Appendix F

Boring Logs

Boring logs for the remaining sample locations in Garfield Avenue collected via soil core are included in this Appendix. Logs were not generated for grab samples collected during excavation activities, typically designated by "PB", "SWE", or "SW" in the Location ID. In addition, boring logs were not identified for the following locations:

114GAR-3 TPA TPB

PPG - 2012-09 RA PPG_LOGS_A.GDT - 6/6/17 12:10

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: 114-A5B-WS

Project	Name: F	PPG Ga	rfield Ave	,		Orilling Company:			
	Number:					Orilling Method: Ge	eoprobe Dual Tube		IAD83) x: 610983.848
	tarted Dril					Rig Type:			AD83) y: 683775.904
			5/3/2017	10:00:00 AM		Core Size: 2.0 in	ant Mikanian	Boring Total Depth:	
Dhysic	l By: S.F al Locatio	raige n: Act	2\W_leu			Project Manager: So	cott iviikaeiian	Depth to Water: 10. Surface Elevation:	
	ai LUCaliU	II. ACC	uai-vv3					Surface Elevation.	14.090 IL NAVD80
Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Sı	urface Cover and Thickr	ess:	Sample ID
(ft bgs) -	3	0.0	dry to wet	SM SP		fine to medium si (7.5YR 3/2) dark Soils consistent v medium to coarse	e SAND, (5YR 4/3) redd dor, no staining, refusal	nedium gravel, dor, no staining.	114-A5B-WS-15.0-15.5 114-A5B-WS-17.0-17.5
MM - me	adow mat		GGM - gree	n grey mud		UNDorg - organi	ganic undisturbed native d c undisturbed native depo M) present in any internal of this borir	sits CCPW - chr	factured gas plant omate chemical production waste

Boring ID: 114-A6B-WS

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Project						Drilling Method: Geoprobe Dual Tube	Occidinates (1400)	NAD83) x: 610998.79				
Date St	tarted Dril	ling:	5/2/2017 12	:00:00 PM		Rig Type:		NAD83) y: 683799.831				
	inished Dr					Core Size: 2.0 in	Boring Total Depth:					
	d By: S. F					Project Manager: Scott Mikaelian	Depth to Water: 8.					
	al Locatio		ual-WS				Surface Elevation:					
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphi Log	Surface Cover and Thick	iness:	Sample ID				
-1 -2 -3	2	0.0	dry to wet	FILL		DGA, fine to coarse SAND, some fine to (2.5Y 5/2) grayish brown, medium dens odor, no staining, water at 8.0 feet.	o medium gravel, e, dry to wet, no					
	1				\bowtie	X						
-5— -6— -7— -8— -9—	3	0.0										
–							\bowtie					
-10		0.0										
11	1											
-11- 												
-12	1											
_	5					X						
-13	-			SP		CAND come fine and	(EVD 2/2) deals	114-A6B-WS-13.0-13.5				
_ -14 			moist	SF		medium to coarse SAND, some fine gra reddish brown, medium dense, moist, no Soils consistent with UNDno.						
-15								114-A6B-WS-15.0-15.5				
_	_	0.0					114-A0B-W0-13.0-13.3					
-16 												
_	1											
-17	5							114-A6B-WS-17.0-17.5				
_10]					4						
-18]					:}						
-19 	1					4		44				
	1					<u>;</u>		114-A6B-WS-19.0-19.5				
20						4						
_	-	0.0				:∤						
21	1							114-A6B-WS-21.0-21.5				
-	†					:						
-22	5					4						
-]					:						
-23 -]					3		114-A6B-WS-23.0-23.5				
-24	1					:1						
	1					: 						
25						:1		444 ACD MO OF O CE				
	1	0.0				3		114-A6B-WS-25.0-25.5				
26					<u> </u>	:1						
otes:	I											
gs - bel	low surface	grade	COPR - chro	mite ore pro	cessing re	esidue UNDno - non-organic undisturbed native	deposits MGP - man	ufactured gas plant				
IM - me	eadow mat		GGM - greer	arov mud	-	UNDorg - organic undisturbed native dep	ocito CCDM ob	romate chemical production w				

A=COM

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: 114-AB7B-WS

					- 11	Orilling Method: Geoprobe Dual Tube	Coordinates (N ISDI	NAD83) x: 611024.498			
Date Star	lumber: rted Dril		5/2/2017 9:	55:00 AM				IAD83) y: 683836.11			
			5/2/2017	00.00 7 WI			Boring Total Depth:				
ogged E			0.2.20				Depth to Water: 8.0				
Physical			ual-WS .				Surface Elevation:				
Depth Range ft bgs)	ecovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thicknes	SS:	Sample ID			
-1 -2 -3 -4	2.5	0.0	dry to wet	FILL		DGA, fine to coarse SAND, some fine to me (2.5Y 5/2) grayish brown, medium dense, d odor, no staining, water at 8.0 feet.					
-5	3	0.0		dry SM dry SP							
-10	3	0.0									
-16 -17 -18 -19	5	0.0									fine to medium silty SAND, some fine to medium gravel, (7.5YR 4/2) brown, dense, dry, no odor, no staining. Soils consistent with UNDno. medium to coarse SAND, trace fine to coarse gravel, (5YR 4/3) reddish brown, dense, dry, no odor, no staining, refusal at 22.0 feet. Soils consistent with UNDno.
-20 21 	2	0.0						114-AB7B-WS-21.4-21.9			
	2	0.0						114-AB7B-WS-21.4-2			

