinders, (2.5YR 3/4) dark reddish brown, non plastic, loose,
-5 1.2 0.0 moist 3 FilL moist, no ador, no staining. NR NR NR NR NR NR NR NR NR	0.	0.0	moist				fine silty SAND, some fine to medium gravel, little
fine sitty SAND, little fine to medium gravel, (10YR 4/2) dark grayish brown, non plastic, loose to soft, moist, no odor, no staining. 1.4 1.4 1.4 0.0 moist 3 FILL 0.0 moist 3 FILL 0.0 moist 3 FILL 0.0 slightly 6 FILL 0.0 moist 3 FILL 0.0 moist 3 FILL 10 moist 3 FILL 11 moist 0.0 moist 3 FILL 12 0.0 moist 3 FILL 13 FILL 14 moist 9 OL 14 moist 9 OL 15 FILL 16 FILL 17 Disable, for part of the staining fine stand, for pastaining. 18 Disable, for part of the staining fine sity SAND, with carse gravel, ittle staining. fine sity SAND, with carse gravel, ittle fine staining. fine sity SAND, with carse gravel, ittle staining. fine sity SAND, with carse gravel, ittle fine staining. fine sity SAND, with carse gravel, ittle fine staining. fine sity SAND, with carse gravel, ittle fine staining. fine sity SAND, with carse gravel, ittle fine staining. fine sity SAND, some fine stand, it for SYR 2.5/1) black, non plastic, loose to soft, moist, no odor, no staining. fine sity SAND, some fine sand, it for sand, it	1.2	0.0	moist	3	FILL		coal,trace brick, glass, non plastic, loose to soft, slightly, moist, no odor, no staining.
1.4 1.4 1.4 1.5 1.4 1.4 1.5 1.6 1.6 1.7 1.8 1.8 1.7 1.8 1.8 1.8 1.8	0	0.0	moist			××××	fine silty SAND, little fine to medium gravel, (10YR 4/2)
staining. 10.0 moist 3 FILL Stataining. 10.0 moist 3 FILL Silt, some fine sand, some fine to coarse gravel, (10YR 5/4) yellowish brown, non plastic, soft, moist, no odor, no staining. 10	1.4						odor, no staining. SILT, some fine sand, little fine to coarse gravel, (2.5YR
2 0.0 moist 3 FILL oddry, non plastic, soft, moist, no odor, no staining. 10 0.0 moist 3 FILL oddry, moist 0.0 moist 3 FILL oddry, non plastic, loose to soft, moist, no odor, no staining. 11 2 0.0 moist 3 FILL oddry, non plastic, loose to soft, moist, no odor, no staining. 12 0.0 moist 3 FILL oddry, non plastic, loose to soft, moist, no odor, no staining. 13 FILL oddry, non plastic, loose to soft, moist, no odor, no staining. 14 moist 9 OL oddry, non plastic, loose, slightly moist, no odor, no staining. 14 moist 9 OL oddry, non plastic, loose to soft, moist, no odor, no staining. 143-P3A-A18/ 143-P3A-A1							staining. NO RECOVERY
0.0 slightly 6 FILL moist 3 FILL 5 fine to medium SAND, with fine to coarse gravel, little silt, (10YR 3/4) dark yellowish brown, non plastic, loose, moist, no odor, no staining. 10 moist 3 FILL 5 fine silty SAND, with coarse gravel, (5YR 5/3) reddish brown, non plastic, loose to soft, moist, no odor, no staining. 10 moist 3 FILL 5 fine silty SAND, with coarse gravel, (5YR 5/3) reddish brown, non plastic, loose to soft, moist, no odor, no staining. 11 2 0.0 moist 3 FILL 5 fine silty SAND, with coarse gravel, (5YR 5/3) reddish brown, non plastic, loose to soft, moist, no odor, no staining. 11 3 2 0.0 moist 3 FILL 5 fine silty SAND, some fine sand, (7.5YR 2.5/1) black, non plastic, loose to soft, moist, no odor, no staining. 12 1 4 13-P3A-A18/11-11-11-11-11-11-11-11-11-11-11-11-11-							(10YR 5/4) yellowish brown, non plastic, soft, moist, no
10 0.0 moist, no ador, no staining. 12 0.0 moist moist moist moist moist moist, no ador, no staining. 13 0.0 moist moist moist moist moist, no ador, no staining. 14 0.0 moist moist moist moist moist, no ador, no staining. 15 0.0 moist moist moist moist, no ador, no staining. 16 0.0 moist moist moist moist, no ador, no staining. 17 0.0 moist moist moist, no ador, no staining. 18 0.0 moist moist moist, no ador, no staining. 19 0.0 moist moist moist, no ador, no staining. 10 0.0 moist moist moist, no ador, no staining. 10 0.0 moist moist moist, no ador, no staining. 10 0.0 moist moist moist, no ador, no staining. 10 0.0 moist moist moist, no ador, no staining. 10 0.0 moist moist moist, no ador, no staining. 10 0.0 moist moist moist, no ador, no staining. 11 14 15 P3A-A18/ 12 0.0 moist moist, no ador, no staining. 13 FILL moist private moist, no ador, no staining. 14 15 P3A-A18/ 14 16 P3A-A18/ 14 17 P3A-A18/ 14 17 P3A-A18/ 14 18 P3A-A							Odor, no staining.
moist moist 3 FILL moist, no odor, no staining. 12		0.0	moisť				silt, (10YR 3/4) dark yellowish brown, non plastic, loose,
12 2 0.0 moist 3 FILL 2 0.0 moist 3 FILL 3 0.0 moist 3 FILL 4 moist 9 OL 14	2	0.0		3	FILL		fine silty SAND, with coarse gravel, (5YR 5/3) reddish brown, non plastic, loose to soft, moist, no odor, no staining.
2 0.0 moist 3 FILL CINDERS, some coal, little fine sand, (7.5YR 2.5/1) black, non plastic, loose, slightly moist, no odor, no staining. 1.4 moist 9 OL	0.	0.0	moist	3	FILL		
staining. 1.4 moist 9 OL 14 staining. 1.4 moist 9 OL 14 staining. SILT, some fine sand, (10YR 5/6) yellowish brown, non plastic, loose to soft, moist, no odor, no staining. SILT, some fine to medium sand, some fine to coarse gravel, (7.5YR 4/4) brown, non plastic, soft, moist, no odor, no staining. fine silty SAND, some fine sand, (7.5YR 4/3) brown, non plastic, loose to soft, moist, no odor, no staining. SILT, little roots, (10YR 4/2) dark grayish brown, non plastic, loose to soft, moist, no odor, no staining. UNDorg SILT, 80% organic silt, 20% organic fibers, (7.5YR 2.5/2) very dark brown, low plasticity, soft to stiff, moist, moderate organic odor, no staining. Soils	0.	0.0	moist	3	FILL		CINDERS, some coal, little fine sand, (7.5YR 2.5/1) 143-P3A-A18A-12.0-
1.4 moist 9 OL ——————————————————————————————————	2 0.	0.0	moist	3	FILL		black, non plastic, loose, slightly moist, no odor, no
gravel, (7.5YR 4/4) brown, non plastic, soft, moist, no odor, no staining. fine silty SAND, some fine sand, (7.5YR 4/3) brown, non plastic, loose to soft, moist, no odor, no staining. fine silty SAND, some fine sand, (7.5YR 4/3) brown, non plastic, loose to soft, moist, no odor, no staining SILT, little roots, (10YR 4/2) dark grayish brown, non plastic, loose to soft, moist, no odor, no staining. UNDorg SILT, 80% organic silt, 20% organic fibers, (7.5YR 2.5/2) very dark brown, low plasticity, soft to stiff, moist, moderate organic odor, no staining. Soils		1.4	moist	9			fine silty SAND, some fine sand, (10YR 5/6) yellowish brown, non plastic, loose to soft, moist, no odor, no staining.
UNDorg SILT, 80% organic silt, 20% organic fibers, (7.5YR 2.5/2) very dark brown, low plasticity, soft to stiff, moist, moderate organic odor, no staining. Soils							gravel, (7.5YR 4/4) brown, non plastic, soft, moist, no odor, no staining. fine silty SAND, some fine sand, (7.5YR 4/3) brown, non plastic, loose to soft, moist, no odor, no staining. fine silty SAND, some fine sand, (7.5YR 4/3) brown, non plastic, loose to soft, moist, no odor, no staining SILT, little roots, (10YR 4/2) dark grayish brown, non
							UNDorg SILT, 80% organic silt, 20% organic fibers, (7.5YR 2.5/2) very dark brown, low plasticity, soft to stiff, moist, moderate organic odor, no staining. Soils
omments: 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 LOGS.GDT - 4/24/13 13:28

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

30 Knightsbridge Road, Piscataway, NJ 08854

Boring ID: 143-P3A-A19A

 Project Name:
 PPG Garfield Ave
 Drilling Company:
 SGS North America

 Project Number:
 60240739
 Drilling Method:
 Geoprobe
 Coordinates (NJSPNAD83) x:
 610654.625

 Date Started Drilling:
 4/15/2013 1:15:00 PM
 Rig Type:
 Coordinates (NJSPNAD83) y:
 683138.375

 Date Finished Drilling:
 4/16/2013 9:15:00 AM
 Core Size: 3 in
 Boring Total Depth:
 15 ft

 Logged By:
 MI
 Project Manager:
 Chris Martell
 Depth to Water:
 NA

Depth to Water: NA Logged By: MI Project Manager: Chris Martell Physical Location: Site 143 - A19A (Note bgs = below ground surface) Depth Recovery PID GΑ Moisture Graphic Sample Range **USCS** Surface Cover and Thickness: (ft/ft) (ppm) Content Class Log ID (ft bgs) 0.0 2 ASPHALT ASPHALT dry 3 fine to medium SAND, with fine to coarse gravel, trace 0.0 FILL 2 silt, (7.5YR 3/4) dark brown, non plastic, loose, dry, no 4B **FILL** 0.0 dry odor, no staining.
fine to medium SAND, with COPR little coal, cinders, (5YR 3/4) dark reddish brown, non plastic, loose, dry, no 0.0 6 FILL slightly odor, no staining.
fine silty SAND, little ash, cinders, coal, trace wood
fragments, (7.5YR 2.5/2) very dark brown, non plastic, moist 143-P3A-A19A-2.5-3.0 0.0 6 **FILL** 1.4 moist loose to soft, slightly moist, no odor, no staining.
SILT, little fine to coarse gravel, trace coal, (7.5YR 3/3) NR NR 0.0 dark brown, non plastic, soft, moist, no odor, no staining. moist 6 FILL NO RECOVERY 143-P3A-A19A-4.5-5.0 1.3 SILT, little fine to coarse gravel, trace ash, coal, (7.5YR 3/3) dark brown, non plastic, soft, moist, no odor, no NR NR staining. NO RECOVERY 0.0 **FILL** saturated 3 SILT, little fine to coarse gravel, little fine to medium 143-P3A-A19A-6.5-7.0 sand, (7.5YR 3/3) dark brown, low plasticity, soft, 2 saturated, no odor, no staining. 0.0 FILL fine silty SAND, trace roots, (10YR 4/2) dark grayish moist 3 brown, non plastic, loose to soft, moist, no odor, no 0.0 moist 6 FILL staining 143-P3A-A19A-8.5-9.0 fine silty SAND, little ash, cinders, coal, trace roots. 2 (7.5YR 3/3) dark brown (10YR 4/2) dark grayish brown, non plastic, soft to dense, moist, no odor, no staining. 0.0 moist 3 **FILL** fine to medium silty SAND, trace roots, (7.5YR 3/3) dark brown (10YR 4/2) dark grayish brown, non plastic, soft 143-P3A-A19A-10.5-11.0 2 to dense, moist, no odor, no staining. 143-P3A-A19A-10.5-11.0X 0.0 **FILL** SILT, little fine to medium sand, little roots, (7.5YR 3/3) moist 3 dark brown (10YR 4/2) dark gravish brown, low 2 plasticity, soft to stiff, moist, no odor, no staining. 143-P3A-A19A-12.8-13.3 13 1.0 UNDorg SILT, 90% organic silt, 10% organic fibers, 143-P3A-A19A-13.3-13.8 OL moist 9 (7.5YR 2.5/1) black, low plasticity, soft, moist, moderate ΡĪ 2.1 dry 10 MH organic odor, no staining. Soils consistent with UNDorg. moist 0.0 PEAT (degraded vegetated material), 70% organic 10 MH moist 0.0 fibers, 30% organic silt, (7.5YR 3/4) dark brown, non 15 plastic, stiff, dry, moderate organic odor, no staining. Soils consistent with MM. UNDno SILT, 75% inorganic silt, 15% organic fibers, (10YR 5/2) grayish brown, low plasticity, soft, moist, slight organic odor. Soils consistent with UNDno. UNDno SILT, 75% inorganic silt, 15% organic fibers, (10YR 5/2) grayish brown, low plasticity, soft, moist, slight organic odor. Soils consistent with UNDno.



Boring ID: 143-P3A-A20A

Pnysicai i	Location	i: Site	143 - A20	JA		1	(Note bg	s = below ground surface)
Depth Range ft bgs)	ecovery (ft/ft)	PID (ppm)	Moisture Content		USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
		0.0	slightly	2	ASPHAL ⁻	ĪXXXXX	ASPHALT	
-1- <u></u>	1.8	0.0	moist dry	3	FILL		fine silty SILT, little fine gravel, trace cinders, (7.5YR 3/4) dark brown, non plastic, soft, slightly moist, no odor, no staining.	143-P3A-A20A-0.5-1.0
-2				NR	NR	XXXXX	crushed CONCRETE, little fine sand, little fine to coarse gravel, (10YR 8/1) white, non plastic, loose to hard, dry,	
		0.0	dry dry	3	FILL		graver, (1011K 6/1) writte, nort plastic, loose to flard, dry,	
-3	1.6	0.0	moist	6 3	FILL FILL		\NO RECOVERY crushed CONCRETE, little brick, trace cobbles, (5YR 4/3) reddish brown, non plastic, hard, dry, no odor, no	143-P3A-A20A-2.5-3.0
-4				NR	NR		∖ ∖∖staining.	
	1	0.0	moist	3	FILL		fine to medium SAND, with coal and cinders, (7.5YR 2.5/1) black, non plastic, loose, dry, no odor, no staining.	143-P3A-A20A-4.5-5.0
-5				NR	NR		gravel, (10YR 4/2) dark grayish brown, non plastic, soft, moist, no odor, no staining.	
-6	1.4	0.0	moist	6	FILL		NO RECOVERY SILT, little fine to medium sand, little fine to coarse gravel, (10YR 4/2) dark grayish brown, non plastic, soft,	143-P3A-A20A-6.5-7.0
-7	1.4						moist, no odor, no staining.	
_				NR	NR		NO RECOVERY ASH, with coal, cinder, ceramics and fine to medium	
-8	4	0.0	moist	6	FILL		\sand, (10YR 4/1) dark gray, non plastic, loose, moist, no \sqrt{odor, no staining.}	143-P3A-A20A-8.5-9.0
-9 	1			NR	NR	XXXXXX	NO RECOVERY ASH, with coal, cinder, ceramics and fine to medium sand, (10YR 4/1) dark gray, non plastic, loose, moist, no	
-10		0.0	dry	6	FILL		─\ \odor, no staining. / / ─	
-11 	2	0.0	moist	6	FILL		NO RECOVERY ASH, with coal, cinder, ceramics and fine to medium sand, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining.	143-P3A-A20A-10.5-11
-12 - -13 -	2	0.0	moist	6	FILL		SILT, little fine to medium sand, trace ash, roots, (7.5YR 4/3) brown, low plasticity soft, moist, no odor, no staining. SILT, little fine to medium sand, trace ash, (7.5YR 4/3) brown, low plasticity, soft, moist, no odor, no staining.	143-P3A-A20A-12.5-13
-14	2	0.0	moist	3	FILL		sandy SILT, little roots, trace fine to coarse gravel, (10YR 5/6) yellowish brown, low plasticity, soft, moist,	143-P3A-A20A-14.5-15
-15 -	2	0.0	moist	3	FILL		no odor, no staining. sandy SILT, little fine to coarse gravel, (5YR 4/6) yellowish red (10YR 5/6) yellowish brown, low plasticity,	
-16 - -17	2	0.0	moist	3	FILL		soft, moist, no odor, no staining. SILT, little fine sand, little fine to coarse gravel, (10YR 5/2) grayish brown, low plasticity, soft, moist, no odor, no staining.	143-P3A-A20A-16.5-17
-		0.0	dry	3	FILL		fine to medium SAND, with fine to coarse gravel, little	
-18 		0.0	moist	3	FILL		silt, (5YR 4/3) reddish brown, non plastic, loose to hard, dry, no odor, no staining. SILT, little fine sand, little fine to coarse gravel, (10YR	143-P3A-A20A-18.5-19
-19 	2	0.0	dry	10	SM		5/2) grayish brown, low plasticity, soft, moist, no odor, no staining.	143-P3A-A20A-19.0-19
20	0.5	0.0	dry	10	SM		fine to medium SAND, with fine to coarse gravel, (2.5YR 4/8) red, non plastic, loose to hard, dry, no odor, no staining. Soils consistent with UNDno.	143-P3A-A20A-20.0-20
							fine to medium SAND, with fine to coarse gravel, (2.5YR 4/8) red, non plastic, loose to hard, dry, no odor, no staining. Soils consistent with UNDno.	