AECOM

A.GDT - 6/1

2012-09 RA PPG LOGS

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: 114-GA-A`5A

Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Coordinates (NJSPNAD83) x: 610820.1 Drilling Method: Geoprobe Date Started Drilling: 8/18/2014 11:30:00 AM Rig Type: Coordinates (NJSPNAD83) y: 683524.3 Date Finished Drilling: 8/18/2014 12:40:00 PM Core Size: 3 in Boring Total Depth: 20.5 ft Depth to Water: NA Logged By: AG Project Manager: Scott Mikaelian Surface Elevation: 8.749 ft NAVD88 Physical Location: GA Sidewalk Depth PID Recovery Moisture Graphic Sample **USCS** Surface Cover and Thickness: Range ΙĎ (ft/ft) (ppm) Content Log (ft bgs) 114-GA-A`5A-0.0-0.5 4.7 moist **FILL** DGA, trace brick, (10YR 4/1) dark gray, non plastic, loose, **FILL** 3.5 moist DGA, (10YR 4/2) dark grayish brown, non plastic, loose, 114-GA-A`5A-2.0-2.5 5 114-GA-A`5A-4.0-4.5 2.7 moist **FILL** fine to coarse silty DGA, little mica, little gravel, (10YR 4/2) dark grayish brown, non plastic, loose, moist, no odor, iron FILL 5.7 moist oxide staining. 114-GA-A`5A-6.0-6.5 0.5 FILL ASH, little silt, little cobbles, (10YR 3/1) very dark gray, non moist plastic, loose, moist, no odor. fine to medium clayey SILT, trace mica, trace ash, (10YR 4/2) dark grayish brown, low plasticity, moist, no odor. 5 114-GA-A`5A-8.0-8.5 114-GA-A`5A-8.5-9.0 silty CLAY, little organics, (10YR 4/1) dark gray, medium 0.0 moist OH plasticity, moist, slight sulfur odor. Soils consistent with 114-GA-A`5A-9.0-9.5 0.0 moist OL UNDorg clayey SILT, little organics, (10YR 4/2) dark grayish brown, low plasticity, medium dense, moist, no odor. Soils 114-GA-A`5A-10 0-10 5 0.0 SM moist consistent with UNDorg. 0.0 dry SM fine silty SAND, trace mica, (10YR 4/2) dark grayish brown, to non plastic, moist, no odor. Soils consistent with UNDno. moist fine to coarse silty SAND, trace pebbles, non plastic, loose, dry to moist, no odor, iron oxide staining, reddish brown. 12 114-GA-A`5A-12.0-12.5 Soils consistent with UNDno. 5 13 0.0 SP fine SAND, little medium to coarse sand, non plastic, loose, dry to dry to moist, no odor, iron oxide staining, reddish brown. Soils consistent with UNDno. moist 114-GA-A`5A-14.0-14.5 fine to medium SAND, little coarse sand, little cobbles, non 0.0 SW moist plastic, loose, moist, no odor, reddish brown. Soils consistent with UNDno. 16 114-GA-A`5A-16.0-16.5 5.5 0.0 wet SW fine to medium SAND, trace cobbles, non plastic, loose, wet. reddish brown. Soils consistent with UNDno. 114-GA-A`5A-18.0-18.5 19 -20 114-GA-A`5A-20-20.5 bgs - below surface grade COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits MM - meadow mat GGM - green grey mud UNDorg - organic undisturbed native deposits MGP - manufactured gas plant CCPW - chromate chemical production waste

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

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: 114-GA-A`7A

Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Coordinates (NJSPNAD83) x: 610789.3 Drilling Method: Geoprobe Date Started Drilling: 8/18/2014 9:00:00 AM Rig Type: Coordinates (NJSPNAD83) y: 683475.7 Date Finished Drilling: 8/18/2014 10:30:00 AM Core Size: 3 in Boring Total Depth: 20.5 ft Project Manager: Scott Mikaelian Depth to Water: NA Logged By: AG Surface Elevation: 8.922 ft NAVD88 Physical Location: GA Sidewalk Depth PID Recovery Moisture Graphic Sample **USCS** Surface Cover and Thickness: Range ΙĎ (ft/ft) (ppm) Content Log (ft bgs) 114-GA-A`7A-0.0-0.5 7.3 moist **FILL** DGA, (10YR 4/2) dark grayish brown, non plastic, dense, 7.2 FILL moist DGA, (10YR 4/2) dark grayish brown, non plastic, medium dense to dense, moist. 114-GA-A`7A-2.0-2.5 5 114-GA-A`7A-4.0-4.5 7.5 **FILL** fine to medium silty SAND, some ash, (10YR 4/2) dark grayish brown. 114-GA-A`7A-6.0-6.5 SILT, trace fine sand, (10YR 4/2) dark grayish brown, low 7.2 FILL moist plasticity, medium stiff, moist to wet, no odor. 5 wet 114-GA-A`7A-8.0-8.5 114-GA-A`7A-8.5-9.0 4.9 MH SILT, little roots, trace very fine sand, (10YR 4/1) dark gray, low plasticity, medium stiff. Soils consistent with UNDorg 114-GA-A`7A-9.0-9.5 0.0 MH SILT, little roots, trace very fine sand, (10YR 4/2) dark grayish brown, low plasticity, medium stiff. Soils consistent 10 with UNDno. 114-GA-A`7A-10.0-10.5 saturated 0.0 MI SILT, trace fine gravel, (10YR 4/2) dark grayish brown, low plasticity, very loose to medium soft, saturated. Soils consistent with UNDno. 0.0 SILT, some fine to coarse gravel, (10YR 4/2) dark grayish wet ML12 brown, non plastic, medium stiff, wet. Soils consistent with 114-GA-A`7A-12.0-12.5 5 2.0 SP wet fine to medium SAND, some fine gravel, little coarse gravel, 13 (2.5YR 4/3) reddish brown, non plastic, dense to very dense, wet. Soils consistent with UNDno. 114-GA-A`7A-14.0-14.5 2.0 SP medium to coarse SAND, some fine gravel, little coarse wet gravel, trace cobbles, (2.5YR 3/3) dark reddish brown, non to saturated plastic, very dense, wet to saturated. Soils consistent with 16 114-GA-A`7A-16.0-16.5 UNDno. 5.5 114-GA-A`7A-18.0-18.5 19 -20 114-GA-A`7A-20.0-20.5 bgs - below surface grade COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits MM - meadow mat GGM - green grey mud UNDorg - organic undisturbed native deposits MGP - manufactured gas plant CCPW - chromate chemical production waste

2012-09 RA PPG LOGS

A.GDT - 6/1

		TEST PI	T FELD LOG	•	· · · · · · ·	
			PROJECT 1996-Site 114 while Ave, South	TEST PIT N FILE No DATE	2/14/12	
ENGINEER Tom	· · · · · · · · · · · · · · · · · · ·	EXCAVATION CONTRACTOR OPERATOR MAKE CAPACITY	N EQUIPMENT	GROUND ELEV TIME STARTED TIME COMPLE	2/16/12 9 ED 2/16/12 9	0700
DEPTH		DESCRIP	TION	EXCAV. EFFORT	BOULDER COUNT QTY. CLASS	REMARK No.
0.	8" AS PHALT					-
_1'-	G" CONCRET	E	ADER SAND, SOMA Fina	to M		
2'		2012 - 7000 -	d little fine to cook			
_ 3·	boulde	15 - 258 F	angular colons for ITL (coal ost, clinders, butch) mixed through	out M	. '	
5'	Be Ge	Hom of Ex		8	160	+
6'		*	javetion at Ga25'	659		•
7' —						
9,			9			
10'						
—11°—						
12'-						
13'-		æ ^Ē	*			1 .
14'					1	14 -
REMARKS:	est pit complet locate server	ed on Gar line and de	field Ave, near St termine distance t	N commer of	site 14, In	
TEST PIT I			PROPORTIONS USED TRACE (TR.) 0-10% LITTLE (U.) 10-20%	F-FINE N-MEDIUM C-COARSE F/M-FINE TO M	E	TION EFFORT EASY MODERATE DIFFICULT UNDWATER
NORTH VOLUME=	18°~		SOME (SO) 20-35% AND 35-50%	F/C-FINE TO CO V-VERY GRGRAY BNBROWN YEL-YELLOW	DARSE ELAPSI READIN (HRS.)	

FIGURE 1. TEST PIT LOG

Me.	<u>+</u>		_	_			1	_					_		-]
_	-	17	L/A	lat	ALT	5	1			_ '	0	_			17	GROUN
+	E	E	1/2	170		-	-	-							F	
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NO	TEC.	Tog	of P	rit c	20-04	plete	9		SAM	PLES:	AG		ARI.	40		4.0'
	1 53.	in	and	ct -	0	OCQ.	te		4:		· .			_	-	

		DESCRIPTION LOCATION GO	POW HOW IENT	FILE No		λ
ENGINEER Tom		CONTRACTOR OPERATOR MAKE CAPACITY	MODEL	CROUND ELE TIME STARTEI TIME COMPLE	2/15/12 C	9 1/60 9: 1830
DEPTH		IL DESCRIPTI	ON	EXCAV. EFFORT	BOULDER COUNT CIY, CLASS	REMAR No.
0.	8" ASPHAL	·T				
— 1° —	3'4" Park	sage GRAVEL AN wood debris from	DED SAND WETH O SILT, WET at 3.	s' m		
2' —		HOOD CLEAS Tree	7.4			-
3, —			*			
1-4	Bo	thom of Excavati	on at 4'659			
5'						
6'—						·
7'					-	+
8'		*		. —	-	-
						+
9, —			31 V			
-10'-			= +			
11'-	* 1					
12'-			4		1	
13'—						-
		荒				-
14'						
REMARKS: TE	ist pit comp	phetal to 4' 659	in-order to l	ocate a Fi		
TEST PIT	BC	LEGEND: DULDER COUNT ZE RANGE LETTER SSSPICATION DESIGNATION	TRACE (TR.) 0-10%	ABBREVIATION F-FINE N-MEDIUM C-COARSE	E N D GRO	
NORTH	1	1°-18° A 8°-36° B and Larger C	UTTLE (UL) 10-20% SOME (SO) 20-35% AND 35-50%	F/M-FINE TO N F/C-FINE TO C V-VERY GRGRAY BNBROWN	DARSE ELAPSI READIN (HRS.)	

FIGURE 1. TEST PIT LOG

A D-6"GAS	
A D-6-6AS	
5 Bottom of	
- Frederick Tay same	
(Steel)	7
10-	
	*
	•
15	

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: 114-MW16AB-O

Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60279173-GA.RI.RPT.HDS Drilling Method: Direct Push/Hand Auger | Coordinates (NJSPNAD83) x: 610612

	rted Drill	ina: 1	1/24/2017	8:50:00 AM		Rig Type: Geoprobe/Hand Auger	Coordinates (NJSPN	IAD83) v: 683364
				7 9:30:00 AM		Core Size: 3.0 in	Boring Total Depth:	
	By: E. A		., = ., = 0 11	3.33.00 / (IVI		Project Manager: Bill Spronz	Depth to Water: 4.5	
			ctual - Histo	orical Data S			Surface Elevation:	
	Recovery	PID	Moisture Content	USCS	Graphi Log	Surface Cover and Thick		Sample ID
it bgo)		0.0		ACDUALT		ACDUALT		
. 4		0.0		ASPHALT	XXXXX	ASPHALT (7.5)(D	0(0)	
-1— - – -2—	5		moist	FILL		SILT, trace fine sand and clay, (7.5YR firm, moist, no odor, no staining.	3/2) dark brown,	114-MW16AB-O-2.0-2.5
-3 -4 			wet	FILL		fine silty SAND, (10YR 5/4) yellowish b	orown, medium	114-MW16AB-O-4.5-5.0
-5 6 7	2	0.0				dense, wet, no odor, no staining, water	at 4.5 feet.	114-MW16AB-O-5.5-6.0
lotes:			00DD -k-	omite ore proce	eeina roe	idue UNDno - non-organic undisturbed native de	posits MGP - manu	factured gas plant
gs - belov IM - mead	w surface g	rade	GGM - gree		ssing res	UNDorg - organic undisturbed native depos	ite CCD\\\ ab=	omate chemical production waste



30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: 143-P3A-A`15A

	Name: P						ng Company: SGS North America		
	Number:						ng Method: Soft Dig/Geoprobe	Coordinates (NJSPNAD	
	arted Drilli						Гуре:	Coordinates (NJSPNAD	
	nished Dri	ıııng: _	4/8/2013 2	<u>::59:0</u> 0	PM		Size: 3 in	Boring Total Depth: 21	π
	I By: MI al Location	: Site	143 - Δ'14	5A		roje	ect Manager: Chris Martell	Depth to Water: NA Surface Elevation: 12.4	ft NAVD88
Hysica	Location	i. Oile	1 1 0 - A 10	<u> </u>					= 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
	4	0.0		1 C	ONCRET	DP 6 4 P	CONCRETE		
_	. 1	0.0	dry	3	FILL		fine to medium SAND, little fine gra	vel (7.5YR 3/2) dark	
-1 -	2	0.0	dry	3	FILL		brown, non plastic, loose, dry, no o fine to medium SAND, little fine gra brown, non plastic, loose, dry, no o	dor, no staining. lvel, (7.5YR 3/2) dark	
-2	2	0.0	dry	3	FILL		fine to medium GRAVEL, little fine dark brown, non plastic, loose, dry,	sand, (7.5YR 3/2)	
-3- -	2	0.0	dry	6	FILL		fine to medium SAND, little fine to cinders, ash, (7.5YR 3/1) very dark		
-4 -		0.0	dry	6	FILL		loose, dry, no odor, no staining. fine to medium SAND, little fine to cinders, ash, (7.5YR 3/1) very dark		
-5 - -6	1	0.0	moist	6	FILL		loose, dry, no odor, no staining. fine SAND, with ash, little cinders, ogray, non plastic loose, moist no od		
-7 -7				6	NR		NO RECOVERY		
- -8	0.8	0.0	moist	6 NR	FILL NR		SILT, some cinders, coal, fine sand dark brown, non plastic soft, moist NO RECOVERY	little ash, (7.5YR 3/3) no odor no staining	
- -9		0.0				*****			
-10 -	2	0.0	moist	3	FILL		SILT, little fine sand, trace roots, (7 brown, non plastic, soft, moist, no c		
-11 - -12	2	0.0	moist	3	FILL		SILT, little fine sand, trace roots, (7 brown, non plastic, soft, moist, no c	odor, no staining.	
-13		0.0	slightly	3	FILL		fine to medium SAND, some fine to		
_ 14 _	1.8	0.0	moist slightly moist	3	FILL		cobbles, (5YR 4/3) reddish brown, I slightly moist, no odor. fine to medium SAND, some fine to cobbles, (5YR 4/3) reddish brown, I slightly moist, no odor.	o coarse gravel, trace	
-15 - -16	1.3	0.0	slightly moist	NR 3 NR	NR FILL NR		NO RECOVERY fine to medium SAND, some fine to cobbles,fill material, (2.5YR 4/6) rec brown, non plastic, hard, slightly me NO RECOVERY	d (5YR 4/3) reddish	
-17 -		0.0	slightly moist	3	FILL		fine to medium SAND, some fine to cobbles,fill material, (2.5YR 4/6) red	d (5YR 4/3) reddish	143-P3A-A`15A-17.5-
-18 	2	0.0	slightly moist	10	SM		 brown, non plastic, hard, slightly me fine SAND, with medium gravel, tra red, non plastic, dense, slightly mo 	ce silt, (2.5YR 4/8) ist, no odor, no	143-P3A-A`15A-18.0-1 143-P3A-A`15A-18.0-1
-19 -20	1.5	0.0	slightly moist	10	SM		staining. Soils consistent with UND fine SAND, with medium gravel, tra red, non plastic, dense, slightly mostaining. Soils consistent with UND	ce silt, (2.5YR 4/8) ist, no odor, no	143-P3A-A`15A-18.5- 143-P3A-A`15A-20.0-2
_ -21				NR	NR		NO RECOVERY		
ommen									