30 Knightsbridge Road, Piscataway, NJ 08854

Boring ID: 143-P3A-B16A

Page: 1

Project Name:PPG Garfield AveDrilling Company:SGS North AmericaProject Number:60240739Drilling Method:GeoprobeCoordinates (NJSPNAD83) x:610721.8125Date Started Drilling:8/27/2013 11:05:00 AMRig Type:Coordinates (NJSPNAD83) y:683205.3125

Date Finished Drilling: 8/27/2013 1:30:00 PM Core Size: 3 in Boring Total Depth: 15 ft Depth to Water: NA Logged By: JF Project Manager: Chris Martell Physical Location: Site 143 - B16A (Note bgs = below ground surface) Depth Recovery PID GΑ Moisture Graphic Sample Range **USCS** Surface Cover and Thickness: (ft/ft) (ppm) Content Class Log ID (ft bgs) 0.0 1 CONCRETE \$ \$ CONCRETE 143-P3A-B16A-0.8-1.3 0.0 **FILL** CINDERS, and coal slag with trace ash, coal dust and glass fragments, (7.5YR 2.5/3) very dark brown, non dry 6 plastic, loose to medium dense, dry, no odor, no staining. 5 0.0 143-P3A-B16A-2.5-3.0 SILT, with some fine sand, and traces of poorly graded 3 **FILL** dry gravel, (7.5YR 5/8) strong brown, non plastic, loose to medium dense, dry to slightly moist, no odor, no staining. 143-P3A-B16A-4.5-5.0 0.0 dry 3 **FILL** SILT, with some fine sand, and traces of poorly graded gravel, (7.5YR 5/8) strong brown, non plastic, loose to medium dense, dry to slightly moist, no odor, no 143-P3A-B16A-6.5-7.0 0.0 FILL 3 SILT, with coal dust, some cinders and trace ash. moist (7.5YR 2.5/1) black, low plasticity, loose to medium dense, moist to wet, no odor, no staining. 143-P3A-B16A-8.5-9.0 NO RECOVERY NR NR 0.0 3 FILL SILT, with trace sand, (7.5YR 5/1) gray, low plasticity, soft, wet, no odor, no staining. 143-P3A-B16A-10.5-11.0 5 143-P3A-B16A-12.3-12.8 143-P3A-B16A-12.8-13.3 0.0 13 moist 9 OL SILT, with trace organics, (7.5YR 3/1) very dark gray, medium plasticity, soft, moist to wet, moderate organic odor, no staining. Soils consistent with UNDorg. 0.0 ML-SM sandy SILT, with traces of clay, (7.5YR 6/1) gray, non 9 wet plastic, loose, wet, no odor, no staining. Soils consistent with UNDno.



Boring ID: 143-P3A-B17A

Page: 1

Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Coordinates (NJSPNAD83) x: 610708.3125 Drilling Method: Geoprobe Date Started Drilling: 8/27/2013 9:50:00 AM Rig Type: Coordinates (NJSPNAD83) y: 683178.5625

Date Finished Drilling: 8/27/2013 10:50:00 AM Core Size: 3 in Boring Total Depth: 15 ft Chris Martell

ogged By:				P	roject Manager: Chris Martell D	epth to Water: NA	
Physical Loca	ition: Sit	e 143 - B1	7A			(Note	e bgs = below ground surface)
Depth Range ft bgs)		Moisture Content	USCS	Graphic Log	Surface Cover and Thicknes		Sample ID
	0.0		CONCRETE		CONCRETE		
-1 -2 4.8	0.0	dry	FILL		fine to medium SAND, little crushed conc material, (7.5YR 3/4) dark brown, non plas soft, dry, no odor, no staining.		143-P3A-B17A-0.7-1.2 143-P3A-B17A-2.0-2.5 143-P3A-B17A-2.0-2.5
-3-	0.0	dry	FILL		medium SAND, trace silt, (7.5YR 4/2) brov	wn, non plastic,	
-4	0.0	dry	FILL		soft, dry to moist, no odor, no staining. medium to coarse SAND, with ash, little ci 3/1) very dark gray, non plastic, loose, dry		143-P3A-B17A-4.0-4.
-5- - -6	0.0	moist	NR FILL		staining. NO RECOVERY fine to medium SAND, with fine to medium silt, (7.5YR 2.5/3) very dark brown, non pla	n gravel, trace astic, soft,	
_	0.0	moist	FILL		moist, no odor, no staining. medium SAND, trace silt, (7.5YR 4/2) brov	wn non plastic	143-P3A-B17A-6.0-6.
3.6	0.0	moist	FILL		soft, moist, no odor, no staining. fine to medium SAND, with brick fragment (7.5YR 2.5/3) very dark brown, non plastic no odor, no staining, trace very fine gravel	ts and silt,	143-P3A-B17A-8.0-8.
-9-			NR		NO RECOVERY		
10	0.0	moist	FILL		SILT, trace sand, trace clay, (7.5YR 6/1) g	gray, medium	143-P3A-B17A-10.0-10
-11 	0.0	moist	FILL		plasticity, moist, no odor, no staining. medium SAND, little silt, (7.5YR 4/2) brow soft, moist, no odor, no staining.	vn, non plastic,	
-12	0.0				UND 011 T 111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		143-P3A-B17A-12.0-12
-13	0.0	moist	OL		UNDorg SILT, with trace organics, (7.5YR brown, non plastic, soft, moist, no odor, no consistent with UNDorg.	o staining. Soils	
-14 	0.0	moist	MH NR		UNDno SILT, with roots, (7.5YR 5/1) gray, soft, moist, no odor, no staining. Soils con UNDno.	, non plastic, nsistent with	
-15					NO RECOVERY		
omments: 1) 3	attempts w	ere made to	obtain best reco	very 2) MI	//UND confirmed to be 1 ft thick 3) No CCPW (COPR	or GGM) present in any	interval of this boring.



Boring ID: 143-P3A-B18A

Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Drilling Method: Geoprobe Coordinates (NJSPNAD83) x: 610694.8125 Date Started Drilling: 5/30/2013 7:30:00 AM Rig Type: Coordinates (NJSPNAD83) y: 683151.75 Date Finished Drilling: 5/31/2013 8:15:00 AM Core Size: 3 in Boring Total Depth: 15 ft

d By: MI al Location	n: Site	e 143 - B1	8A				
						(Note	bgs = below ground surface)
Recovery (ft/ft)		Moisture Content	USCS	Graphic Log	Surface Cover and Thickr	ness:	Sample ID
2	0.0	slightly moist	ASPHALT FILL				
2	0.0	dry dry	FILL FILL		coarse gravel, (5YR 3/4) dark reddish b loose, dry, no odor, no staining. fine to medium silty SAND, fine gravel,	orown, non plastic, little coal, cinders,	143-P3A-B18A-2.5-3.
1.5	0.0	moist	FILL				143-P3A-B18A-4.5-5.
			NR		NO RECOVERY		
4 7	0.0	moist moist	FILL FILL		\ 2.5/2) very dark brown, non plastic, loos	ders, (7.5YR se, moist, no odor,	143-P3A-B18A-6.5-7.
1./			ND		— (10YR 3/6) dark yellowish brown, low p		
1.8	0.0	moist	FILL		NO RECOVERY SILT, some fine sand, little fine to coars fragments, (10YR 3/6) dark yellowish b	rown, low	143-P3A-B18A-8.5-9
	0.0		NR	XXXXX	NO RECOVERY		
2	0.0	moist	FILL		SILT, some fine sand, little fine to coars fragments, trace roots, (10YR 3/6) dark	yellowish brown,	143-P3A-B18A-10.5-1
2	0.0	moist	FILL		fragments, trace roots, (10YR 3/6) dark	yellowish brown,	143-P3A-B18A-12.0-1
	0.0	moist dry	OL PT		∖ (7.5YR 2.5/3) very dark brown, low plas	rganic fibers, sticity, soft, moist,	143-P3A-B18A-13.3-1
. 1	2.0	dry	РТ		PEAT (degraded vegetated material), 8 20% organic silt, (7.5YR 3/3) dark brow organic odor. Soils consistent with MM. PEAT (degraded vegetated material), 8	n, dry, slight	
					organic odor. Soils consistent with MM.	J	
	Recovery (ft/ft) 2 1.5 1.7 2 2	Recovery (ft/ft)	Recovery (ft//ft)	(ft/ft) (ppm) Content OSCS 2 0.0 slightly moist ASPHALT 0.0 dry FILL 0.0 dry FILL 1.5 NR 0.0 moist FILL 1.7 NR 0.0 moist FILL 1.8 NR 1.8 NR 2 0.0 moist 2 NR FILL 2 NR FILL 2 0.0 moist FILL 2 0.0 moist FILL	Recovery (ft//ft)	Recovery (ft/ft) 2	Recovery (rith) PID Moisture (pm) Moisture (pm) Content USCS Graphic Log Surface Cover and Thickness: 2



Project Number: 60240739

Project Name: PPG Garfield Ave

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: 143-P3A-B19A

Page: 1 Coordinates (NJSPNAD83) x: 610681.3125

Coordinates (NJSPNAD83) y: 683125

Date Started Drilling: 5/30/2013 9:40:00 AM Rig Type: Date Finished Drilling: 5/30/2013 11:00:00 AM Core Size: 3 in Boring Total Depth: 16 ft

Drilling Method: Geoprobe

Drilling Company: SGS North America

	IBy: AB	o. C:+-	142 040	ι Λ	ļ!	Project Manager: Chris Martell	Depth to Water:	17.	
nysica	ai Locatioi	n: Site	e 143 - B19	Α				(Note bas	= below ground surface)
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thick			Sample ID
-		0.0	dry	FILL		fine to coarse silty SAND, some grave (10YR 3/2) very dark grayish brown, n	el, little cinders, on plastic, loose,		
-1-	2	477				dry.			
-2		17.7	slightly moist	FILL	\longrightarrow	fine to medium silty SAND, some grav	el, little COPR,	\mathcal{A}	
_		0.0	slightly	FILL FILL	-	\\slightly moist.	mastic, 100se,	/Г	110 501 5101 0 50
-3-	2	0.0	moisť	FILL	+	$\neg \backslash \overrightarrow{COPR}$, some silt, (7.5YR 5/1) gray, no	on plastic, loose,	\mathcal{H}	143-P3A-B19A-2.5-3.
			slightly		\longrightarrow	\\slightly moist.	d (40)/D 0/4)	/	
,		0.0	moist slightly	FILL		fine CINDERS, some fine to medium s		/	
-4		0.0	moist	FILL		fine silty SAND, some gravel, little cine	ders, (7.5YR 4/3)	П	
_ 7	2		moist			∖brown, non plastic, medium dense, sli	ghtly moist.		143-P3A-B19A-4.5-5.
-5	2	0.0	moist	FILL		fine silty SAND, little medium to coars		/	
\dashv		0.0	moist wet	FILL		(2.5Y 5/2) grayish brown, non plastic, moist.	meaium aense,	\Box	
-6-		0.0	wet	FILL		fine to medium silty SAND, some grav	rel, (7.5YR 3/2)	H	
\dashv		5.0	WEL	FILL		\\\dark brown, non plastic, loose, moist.	,	/	143-P3A-B19A-6.5-7.
-7-	2					\fine to medium silty SAND, some grav		'	143-M3A-B 19A-0.5-7.
						(7.5YR 5/2) brown, low plasticity, loose			
_。						fine to medium silty SAND, some grav (7.5YR 5/2) brown, medium plasticity,			
-8-		0.0	wet	FILL		fine to medium silty SAND, some grav	el, little clav.	Д	
\dashv	1.0	0.0	moist	FILL	_	\\(7.5YR 5/2) brown, medium plasticity,	loose, wet. //	H	143-P3A-B19A-8.5-9.
-9-	1.2	0.0	moist	FILL		∖∖ fine to medium silty SAND, little grave	I, little clay, (7.5YR	\Box	
\dashv				NR		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	[[O] has::::: ::	/	
-10		0.0		FII 1	XXXXX	fine silty SAND, trace cinders, (7.5YR) plastic, loose, moist.	5/2) brown, non	<u>'</u> H	
_		0.0	wet	FILL		\fine to coarse CINDERS, some gravel	. trace metal	/	140 DOA D/O1 40 = :
-11	1.8					∖(10YR 2/1) black, non plastic, dense, i			143-P3A-B19A-10.5-11
''		0.0	moist	FILL		NO RECOVERY		/	
		0.0	moist	FILL		fine silty SAND, some gravel, little clay	y, trace cinders,	\square	
-12		0.0	wet	NR		(7.5YR 5/2) brown, low plasticity, loose CINDERS, some ash, little wood fragr	nents trace metal		
	2	0.0	moist	FILL FILL		\\\(10YR 2/1) black, non plastic, medium	n dense, moist. //	/ ·	143-P3A-B19A-12.5-13
-13	۷			I ILL		SILT, some clay, (10YR 4/2) dark gray	vish brown, high	/ .	143-P3A-B19A-13.0-13
\dashv		0.0	moist	PT	<u> </u>	plasticity, soft, moist.			143-P3A-B19A-13.5-14
-14		0.0		PT	11, 11,	NO RECOVERY medium SAND, trace metal, (10YR 4/2	2) dark gravish	Н	
4		0.0	moist	ΡI	<u> </u>		2) dank grayion		
-15	1.5					SILT, little roots, little fine to medium s			
					11/ 11/	dark grayish brown, low plasticity, loos		\perp	
16				NR		PEAT (degraded vegetated material), 30% organic silt, (10YR 2/2) very dark	hrown low		
-10						plasticity, loose, moist, slight sulfur od			
						with MM.			
						PEAT (degraded vegetated material),		'	
						20% organic silt, (10YR 3/3) dark brow medium dense, moist, moderate sulfu			
						consistent with MM.	i ouoi. Soils		
						NO RECOVERY			
						_			
_	_		re made to o						



Boring ID: 143-P3A-B20A

Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America

Project Number: 60240739 Drilling Method: Geoprobe Coordinates (NJSPNAD83) x: 610668 Date Started Drilling: 4/16/2013 9:20:00 AM

Date Finished Drilling: 4/16/2013 11:30:00 AM Rig Type: Coordinates (NJSPNAD83) y: 683099 Core Size: 3 in Boring Total Depth: 16 ft

		lling: _	4/16/2013	11:30	:00 AM		Size: 3 in	Boring Total Depth: 1	6 ft
	I By: MI					Proje	ct Manager: Chris Martell	Depth to Water: NA	
Physica	al Location	ı: Site	143 - B20)A				(Alata ha	balan
								(Note bg	s = below ground surface)
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	GA Class	USCS	Graphic Log	Surface Cover and Th	ickness:	Sample ID
		0.0		1.0	ONCRET	D 4 4 P	CONCRETE		
-1 -1	1.8	0.0	dry moist	4B 4A	FILL FILL		fine to medium SAND, with fine to coal, cinders, trace COPR, (7.5YR 2 brown, non plastic, loose, dry, no oc COPR, some fine sand, little silt, (5)	2.5/2) very dark dor, no staining. YR 4/3) reddish	
-2		0.0	moist	NR	NR		brown, non plastic, loose to soft, mo	oist, no odor, green	
-3- -	1.5			6 NR	FILL NR		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	R 3/1) very dark	143-P3A-B20A-2.5-3
-4 - 		0.0	moist	3	FILL	XXXXX	$\sqrt{\text{gray, non plastic, loose to soft, moist}}$	st, no odor, no	
_ -5-	1.4	0.0	moist	6	FILL		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		143-P3A-B20A-4.5-5
_	-			NR	NR		√5/2) grayish brown, non plastic, soft staining. √ staining. √ staining. √ staining. √ staining. √ staining. √ staining. √ staining. √ staining. √ staining. √ staining. √ staining. √ staining. staining	i, moist, no odor, no	
-6- <u>-</u>		0.0	moist	6	FILL		fine SAND, some ash, little cinders, dark grayish brown, non plastic, loo no staining.		143-P3A-B20A-6.5-7
-7— -	1			NR	NR	XXXXX	NO RECOVERY ASH, some fine sand, medium grav cinders, trace glass, (7.5YR 5/1) grav	vel, some coal,	
-8		0.0	moist	6	FILL		\loose, moist, no odor, no staining.	ay, non piastic,	
-9 	1.2			ND	ND		NO RECOVERY ASH, some fine sand, medium grav	vel, some coal,	143-P3A-B20A-8.5-9
_	1			NR	NR		cinders, trace glass, (7.5YR 5/1) gramoist, no odor, no staining.	ay, non piastic loose,	
-10 - -11	1.6	0.0	moist	6	FILL		NO RECOVERY fine to medium SAND, little silt, trac (7.5YR 3/4) dark brown, non plastic		143-P3A-B20A-10.5-
-12		0.0		NR	NR FILL		no odor, no staining. NO RECOVERY		
_ -13 	1.6		moist	6			fine SAND, with ash, some medium cinders, trace glass, (7.5YR 4/1) da loose, moist, no odor, no staining.	rk gray, non plastic,	143-P3A-B20A-12.6-1
_	1	0.0	moist	9	OL		UNDorg SILT, 80% organic, silt 20% roots, (7.5YR 3/4) dark brown, low p	⁄₀ organic tibers,	143-P3A-B20A-13.1-
-14		1.9	oli albali.	NR	NR	<u>\\ 1</u> / ₁ \\ 1/ ₁	\ slight organic odor, no staining. Soil	Is consistent with	
_			slightly moist	7	PT		¬\\UNDora.		
15 16	2	0.0	moist	10	MH		NO RECOVERY PEAT (degraded vegetated materia fibers, 30% organic silt, (7.5YR 2.5/non plastic, stiff, slightly moist, mod	(3) very dark brown, lerate organic odor,	
							no staining. Soils consistent with MI UNDno SILT, 90% inorganic silt, 10 plasticity, soft to stiff, moist, slight o staining. Soils consistent with UNDr	% organic fibers, low organic odor, no	
ommen	ι τs: 1) 3 atter	npts wer	e made to o	otain be	est recovery	/ 2) MM/UN	ID confirmed to be 1 ft thick.		