ENCD	AFCON	Client: PPG			BORIN	
ENSR	AECON	Site: PPG - Jerse	y City, NJ		A (6
Start Da	ate:	Project: Site Investig	gation		Page: 1 of	f 2
9/2/2002		Coordinates: X-610797.7	7 Y-683480.19		Depth of E	Boring: 16.00
End Dat		Elevation: 12.35			Geologist:	
9/2/2002		Drill Subcontractor: Ter			Driller:	
Depth (ft)	Lithology	Descriptio	h biD	58	mple ID	Sample Parameters
I 0_		SILT: Organics, silt, wet				
	<u> </u>					
-		CONCRETE	0.0 ppr	m		
	F	ILL: Yellow/orange, trace silt, sa	nd, damp			
2+	D F	ILL: Brown, fine sand, wet	0.0 ppr	m		
	DS⊿D F	ILL: Orange and brown clay, lam	ninations			
-			0.0 ppr	m		
4+		ILL: Orange and brown clay, lam	0.0 ppr	m		
		<i>y</i> .				
-		ILL: Black, fine sand, some grav	rel, ash, coal, coke,	m		
		lag				
6+			0.0 ppr	m		
				(6	A6 6.5-7.0)	TAL Metals, Cr+6
			0.0 ppr		<u> </u>	
8+		TILL: COKE/SLAG	0.0 ppr	m		
				(8	A6 8.5-9.0)	TAL Metals, Cr+6
			0.0 ppr		· · · · · · · · · · · · · · · · · · ·	
		SILT: Brown, fine				
10 +	<u> </u>		0.0 ppr	m		
		PEAT: Brown, organic material (m	neadow mat)	(10	A6 0.5-11.0)	TAL Metals, Cr+6, SVOCs, PCBs, VOCs, Cyanide
			0.0 ppr			

	Client: PPG		BORII	NG ID:
ENSR AECOM	Site: PPG - Jersey City, NJ		A	6
Start Date:	Project: Site Investigation		Page: 2 o	f 2
9/2/2002	Coordinates: X-610797.7 Y-68	33480.19	Depth of I	Boring: 16.00
End Date:	Elevation: 12.35		Geologist	
9/2/2002	Drill Subcontractor: Terra Probe		Driller:	
Debty (41) Tithology	Description	PID	Sample ID	Sample Parameters
-	ND: Brown/gray fine	0.0 ppm 0.0 ppm		
∵ _	ND: Brown/gray fine, small gravel	0.0 ppm		
	ND: Orange, coarse	0.0 ppm		
16 [⊥] \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	JLL: End of Boring at 16 ft.			

4	A		M				Borir	ng ID:	A'-8A	
30 Kn			scataway, NJ 0 e telephone	18854					Page 1 of	
roject N	ame:	Р	PG Soil	UR PA	Drilling (Company: SC	Drilling Water Le	vel (bgs):		
roject N	umber:		8847-4691		Drilling !	Method: Reprobe	Boring Total Dep	th (bgs):		
ate Star	ted Drilli	ng: 9	20/11		Rig Type		Grout Depth (bg:	s):		
ate Finis	shed Dril	lling: 9	20 11		Core Siz	e:2in	Boring Total Dep	th (bgs):		
hysical	Location	= 51	te 114		30-A	rea (mod	Logged By: N	1. Mero		
-1	>			, i			27-17/24		(Note bgs = below ground surface	9)
Depth Range	over /ft	PID (ppm)	Moisture Content	3A Class	nscs	Garfield Avenue Sites	Classification & Modifier	d Unified Soil Cla	siffication System	4
R B	Re covery fuft	8	So iš	8 8) S	Surface Cover and Thickness		0.11)	Sample name & #:	
0-1	2.5	5.0	Moist			11+16 Fill (Cool, C	eromic, Slog	SSICT,	119-A'-8A-0.	MST
1-2		0.0	[Organics, moist,	oft NO		(-1	
2-3		0.0	4			1.0-2.5 Brown t	e Reddish	Brown	114-A'-8A-2	O
3-4			·			ord crusted (oo),	Trace Clas	, motte	d, MS	P C
4-5						307 1, 116131	140			
5-6	75	0.0	net.			5,0-6.8 Brown		18tt	14-A-8A-S	6
6-7	Lis		()			forg Gravel, met	Inta Silt,	od	114-41-8A-6	0
		0.0				6.8-7.5 Light 7	Syoun (10	114-A1-8A-6	.01
7-8		90	4			ESAND, somes	A CONTRACTOR OF THE PARTY OF TH	100	1415	
8-9					14	frogs, moist, lo		((00)		
9-10				,		3				
10-11	3,5	0.0	wet			10.0-12.0 SAA ,	trace inter	becideo	01 - AB-1A-PIT	0,0
11-12	010		I			Trose organis M	PEAT	Ity Clay	14 50	
		00)		127 - 13.0 Grail	1	IMAZ FI		7
12-13		0.0	Moist	- 1		THU SEL TEC	e in roundo	(Nove)	, '	-
13-14		0.0				13.0-13.5 Pool	ish Brown (·)	-
14-15						1. HU SIR, dense	+ rounded	Grove!		
15-16								7 1 5		
16-17										
17-18			-							
18-19							_			
19-20			-							
Stra	L atigraph	nic Unit	Depth Int	tervals	(bgs):		Commer			
)		,	4)			9/21/4 - Smd	od for Tat	CP XC	P ehloH	
2)			5)			-9/21/11 - Sample TCLP CK	2		-(-11/11/1)	
3)			6)	-] ICLYCK				

A E COM

PPG - 2012-09 RA PPG_LOGS_A.GDT - 12/14/16 09:50

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone **Boring ID: BC8**

	Name: F Number:					rilling Company: Terra Probe Incorporated rilling Method: Direct Push (Geoprobe)		NAD83) x: 610958.6875
	arted Dril					g Type:		NAD83) x: 610958.6875 NAD83) y: 683743.3125
			9/3/2003			ore Size: 1.25 inches	Boring Total Depth:	
	nisnea br I By:	mmy.	31312003			roject Manager: Chris Martell	Depth to Water:	10 IL
	al Locatio	n· IRN	<u>л</u> #1		<u> </u>	Oject Manager: Chins Marten	Surface Elevation:	10 89 ft NAVD88
41-								
epth inge bgs)	nge Content USCS Gi					Surface Cover and Thickr	ness:	Sample ID
				ASPHALT	A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
٦			\vdash	SAND	} 	Black Brown, some silt		BC8S0.5-1)
1—				SAND		Brown, some sin		BC8S1.5-2)
2— - 3— -			damp	SILT		Light orange, trace sand, some ash, trace	e cobble	BC8S1-1.5)
4 — _ _			wet	SAND		Gray, some silt		-
5— - 6— -			saturated	SAND		Gray, little gravel		
7			wet	PEAT	<u> </u>	Black, organic material		BC8S7-7.5)
8			wet	SILT		Black, fine		_
9								BC8S9-9.5
10— - 11— -			wet	SAND		Red brown, trace silt, cobble		
12			wet	SAND	F-3-17-13-1	Red brown, trace silt		†
\dashv			wet	SAND		Red brown, trace silt, cobble		+
3 — 4 — 5 —			West of the second	S. W.B		rea siemi, daec cik, cossie		
16 — — 17— —			wet	SAND		Red brown, trace silt, cobble, weathered	rock fragment	-
18						End of Boring		
otes: s - bel M - me	ow surface adow mat	grade	COPR - chro GGM - gree	omite ore proc n grey mud	essing resi	due UNDno - non-organic undisturbed native d UNDorg - organic undisturbed native depo	eposits MGP - man sits CCPW - ch	ufactured gas plant romate chemical production was

	Client: PPG		BORI	NG ID:
ENSR AECOM	Site: PPG - Jersey	City, NJ	C	9
Start Date:	Project: Site Investig	ation	Page: 1 c	of 2
9/3/2003	Coordinates: X-611015.1	Depth of	Boring: 23.00	
End Date:	Elevation: 12.97	Geologist	:	
9/3/2003	Drill Subcontractor: Ter	Driller:		
Debty (41)	Description	, blo	Sample ID	Sample Parameters
0_		· · · · · · · · · · · · · · · · · · ·		
A	SPHALT	/	C9	TAL Metals, Cr+6
F	LL: Brown fine sand, wood, brick	x, cobble (yellow	(0.5-1.0)	TAL Metals, CI+6
st	ained), some silt	0.0 ppm	C9 (1.0-1.5)	TAL Metals, Cr+6
2+				
		1.8 ppm		
	LL: Brown fine silt, trace sand		C9 (2.5-3.0)	TAL Metals, Cr+6, SVOCs PCBs, VOCs, Cyanide
		26 ppm		
4	LL: Brown to gray-yellow, fine sa	and, some silt 32 ppm		
		4 ppm		
6+		0.0 ppm		

C9 (7.0-7.5)

0.0 ppm

0.0 ppm

0.0 ppm

0.0 ppm

0.0 ppm

TAL Metals, Cr+6

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

FILL: Brown silt, with wood

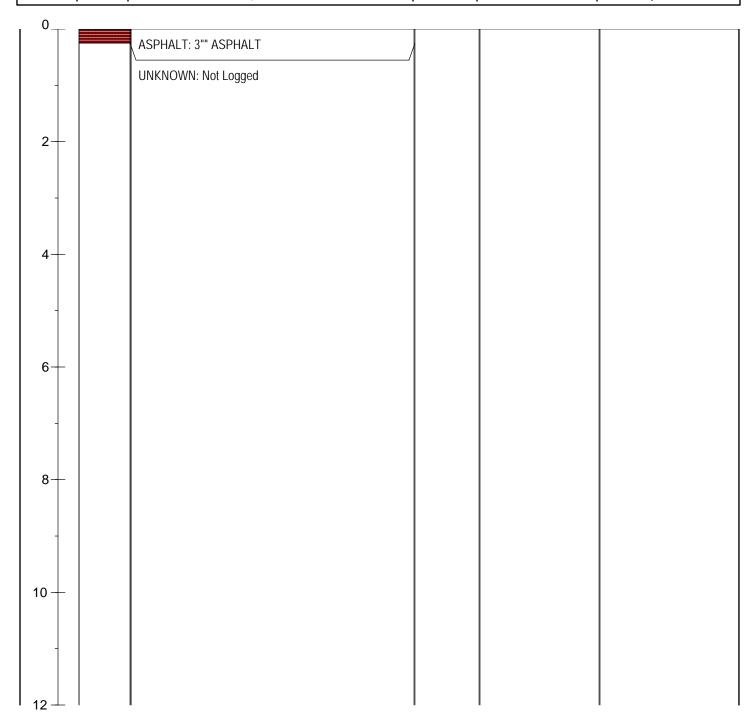
FILL: Brown/yellow/orange, fine sand, trace silt, cobble

8

10

NCD AECON	Client: PPG		BORI	NG ID:
ENSR AECOM	Site: PPG - Jersey City, NJ			9
Start Date:	Project: Site Investigation		Page: 2	of 2
9/3/2003	Coordinates: X-611015.15 Y-6838	332.21	Depth of	Boring: 23.00
End Date:	Elevation: 12.97		Geologis	t:
9/3/2003	Drill Subcontractor: Terra Probe		Driller:	
Debty (41) Tityology	Description	PID	Sample ID	Sample Parameters
12 _		0.0 ppm		
	LL: Yellow stained, coarse sand	0.0 ppm		
14 +		0.0 ppm		
		0.0 ppm		
16 + SA	AND: Red brown, trace to some silt, cobble	0.0 ppm		
10		0.0 ppm		
18 + SA	AND: Red brown	0.0 ppm		
		0.0 ppm		
20+		0.0 ppm		
		0.0 ppm	C9	TAL Metals, Cr+6, SVO
22 +		0.0 ppm	(21.5-22.0)	PCBs, VOCs, Cyanide
			C9 (22.5-23.0)	TAL Metals, Cr+6