Boring ID: 143-P3A-C16A

 Project Name:
 PPG Garfield Ave
 Drilling Company:
 SGS North America

 Project Number:
 60240739
 Drilling Method:
 Geoprobe
 Coordinates (NJSPNAD83) x:
 610748.625

 Date Started Drilling:
 8/29/2013 8:16:00 AM
 Rig Type:
 Coordinates (NJSPNAD83) y:
 683191.8125

 Date Finished Drilling:
 8/29/2013 9:25:00 AM
 Core Size: 3 in
 Boring Total Depth:
 15 ft

 Logged By:
 JF
 Project Manager:
 Chris Martell
 Depth to Water:
 NA

	I By: JF al Location	o Cita	142 C1	6 ^	P	Project Manager: Chris Martell	Depth to Water: NA	
Pnysica	al Location	1: 5116	2 143 - CT	0A			(Not	e bgs = below ground surface)
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickr	ness:	Sample ID
		0.0		CONCRETE	D 0 0 D	CONCRETE		
-1		0.0	dry	FILL		fine to medium SAND, little COPR, little (5YR 2.5/2) dark reddish brown, non plano odor, no staining.	astic, loose, dry,	
_ +	5	0.0	dry	FILL		fine to medium SAND, with cinders, littl very dark gray, non plastic, loose, dry, staining, some coal.		143-P3A-C16A-2.0-2.5
-3 -4		0.0	moist	FILL		fine SAND, and silt, (7.5YR 4/6) strong plastic, soft, moist, no odor, no staining	brown, non	142 D2A C16A 4 0 4 1
4								143-P3A-C16A-4.0-4.5 143-P3A-C16A-4.0-4.5
5		0.0	dry	FILL		medium SAND, with fine to coarse grav	vel (7.5YR 4/1)	
-	-	0.0	moist	FILL		dark gray, non plastic, loose, dry, no oc	lor, no staining.	
-6		0.0	moist			fine to medium SAND, with silt, little cir 2.5/1) black, non plastic, soft, moist to staining.		143-P3A-C16A-6.0-6.
-7 - -8	3.8	0.0	wet	FILL		SILT, with fine sand and fill material, (7 non plastic, soft, wet, no odor, no stain wood fragments.		143-P3A-C16A-8.0-8.
-9				NR		NO RECOVERY		143-F3A-C10A-0.0-0.
10		0.0						440 500 0400 40 0 40
11-		0.0	wet	FILL		medium to coarse SAND, with cinders 2.5/1) black, non plastic, loose, wet, no		143-P3A-C16A-10.0-10
12-		0.0	wet	FILL		fine to medium SILT, with fine sand and gravel, (7.5YR 4/4) brown, non plastic, no staining.		440 500 0400 40 0 40
13	4.2					no otaning.		143-P3A-C16A-12.0-12 143-P3A-C16A-12.7-13
-14		1.9	moist	PT	<u> </u>	PEAT (degraded vegetated material), v fibers and 20% organic silt, (7.5YR 2.5/ brown, moist, moderate organic odor, n	(2) very dark	143-P3A-C16A-13.2-13
- -15				NR		consistent with MM. NO RECOVERY	lo stairing. Solis	



Boring ID: 143-P3A-C17A

Page: 1

Project Name:PPG Garfield AveDrilling Company:SGS North AmericaProject Number:60240739Drilling Method:GeoprobeCoordinates (NJSPNAD83) x:610735.125Date Started Drilling:8/29/2013 10:20:00 AMRig Type:Coordinates (NJSPNAD83) y:683165.0625Date Finished Drilling:8/29/2013 11:50:00 AMCore Size:3 inBoring Total Depth:15 ftLogged By:EWProject Manager:Chris MartellDepth to Water:NA

Depth							
Range t bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness.	Sample ID
		0.0		CONCRETE	PAAPA	CONCRETE	
_1		0.0	dry	FILL		fine to medium SAND, little crushed COPR, (5YR 3/2)	440 504 0454 4 0 4
. 4		0.0	dry	FILL		\dark reddish brown, non plastic, loose, dry, no odor, no \staining.	143-P3A-C17A-1.0-1.5
-2-						fine to medium SAND, with silt and fill material, (7.5YR	
-	5					4/2) brown, non plastic, soft, dry to moist, no odor, no staining, some fine to medium gravel.	
-3						g	143-P3A-C17A-3.0-3.5
-4		0.0					
_		0.0	dry	FILL		medium SAND, with cinders and crushed coal, (7.5YR 3/1) very dark gray, non plastic, loose, dry, no odor, no	
-5-		0.0	wet	FILL		\staining.	143-P3A-C17A-5.0-5.
-6-						fine to medium silty SAND, with wood fragments and fill material, (7.5YR 2.5/3) very dark brown, non plastic, soft,	
- 4						wet, no odor, no staining.	
-7-							143-P3A-C17A-7.0-7.
\dashv	4.5	0.0	wet	FILL		medium SAND, with silt and fine gravel, (7.5YR 2.5/3)	170-1 OA-O 11A-1.0-1.
-8-		0.0	wet	FILL		very dark brown, non plastic, soft, wet, no odor, no staining.	
						fine to medium SAND, and silt with fine gravel, (7.5YR	
-9-		0.0	moist	FILL		4/1) dark gray, non plastic, soft to loose, wet, no odor, no staining.	143-P3A-C17A-9.0-9.
-10				NR		medium SAND, with very fine gravel, (7.5YR 3/2) dark	
		0.0	moist	FILL		\brown, non plastic, loose, moist, no odor, no staining. \\NO RECOVERY	
-11						medium to coarse SAND, with very fine gravel and ash, (7.5YR 4/1) dark gray, non plastic, loose, moist, no odor,	143-P3A-C17A-11.0-11
-						no staining.	143-P3A-C17A-11.0-11
-12	4.5						
	4.5	0.0	moist	FILL		fine SAND, and silt little roots, (7.5YR 3/4) dark brown,	
-13						soft, moist, no odor, no staining.	143-P3A-C17A-13.0-13
_14		2.2	moist	PT	<u> </u>	PEAT (degraded vegetated material), with 80 % organic fibers and 20% organic silt, (7.5YR 2.5/3) very dark	143-P3A-C17A-13.5-14
4					\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	brown, non plastic, stiff, moist, moderate organic odor,	
-15				NR		no staining. Soils consistent with MM. NO RECOVERY	
						(NO RECOVERT	
				1			



Boring ID: 143-P3A-C18A

Page: 1

 Project Name:
 PPG Garfield Ave
 Drilling Company:
 SGS North America

 Project Number:
 60240739
 Drilling Method:
 Geoprobe
 Coordinates (NJSPNAD83) x:
 610721.625

 Date Started Drilling:
 8/23/2013 1:00:00 PM
 Rig Type:
 Coordinates (NJSPNAD83) y:
 683138.25

 Date Finished Drilling:
 8/23/2013 1:06:00 PM
 Core Size:
 3 in
 Boring Total Depth:
 15 ft

 Logged By:
 Project Manager:
 Chris Martell
 Depth to Water:
 NA

 Physical Location:
 Site 143 - C18A

epth	_				_		_
ange bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
- 1 - 2		0.0	dry	FILL		CINDERS, with coal dust, slag, ash, gravel, (7.5YR 2.5/1) black, non plastic, loose to dense, dry, no odor, no staining.	
3	5						
5— 6—		0.0	wet	FILL		SILT, with cinders, ash and coal slag, (7.5YR 6/4) light brown, non plastic, loose to dense, wet, no odor, no staining.	143-P3A-C18A-5.0-5.
7— 8—	5						143-P3A-C18A-7.0-7.
9—		0.0	dn/	FILL		CINDERS with goal dust alog ash group! (7.5VP	143-P3A-C18A-9.0-9
 1 		0.0	dry	FILL		CINDERS, with coal dust, slag, ash, gravel, (7.5YR 2.5/1) black, non plastic, loose to dense, dry, no odor, no staining.	143-P3A-C18A-11.0-1
12 <u> </u>	5						143-P3A-C18A-13.0-1
14-		2.1	moist	PT	\(\frac{\frac}\frac{\frac}\f{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\fracc}\frac	PEAT (degraded vegetated material), organic fibers 80%, organic silt 20%, (7.5YR 3/1) very dark gray, non plastic, loose to medium dense, moist, moderate organic odor, no staining. Soils consistent with MM.	143-P3A-C18A-13.5-1
15							
					1		



30 Knightsbridge Road, Piscataway, NJ 08854

Boring ID: 143-P3A-C19A

Droice	Name: F		arfield Ave			Orilling Company: SGS North America		Page: 1
	Name: F					Orilling Method: Geoprobe	Coordinates (N.ISDA	IAD83) x: 610708.125
				12:40:00 PM		Rig Type:	Coordinates (NJSPN	
				1:35:00 PM		Core Size: 3 in	Boring Total Depth:	
	d By: AB		0/00/2010	1.00.001111		Project Manager: Chris Martell	Depth to Water: NA	
			e 143 - C19	9A		- ojoot managon onno manon		
•							(Not	e bgs = below ground surface)
Depth	Recovery	PID	Moisture		Graphic			Sample
Range	(ft/ft)	(ppm)		USCS	Log	Surface Cover and Thick	ness:	Sample ID
ft bgs)	()	(66)			-09			
		0.0	slightly	FILL		fine to medium silty SAND, some grave	el, little weathered	
_	2	331	moist	FILL		concrete, (10YR 4/2) dark grayish brow	vn, non plastic,	
-1			dry		\bowtie	\medium dense, slightly moist. fine to medium CINDERS, little gravel,	little coal (10VP	
_					\bowtie	2/1) black, non plastic, loose, dry.	iittie coai, (101K	
-2		0.0	moist	FILL		COPR, little silt, (10YR 4/2) dark grayis	sh brown, low	
_		0.0	moist	FILL		plasticity, loose, moist.		
-3	2	5.7	moist	FILL		COPR, little silt, (10YR 4/2) dark grayis plasticity, soft, moist.	sn brown, mealum	143-P3A-C19A-3.0-3.5
_					\bowtie	fine to medium silty SAND, some cinde	ers, little ash, little	143-F3A-C19A-3.0-3.3
-4		0.0				gravel, little wood, (10YR 3/2) very darl		
_		2.0	moist	FILL	\bowtie	non plastic, medium dense, moist. fine to medium silty SAND, some ash,	little gravel little	143-P3A-C19A-4.4-4.9
-5	0.9	0.0	to wet	ND	<u> </u>	tine to medium silty SAND, some ash, cinders, (10YR 3/2) very dark grayish b	nitile graver, little	143-F3A-013A-4.4-4.9
5		0.0		NR		plasticity, loose, moist to wet, sheen.	/	
6						NO RECOVERY		
-6		0.0	wet	· · ·			, little clay, (7.5YR /	143-P3A-C19A-6.0-6.3
	0.3			NR		4/2) brown, medium plasticity, soft, we	t/	
7—	0.5					NO RECOVERY		
_								
8		0.0	wet	FILL		SILT, little fine to medium sand, little cl	av little gravel	143-P3A-C19A-8.0-8.5
_		0.0	WCt	1166		(5YR 5/3) reddish brown, medium plas	ticity, soft, wet.	
9	1.7	0.0	moist	FILL		, , , , , , , , , , , , , , , , , , , ,	•	
_		0.0	moist to	ITILL		ASH, some cinders, little gravel, little fi sand, (10YR 2/1) black, non plastic, loc	ose, moist to wet	
10		0.0	wet	NR	XXXXX	NO RECOVERY		143-P3A-C19A-10.0-10.5
_		0.0	moist	FILL	\bowtie	SILT, some cinders, some ash, little gr		143-F3A-C19A-10.0-10.5
-11	1.2		to wet		\bowtie	very dark grayish brown, low plasticity, wet.	ioose, moist to	
_			1.00	NR		NO RECOVERY		
-12								440 B04 0404 :== ::==
_		0.0	moist	FILL	\bowtie	SILT, little cinders, little ash, little roots		143-P3A-C19A-12.0-12.5
-13	1.5					(10YR 3/2) very dark grayish brown, lo moist.	w piasticity, 100se,	143-P3A-C19A-12.5-13.0
		1.8	moist	PT	71 71	PEAT (degraded vegetated material), 7		143-P3A-C19A-13.0-13.5
_1/				NR		30% organic silt, (10YR 4/2) dark grayi	sh brown, low	
-14		2.0	moist	PT	71/ 71/	plasticity, loose, moist, slight sulfur odd	or. Soils consistent //	
45	1				1, 11, 1	NO RECOVERY	//	
-15	'			NR		PEAT (degraded vegetated material), 8	30% organic fibers,	
4.5						20% organic silt, (10YR 3/3) dark brow medium dense, moist, moderate sulfur		
-16						\consistent with MM.	Julio /	
						NO RECOVERY		
omma	nte: 1\ 2 a#a	mote um	re made to a	htain heet rece	Very 2\ N	M/UND confirmed to be 1 ft thick.		
ommer	ແ ຮ ະ ເ) ຽ ສແອ	mpts we	re made to 0	DUAITI DEST FECO	very∠)lV	IVI/OND CONTINUED TO BE 1 TETNICK.		



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

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

Road, Piscataway, NJ 08854

Boring ID: 143-P3A-C20A

Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Drilling Method: Geoprobe Coordinates (NJSPNAD83) x: 610694.5 Date Started Drilling: 4/15/2013 11:15:00 AM Coordinates (NJSPNAD83) y: 683084.75 Rig Type: Date Finished Drilling: 4/15/2013 2:10:00 PM Core Size: 3 in Boring Total Depth: 16 ft Depth to Water: NA Logged By: AB Project Manager: Chris Martell Physical Location: Site 143 - C20A (Note bgs = below ground surface) Depth Recovery PID GΑ Moisture Graphic Sample Range **USCS** Surface Cover and Thickness: (ft/ft) (ppm) Content Class Log ID (ft bgs) 2.7 dry 3 FILL fine to medium silty SAND, some gravel little brick, little 2.7 moist FILL glass, (10YR 3/4) dark yellowish brown, non plastic, 1.8 loose, dry to moist. fine to medium SAND, some gravel some ash & cinders, 0.0 moist 4B FILL (10YR 2/1) black, non plastic, loose, moist, burnt odor. fine to medium silty SAND, some COPR little gravel, 0.0 dry FILL NR NR (5YR 3/2) dark reddish brown, non plastic, medium 3.7 moist 143-P3A-C20A-2.5-3.0 moist 3 FILL dense, moist 1.6 1.2 FILL medium SAND, some angular gravel, (10YR 6/2) light brownish gray, non plastic, loose, dry to moist. NO RECOVERY NR NR fine to medium silty SAND, some gravel little cinders, 37.8 moist 3 FILL (10YR 3/2) very dark grayish brown, non plastic, very 143-P3A-C20A-4.5-5.0 47.4 6 **FILL** 1.4 dense, moist to wet, slight HC odor, sheen. fine silty SAND, some gravel little wood fragments, NR NR (10YR 4/2) dark grayish brown, non plastic, medium dense, moist to wet. 2.7 3 **FILL** NO RÉCOVERY 143-P3A-C20A-6.5-7.0 fine silty SAND, some gravel little brick, (5YR 4/3) 0.0 6 FILL wet reddish brown, non plastic, medium dense, moist. NR NR fine to coarse silty SAND, some ash, some debris, little gravel, non plastic, medium dense, wet, strong HC odor, 0.0 wet 6 FILL sheen. NO RECOVERY 143-P3A-C20A-8.5-9.0 1.3 fine to medium silty SAND, little roots, little wood fragments, little clay, (10YR 3/2) very dark grayish NR NR brown, low plasticity, soft, wet, slight HC odor.
ASH, some cinders, (10YR 4/1) dark gray, non plastic, 2.0 6 **FILL** soft, wet 143-P3A-C20A-10.5-11.0 NO RECOVERY 1.4 0.0 moist 3 **FILL** ASH, some cinders, little sand, little gravel, (10YR 4/1) dark gray, non plastic, loose, wet. NO RECOVERY NR NR 143-P3A-C20A-12.0-12.5 0.0 3 **FILL** moist ASH, some cinders, little sand, little gravel, (10YR 4/1) dark gray, non plastic, loose, wet. 0.0 SP-SM 143-P3A-C20A-12.5-13.0 moist 9 1.5 fine to medium silty SAND, little gravel trace brick, 13 0.0 moist 9 ОН (7.5YR 3/3) dark brown, non plastic, loose, moist. NR NR NO RECOVERY fine to medium silty SAND, little gravel, (7.5YR 4/3) 11/ 2.1 11/ 7 PT moist brown, non plastic, medium dense, moist fine SAND, some silt and clay in horizontal bands, 18 2.3 moist 7 PT (7.5YR 4/2) brown, non plastic, medium dense, moist. 1, 11, 1 Soils consistent with UNDno. organic SILT, some roots, (10YR 4/2) dark grayish brown, high plasticity, soft, moist. Soils consistent with NR NR 16 UNDorg. NO <u>RECOVERY</u> PEAT (degraded vegetated material), with 80% organic fibers silt and 20% organic silt, (7.5YR 2.5/3) very dark brown, high plasticity, medium stiff, moist slight organic odor. Soils consistent with MM. PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (7.5YR 2.5/3) very dark brown, non plastic, medium stiff, moist moderate organic odor. Soils consistent with MM NO RECOVERY



Boring ID: 143-P3A-D16A

Page: 1

Project Name: PPG Garfield Ave Drilling Company: SGS North America
Project Number: 60240739 Drilling Method: Geoprobe Coordinates (NJSPNAD83) x: 610775.4375
Date Started Drilling: 8/23/2013 7:45:00 AM Rig Type: Coordinates (NJSPNAD83) y: 683178.375
Date Finished Drilling: 8/23/2013 7:51:00 AM Core Size: 3 in Boring Total Depth: 20 ft
Logged By: JF Project Manager: Chris Martell Depth to Water: NA
Physical Location: Site 143 - D16A