ENSR AECOM	Client:	PPG			BORING ID:		
ENSR AECOM	Site:	PPG - Jersey City, NJ	C9V				
Start Date:	Project:	Site Investigation			Page: 1 o	f 4	
10/6/2005	Coordinat	es: X-611014.86 Y-68383	Depth of Boring: 36.00				
End Date:	Elevation	: 13.00	Geologist:	McCray, Scott			
10/6/2005	Drill Subc	ontractor: Ameridrill	Driller:				
Depth (th) Lithology		Description	PID	Sal	inble ID	Sample Parameters	



ENSR AECOM	Client:	PPG					NG ID:			
ENSR AECOM	Site:	PPG - Jersey City,	NJ			C	9V			
Start Date:	Project: Site Investigation Page: 2 of 4									
10/6/2005		tes: X-611014.86	Y-683837.	42		Depth of I	Boring: 36.00			
End Date:	Elevation					Geologist	McCray, Scott			
10/6/2005	Drill Subc	contractor: Ameridrill	-	T		Driller:				
Depth (tt) Lithology		Description Description		PID	Sal	mple ID	Sample Parameters			
12							1			
-										
14 +										
16+										
-										
18 —										
20 —										
22 +										

		Client: PPG			BORIN	NG ID:
ENSR	AECOM	Site: PPG - Jersey City, NJ			C	9V
Start Dat	e:	Project: Site Investigation			Page: 3 of	f 4
10/6/200	5	Coordinates: X-611014.86 Y-683837.	42		Depth of E	Boring: 36.00
End Date) :	Elevation: 13.00			Geologist:	McCray, Scott
10/6/200	5	Drill Subcontractor: Ameridrill			Driller:	
Debty (41)	Lithology	Description	PID	Sar	nple ID	Sample Parameters
. 24						
-	sor	NND: Dusky Red (10R 3/4) fine-very fine SAND, me Silt, little angular to rounded Gravel, damp, trace Green color in small patches throughout, wet	0.0 ppm		C9VA .0-25.5	Cr+6
26 —	NR	R: No Recovery				
28—		ND: Same as above (SAA) without Green color tches	0.0 ppm	(C9VB	Cr+6
30 —	GF sul	RAVEL: Dusky Red (10R 3/4) coarse angular to bangular GRAVEL, some coarse-fine Sand, little Silt,		29	.0-29.5	
32 —	•.•.•.	R: No Recovery	0.0 ppm			
	SA Sill	ND: Dusky Red (10R 3/4) medium-fine SAND, some t, trace Gravel, wet (32-33'), damp (33-34')	о.о ррш		C9VC .0-33.5	Cr+6
34 —	NR	R: No Recovery				
36						

ENSR AECOM	Client: PPG	BORING ID:		
ENSK AECOM	Site: PPG - Jersey City, NJ	C9V		
Start Date:	Project: Site Investigation	Page: 4 of 4		
10/6/2005	Coordinates: X-611014.86 Y-683837.42	Depth of Boring: 36.00		
End Date:	Elevation: 13.00	Geologist: McCray, Scott		
10/6/2005	Drill Subcontractor: Ameridrill	Driller:		
Depth (ft) Lithology	Description PID Sa	mple ID Sample Parameters		

\sim	\sim
٠.	n

NULL: End of Boring at 36 ft.

Comments: No COPR/GGM identified at this location.

ATION/FIELD WORK/BORING LOGS/GINT L

Boring ID: EF-36

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone Page: 1 Project Name: PPG Soil RIWP Drilling Company: SGS Project Number: 6015-4801 **Drilling Method:** Airknife/Geoprobe Coordinates (NJSPNAD83) x: 610619.877 Date Started Drilling: 4/22/2011 Rig Type: Airknife/Geoprobe Coordinates (NJSPNAD83) y: 683269.884 Date Finished Drilling: 4/25/2011 Boring Total Depth: 25 ft Core Size: 2 in Project Manager: Robert Cataldo Depth to Water: 5 ft Logged By: B. Daniels, M. Merdinger Physical Location: SW corner of Garfield Avenue & Carteret Avenue

છેŀ	1 Hyorour			oomer or c	<u> </u>	37 (VOIIGO G	Carteret	(Note bgs = below ground si	urface)
\DATA_USPSW2/PP001\ENVIRONMENT\PISCATAWAY\PROJECT\PPG-NJC\PROGRAM\9-WORKFILES\PROJECT MANAGER-CATALD\B\GA RI-SOIL INVESTIGA	Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content		USCS	Graphic Log	Surface Cover and Thickness:	Sample Number
AR	- ₁ -		0	dry	1	Fill	-	Concrete	EF-B36_0.5
Ble				moist	3	Fill		Brown (7.5YR 5/4) CLAY and SILT, trace fine Gravel, trace Organics, medium stiff, moist. Slight organic odor.	
Ğ.	2		0					organico, modalin can, moiot. Organic organic caor.	EF-B36_2.0
ÄŢ	_3 _		0						EF-B36_2.5
ER-(_4 -		0						EF-B36_4.0
NAG				-					LI -B30_4.0
MA	5		0		2	— ::::		Daddish Drawn (CVD C/A) fine CAND and CU T trace Mudatons	
ECT	6		0	wet	3	Fill		Reddish Brown (5YR 5/4) fine SAND and SILT, trace Mudstone, slightly mottled, loose to medium dense, wet. No odor.	EF-B36_6.0
S.	- ₇ -		0	wot	10	SP-SM		Reddish Brown (2.5YR 4/4) fine SAND, little Silt and fine	
ES/F		3.1		wet	10	SF-SIVI		subangular Gravel, medium dense, wet. No odor.	EF-B36_7.5
즑	8			4	40	00.014			
WOR	9			wet	10	SP-SM		No Recovery	
\-6\N	_ ₁₀ _		0						
3RA			0	wet	10	SP-SM		Same as above, soft to medium dense.	
N N	11								
일	12	0.0	0						EF-B36_12.0
PG-	_ 	2.8							
F				wet	10	SP-SM		No Recovery	
SEC	14								
PR	15		0		4.0				FF D26 45 5
WAY	_ 16		0	moist	10	GM		Reddish Brown (2.5YR 4/4) SILT and fine to medium sub-round to sub-angular Gravel (Red Mudstone fragments), little medium	EF-B36_15.5
ATA				moist	11	GM	BJ Co	Sand, dense, moist. No odor.	
PISC		1.4		IIIOISt	' '	Givi	60000	No Recovery	
Ę.	18						600		
N N	19								
NR.			0				200		EF-B36_20.0
				moist	11	GM	1000	Reddish Brown (2.5YR 4/4) fine to medium angular to sub-round	21 200_20.0
P00	21			moist	11	GM	0000	GRAVEL, some coarse Sand, little Silt and fine Sand, dense,	
/2VF								\moist. No odor. No Recovery	
PSV		0.7					0000	,	
Sn							60000		
ΑŢ	24								
	25						0700	F (1) 105 (1)	
VFP(End of boring at 25 ft.	
SW2									
USP									
2-	28								
14:3	29								
- GINT STD US LAB.GDT - 11/3/11 14:35 - \\USPSW2VFP001	30								
1									
E T	31								
AB.C	32								
1SN									
STD									
Ĕ	34								
G.	35								