Depth	_	DID					
Range t bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
		0.0		FILL		Concrete	
-1 - -2	4	0.0	moist	FILL		fine CINDERS, with silt, coal dust and slag, some large brick fragments and gravel, (7.5YR 3/4) dark brown, non plastic, loose to dense, moist, no odor, no staining.	
-3							143-P3A-D16A-2.5-3. 143-P3A-D16A-3.5-4.
4				NR		NO RECOVERY	
-5-		0.0	wet	FILL		SILT, with trace sand-10%, with trace fine to medium	
-6						sized gravel, (7.5YR 6/4) light brown, medium plasticity, soft, wet to saturated, no odor, no staining.	143-P3A-D16A-5.5-6.
-7—	_						143-P3A-D16A-7.0-7.
-8	5						
9-							143-P3A-D16A-9.0-9.
10 -		0.0	wet	FILL		SILT, with trace sand-10%, with trace fine to medium sized gravel, (7.5YR 6/4) light brown, medium plasticity, soft, wet to saturated, no odor, no staining.	143-P3A-D16A-11.0-1
-							143-F3A-D10A-11.0-1
12	5	0.0	wet	FILL		CINDERS, with coal slag, ash, dust, trace fine to medium sized gravel, ceramic and glass fragments, (7.5YR 2.5/1)	
13						black, non plastic, loose to dense, wet to saturated, no odor, no staining.	143-P3A-D16A-13.0-13
<u>, </u>		0.4	moist	OL	**************************************	organic SILT, with 10% organic fibers, 90% organic silt,	143-P3A-D16A-14.5-1
15 -		2.6	moist	PT	\(\frac{1}{1} \) \(\frac{1} \) \(\frac{1}{1} \) \(\frac{1}{1} \) \(\frac{1}{1} \) \(\frac{1} \) \(\frac{1}{1} \) \(\frac{1} \) \(\frac{1}{1} \) \(\frac{1}{1} \) \(\frac{1}{1} \) \(\frac{1} \) \(\frac{1}{1} \) \(\frac{1} \	(7.5YR 4/1) dark gray, low plasticity, soft to medium stiff, moist to wet, slight organic odor, no staining. Soils consistent with UNDorg. PEAT (degraded vegetated material), 80% organic fibers,	143-P3A-D16A-15.0-1
47					1, 11, 1	20% organic silt, (7.5YR 2.5/3) very dark brown, non plastic, stiff, moist, moderate organic odor, no staining.	
17—	4	0.0	slightly moist	ML-SM		Soils consistent with MM.	
18 -			moist			sandy SILT, with some rounded fine to medium sized gravel, (7.5YR 7/1) light gray, non plastic, loose to medium dense, slightly moist, slight organic odor, no staining Soils consistent with LINDAG	
19 -				NR		staining. Soils consistent with UNDno. NO RECOVERY	
20							



Boring ID: 143-P3A-D17A

Page: 1

Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Drilling Method: Geoprobe

Coordinates (NJSPNAD83) x: 610761.9375 Date Started Drilling: 8/23/2013 10:00:00 AM Rig Type: **Coordinates (NJSPNAD83) y:** 683151.5625 Date Finished Drilling: 8/23/2013 10:07:00 AM Boring Total Depth: 20 ft Core Size: 3 in

Chris Martell

	IBy: JF				P	oject Manager: Chris Martell	1	
Physica	al Location	n: Site	e 143 - D17	'A			(No	te bgs = below ground surface)
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thi	·	Sample ID
		0.0		FILL		GRAVEL		
-1 - -2	4	0.0	dry to moist	FILL		COPR, with sand, silt and cinders, tr gravel, (5YR 3/4) dark reddish browr to dense, dry to moist, no odor, no s	n, non plastic, loose	
-3- -	4	0.0	dry to moist	FILL		FILL MATERIAL, as large brick and coal cinders and slag from 3.0' to 3.3 dark brown, non plastic, loose to der odor, green staining, lime green stain	3 ['] , (7.5YR 2.5/3) very nse, dry to moist, no	143-P3A-D17A-3.0-3.
-4				NR		staining is light and only at this inter- NO RECOVERY		
-5-		0.0		FILL		CINDERS, with coal dust, fine grave	l and glass	143-P3A-D17A-5.0-5.
-6		0.0	saturated	FILL		fragments, (7.5YR 2.5/1) black, non medium dense. SILT, with trace sand and fine to me 6/4) light brown, non plastic, loose, so a taking.	dium gravel, (7.5YR	
-8-	5	0.0	wet	FILL		no staining. SILT, with fine cinders and trace fine	a gravel (7 5VR	143-P3A-D17A-7.0-7.
-9-		0.0	wet	TILL		2.5/3) very dark brown, non plastic, I saturated, no odor, no staining.	oose, wet to	143-P3A-D17A-9.0-9.
\dashv								
-10 - -11		0.0	wet	FILL		SILT, with trace sand and fine grave brown, non plastic, soft to medium s staining.	I, (7.5YR 6/4) light tiff, wet, no odor, no	
-12 	5					•		143-P3A-D17A-11.0-11
-13		0.0		FILL		CINDERS, with coal slag, coal dust, and glass fragments, (7.5YR 2.5/1) I	and some ceramic plack.	143-P3A-D17A-13.0-13
-14		0.6	moist	OL		organic SILT, with 10% organic fiber (7.5YR 4/1) dark gray, low plasticity,	stiff, moist,	143-P3A-D17A-14.5-15
-15		2.9	moist	PT	11/1/1/	moderate organic odor, no staining. UNDorg.	Soils consistent with	143-P3A-D17A-15.0-15
-16 -17					1/ 1/ 1/ 1/ 1// 1/	PEAT (degraded vegetated material 20% organic silt, (7.5YR 3/4) dark bi stiff, moist, moderate organic odor, r consistent with MM.	own, non plastic, no staining. Soils	
_ _18	4	0.0	moist	ML-SM		sandy SILT, with traces of fine to me 7/1) light gray, non plastic, loose to r to wet, no odor, no staining. Soils co	nedium dense, moist	
-19 - -20				NR		NO RECOVERY		
20								



Boring ID: 143-P3A-D18A

			arfield Ave			Orilling Company: SGS North America		
	Number:			. =0.00.414		Orilling Method: Geoprobe		NAD83) x: 610748.375
				9:52:00 AM		Rig Type: Core Size: 3 in		MAD83) y: 683124.75
	I By: MI	iling:	5/31/2013	11:00:00 AM		Project Manager: Chris Martell	Boring Total Depth: Depth to Water: NA	
		1: Site	e 143 - D18	BA	F	Toject Manager. Offits Martell	Deptil to water. IN	1
							(No	te bgs = below ground surface)
epth ange bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and T	hickness:	Sample ID
		0.0	dnı	ASPHALT	××××	ASPHALT		
-1 -2	2	17.1	dry ^t	FILL		fine to medium SAND, with fine to cinders, coal, fill material, non plas petroleum odor, no staining.	tic, dry, slight	
		19.1	dry	FILL		fine to medium SAND, with fine to	coarse gravel, some	
-3 -4	2	14.5	dry	FILL		cinders, coal, fill material, trace CC slight petroleum odor, no staining. fine to medium SAND, with fine to cinders, coal, fill material, non plas petroleum odor, no staining.	coarse gravel, some	143-P3A-D18A-2.5-3.
· _		0.0	slightly	FILL		SILT, with fine sand, little fine grav	el, wood fragments,	
-5	1		moist	NR		trace crushed concrete, (10YR 3/6 non plastic, soft, slightly moist, no NO RECOVERY) dark vellowish brown,	143-P3A-D18A-4.5-5.
-6	2	0.0	slightly moist	FILL		SILT, with fine sand, little coarse g roots, (5YR 4/3) reddish brown, no		143-P3A-D18A-6.5-7.
-8	2	0.0				moist, no odor, no staining.		
-9-	1.8	0.0	slightly moist	FILL		SILT, with fine sand, little coarse g roots, (5YR 4/3) reddish brown, no moist, no odor, no staining.	ravel, fill materail, n plastic, soft, slightly	143-P3A-D18A-8.5-9.
\dashv		0.0	slightly	FILL		fine to coarse GRAVEL, some silt,		
-10	1.2	0.0	moist moist	FILL		reddish brown, non plastic, loose, s fine to coarse GRAVEL, with ash, l material, ceramics, (10YR 4/1) dar	ittle cinders, coal, fill	143-P3A-D18A-10.5-11
-				NR	XXXXX	loose, moist, no odor, no staining. NO RECOVERY		
-12		0.0	moist	FILL		fine to coarse GRAVEL, with ash, I	ittle cinders, coal, fill	143-P3A-D18A-12.0-12
-13	0.7			NR	*****	material, ceramics, (10YR 4/1) dar loose, moist, no odor, no staining. NO RECOVERY	k gray, non plastic,	_
-14		0.0	moist	FILL		fine to coarse ASH, with fine to coa	arse gravel little	_
\dashv		1.4	moist	OL		cinders, coal, fill material, ceramics	s, (10YR 4/1) dark /	143-P3A-D18A-14.5-15
-15 - -16	2	2.3	moiot	PT	<u> </u>	gray, non plastic, loose, moist, no UNDorg SILT, 90% organic silt, 10 (7.5YR 3/2) dark brown, low plastic moderate organic odor, no staining	% organic fibers, city, soft, moist,	143-P3A-D18A-15.0-15
						UNDorg. PEAT (degraded vegetated material brown, non plastic, stiff, strong org consistent with MM.	al), (7.5YR 3/2) dark	
						M/UND confirmed to be 1 ft thick.		



Boring ID: 143-P3A-D19A

Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Drilling Method: Geoprobe Coordinates (NJSPNAD83) x: 610734.875 Date Started Drilling: 8/20/2013 1:41:00 PM Rig Type: Coordinates (NJSPNAD83) y: 683098 Date Finished Drilling: 8/20/2013 3:00:00 PM Core Size: 3 in Boring Total Depth: 20 ft Logged By: JF Depth to Water: NA Project Manager: Chris Martell

Depth	Recovery	חום	Moisture		Cranhi		Cample
Range ft bgs)	(ft/ft)	(ppm)	Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
 -1 		0.0	dry	FILL		crushed gravelly CINDERS, with coal dust and trace ash, (7.5YR 2.5/1) black, non plastic, loose, dry, no odor, no staining.	
	5	0.0		FILL		SILT, trace fine gravel, (7.5YR 6/4) light brown, low	
-3		0.0	dry	FILL		plasticity, stiff to medium stiff. Trace COPR, with coal, cinders, fine gravel and trace silt,	
-4-		0.0		FILL		(5YR 4/4) reddish brown, non plastic, loose, dry to slightly moist, no odor. poorly graded FILL MATERIAL, as coal fragments, cinders, woody material, and fine gravel.	
-5-		0.0	moist	FILL		SILT, with some gravel and trace sand, (7.5YR 4/6)	
6-		0.0	moist to wet	FILL		strong brown, low plasticity, medium dense, moist, no odor, no staining. FILL MATERIAL, as cinders, coal, coal dust, ash, fine gravel with trace silt, (7.5YR 3/1) very dark gray, non	143-P3A-D19A-5.0-5.
-7— - -8—	5	0.0	wet	FILL		plastic, medium dense, moist to wet, no odor, no staining. SILT, with some fine gravel, (7.5YR 4/3) brown, low plasticity, dense, wet, no odor, no staining, traces of	143-P3A-D19A-6.5-7.
-9 -						cinders found at 8'.	143-P3A-D19A-8.5-9.
-10		0.0	wet	FILL		SILT, with some fine gravel, (7.5YR 5/4) brown, low	
			to saturated			plasticity loose to medium dense, wet to saturated, no odor, no staining.	143-P3A-D19A-10.5-11
-12 - -13 - -14	5	0.0		FILL		with ash and coal dust, some fine gravel and coal fragments and trace ceramics, (7.5YR 5/1) gray, weathered wood fragments concentrated at 12.0-12.3'.	143-P3A-D19A-12.5-13
4		0.0	moist	FILL		SILT, with some organic fibers, trace cinders and ash,	143-P3A-D19A-14.5-15
-15 - - -16 -		3.3	to wet moist	FILL PT	1/ 1/ 1/ 1/ 1// 1/ 1/ 1// 1/	(7.5YR 2.5/1) black, non plastic, moist to wet, slight organic odor, no staining. SILT, with organic fibers, (7.5YR 3/2) dark brown, non plastic, stiff. PEAT (degraded vegetated material), 90% organic fibers,	143-P3A-D19A-15.0-15
-17					<u> </u>	10% organic silt, (7.5YR 3/4) dark brown, non plastic, stiff, moist, moderate organic odor, no staining. Soils	
4	3.2	0.9	moist moist	OL ML	+===	consistent with MM. organic SILT, with trace organic fibers, 90% organic silt,	
-18 - - -19		0.5	moist	NR		10% organic fibers, (7.5YR 2.5/1) black (10YR 3/3) dark brown, medium plasticity, medium stiff, moist to wet, moderate organic odor, no staining. Soils consistent with	
20						\text{UNDorg.} \square SILT, (7.5YR 7/1) light gray, non plastic, loose, moist to wet, slight organic odor, no staining. Soils consistent with UNDno.	
						NO RECOVERY	



Boring ID: 143-P3A-D20A

Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Drilling Method: Geoprobe Coordinates (NJSPNAD83) x: 610721.375 Coordinates (NJSPNAD83) y: 683071.1875 Date Started Drilling: 4/15/2013 9:31:00 AM Rig Type: Date Finished Drilling: 4/15/2013 11:05:00 AM Core Size: 3 in Boring Total Depth: 16 ft

		iling:	4/15/2013	11:05:	.00 AM		e Size: 3 in Boring Total Depth: 16 ft	
Dhysica	l By : AB					Proje	ect Manager: Chris Martell Depth to Water: NA	
riiysica	al Location	ı: Site	143 - D20)A				
				Т			(Note bgs = below ground surface)	
Depth	Recovery	PID	Moisture	GA		Cropbio	Surface Cover and Thickness: Sample	
Range					USCS	Graphic	Surface Cover and Thickness:	;
ft bgs)	(ft/ft)	(ppm)	Content	Class		Log	ID	
				\longrightarrow				
		1.2	dry	3	FILL	_	fine to coarse silty SAND, some gravel, (10YR 6/2) light	
	1.3	7.0	moist	3	FILL		\brownish gray, non plastic, loose, dry.	
– 1 ––	1.3						fine to medium silty SAND, some gravel, little glass,	
_				NR	NR	1	(10YR 3/1) very dark gray, non plastic, medium dense,	
-2							moist, moderate petroleum odor, hydrocarbon staining.	
		8.2	wet	4B	FILL		NO RECOVERY	
_	1						fine to medium silty SAND, some gravel, some brick,	
−3 —	1.8	4.0				+	some debris (wire, glass, wood), trace COPR, (10YR 3/2) very dark grayish brown, non plastic, medium	
		4.0		3	FILL		dense, wet, moderate petroleum odor, hydrocarbon	
		1.6	moist	3	FILL		\\\staining.	
-4 		0.0	moist	NR	NR		fine SAND, (10YR 2/1) black, non plastic, loose,	
_	-	0.0	moist	5	FILL		moderate petroleum odor, hydrocarbon staining.	
-5	1.6	7.3		3	FILL		fine silty SAND, little gravel, (10YR 4/2) dark grayish	
5		7.0		"	I ILL		brown, non plastic, medium dense, moist, slight HC	
	1			ND	ND	+XXXXXX	odor.	
- 6 - 		2.5	mc:-t	NR	NR	 	NO RECOVERY	
		۷.5	moist	3	FILL		fine silty SAND, little gravel, trace GGM, (5YR 3/3) dark	
-	1.7						reddish brown, non plastic, medium dense, moist.	-6.5-7
-7 —	'.'	0.0		+		+	← \ fine to medium silty SAND, some gravel, some debris	
_		0.9	moist	3	FILL		(concrete, wire), (10YR 3/2) very dark grayish brown.	
- 8 				NR	NR		NO RECOVERY	
Ŭ		0.0		6	FILL		fine silty SAND, little gravel, little medium to coarse	
	1 40						sand, trace clay, (5YR 3/4) dark reddish brown, low	-8.5-9
-9 —	1.2						plasticity, medium dense, moist to wet.	
_				NR	NR		fine to medium silty SAND, some gravel, little debris,	
_10							(10YR 3/2) very dark grayish brown, non plastic,	
-10		0.0	wet	6	FILL		medium dense, moist.	
_	, _						NO RECOVERY ASH, game sinders, little goal (10VP 4/1) dark gray. 143-P3A-D20A-	10.5-1
-11	1.2						MASH, Some cinders, little coal, (10 f K 4/1) dark gray,	. 5.5
				NR	NR	T	non plastic, loose, wet.	
40				"			NO RECOVERY ASH, some cinders, little coal, trace glass, (10YR 4/1)	
-12 		0.0	wet	6	FILL		\\dark gray, non plastic loose, wet	
_				-	- 	\bowtie	NO RECOVERY	12.3-
-13	1.3	1.8	moist	7	PT	<u> </u>	ASH, some cinders, little coal, (10YR 4/1) dark gray, 143-P3A-D20A-	12.8-
. •			1110101				non plastic, loose, wet.	
	1			NR	NR		PEAT (degraded vegetated material), with 80% organic	
		0.4	moist	7	PT	<u>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</u>		
-14		21		'	FI		\\ modium planticity, modium stiff, moist, clight organic	
-14 -		2.1	moist				Willedigili plasticity. Hiedigili still. Hiolst. Shufit organic	
_	2	2.1	moist			1/ 1/1/ //		
-14 - -15	2			7			\ \text{odor, no staining. Soils consistent with MM.} \ \text{NO RECOVERY}\	
_	2	2.0	moist	7	PT	<u> </u>	\ \text{odor, no staining. Soils consistent with MM.} \ \text{NO RECOVERY} \ \text{PEAT (degraded vegetated material), with 80% organic} \ Image: No Recovery of the property of the pro	
_	2			7	PT		\ \text{odor, no staining. Soils consistent with MM.} \ \text{NO RECOVERY} \ \text{PEAT (degraded vegetated material), with 80% organic} \ Image: No Recovery of the property of the pro	
_ _15	2			7	PT	<u> </u>	odor, no staining. Soils consistent with MM. NO RECOVERY PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (7.5YR 4/3) brown, medium plasticity, soft, moist, moderate organic odor, no	
_ _15	2			7	PT	<u> </u>	odor, no staining. Soils consistent with MM. NO RECOVERY PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (7.5YR 4/3) brown, medium plasticity, soft, moist, moderate organic odor, no staining. Soils consistent with MM.	
_ _15	2			7	PT	<u> </u>	odor, no staining. Soils consistent with MM. NO RECOVERY PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (7.5YR 4/3) brown, medium plasticity, soft, moist, moderate organic odor, no staining. Soils consistent with MM. PEAT (degraded vegetated material), with 80% organic	
_ -15 	2			7	PT	<u> </u>	odor, no staining. Soils consistent with MM. NO RECOVERY PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (7.5YR 4/3) brown, medium plasticity, soft, moist, moderate organic odor, no staining. Soils consistent with MM. PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (10YR 3/3) dark brown, non	
_ -15 	2			7	PT	<u> </u>	odor, no staining. Soils consistent with MM. NO RECOVERY PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (7.5YR 4/3) brown, medium plasticity, soft, moist, moderate organic odor, no staining. Soils consistent with MM. PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (10YR 3/3) dark brown, non plastic, medium stiff, moist, moderate organic odor, no	
_ -15	2			7	PT	<u> </u>	odor, no staining. Soils consistent with MM. NO RECOVERY PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (7.5YR 4/3) brown, medium plasticity, soft, moist, moderate organic odor, no staining. Soils consistent with MM. PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (10YR 3/3) dark brown, non	
_ -15	2			7	PT	<u> </u>	odor, no staining. Soils consistent with MM. NO RECOVERY PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (7.5YR 4/3) brown, medium plasticity, soft, moist, moderate organic odor, no staining. Soils consistent with MM. PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (10YR 3/3) dark brown, non plastic, medium stiff, moist, moderate organic odor, no	
_ -15 	2			7	PT	<u> </u>	odor, no staining. Soils consistent with MM. NO RECOVERY PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (7.5YR 4/3) brown, medium plasticity, soft, moist, moderate organic odor, no staining. Soils consistent with MM. PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (10YR 3/3) dark brown, non plastic, medium stiff, moist, moderate organic odor, no	
_ -15	2			7	PT	<u> </u>	odor, no staining. Soils consistent with MM. NO RECOVERY PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (7.5YR 4/3) brown, medium plasticity, soft, moist, moderate organic odor, no staining. Soils consistent with MM. PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (10YR 3/3) dark brown, non plastic, medium stiff, moist, moderate organic odor, no	
_ -15 	2			7	PT	<u> </u>	odor, no staining. Soils consistent with MM. NO RECOVERY PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (7.5YR 4/3) brown, medium plasticity, soft, moist, moderate organic odor, no staining. Soils consistent with MM. PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (10YR 3/3) dark brown, non plastic, medium stiff, moist, moderate organic odor, no	
_ -15 	2			7	РТ	<u> </u>	odor, no staining. Soils consistent with MM. NO RECOVERY PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (7.5YR 4/3) brown, medium plasticity, soft, moist, moderate organic odor, no staining. Soils consistent with MM. PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (10YR 3/3) dark brown, non plastic, medium stiff, moist, moderate organic odor, no	
_ -15 	2			7	РТ	<u> </u>	odor, no staining. Soils consistent with MM. NO RECOVERY PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (7.5YR 4/3) brown, medium plasticity, soft, moist, moderate organic odor, no staining. Soils consistent with MM. PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (10YR 3/3) dark brown, non plastic, medium stiff, moist, moderate organic odor, no	
_ -15	2			7	PT	<u> </u>	odor, no staining. Soils consistent with MM. NO RECOVERY PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (7.5YR 4/3) brown, medium plasticity, soft, moist, moderate organic odor, no staining. Soils consistent with MM. PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (10YR 3/3) dark brown, non plastic, medium stiff, moist, moderate organic odor, no	
_ _15	2			7	PT	<u> </u>	odor, no staining. Soils consistent with MM. NO RECOVERY PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (7.5YR 4/3) brown, medium plasticity, soft, moist, moderate organic odor, no staining. Soils consistent with MM. PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (10YR 3/3) dark brown, non plastic, medium stiff, moist, moderate organic odor, no	
_ _15	2			7	PT	<u> </u>	odor, no staining. Soils consistent with MM. NO RECOVERY PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (7.5YR 4/3) brown, medium plasticity, soft, moist, moderate organic odor, no staining. Soils consistent with MM. PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (10YR 3/3) dark brown, non plastic, medium stiff, moist, moderate organic odor, no	
_ _15	2			7	PT	<u> </u>	odor, no staining. Soils consistent with MM. NO RECOVERY PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (7.5YR 4/3) brown, medium plasticity, soft, moist, moderate organic odor, no staining. Soils consistent with MM. PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (10YR 3/3) dark brown, non plastic, medium stiff, moist, moderate organic odor, no	
_ _15	2			7	РТ	<u> </u>	odor, no staining. Soils consistent with MM. NO RECOVERY PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (7.5YR 4/3) brown, medium plasticity, soft, moist, moderate organic odor, no staining. Soils consistent with MM. PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (10YR 3/3) dark brown, non plastic, medium stiff, moist, moderate organic odor, no	
_ _15	2			7	PT	<u> </u>	odor, no staining. Soils consistent with MM. NO RECOVERY PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (7.5YR 4/3) brown, medium plasticity, soft, moist, moderate organic odor, no staining. Soils consistent with MM. PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (10YR 3/3) dark brown, non plastic, medium stiff, moist, moderate organic odor, no	
_ _15	2			7	PT	<u> </u>	odor, no staining. Soils consistent with MM. NO RECOVERY PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (7.5YR 4/3) brown, medium plasticity, soft, moist, moderate organic odor, no staining. Soils consistent with MM. PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (10YR 3/3) dark brown, non plastic, medium stiff, moist, moderate organic odor, no	
_ -15 	2			7	PT	<u> </u>	odor, no staining. Soils consistent with MM. NO RECOVERY PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (7.5YR 4/3) brown, medium plasticity, soft, moist, moderate organic odor, no staining. Soils consistent with MM. PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (10YR 3/3) dark brown, non plastic, medium stiff, moist, moderate organic odor, no	
		2.0	moist				odor, no staining. Soils consistent with MM. NO RECOVERY PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (7.5YR 4/3) brown, medium plasticity, soft, moist, moderate organic odor, no staining. Soils consistent with MM. PEAT (degraded vegetated material), with 80% organic fibers and 20% organic silt, (10YR 3/3) dark brown, non plastic, medium stiff, moist, moderate organic odor, no	



PPG LOGS.GDT - 9/17/13 11:29

30 Knightsbridge Road, Piscataway, NJ 08854

Boring ID: 143-P3A-E16A

 Project Name:
 PPG Garfield Ave
 Drilling Company:
 SGS North America

 Project Number:
 60240739
 Drilling Method:
 Geoprobe
 Coordinates (NJSPNAD83) x:
 610802.1875

 Date Started Drilling:
 5/29/2013 10:30:00 AM
 Rig Type:
 Coordinates (NJSPNAD83) y:
 683164.875

 Date Finished Drilling:
 5/29/2013 1:50:00 PM
 Core Size: 3 in
 Boring Total Depth:
 16 ft

 Logged By:
 MI
 Project Manager:
 Chris Martell
 Depth to Water:
 NA

Depth to Water: NA Logged By: MI Project Manager: Chris Martell Physical Location: Site 143 - E16A (Note bgs = below ground surface) Depth Recovery PID Moisture Sample Graphic Range **USCS** Surface Cover and Thickness: (ft/ft) (ppm) Content Log ID (ft bgs) 0.0 slightly FILL fine to coarse GRAVEL, some fine to medium sand, 0.0 moist FILL (7.5YR 5/4) brown, non plastic, loose, slightly moist, no 1.4 odor, no staining.
fine to medium SAND, little coal, trace cinders, trace slightly 0.0 FILL moist NR brick, (7.5YR 2.5/1) black, non plastic, loose, slightly slightly moist moist, no odor, no staining. 0.0 FILL slightly WOOD fragments, some fine sand, (7.5YR 2.5/3) very 0.0 FILL dark brown, non plastic, loose, slightly moist, no odor, no moist 1.8 slightly staining. NO RECOVERY moist WOOD fragments, some fine sand, (7.5YR 2.5/3) very NR 0.0 slightly dark brown, non plastic, loose, slightly moist, no odor, no FILL moist 2 fine to medium SAND, little coal, trace cinders, trace 143-P3A-E16A-5.0-5.5 brick, (7.5YR 2.5/1) black, non plastic, loose, slightly moist, no odor, no staining. NO RECOVERY 0.0 **FILL** slightly fine silty SAND, some fine to coarse gravel, little clay, moist 143-P3A-E16A-6.5-7.0 (5YR 4/3) reddish brown, low plasticity, loose to soft, 2 slightly moist, no odor, no staining. fine silty SAND, some fine to coarse gravel, little clay, (5YR 4/3) reddish brown, low plasticity, loose to soft, 0.0 slightly **FILL** slightly moist, no odor, no staining. FILL 0.0 moist ASH, some fine sand, some cinders, coal, ceramics, 143-P3A-E16A-8.5-9.0 slightly 2 (10YR 5/1) gray, non plastic, loose, slightly moist, no moist odor, no staining. 0.0 NR ASH, some fine sand, some cinders, coal, ceramics, (10YR 5/1) gray, non plastic, loose, slightly moist, no 0.0 **FILL** odor, no staining 143-P3A-E16A-10.5-11.0 NO RECOVERY 2 ASH, some fine sand, some cinders, coal, ceramics, (10YR 5/1) gray, non plastic, loose, slightly moist, no 0.0 odor, no staining NO RECOVERY NR moist FILL 0.0 ASH, some fine sand, some cinders, coal, ceramics, 143-P3A-E16A-12.5-13.0 2 -13 (7.5YR 5/1) gray, non plastic, loose, moist, no odor, no 0.0 NR staining **NO RECOVERY** 0.0 **FILL** ASH, some fine sand, some cinders, coal, ceramics, moist 143-P3A-E16A-14.2-14.7 (7.5YR 5/1) gray, non plastic, loose, moist, no odor, no 2 143-P3A-E16A-14.7-15.2 1.3 moist OL staining. 11, UNDorg SILT, 90% organic silt, 10% organic fibers, 2.5 dry 1, 11, 1 (7.5YR 2.5/1) black, low plasticity, soft, moist, moderate -16 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, no 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.



Boring ID: 143-P3A-E17A

Page: 1

Project Name: PPG Garfield Ave Drilling Company: SGS North America Drilling Method: Geoprobe Coordinates (NJSPNAD83) x: 610788.6875

Project Number: 60240739 Date Started Drilling: 5/29/2013 9:23:00 AM Rig Type: **Coordinates (NJSPNAD83) y:** 683138.0625

		illing:	5/29/2013	3 10:22:00 AM		Core Size: 3 in	Boring Total Depth:	
	By: MI					Project Manager: Chris Martell	Depth to Water: NA	Α
Physica	I Locatio	n: Site	e 143 - E1	7A			(No	ote bgs = below ground surface)
Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphi Log	Surface Cover and Thickn		Sample ID
 1 	2	0.0	slightly moist	ASPHALT		ASPHALT medium to coarse SAND, with COPR, s coal, fine to coarse gravel, (7.5YR 2.5/1 plastic, loose, slightly moist, slight petro staining.) black, non	
2	2	0.0	slightly moist slightly moist	FILL FILL		SILT, with COPR some fine sand, (5YR gray, non plastic, soft, slightly moist, no fine silty SAND, some fine gravel, little f (7.5YR 2.5/1) black, non plastic, loose to moist, no odor, no staining.	odor, no staining./ ill material,	
4 5	1.7	0.0	slightly moist	FILL		fine silty SAND, with coarse gravel, little reddish brown, non plastic, loose to soft no odor, no staining.		143-P3A-E17A-4.0-4.5
-6- -7- 	2	0.0	slightly moist	NR FILL		NO RECOVERY fine silty SAND, with coarse gravel, little (5YR 4/3) reddish brown, non plastic, los slightly moist, no odor, no staining.		143-P3A-E17A-6.0-6.9
-8-		0.0	slightly	FILL		fine silty SAND, with roots, wood fragme	ents, (7.5YR 4/2)	143-P3A-E17A-8.0-8.5
9-	1.4	0.0	moist dry	FILL		brown, non plastic, loose to soft, slightly no staining. ASH, with fine to medium sand, some c	. /	
10				NR		\ wood fragments, little ceramics, (10YR :		
10 11 	1.5	0.0	dry	FILL		NO RECOVERY ASH, with fine to medium sand, some c wood fragments, little ceramics, (10YR plastic, loose, dry, no odor, no staining.		143-P3A-E17A-10.0-10
-12 13	1.3	0.0	dry	FILL		NO RECOVERY ASH, with fine to medium sand, some c wood fragments, little ceramics, (10YR plastic, loose, dry, no odor, no staining.		143-P3A-E17A-12.0-12
				NR		NO RECOVERY		
-14		0.0	dry	FILL		ASH, with fine to medium sand, some c wood fragments, little ceramics, (10YR)		143-P3A-E17A-14.2-14
-15 - -16	2	2.3	slightly moist	PT	<u> </u>	plastic, loose, dry, no odor, no staining. PEAT (degraded vegetated material), 8(0% organic fibers, n, non plastic,	143-P3A-E17A-14.7-15
	ts: 1) 3 atte	mpts we	re made to	obtain best reco	overy 2) N	IM/UND confirmed to be 1 ft thick.		



30 Knightsbridge Road, Piscataway, NJ 08854

Boring ID: 143-P3A-E18A

Project Date St	Number:	60240 ing: 5	5/29/2013 1	0:00:00 AM 9:30:00 AM		Drilling Company: SGS North America Drilling Method: Geoprobe Rig Type: Core Size: 3 in		IAD83) x: 610775.1875 AD83) y: 683111.25 18 ft
Logged	d By: AB					Project Manager: Chris Martell	Depth to Water: NA	
Physica	al Location	n: Site	e 143- E18	Α				
							(Note	e bgs = below ground surface)
Depth Range ft bgs)	Recovery (ft/ft)	(ppm)	Moisture Content	USCS	Graphi Log	Surface Cover and Thick	ness:	Sample ID
 1	2	25.2	dry	FILL		fine to medium SAND, some gravel, li metal, (10YR 2/1) black, non plastic, lo odor.	oose, dry slight HC	
		0.0	slightly moist	FILL FILL	\bowtie	SILT, (5YR 5/6) yellowish red, non pla moist, iron oxide staining, mottled.	stic, loose, slightly	
-2-		0.0	dry			fine to medium SAND, some cinders,	some ash, (10YR	
. 4		74	moist	FILL		√3/1) very dark gray, non plastic, loose.	dry.	142 D24 E404 0 E 0
-3 	2		dry	FILL		COPR, some silt, little fine to medium light reddish brown, non plastic, loose fine CINDERS, some fine to medium trace coarse cinders, (10YR 2/1) black	moist. sand, little gravel,	143-P3A-E18A-2.5-3.
		0.0	moist	FILL	\bowtie	loose, dry.		
-5-	1.5	0.0	wet	FILL		fine to medium SAND, some wood fra gravel, (10YR 2/2) very dark brown, no moist, sheen.	on plastic, dense,	143-P3A-E18A-4.5-5.
6]				NR		fine to medium silty SAND, some ash,		
-6-		0.0	wet	FILL		wood, (2.5Y 5/2) grayish brown, non p	lastic, medium	
, T	1.2	0.0	wet	FILL			/ //	143-P3A-E18A-6.5-7.
				NR	****	fine to medium SAND, some cinders, 4/2) dark grayish brown, non plastic, lo SILT, some fine to medium sand, trac	oose, wet //	
-8	1.5	0.0	moist to	FILL		\vellowish brown, medium plasticity, so NO RECOVERY	ft, wet.	143-P3A-E18A-8.5-9.
-9-	1.5	0.0	wet wet	FILL		SILT, little clay, little fine sand, little gr (5YR 5/4) reddish brown, medium plas	avel, trace cinders,	
. 4			wol	NR	rxxxx	wet.	sucity, soit, illuist to	
-10		0.0	wet	FILL		ASH, some cinders, little coal, little gra		
-11 -12	2	0.0	wet	FILL		\\sand, (10YR 3/1) very dark gray, non \\NO RECOVERY ASH, some cinders, little gravel, little dark gray, non plastic, loose, wet. ASH, some cinders, little gravel, littl	coal, (10YR 4/1)	143-P3A-E18A-10.5-1
-13 - -14	2	0.0	wet	FILL		dark gray, non plastic, loose, wet. ASH, some cinders, little gravel, little	onal (10VP 4/1)	143-P3A-E18A-12.5-13
. 4		0.0	moist	FILL		dark gray, non plastic, loose, wet.		143-P3A-E18A-14.5-15
-15	1.7	1.7			XXX	SILT, some roots, little gravel, little cir	ders, (10YR 3/2)	143-P3A-E18A-15.0-15
			moist	PT NR	1	PEAT (degraded vegetated material),	70% organic fibers, /	140-F JA-E 10A-13.U-13
-10 - -17	1.5	1.9	moist	PT	<u> </u>	\\plasticity, soft, moist. Soils consistent \NO RECOVERY	with MM. 80% organic fibers,	
18				NR		moist, moderate sulfur odor. Soils con	sistent with MM.	
						\NO RECOVERY		
ommer	nts: 1) 3 atte	mpts we	ere made to o	btain best rec	overv 2) N	/IM/UND confirmed to be 1 ft thick.		