STD US LAB GDT - 11/3/11 14:35 - \USPSWZVFP001\DATA USPSWZVFP001\DATA USPSWZVFP001\D Road, Piscataway, NJ 08854 Project Name: PPG Soil RIWP Project Number: 6015-4801 Date Started Drilling: 4/22/2011 Date Finished Drilling: 4/25/2011 Logged By: B. Daniels, M. Merdinger Depth Recovery PID Moisture GΑ Range (ft/ft) (ppm) Content Class (ft bgs) dry 2 0 3 moist 0 2 0 3 0 4 moist 3 0 5 3 wet 0 6 0 wet 10 3.8 0 8 9 10 wet 0 10 10 moist 0 11 12 moist 10 1.8 13 14 0 15 13 moist

Boring ID: EF-37

Page: 1 Drilling Company: SGS Drilling Method: Airknife/Geoprobe Coordinates (NJSPNAD83) x: 610679.529 Rig Type: Airknife/Geoprobe Coordinates (NJSPNAD83) y: 683445.78 Core Size: 2 in Boring Total Depth: 16.5 ft Project Manager: Robert Cataldo Depth to Water: 5 ft Physical Location: South side of French Park, in gated area (Note bgs = below ground surface) Graphic Sample **USCS** Surface Cover and Thickness: Log Number Fill Black Asphalt EF-B37_0.5 Brown (7.5YR 4/3) fine to coarse SAND, some fine to coarse Fill Gravel and Fill Material (slag, coal, glass, brick), little Silt, loose EF-B37 2.0 to medium dense. No odor. EF-B37_2.5 EF-B37 4.0 Yellowish Brown (10YR 5/4) fine SAND and SILT, trace Fill Fill Material (slag, ash, cinders), loose. No odor. Fill Same as above. EF-B37_6.0 SP-SM Reddish Brown (2.5YR 4/4) SILT, some medium to coarse EF-B37_7.5 Sand, little fine to medium Mudstone fragments, very loose to medium dense. No odor. SP-SM No Recovery SP-SM Reddish Brown (2.5YR 4/4) SILT and fine SAND, some fine to EF-B37_11.0 medium Rock fragments (Mudstone, Quartzite), medium dense. No odor. SP-SM No Recovery GM Black DIABASE and Red MUDSTONE fragments (weathered), 16 13 GM moist little Silt, very dense. 0.2 No Recovery 17 Refusal at 16.5 ft. 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34

Comments: No COPR/GGM identified at this location.

GINT

30 Knightsbridge Road, Piscataway, NJ 08854

Boring ID: EF-38

Page: 1 Project Name: PPG Soil RIWP Drilling Company: SGS Coordinates (NJSPNAD83) x: 610761.209 Project Number: 6015-4801 **Drilling Method:** Airknife/Geoprobe Date Started Drilling: 4/22/2011 Rig Type: Airknife/Geoprobe Coordinates (NJSPNAD83) y: 683529.983 Date Finished Drilling: 4/22/2011 Core Size: 2 in Boring Total Depth: 3.8 ft Project Manager: Robert Cataldo Depth to Water: N/A ft Logged By: B. Daniels JERSEY\GARFIELD AVENUE GROUP OF SITES\GARFIELD AVENUE GROUP OF SITES.GP. Physical Location: Garfield Avenue, near OSB-5 (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) OL dry 3 Black Topsoil, some Organics, dry, loose. No odor. EF-B38_0.5 0 Dark Brown (7.5YR 3/2) fine to medium SAND, some fine to dry 3 Fill medium Gravel and Fill Material (coal, slag, brick, glass), trace 0 2 EF-B38 2.0 Silt, medium dense. No odor. moist 3 Fill EF-B38_2.5 Very Dark Grayish Brown (10YR 3/2) SILT and CLAY, little 0 3 medium to coarse Gravel and Fill Material (slag, brick, debris), medium stiff. Slight organic odor. Refusal at 3.8 ft. 5 6 8 10 11 12 GINT STD US LAB.GDT - 9/21/11 12:04 - 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 33 34 Comments: No COPR/GGM identified at this location.