Boring ID: 143-P3A-E19A

Road, Piscataway, NJ 08854 Page: 1 Drilling Company: SGS North America Project Name: PPG Garfield Ave Project Number: 60240739 Drilling Method: Geoprobe Coordinates (NJSPNAD83) x: 610761.6875 Date Started Drilling: 5/29/2013 8:15:00 AM Coordinates (NJSPNAD83) y: 683084.5 Rig Type: Date Finished Drilling: 5/29/2013 9:30:00 AM Core Size: 3 in Boring Total Depth: 18 ft Depth to Water: NA Logged By: AB Project Manager: Chris Martell Physical Location: Site 143 - E19A (Note bgs = below ground surface) Depth Recovery PID Moisture Sample Graphic Range **USCS** Surface Cover and Thickness: (ft/ft) (ppm) Content Log ID (ft bgs) 0.0 slightly **ASPHALT** ASPHALT, weathered, (10YR 2/1) black, non plastic, 447 moist FILL dense, slightly moist. 2 fine to medium silty SAND, some gravel, some cinders, slightly little glass, little red-brown clay, (10YR 2/1) black, non moist plastic, medium dense, slightly moist, heavy oil odor. 0.0 FILL fine to medium silty SAND, little gravel, little cinders, moist trace COPR, (5YR 3/2) dark reddish brown, non plastic, 0.0 moist FILL 2 slightly FILL medium dense, moist, slight burnt odor. 0.0 SILT, (5YR 6/2) pinkish gray, low plasticity, soft, moist. fine silty SAND, some COPR, (2.5Y 6/1) gray, non moist FILL 0.0 FILL moist 0.0 FILL plastic, loose, slightly moist. slightly 0.0 COPR, little fine to medium sand, little cinders, (5YR 3/3) FILL moist 0.0 dark reddish brown, non plastic, loose, moist, moderate slightly FILL 2 FILL 143-P3A-E19A-5.0-5.5 burnt odor 50.0 moist fine to medium SAND, some cinders, little gravel, (10YR slightly 0.0 3/2) very dark grayish brown, non plastic, loose, slightly moist 0.0 **FILL** moist moist. FILL 0.0 fine CINDERS, (10YR 2/1) black, non plastic, loose, moist 1.7 slightly moist, strong burnt odor. moist 143-P3A-E19A-7.0-7.5 SILT, some fine sand, (10YR 6/2) light brownish gray, moist non plastic, medium dense, slightly moist. NR fine to medium silty SAND, some wood fragments, some 0.0 moist FILL cinders, (10YR 2/1) black, non plastic, loose, moist, to 0.0 **FILL** moderate burnt odor. 2 wet SILT, some fine sand, little gravel, (7.5YR 5/3) brown, 143-P3A-E19A-9.0-9.5 moist 0.0 **FILL** non plastic, medium dense, moist to fine to medium silty SAND, some fine cinders, little wood wet 0.0 **FILL** (10YR 3/3) dark brown, non plastic, loose, moist. moist fine silty SAND, some cinders, little clay, trace brick, 0.0 to **FILL** 1.5 trace organic fibers, (10YR 4/2) dark grayish brown, low wet 143-P3A-E19A-11.0-11.5 plasticity, medium dense, moist, slight burnt odor. moist NR NO RECOVERY to fine silty SAND, little cinders, little gravel, (10YR 4/2) 0.0 **FILL** wet dark grayish brown, low plasticity, loose, moist to wet. wet fine to medium silty SAND, little clay, trace roots, (5YR 5/3) reddish brown, medium plasticity, soft, moist to wet. 15 13 wet 143-P3A-E19A-13.0-13.5 fine to medium silty SAND, little clay, little roots, (10YR NR 6/3) pale brown, medium plasticity, soft, moist to wet. fine silty SAND, some clay, little cinders, trace wood, 0.0 **FILL** wet trace glass, (10YR 5/2) grayish brown, high plasticity, 2 143-P3A-E19A-14.7-15.2 0.0 FILL moist soft, moist to wet. fine to medium silty SAND, some cinders, some ash, 143-P3A-E19A-15.2-15.7 1.8 PT moist little gravel, (10YR 4/2) dark grayish brown, non plastic, -16 loose, wet. 2.2 РТ moist NO RECOVERY 1, 11, 1 1.5 ASH, some cinders, little gravel, (10YR 4/1) dark gray, 11, 11, non plastic, loose, wet, slight burnt odor. NO RECOVERY NR ASH, some cinders, little gravel, trace glass, trace shell -18 fragments, trace metal, (10YR 3/1) very dark gray, non plastic, loose, wet. SILT, little clay, little roots, little cinders, (10YR 3/2) very dark grayish brown, medium plasticity, soft, moist. PEAT (degraded vegetated material), 70% organic fibers, 20% organic clay, 10% organic silt, (10YR 4/2) dark PPG LOGS.GDT - 9/17/13 11:30 grayish brown, medium plasticity, soft, moist moderate sulfur odor. Soils consistent with MM. PEAT (degraded vegetated material), 80% organic fiber, 20% organic silt, (10YR 4/3) brown, non plastic, loose, moist, strong sulfur odor. Soils consistent with MM. NO RECOVERY

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



Boring ID: 143-P3A-E20A

Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Drilling Method: Geoprobe Coordinates (NJSPNAD83) x: 610748.1875 **Date Started Drilling:** 3/21/2013 11:25:00 AM Rig Type: **Coordinates (NJSPNAD83) y:** 683057.6875 Date Finished Drilling: 3/22/2013 10:50:00 AM Core Size: 3 in Boring Total Depth: 16 ft

	d By: EW al Location		1/3 - F20	1Δ		Proje	ect Manager: Chris Martell	Depth to Water: NA	
riiysic	ai Locatioi	ı. Sile	143 - LZ0	, <u> </u>				(Note bg	s = below ground surface)
Depth Range ft bgs)	Recovery	PID (ppm)	Moisture Content		USCS	Graphic Log	Surface Cover and Th	nickness:	Sample ID
		0.0		1 C	ONCRET		CONCRETE		
- 1 	2	0.0	dry	3	FILL		fine to medium SAND, little coal, lit 2.5/3) very dark brown, non plastic,		
_	-	55.6	slightly moist	6	FILL		\no staining.	. ,	
-2		53.5	slightly	4B	FILL		fine to medium SAND, some tar-lik cinders,coal, (7.5YR 2.5/1) black, r		
-3	2	6.5	moist slightly	6	FILL		\slightly moist, moderate tar odor, s fine to medium SAND, with COPR,	heen. / /	143-P3A-E20A-2.5-3
_		4.5	moist	6	FILL		$\bigcap \setminus (5YR 3/2)$ dark reddish brown, non	plastic loose, slightly / [
-4		1.0	dry dry	6	FILL		moist, strong tar odor, no staining, fine to medium SAND, some cinde	sheen in split spoon. / rs, coal, little tar-like	
-	1.5	1.0	ury		I ILL		material, (7.5YR 2.5/1) black, non project, moderate tar odor, no staining	plastic loose, slightly	143-P3A-E20A-4.5-5
- 5	1.5	0.0	moist	3	FILL		¬∖\spoon.	. //-	
-6-				NR	NR		fine SAND, trace cinders, (7.5YR 2	ar odor, no staining,	
_		0.2	moist moist	3	FILL FILL		sheen in spilt spoon. fine SAND, little silt, trace cinders,		143-P3A-E20A-6.5-7
- 7 —	2	0.2	moist		1 122		non plastic, medium dense, dry, sli	ght tar odor, no	143-F3A-E20A-0.5-7
_	-						staining, sheen in spilt spoon. fine SAND, with wood fragments, a	nd fill material.	
-8		0.0	moist	3	FILL		(7.5YR 3/2) dark brown, non plastic	c, hard, moist, no	
- 9	2						NO RECOVERY		143-P3A-E20A-8.5-9
_	-						fine silty SAND, with fill material, (7 non plastic, soft, moist, no odor, no		
-10		0.0	moist	3	FILL		fine sandy SILT, with fine gravel an 3/1) very dark gray, non plastic, so	id fill material, (7.5YR / -	
_	1						odor, no staining, trace wood fragm	nents.	143-P3A-E20A-10.5-1
11 -		0.0	moist	NR	NR		SILT, trace sand, little ash, (7.5YR non plastic, soft, moist to wet, no o		
-12		0.0	maiat	3	FILL	XXXXX	some brick fragments. SILT, trace sand, little ash, (7.5YR)	- 11_	
-	2	0.0	moist	3	FILL		\non plastic, soft, moist to wet, no o		143-P3A-E20A-12.5-1
-13							Some brick fragments. NO RECOVERY		
- -14							fine SAND, with ash, little fine grav	el, (7.5YR 4/1) dark	143-P3A-E20A-13.8-1
_		0.0	moist moist	3	FILL OL	<u> </u>	□\staining.	/_	143-P3A-E20A-14.3-1
-15	2	1.6	moist	7	PT	7 77 7 7 77 7	fine SAND, with ash, little fine grave gray, non plastic, loose, moist to we		
-	-					<u> </u>	\staining. \UNDorg SILT, with organics, (7.5Y)	//	
-16							brown, non plastic, soft, moist, slig	ht organic odor, no	
							staining. Soils consistent with UND PEAT (degraded vegetated material)	al), with 80% organic	
							fibers and 20% organic silt, (7.5YR brown, non plastic, stiff, moist, mod	2.5/3) very dark	
							no staining. Soils consistent with M		
	ete: 1\ 2 ottor		o mada ta a	la facta da		O) NANA/I IN	ID confirmed to be 1 ft thick.		



Boring ID: 143-P3A-F15A

Page: 1

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

Physica	al Location	ı: Site	143 - F15	iA				
							(Note bg	s = 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	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.	
_	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,	
	2	0.0	dry	6	FILL		slightly moist, no odor, no staining. 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		0.0	moist	6	FILL		fine silty SAND, with ash, little cinders, coal, brick,	143-P3A-F15A-5.0-5.5
	1	0.0	moist	6	FILL		(10YR 4/2) dark grayish brown, non plastic, soft to	
6 	•			NR	NR	*****	\langle loose, moist, no odor, no staining. fine SAND, little fine to coarse gravel, little ash, cinders, brick, coal, (7.5YR 3/2) dark brown, non plastic, loose,	
7-		0.0	moist	6	FILL		∖moist, no odor, no staining.	143-P3A-F15A-7.0-7.5
8	2	0.0	moist	6	FILL		NO RECOVERY 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 — – – —10—	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. SILT, little fine to medium gravel, little coal and cinders,	143-P3A-F15A-9.0-9.5
 11		0.0	moist	2	FILL		(10YR 4/2) dark grayish brown, non plastic, soft, moist, no odor, no staining. SILT, some fine to medium sand, little roots, fine to	143-P3A-F15A-11.0-11.5
12 12	2	1.9	moist	7	PT	\(\frac{1}{2}\) \(\frac{1}{2}\	coarse gravel, (10YR 6/2) light brownish gray, non plastic, soft, moist, no odor, no staining. PEAT (degraded vegetated material), 75% oragnic fibers, 25% organic silt, (7.5YR 3/2) dark brown, non	143-P3A-F15A-11.5-12.0
13							plastic, stiff. Soils consistent with MM.	



Boring ID: 143-P3A-F16A

Page: 1

 Project Name:
 PPG Garfield Ave
 Drilling Company:
 SGS North America

 Project Number:
 60240739
 Drilling Method:
 Geoprobe
 Coordinates (NJSPNAD83) x:
 610829

 Date Started Drilling:
 5/24/2013 9:00:00 AM
 Rig Type:
 Coordinates (NJSPNAD83) y:
 683151.375

 Date Finished Drilling:
 5/24/2013 10:05:00 AM
 Core Size: 3 in
 Boring Total Depth:
 16 ft

 Logged By:
 AB
 Project Manager:
 Chris Martell
 Depth to Water:
 NA

hysical Locati		0 1/3 E16	<u>.</u>		Office Manager. Chins Marten	Deptil to water. NA	`
Tiysical Local	OII. SIL	- 143-110)A			(No	te bgs = below ground surface)
Depth ange t bgs)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickn	ess:	Sample ID
-12	0.0	slightly moist	FILL		fine silty SAND, some ash, little cinders glass, (10YR 2/1) black, non plastic, loo		
-3 _ 2	0.0	moist to wet	FILL		fine CINDERS, little fine silty sand, tract 2/1) black, non plastic, medium dense,		
1.8	0.0	moist	FILL		SILT, some fine sand, some ash, (7.5Y) brown, low plasticity, medium dense, m		
5	0.0	wet	FILL		fine silty SAND, little cinders, trace woo reddish gray, medium plasticity, loose, v		143-P3A-F16A-5.0-5.5
j	0.0	moist	NR FILL		NO RECOVERY SILT, some fine sand, little gravel, (7.5)	/R 5/2) brown,	
7 1.2	0.0	moist	FILL NR		medium plasticity, loose, moist. SILT, little clay, trace fine sand, (7.5YR high plasticity, soft, moist.	3/2) dark brown,	143-P3A-F16A-6.7-7.2
3	0.0	wet	FILL		NO RECOVERY ASH, some wood fragments, some cind	ers, trace	
1.6	0.0	wet	FILL		ceramics, (10YR 2/1) black, non plastic ASH, some cinders, little gravel, trace w dark gray, non plastic, loose, wet.		143-P3A-F16A-8.7-9.
0 1.5	0.0	wet	NR FILL		NO RECOVERY ASH, some cinders, little coal, little fine (10YR 4/1) dark gray, non plastic, loose		143-P3A-F16A-10.7-11
-			NR		NO RECOVERY		
2 3 2	0.0	wet	FILL		ASH, some cinders, little coal, (10YR 4/ plastic, loose, wet.	1) dark gray, non	143-P3A-F16A-12.7-13
	0.0	moist	FILL		SILT, little ash, little cinders, little roots,	(5VD 3/1) yeny	143-P3A-F16A-13.5-14
5 1.8	2.4	moist	PT	\(\frac{1}{2}\)\(\frac{1}\)\(\frac{1}{2}\)\(\frac{1}{2}\)\(\frac{1}{2}\)\(\frac{1}{2}\)\(\frac{1}{2}\)\(\frac{1}{2}\)\(\frac{1}{2}\)\(\frac{1}{2}\)\(\frac{1}{2}\)\(\frac{1}{2}\)\(\frac{1}{2}\)\(\frac{1}{2}\)\(1	dark gray, medium plasticity, soft, moist PEAT (degraded vegetated material), 8th 20% organic silt, (10YR 3/3) dark brown soft, moist, moderate sulfur odor. Soils MM.	0% organic fibers, l, low plasticity,	143-P3A-F16A-14.0-14
6			NR		NO RECOVERY		



Boring ID: 143-P3A-F17A

 Project Name:
 PPG Garfield Ave
 Drilling Company:
 SGS North America

 Project Number:
 60240739
 Drilling Method:
 Geoprobe
 Coordinates (NJSPNAD83) x:
 610815.5

 Date Started Drilling:
 5/24/2013 10:10:00 AM
 Rig Type:
 Coordinates (NJSPNAD83) y:
 683124.5625

 Date Finished Drilling:
 5/24/2013 10:50:00 AM
 Core Size: 3 in
 Boring Total Depth:
 16 ft

	d By: AB al Location	n: Site	e 143 - F17	Ά	1	Project Manager: Chris Martell	Depth to Water: NA	
							(Not	e bgs = below ground surface)
Depth Range t bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphi Log	Surface Cover and Thickr	ness:	Sample ID
_	_	0.0	slightly moist	FILL		fine to medium silty SAND, some brick, (7.5YR 5/3) brown, non plastic, loose, s		
-1- -	2	0.0	dry	FILL		fine to medium CINDERS, some COPF concrete, (7.5YR 2.5/1) black, non plas	R, little brick, trace	
-2- -		0.0	slightly	FILL		fine silty SAND, some gravel, little COF		
-3- -	2	0.0	moist moist	FILL		brown, non plastic, dense, slightly mois fine CINDERS, little brick, little wood fra concrete, little COPR, (10YR 2/1) black medium dense, moist.	agments, little	
-4		0.0	wet	FILL		SILT, some ash, little wood fragments,	little cinders,	
-5- <u>-</u>	1.5	0.0	moist to wet	FILL		(10YR 3/1) very dark gray, non plastic, fine to medium silty SAND, little clay, lit 5/4) brown, medium plasticity, soft, moi	tle glass, (7.5YR	
-6- - -7	1.3	0.0	moist	NR FILL		NO RECOVERY SILT, some fine to medium sand, little of fragments, (10YR 5/4) yellowish brown, medium dense, moist.	clay, little rock , low plasticity,	143-P3A-F17A-6.8-7.
, –				NR	XXXX	NO RECOVERY		140 1 0/11 1/71 0.0 7.
-8		0.0	moist	FILL		fine to medium silty SAND, some grave	el, little coal,	
-9- -	1.3	0.0		FILL NR		(10YR 4/3) brown, non plastic, medium ASH, some cinders, NO RECOVERY	dense, moist.	143-P3A-F17A-8.8-9.
-10		0.0	wet	FILL		ASH, some cinders, little coal, (10YR 4	/1) dark gray, pap	
_ -11	1.3	0.0	wet	FILL		plastic, loose, wet.	71) dark gray, non	143-P3A-F17A-10.8-1
-				NR		NO RECOVERY		
-12 - -13	0.5	0.0	wet	FILL NR		ASH, some cinders, little gravel, (10YR non plastic, loose, wet. NO RECOVERY	4/1) dark gray,	143-P3A-F17A-12.0-12
-14 -		0.0	wet	FILL		ASH, some cinders, little gravel, (10YR	4/1) dark gray,	143-P3A-F17A-14.0-14
-15	2	0.0	moist	ОН		non plastic, loose, wet. organic SILT, little clay, some roots, (10	OYR 3/2) very dark	143-P3A-F17A-14.5-1
_ -16		2.1	moist	PT	() ()	\tag{ \consistent with UNDorg. \tag{PEAT (degraded vegetated material), 8}	0% organic fibers,	
						20%organic silt, (10YR 3/3) dark brown loose, moist, slight sulfur odor. Soils co	, non plastic, insistent with MM.	
ommer	n ts: 1) 3 atte	mpts we	re made to o	btain best red	covery 2) N	/IM/UND confirmed to be 1 ft thick.		



Boring ID: 143-P3A-F18A

	Name: F					Drilling Company: SGS North Americ		
Project	Number:	60240	0739			Drilling Method: Geoprobe	Coordinates (NJSP	NAD83) x: 610802
			5/24/2013 8			Rig Type:	Coordinates (NJSPI	NAD83) y: 683097.8125
Date Fi	nished Dri	illing:	5/24/2013	10:02:00 A		Core Size: 3 in	Boring Total Depth:	
	IBy: MI				l	Project Manager: Chris Martell	Depth to Water: N	Α
hysica	al Location	n: Site	e 143 - F18	SA			Al	to have a bodom amount and and
							(Ns	ote bgs = below ground surface)
epth ange t bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and 1	Thickness:	Sample ID
_ -1 - -2	2	10.8	dry	FILL		fine to medium SAND, some COF fill material, brick, fine to coarse g very dark brown, non plastic, loose odor, no staining.	ravel, (7.5YR 2.5/2)	
-3	2	0.0	slightly moist	FILL		fine to medium SAND, some wood COPR, brick, (7.5YR 2.5/1) black, slightly moist, no odor, no staining	non plastic, loose,	
-5	2	0.0	slightly moist	FILL		fine to medium SAND, some cindo black, non plastic, loose, slightly n staining.	ers, coal, (7.5YR 2.5/1) noist, no odor, no	
-		0.0	dry	FILL		fine to medium SAND, with fine to	coarse gravel little	143-P3A-F18A-5.0-5
-6-		0.0	moist	FILL		cinders, (5YR 5/3) reddish brown,	non plastic, medium /	
-7-	1.1			NR		\dense to hard, dry, no odor, no sta SILT, some fine sand, little fine to 5/2) grayish brown, low plasticity s	aining. coarse gravel, (10YR	143-P3A-F18A-6.5-7
-8-		0.0	moist	FILL		staining. NO RECOVERY ASH, with fine sand, cinders, coal		_
-9-	1.6					(7.5YR 4/1) dark gray, loose, mois		143-P3A-F18A-8.5-9
-10		0.0		NR		NO RECOVERY		_
-	,	0.0	moist	FILL		ASH, with fine sand, cinders, coal (7.5YR 4/1) dark gray, loose, mois		143-P3A-F18A-10.5-1
-11 	1			NR	<u> </u>	NO RECOVERY	<u> </u>	_
12	1.4	0.0	moist	FILL		ASH, with fine sand, cinders, coal fragments, little ceramics, (7.5YR moist, no odor, no staining.		143-P3A-F18A-12.5-1
-13 -				NR		NO RECOVERY		+
-14		0.0	moist	FILL		ASH, with fine sand, cinders, coal fragments, little ceramics, (7.5YR		143-P3A-F18A-14.1-1
-15 -	2	1.4	moist dry	OL PT		moist, no odor, no staining. UNDorg SILT, 90% organic silt, 10	0% organic fibers,	143-P3A-F18A-14.9-1
-16						organic odor, no staining. Soils copenated water 20% organic silt, (7.5YR 3/2) dark stiff, dry, strong organic odor, no sconsistent with MM.	insistent with UNDorg. / ial), 80% organic fibers, brown, non plastic,	
	nts: 1) 3 atte							1



PPG - PPG_LOGS.GDT - 9/17/13 11:30

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

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: 143-P3A-F19A

Project Name: PPG Garfield Ave Drilling Company: SGS North America
Project Number: 60240739 Drilling Method: Geoprobe Coordinates (NJSPNAD83) x: 610788.5
Date Started Drilling: 5/24/2013 7:30:00 AM Rig Type: Coordinates (NJSPNAD83) y: 683071
Date Finished Drilling: 5/24/2013 8:20:00 AM Core Size: 3 in Boring Total Depth: 18 ft
Logged By: MI Project Manager: Chris Martell Depth to Water: NA

2 2.4 dry PT (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (7.5YR 3/2) dark brown, non plastic,	ogged By:				P	Project Manager: Chris Martell	Depth to Water: NA	
Recovery PID (trift) (ppm) Content USCS Graphic Surface Cover and Thickness: Sample (ppm) Content USCS Graphic Surface Cover and Thickness: Sample (ppm) Content USCS Graphic Surface Cover and Thickness: Sample (ppm) Content USCS Graphic Surface Cover and Thickness: Sample (ppm) Content USCS Graphic Surface Cover and Thickness: Sample (ppm) Content USCS Graphic Surface Cover and Thickness: Sample (ppm) Content USCS Graphic Surface Cover and Thickness: Sample (ppm) Content USCS Graphic Surface Cover and Thickness: Sample (ppm) Content USCS Graphic Surface Cover and Thickness: Sample (ppm) Content USCS Graphic Surface Cover and Thickness: Sample (ppm) Content USCS Graphic Surface Cover and Thickness: Sample (ppm) Content USCS Graphic Surface Cover and Thickness: Sample (ppm) Content USCS Graphic Surface Cover and Thickness: Sample (ppm) Content USCS Graphic Surface Cover and Thickness: Sample (ppm) Content USCS Graphic Surface Cover and Thickness: Sample (ppm) Content USCS Graphic Surface Cover and Thickness: Sample (ppm) Content USCS Graphic Surface Cover (ppm) Content USCS Graphic Surface Cover (ppm) Content USCS Graphic Surface Cover (ppm) Content USCS Graphic Surface Cover (ppm) Content USCS Graphic Surface Cover (ppm) Content USCS Graphic Surface Cover (ppm) Content USCS Graphic Surface Cover (ppm) Content USCS Graphic Surface Cover (ppm) Content USCS Graphic Surface Cover (ppm) Cover (ppm) Content USCS Graphic Surface Cover (ppm) Content USCS Graphic Surface Cover (ppm) Content USCS Graphic Surface Cover (ppm) Cov	nysical Loca	tion: Sit	e 143 - F19	9A				
inge (Mrtt) (ppm) Content (ppm							(Not	e bgs = below ground surface)
some cinders, coal, ash, trace COPR, (7.5YR 2.5/3) very dark brown, non plastic, loose, dry, no odor, no staining. 46.9 slightly moist	inge Recov			USCS		Surface Cover and Thic	kness:	
dark brown, non plastic, loose, dry, no odor, no staining. 46.9 slightly moist 18.9 dry FILL fine SAND, little coal, trace oil-like material, (7.5YR 2.5/1) black, loose, dry, slight petroleum odor sheen. fine SAND, little coal, trace oil-like material, (7.5YR 2.5/1) black, loose, dry, slight petroleum odor, no staining. NR NR RECOVERY fine SAND, little coal, cinders, (7.5YR 2.5/1) black, loose, dry, no odor, no staining. NO RECOVERY fine SAND, little coal, cinders, (7.5YR 2.5/1) black, loose, dry, no odor, no staining. NO RECOVERY fine SAND, little coal, cinders, (7.5YR 2.5/1) black, loose, dry, no odor, no staining. NO RECOVERY fine SAND, some fine to medium gravel, little coal, cinders, ash, (7.5YR 4/2) brown, non plastic, loose to soft, slightly moist, no odor, no staining. NR NR (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. NR NO RECOVERY ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. NR NO RECOVERY ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. NR NO RECOVERY ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. NO RECOVERY ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. NO RECOVERY ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. NO RECOVERY ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. NO RECOVERY ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. PEAT (degraded vegetated material), 80% organic offers, 200% organic stailing. PEAT (degraded vegetated material), 80% organic offers, 200% organic stailing.		0.0	dry	FILL				
moist 1.8 moist	2							
1.8 18.9 dry FILL petroleum odor sheen. fine SAND, little coal, trace oil-like material, (7.5YR 2.5/1) black, loose, dry, slight petroleum odor, no staining. 1.6 18.9 dry FILL Shape of the SAND, little coal, cinders, (7.5YR 2.5/1) black, loose, dry, no odor, no staining. 1.6 18.9 dry FILL Shape of the SAND, little coal, cinders, (7.5YR 2.5/1) black, loose, dry, no odor, no staining. 1.8 NR NO RECOVERY 1.8 NR NO RECOVERY 1.9 O.0 moist FILL Shape of the SAND, some fine to medium gravel, little coal, cinders, ash, (7.5YR 4/2) brown, non plastic, loose to soft, slightly moist, no odor, no staining. 1.8 NR NR NR ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. 1.9 NR NR NO RECOVERY 1.0 moist FILL Shape of the SAH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. 1.2 NR NR NO RECOVERY 1.3 NR NR NO RECOVERY 2.4 dry NR NR NO RECOVERY 3. 1.2 ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. NO RECOVERY 3. 1.2 ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. NO RECOVERY 3. ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. NO RECOVERY 3. ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. NO RECOVERY 3. ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. NO RECOVERY 3. ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. 3. ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. 3. ASH, with fine sand, some cinders,	!	46.9		FILL				
18.9 dry FILL fine SAND, little coal, cinders, (7.5YR 2.5/1) black, loose, dry, no odor, no staining. 18.9 dry FILL fine SAND, little coal, cinders, (7.5YR 2.5/1) black, loose, dry, no odor, no staining. 1.3	1.8	18.9		FILL		petroleum odor sheen. fine SAND, little coal, trace oil-like ma	aterial, (7.5YR 2.5/1)	
Inter SAND, little coal, cinders, (7.5YR 2.5/1) black, loose, dry, no odor, no staining. NR NO RECOVERY It fine SAND, little coal, cinders, (7.5YR 2.5/1) black, loose, dry, no odor, no staining. NO RECOVERY It solve the sand, some fine to medium gravel, little coal, cinders, ash, (7.5YR 4/2) brown, non plastic, loose to soft, slightly moist, no odor, no staining. NR SAND, little coal, cinders, (7.5YR 2.5/1) black, loose, dry, no odor, no staining. NO RECOVERY It solve the sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. NO RECOVERY ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. NO RECOVERY ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. NO RECOVERY ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. NO RECOVERY ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. NO RECOVERY ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. NO RECOVERY ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. NO RECOVERY ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. PEAT (degraded vegetated material), 80% organic fibers, 20% organic stilt, (7.5YR 3/2) dark brown, non plastic,	. —	18.9	dny			NO RECOVERY		
1.3	1.6		diy	FILL			2.5/1) black, loose,	
1.3 O.0 slightly moist FILL fine sand, some fine to medium gravel, little coal, cinders, (7.5YR 2.5/1) black, loose, dry, no odor, no staining. NO RECOVERY fine silty SAND, some fine to medium gravel, little coal, cinders, ash, (7.5YR 4/2) brown, non plastic, loose to soft, slightly moist, no odor, no staining. O.0 moist FILL SIGHTLY moist, no odor, no staining. NO RECOVERY ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. NO RECOVERY ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. NO RECOVERY ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. NO RECOVERY ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. NO RECOVERY ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. NO RECOVERY ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. NO RECOVERY ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. PRECOVERY ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. PRECOVERY ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. PRECOVERY 2006 organic sittle, (7.5YR 3/2) dark brown, non plastic, loose, moist, no odor, no staining. PRECOVERY				NR		NO RECOVERY		
dry, no odor, no staining. NO RECOVERY 1.3 0.0 slightly moist FILL cinders, ash, (7.5 YR 4/2) brown, non plastic, loose to soft, slightly moist, no odor, no staining. NR 0.0 moist FILL NR 1 NR	i —	18.9	dry			fine SAND, little coal, cinders, (7.5YR	2.5/1) black, loose,	
1.3 0.0 moist FILL moist moi	0.7			NR				
ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. NR O.0 moist NR NR NR NR NR NR NR NR NR N	-			FILL		cinders, ash, (7.5YR 4/2) brown, non	plastic, loose to	
1 0.0 moist FILL NR NR NR NR NR NR NR NR NR NR NR NR NR	1.3	0.0	moist	FILL				
0.0 moist FILL No RECOVERY ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. NO RECOVERY ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. NO RECOVERY 1.2 0.0 moist FILL ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. NO RECOVERY 2 0.0 moist FILL ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. NO RECOVERY ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (7.5YR 3/2) dark brown, non plastic,	\dashv			NR				
NR (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. NO RECOVERY ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. NR NO RECOVERY ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. NR NR NO RECOVERY ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. NO RECOVERY ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. PT ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (7.5YR 3/2) dark brown, non plastic,	-	0.0	moist	FILL		\no staining. \NO RECOVERY		
ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. NR NR NO RECOVERY ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. NR NR ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. NO RECOVERY ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (7.5YR 3/2) dark brown, non plastic,				NR		(10YR 4/1) dark gray, non plastic, loo \no staining.		
ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. NR O.0 moist FILL ASH, with fine sand, some cinders, coal, little ceramics, no staining. NO RECOVERY ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (7.5YR 3/2) dark brown, non plastic,	-		moist	FILL		ASH, with fine sand, some cinders, co (10YR 4/1) dark gray, non plastic, loo		
ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. NO RECOVERY O.0 moist FILL ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (7.5YR 3/2) dark brown, non plastic,	4			NR		NO RECOVERY		
1 NR NR NR NR NO RECOVERY O.0 moist FILL ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (7.5YR 3/2) dark brown, non plastic,	<u> </u>	0.0	me:et	FU I	XXXXX	ACII with fine acid come sind acid	ad little core	
NR NO RECOVERY O.0 moist FILL ASH, with fine sand, some cinders, coal, little ceramics, (10YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (7.5YR 3/2) dark brown, non plastic,	1	0.0	moist			(10YR 4/1) dark gray, non plastic, loo		
ASH, with fine sand, some cinders, coal, little ceramics, (143-P3A-F19A-16.6) 2.4 dry PT (19YR 4/1) dark gray, non plastic, loose, moist, no odor, no staining. PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (7.5YR 3/2) dark brown, non plastic,	+			NR				
no staining. PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (7.5YR 3/2) dark brown, non plastic,	`		moist	FILL				143-P3A-F19A-16.0-1
	2	2.4	dry	PT	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\no staining. PEAT (degraded vegetated material),	80% organic fibers,	143-P3A-F19A-16.5-1
consistent with MM.	}				<u>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</u>	stiff, dry, strong organic odor, no stair		



Boring ID: 143-P3A-F20A

Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Drilling Method: Geoprobe Coordinates (NJSPNAD83) x: 610775 Date Started Drilling: 3/21/2013 8:30:00 AM Rig Type: Coordinates (NJSPNAD83) y: 683044.1875 Date Finished Drilling: 3/21/2013 11:00:00 AM Core Size: 3 in Boring Total Depth: 16 ft

	By: EW Location	: Site	143 - F20	A		Proje	ct Manager: Chris Martell Depth to Water: NA	
							(Note	bgs = below ground surface)
Depth Range t bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content		USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
		0.0	moist	3	FILL	$\otimes \otimes \otimes$	fine to medium SAND, with silt, (7.5YR 4/2) brown, non	
. –	2	0.0	moist	4B	FILL		plastic, soft, moist, no odor, no staining.	
-1	-	0.0	moist	4A	FILL		fine to medium SAND, with silt, trace COPR, (7.5YR 2.5/1) black, non plastic, soft, moist, no odor, no staining.	
-2		0.0	moist	4A	FILL		COPR, with fine sand, little silt, (5YR 3/4) dark reddish	
-	4.0	0.0	moist	4A	FILL		\tag{brown, non plastic, soft, moist, no odor.} COPR, with fine sand, little silt, (5YR 4/3) reddish brown, //	
-3	1.8	0.0	moist	3	FILL		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	143-P3A-F20A-2.8-3
-4		0.0	moist	NR A	NR FILL		soft, moist to wet, no odor, no staining. fine to medium SAND, with silt, trace ash, (7.5YR 3/1) very dark gray, non plastic, soft, moist, no odor, no	
- 5	1.8	0.0	moist	3	FILL		staining.	143-P3A-F20A-4.5-5
_	-	0.0				\otimes	¬ \\NO RECOVERY	143-P3A-F20A-4.5-5.
6		0.0	moist	3	FILL		fine silty SAND, some fine gravel, (7.5YR 4/2) brown, $ $	
6	1	0.0	moist	NR 3	NR FILL		\non plastic, soft, moist, no odor, no staining. fine to medium SAND, with brick and silt, (7.5YR 3/4) dark brown, non plastic, loose to stiff, moist, no odor, no	143-P3A-F20A-6.5-7
-7 <i>-</i> -				NR	NR		staining.	
-8		0.0	moist	3	FILL		black, non plastic, soft to dense, moist, no odor, no staining. NO RECOVERY	143-P3A-F20A-8.5-9
-9	1			NR	NR		fine to medium SAND, little wood fragments, some silt, (7.5YR 2.5/2) very dark brown, non plastic, soft, moist to	143-F3A-F20A-6.5-8
-10							wet, no odor, no staining.	
		0.0	moist	3	FILL		fine to medium SAND, little fine gravel, (7.5YR 4/2)	143-P3A-F20A-10.5-1
-11	1			NR	NR		\brown, non plastic, soft, moist, no odor, no staining. \NO RECOVERY fine to medium SAND, little silt, (7.5YR 4/6) strong	143-P3A-F20A-10.5-
-12							brown, non plastic, soft, moist to wet, no odor, no	
_		0.0	moist	3	FILL		\staining. \NO RECOVERY	143-P3A-F20A-12.5-1
-13 	2						ASH, some ceramics and fine sand, (7.5YR 5/1) gray, non plastic, loose, moist to wet, no odor, no staining.	
-14	2	0.0	moist	3	FILL		ASH, with fine to medium gravel and sand, (7.5YR 4/1) dark gray, non plastic, loose, moist to wet, no odor, no	143-P3A-F20A-14.5-
-15	-	0.8	moist	9	OL		— staining. ─ UNDorg SILT, little organics, (7.5YR 2.5/3) very dark	143-P3A-F20A-15.0-1
-		1.3	moist	7	PT	11/11/11	brown, non plastic, soft, moist, slight organic odor, no	
-16							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.	
omments	s: 1) 3 atter	npts wer	e made to o	btain be	est recovery	/ 2) MM/UI	ID confirmed to be 1 ft thick.	

30 Knightsbridge Road, Piscataway, NJ 08854

WELL ID 143-P3A-MW101I

Project Drilling	Number Date: 8	: 60 3/31/2	Garfield A 0240739 2015 10:40:	00 AM		Drille Drilli	er: T. ing Me	mpany: SGS North America Lynch Jr thod: HSA/Mud Rotary	NJDEP Well Permit Number Coordinates (NJSPNAD83 Coordinates (NJSPNAD83)	3) x: 610728.7
Geologi	ist: ES		9/1/2015 2:0 PBR Well F		M		ation: ect Ma	10.9 nager: Scott Mikaelian	Total Well Depth: 34 ft Depth to Water: 7.7 ft Date Gauged: 9/4/2015	
G (ft bgs)	SAMPLE NUMBER	RECOVERY (FT)	BLOW	PID READING (PPM)	GA Class	uscs	LITHOLOGY	Surface Cover a	nd Thickness:	(Note bas = below ground surface) WELL DIAGRAM
-4 -43321111 -	2	1	19-17-16- 15 (33)	0.0	3 8 8	FILL		DGA(Ammended) fine to coa gravel,(7.5YR 5/1) gray,dry,n Driller advance borehole to 1 Auger. UNDno fine to coarse SAND, reddish brown, medium dens staining. NO RECOVERY.	5.0' via Hollow Stem	Top Cap (J-Plug 8" Steel Casing Cement (bent-cement gr 4" Riser (PVC sr 40) Annular seal (#0 Sand Seal)
20 -	nte: St	991 (Casing set @	0 15 0	•					



WELL ID 143-P3A-MW101I

PAGE 2 OF 2

Project Number: 6 Drilling Date: 8/31. Well Completion Date: Geologist: ES Physical Location:	/2015 10:40:00 AM 9/1/2015 2:00:00 PM	Driller: T Drilling Me Elevation:	thod: HSA/Mud Rotary	NJDEP Well Permit Numbe Coordinates (NJSPNAD83) Coordinates (NJSPNAD83) Total Well Depth: 34 ft Depth to Water: 7.7 ft Date Gauged: 9/4/2015	x: 610728.7
C (ff bgs) WATER LEVEL (ft) SAMPLE NUMBER	BLOW COUNTS PID READING (PPM)	SA USCS USCS	Surface Cover a	and Thickness:	WELL DIAGRAM
21	27-23-21- 28 (44) 0.0 20-28-33- 30 (61)	10 SM 8 SP 8 SP 8 SP 8 NR	UNDno fine to medium silty brown, medium dense,wet,r staining,(interbedded silt @ UNDno fine to medium SAN brown,medium dense,wet,n NO RECOVERY. UNDno fine to medium SAN gravel,(5YR 4/3) reddish brodor,no staining. NO RECOVERY. UNDno fine to medium SAN (5YR 4/3) reddish brown, demoist,no odor,no staining, (133.0-33.5') NO RECOVERY.	ID, some gravel, little silt, ense to very dense, wet to	Filter Pack (#1 Filter Pack) 4" 10 Slot Screet (PVC sch 40) End Cap (PVC s 40)



30 Knightsbridge Road, Piscataway, NJ 08854

Boring ID: DD1-TW2

 Project Name:
 Site 143
 Drilling Company:
 SGS

 Project Number:
 60237614.846GARF.A
 Drilling Method:
 Soft Dig/Geoprobe
 Coordinates (NJSPNAD83) x:
 683114

 Date Started Drilling:
 12/5/2011
 Rig Type:
 7728DT
 Coordinates (NJSPNAD83) y:
 610670

 Date Finished Drilling:
 12/6/2011
 Core Size:
 2 in
 Boring Total Depth:
 10 ft

 Logged By:
 Chamberland, Merdinger
 Project Manager:
 Robert Cataldo
 Depth to Water:
 3.0 ft ft

Logged By: Chamberland, Merdinger Physical Location: Site 143 - Junkyard (Note bgs = below ground surface) Depth Recovery PID Moisture GΑ Graphic Sample Range **USCS** Surface Cover and Thickness: (ft/ft) (ppm) Content Class Log Number (ft bgs) JERSEY/GARFIELD AVENUE GROUP OF SITES/TALARICO BORINGS.GPJ 0.1 Moist 3 FILL Black (7.5YR 2.5/1) medium SAND, little medium to coarse DD1-TW2-0.3 Gravel and Fill (glass, debris), loose. Slight asphalt odor. 0 2 FILL Black (7.5YR 2.5/1) fine SILTY SAND, little angular coarse 3 Moist 0.1 Gravel, trace Metal debris, loose. No odor. DD1-TW2-3.5 3 Wet **FILL** Black (7.5YR 2.5/1) fine SANDY SILT, little fine Gravel and 4 Glass debris, trace Brick and Concrete debris, loose. No odor. 0 5 0.5 DD1-TW2-5.0 Wet **FILL** Brown (7.5YR 4/2) fine to medium SAND and SILT, some Ash 6 6 FILL Wet and Cinders, loosé. No odor. No Recovery 8 9 10 End of boring at 10 ft. 11 12 STD US LAB.GDT - 3/15/12 15:07 - C:\DOCUMENTS AND SETTINGS\STANCHAKM\MY DOCUMENTS\MY EQUIS WORK\PPG 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 GINT

Comments: Poor recovery in 5-10 interval. No sample. Temporary well installed to 10 ft bgs. Groundwater sample DD1-TW2 taken 12/6/11 after development, then well abandoned.

ION/FIELD WORK/BORING LOGS/GINT L

Boring ID: EF-32

 Project Name:
 PPG Soil RIWP
 Drilling Company:
 SGS

 Project Number:
 6015-4801
 Drilling Method:
 Airknife/Geoprobe
 Coordinates (NJSPNAD83) x:
 610825.078

 Date Started Drilling:
 4/21/2011
 Rig Type:
 Airknife/Geoprobe
 Coordinates (NJSPNAD83) y:
 683132.991

 Date Finished Drilling:
 4/21/2011
 Core Size:
 2 in
 Boring Total Depth:
 25 ft

 Logged By:
 B. Daniels, M. Merdinger
 Project Manager:
 Robert Cataldo
 Depth to Water:
 1.5/20 ft

Physical	Location:	On S	Site 143				(Note bgs = below ground si	urface)
Depth	_	DID				0 1:	1100 200 2001 912012	
Range (ft bgs)	Recovery (ft/ft)		Moisture Content	GA Class	USCS	Graphic Log	Surface Cover and Thickness:	Sample Number
1		41	dry	4B	Fill		Very Dark Gray (7.5YR 3/1) fine to medium Gravelly SAND, little Silt and COPR (15%), loose, dry. Slight petroleum odor.	EF-B32_0.
2		8.0	wet	3	Fill		Black (10YR 2/1) fine to medium Gravelly SAND, little Silt and	EF-B32_2. EF-B32_2.0
_3		0.6	wet	4B	Fill		Cobbles, medium dense, wet. Slight petroleum odor. Same as above, trace COPR, wet. No odor.	EF-B32_2.
_4		0.4	wet	6	Fill		Brown (7.5YR 5/3) fine SAND and SILT, some Coal Ash and Cinders, loose, wet. No odor.	EF-B32_4.
5		0					,	
6 -								EF-B32_6.
7			wet		Fill		No Recovery	_
 	1.1							
- ₉ -								
	1.3	0						
	1.3		wet	6	Fill		Gray (10YR 6/1) ASH, some Cinders, little Coal and Slag, loose,	EF-B32_10
 			wet		Fill		wet. No odor. No Recovery	
	1.3						No reasons	
13								
14		_						
15		0	moist	7	PT	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Dark Reddish Brown (5YR 3/2) PEAT, Organics, little Silty Clay,	EF-B32_15
16			moist		PT	7 77 77 1	semi-cohesive, medium stiff, moist. Sulfur odor. No Recovery	
17	0.4					71/ 71/ 7	No receivery	
18						1, 11, 11,		
19						711 711		
20	2	0		10	CD CM		Week Ped (40VP 4/2) seems CAND seems City and fine to	
		0	wet	10	SP-SM		Weak Red (10YR 4/3) coarse SAND, some Silt and fine to medium Sand, trace Clay and interbedded Gray fine Sand,	EF-B32_21
_22			wet	10	SP-SM		medium dense, wet. No odor. Dark Red (2.5YR 3/6) fine to medium SAND, some Silt, little	
_23	2		wet		SP-SM		\text{medium angular Gravel, medium dense, wet. No odor.} \text{No Recovery}	
24								
25								
							End of boring at 25 ft.	
29								
30								
31								
32								
33								
34								
35		1		1 1		1		i .

30 Knig	ECO htsbridge Road	d, Piscat		354				Boring	ID: EF-33	
	732.564.3200 lame: PP				Drilling	Company:	SGS		Page: 1	
Project Name: PPG Soil RIWP Project Number: 6015-4801 Date Started Drilling: 4/21/2011					Drilling Rig Type	Method: A e: Airknife/	irknife/Geoprobe	Coordinates (NJSPNAD83) x: 610684.45 Coordinates (NJSPNAD83) y: 683168.566		
	Date Finished Drilling: 4/21/2011 Logged By: B. Daniels, M. Merdinger					e: 2 in Manager: 1	Robert Cataldo	Boring Total Depth: 25 ft Depth to Water: 5/20 ft		
	Location:			901	, roject i	managon	Tobort Outdido	(Note bas = below ground	l ourface)	
Depth								luora nga – wow groun	ŕ	
Range (ft bgs)	Recovery (ft/ft)	(ppm)	Moisture Content	GA Class	USCS	Graphic Log	Sı	urface Cover and Thickness:	Sample Number	
- ₁ -		0	dry dry	2 4B	Fill		Black Asphalt Black (7 5YR 2 5/1)) fine to medium SAND and SILT, some	EF-B33_0.5	
		0	ury				Gravel, little COPR medium dense, dry	(10-15%) and Fill Material (coal, debris),	EF-B33 2.0	
		0					mediam dense, dry	. No odol.	EF-B33_2.5	
		0	moist	3	Fill		Very Dark Gray (5Y	(R 2.5/1) fine to coarse Silty SAND, some	EF-B33 4.0	
		0	1110101				angular Gravel, trac	ce Fill Material (glass, debris), medium		
-6 -		0	wet	3	Fill			SYR 4/4) fine SAND and GRAVEL, little Silt,	EF-B33 6.0	
- ₇ -			moist	3	Fill Fill			r. ne Sand and Gravel, soft, moist. No odor.		
	1.6		moist		FIII		No Recovery			
- ₉ -										
- ₁₀ -		0.1							EF-B33 10.0	
- ₁₀ -		0	moist	3	Fill		Dark Reddish Gray	(5YR 4/2) SILT and very fine SAND, little	<u> </u>	
12		0					Cinders and Coal, s	soft, moist. No odor.	EF-B33 12.0	
13	3	-	moist	7	PT		Black PEAT (PT), C	Organics, little Silty Clay, semi-cohesive,		
			moist		PT	711/ 711/ 71	medium stiff, moist. No Recovery	Sulfur odor.		
		0				\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	No recovery			
		0	moist	7	PT	<u> </u>	Same as above.			
		0	moist	8	SP		dense, moist. No o	o Gray (Gley1 6/0) very fine SAND, trace Silt, dor.	EF-B33_17.0	
 	3.1		dry	10	SP-SM			4) SILT and coarse SAND, very dense, dry.	LI -D35_17.0	
			dry		SP-SM		No odor. No Recovery			
20		0								
		0	wet	10	SP-SM			3) fine to medium SAND, interbedded with		
		0						LT, loose, wet. No odor.	EE D22 22 (
	3.7	0	moist	10	SP-SM			3) medium SAND and SILT, some fine dense, moist. No odor.	EF-B33_22.0	
			moist		SP-SM		No Recovery			
							End of boring at 25	ft.		
26 - 27										
27										
28										
30										
31										
32										
33										
34										
35 Comment							enfieid at 1.5-3.5 ft bgs.			

Boring ID: EF-34

Project Name: PPG Soil RIWP Project Number: 6015-4801						Company: Method: Ai	SGS rknife/Geoprobe	Page: Coordinates (NJSPNAD83) x: 610641.93		
	ted Drillin					: Airknife/		Coordinates (NJSPNAD83) y: 683188.936		
Date Finished Drilling: 4/25/2011					Core Size: 2 in			Boring Total Depth: 25 ft		
Logged By: B. Daniels, M. Merdinger Physical Location: Garfield Avenue, in fro					Project Manager: Robert Cataldo			Depth to Water: 5/20.5 ft		
Physical	Location:	Garti	eld Avenu	ie, in tro	ont of Tala	rico Auto.		(Note bgs = below groun	nd surface)	
Depth								, ,		
Range (ft bgs)	Recovery (ft/ft)		Moisture Content		USCS	Graphic Log	Su	rface Cover and Thickness:	Sample Numbe	
- ₁ -	0	0	dry moist	1 3	Fill	P 4 4 P 4	 Concrete Strong Brown (7.5YR 4/6) Clayey SILT, some Gravel and Fill 		EF-B34_	
		0	HIOISI	3			Material (slag, coal)	, loose to stiff, moist. No odor.	== == .	
2							, , ,		EF-B34_ EF-B34_	
3		0								
4		0	wet	3	Fill		Brown (7.5 VR 4/4)	SILT and medium SAND, little coarse sand	EF-B34	
		0	WCt					g), little mottling, soft. No odor.		
5										
6		0							EF-B34_	
7		0	,		F:II		Dank Oresida L.D.	(40VD 4/2) CILT PIPE	EF-B34_	
	2.8		wet	3	Fill		Dark Grayish Brown wet. No odor.	Dark Grayish Brown (10YR 4/2) SILT, little very fine Sand, soft, wet No odor		
8			wet		Fill		No Recovery			
9							-			
10		0							EF-B34	
		0	wet	3	Fill		Same as above, sof	ft to medium stiff.	EF-B34_1	
11										
12	4.0	0							EE DOA	
13	4.3	0							EF-B34_′	
14			moist	3	Fill			me crushed Sandstone, moist		
15		0	moist		Fill		No Recovery		EF-B34_1	
16		0	wet	3	Fill		Olive Gray (5Y 5/2)	SILT, soft, wet. No odor.		
		0							EF-B34_′	
17	4.2		moist	10	SP-SM	XXXXXXX	Reddish Brown (2.5	YR 4/4) SILT and medium SAND (SP-SM),		
18		0			o. o		some subangular G	ravel, slight mottling, very dense, moist. No		
19							odor.			
20		0	moist		SP-SM		No Recovery			
20			moist	10	SP-SM		Same as above.			
21		0	wet	10	SW		Reddish Brown (2.5	YR 4/4) fine to coarse SAND (SW), well	-	
22		0				[graded, trace Silt, lo	oose, wet. No odor.		
23	4.2	0							EF-B34_2	
			moist	11	GM	POLICE OF THE PROPERTY OF THE	Reddish Brown (2.5	YR 4/4) SILT and fine angular Gravel (GM),		
24						6000	very dense, moist.			
25			moist		GM	ay Un	No Recovery			
26							End of boring at 25	ft.		
27										
28										
29										
30										
31										
32										
33										
34										
35		1		1						

STD US LAB GDT - 11/3/11 14:35 - I/USPSW2VFP001/DATA USPSW2VFP001/ENVRONMENTPISCATAWAY/PROJECT/PPG-NJCPROGRAM/9-WORKFILES/PROJECT/MANAGER-CATALDOBIGA RI-SOIL INVESTIGATION/FIELD WORK/BORING LOGS/GINT Depth Recovery Range (ft/ft) (ft bgs) 2 3 4 5 6 0 8 9 10

GINT

Comments: No COPR/GGM identified at this location.

Boring ID: EF-35

Page: 1 Project Name: PPG Soil RIWP Drilling Company: SGS Project Number: 6015-4801 Drilling Method: Airknife/Geoprobe Coordinates (NJSPNAD83) x: 610667.276 Date Started Drilling: 4/21/2011 Rig Type: Airknife/Geoprobe Coordinates (NJSPNAD83) y: 683255.627 Date Finished Drilling: 4/22/2011 Core Size: 2 in Boring Total Depth: 25 ft Project Manager: Robert Cataldo Logged By: B. Daniels, M. Merdinger Depth to Water: 5 ft Physical Location: SE corner of Garfield Avenue and Carteret Avenue (Note bgs = below ground surface) PID Moisture GΑ Graphic Sample **USCS** Surface Cover and Thickness: Content (ppm) Class Log Number dry 1 Concrete EF-B35_0.5 0 Fill Brown (7.5YR 4/3) Clayey SILT, some fine to coarse Sand, trace moist 3 Fill Material (gravel, glass), soft, moist. No odor. 0 EF-B35 2.0 EF-B35_2.5 0 0 EF-B35 4.0 Fill No Recovery 0 EF-B35 10.0 Dark Yellowish Brown (10YR 4/4) SILT, graded to very fine Sand wet 9 ML 0 11 at 12-13', trace Gravel, soft, wet. No odor. 0 12 EF-B35_12.0 5 0 13 EF-B35_13.0 SP-SM Reddish Brown (5YR 4/4) fine SAND, little medium angular moist 10 0 14 Gravel and Silt, trace medium Sand, dense, moist. No odor. 0 15 10 SP-SM Reddish Brown (5YR 4/3) very fine to fine SAND, little Silt, wet 0 16 SP-SM EF-B35_16.0 loose, wet. No odor. moist 10 Reddish Brown (5YR 4/4) SILT and fine SAND, little subangular 17 SP-SM moist Gravel, dense, moist. Nó odor. 1.5 No Recovery 18 19 0 20 EF-B35 20.0 10 SP-SM Same as above, liner split in core barrel - lost most of sample. moist 21 SP-SM No Recovery moist 22 0.5 23 24 25 End of boring at 25 ft. 26 27 28 29 30 31 32 33 34

34 GINT

Comments: No COPR/GGM identified at this location

Piscataway, NJ 08854

Boring ID: EF-36

Page: 1 Drilling Company: SGS Drilling Method: Airknife/Geoprobe Coordinates (NJSPNAD83) x: 610619.877 Rig Type: Airknife/Geoprobe Coordinates (NJSPNAD83) y: 683269.884 Core Size: 2 in Boring Total Depth: 25 ft

Project Manager: Robert Cataldo Logged By: B. Daniels, M. Merdinger Depth to Water: 5 ft Physical Location: SW corner of Garfield Avenue & Carteret Avenue (Note bgs = below ground surface) PID Moisture GΑ Graphic Sample **USCS** Surface Cover and Thickness: (ppm) Content Class Log Number dry 1 Fill Concrete EF-B36_0.5 0 Brown (7.5YR 5/4) CLAY and SILT, trace fine Gravel, trace moist 3 Fill Organics, medium stiff, moist. Slight organic odor. 0 EF-B36 2.0 EF-B36_2.5 0 0 EF-B36_4.0 0 3 Fill Reddish Brown (5YR 5/4) fine SAND and SILT, trace Mudstone, wet 0 6 EF-B36_6.0 slightly mottled, loose to medium dense, wet. No odor. 0 wet 10 SP-SM Reddish Brown (2.5YR 4/4) fine SAND. little Silt and fine 3.1 EF-B36_7.5 subangular Gravel, medium dense, wet. No odor. 8 wet 10 SP-SM No Recovery 9 0 10 10 SP-SM wet Same as above, soft to medium dense. 0 11 12 0 EF-B36 12.0 2.8 13 SP-SM wet 10 No Recovery 14 0 15 EF-B36_15.5 10 GM Reddish Brown (2.5YR 4/4) SILT and fine to medium sub-round moist 0 16 to sub-angular Gravel (Red Mudstone fragments), little medium Sand, dense, moist. No odor. 17 moist 11 GM No Recovery 1.4 18 0 19 0 0 20 EF-B36 20.0 moist 11 GM Reddish Brown (2.5YR 4/4) fine to medium angular to sub-round 21 GRAVEL, some coarse Sand, little Silt and fine Sand, dense, moist 11 GM moist. No odor. 22 No Recovery 0.7 23 0 24 25 End of boring at 25 ft. 26 27 28 29 30 31 32 33