Boring ID: EF-38A

	htsbridge Road 732.564.3200		taway, NJ 088	354				Boring ID): EF-38
	ame: PP0				Drilling	Company:	969		Page:
Project N	umber: 6	015-4	801		Drilling I	Method: A	irknife/Geoprobe	Coordinates (NJSPNAD83) x: 610761.701	
	ted Drilling shed Drillin				Rig Type Core Siz	: Airknife/	Geoprobe	Coordinates (NJSPNAD83) y: 683534.172 Boring Total Depth: 23 ft	
_ogged E	By: E. Acs	s, M. N	/lerdinger		Project I		Robert Cataldo	Depth to Water: 4.6 ft	
Physical	Location:	Garfi	ield Avenu	ıe, near	OSB-5			(Note bgs = below ground	surface)
Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content		USCS	Graphic Log	Sui	rface Cover and Thickness:	Sample Numbe
1 -		0	da	1	Fill	PA PA	Concrete Sidewalk	2000 (40) (D 2)(A) 500 A 400 C AAND	EF-B38A_
		0	dry dry	6 3	Fill Fill		some fine to medium	Gray (10YR 3/1) fine to medium SAND, n Gravel, Ash and Cinders, loose. No odor.	EE DOOA
2							Reddish Brown (5YF Clay, loose. No odo	R 4/4) fine to medium SILTY SAND, little	EF-B38A EF-B38A
3		0					Clay, 1003e. 140 000	1.	
4		0			F:::		0 + 0 + 0 - 0	(40)(0.00) 011 7 1	EF-B38A
5		0	moist wet	3	Fill Fill		Clay, soft. No odor.	rown (10YR 3/3) SILT, trace fine Sand and	
6		0					Brown (7.5YR 5/3) S No odor.	SILT, trace fine to coarse Sand, very soft.	EF-B38
7		0					INO OUOI.		
8	3.2		wet	10	SP-SM	******	Reddish Brown (2.5)	YR 4/4) fine to medium SAND and Silt, little	EF-B38_
			wet	10	SP-SM			el, soft to medium dense.	+
9		_	MACI	10	OI -OIVI		NO NECOVELY		
10		0	wet	10	SP-SM		Same as above little	e fine to medium sub-round Gravel.	-
11		0	wet	10	OI -OIVI		Same as above, intie	e line to mediam sub-round Graver.	EF-B38_1
12									
13	2		wet	10	SP-SM		No Recovery		
14									
15		0							
		0	moist	10	SP-SM		Same as above, little	e fine to medium sub-round Gravel.	EF-B38 1
16				40	00.014				EF-B30_1
17	1.4		moist	10	SP-SM		No Recovery		
18									
19									
20		0		40	05 6::		0	fine to meeting a land	
21	2	0	moist	10	SP-SM SP-SM		•	e fine to medium sub-round Gravel. YR 4/4) fine SAND, some Silt, trace fine	EF-B38_2
22			wet	10			angular Gravel at 21	.9 ft, loose to medium dense. No odor.	
23			wet	10	SP-SM		No Recovery		
24							Refusal at 23 ft.		
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									

AECOM

Comments: No COPR/GGM identified at this location.

Boring ID: EF-39

Page: 1 Project Name: PPG Soil RIWP Drilling Company: SGS Project Number: 6015-4801 Drilling Method: Airknife/Geoprobe Coordinates (NJSPNAD83) x: 610822.756 Date Started Drilling: 4/25/2011 Rig Type: Airknife/Geoprobe Coordinates (NJSPNAD83) y: 683631.856 Date Finished Drilling: 4/26/2011 Core Size: 2 in Boring Total Depth: 25 ft Project Manager: Robert Cataldo Depth to Water: 4.4 ft Logged By: E. Acs, M. Merdinger JERSEY\GARFIELD AVENUE GROUP OF SITES\GARFIELD AVENUE GROUP OF SITES.GP. Physical Location: Garfield Avenue, near center of French Park Building (Note bgs = below ground surface) Depth Recovery PID Moisture GΑ Graphic Sample Range **USCS** Surface Cover and Thickness: Class Content (ft/ft) (ppm) Log Number (ft bgs) dry 3 OL Topsoil and Grass EF-B39_0.5 0 Black to Very Dark Gray (10YR 3/3) fine to medium SAND, little dry 6 Fill to Fill fine to coarse Gravel, Ash and Cinders, little Silt, loose. No 0 2 EF-B39 2.0 moist EF-B39_2.5 Reddish Brown (5YR 4/4) fine to medium SILTY SAND, trace moist 0 3 Clay, loose. No odor. 0 4 EF-B39 4.0 Very Dark Gray (10YR 3/1) SILT, little Clay, trace fine to moist 3 Fill 0 5 3 Fill medium Sand and Gravel, organics, medium stiff. wet Brown (7.5YR 4/3) SILT, some fine Sand, trace medium angular 0 EF-B39_6.0 6 Gravel and Clay, slight Black staining, very soft. SP-SM moist 10 Reddish Brown (2.5YR 4/4) SILT and medium SAND, some fine to medium angular Gravel, trace Clay, dense. No odor. 2 10 SP-SM moist No Recovery 8 9 10 0 11 EF-B39_11.0 moist 10 SP-SM Reddish Brown (2.5YR 4/4) and Weak Red (10R 4/4) coarse 0 12 SAND and SILT, some fine to medium Gravel and Mudstone 2 fragments, dense. No odor. STD US LAB.GDT - 9/21/11 12:04 - C:\DOCUMENTS AND SETTINGS\STANCHAKM\MY DOCUMENTS\MY EQUIS WORK\PPG 13 SP-SM No Recovery moist 10 14 15 0 16 SP-SM Reddish Brown (2.5YR 4/4) fine SAND and SILT, little fine 10 moist 0 17 EF-B39 17.0X angular Gravel, medium dense. No odor. 2 EF-B39_17.0 18 SP-SM moist 10 No Recovery 19 0 20 EF-B39 20.0 moist 10 SP-SM Same as above, little medium angular Gravel. Liner in core 21 barrel shattered, only 1 ft of recovery left for sample. 10 SP-SM moist No Recovery 22 1 23 24 25 End of boring at 25 ft. 26 27 28 29 30 31 32 33 34 GINT

Boring ID: EF-40 Page: 1 Project Name: PPG Soil RIWP Drilling Company: SGS Project Number: 6015-4801 Drilling Method: Airknife/Geoprobe Coordinates (NJSPNAD83) x: 610859.097 Date Started Drilling: 4/25/2011 Rig Type: Airknife/Geoprobe Coordinates (NJSPNAD83) y: 683692.277 Date Finished Drilling: 4/26/2011 Core Size: 2 in Boring Total Depth: 25 ft Project Manager: Robert Cataldo Depth to Water: 4.6/20 ft Logged By: E. Acs, M. Merdinger JERSEY\GARFIELD AVENUE GROUP OF SITES\GARFIELD AVENUE GROUP OF SITES.GP. Physical Location: Garfield Avenue, near north end of French Park Building (Note bgs = below ground surface) Depth Recovery PID Moisture GΑ Graphic Sample Range **USCS** Surface Cover and Thickness: Class Content (ft/ft) (ppm) Log Number (ft bgs) dry 3 OL Topsoil and Grass EF-B40_0.5 0 Black to Very Dark Gray (10YR 3/3) fine to medium SAND, little dry 3 Fill fine to coarse Gravel, Ash and Cinders, little Silt, loose. No 0 2 EF-B40 2.0 EF-B40 2.5 3 Fill Reddish Brown (5YR 4/4) fine to medium SILTY SAND, trace fine to coarse Gravel, loose. No odor.

Very Dark Gray (10YR 3/1) SILT, little Clay, trace fine to dry 0 3 moist 3 Fill n 4 EF-B40 4.0 medium Sand and Gravel, organics, medium stiff. 0 5 3 Fill Same as above. wet 0 6 EF-B40_6.0 0 3.6 3 Fill Dark Grayish Brown (10YR 4/2) SILT, interbedded with EF-B40 7.5 moist 0 8 Yellowish Brown (10YR 5/6) fine Sand, medium dense. No 10 SP-SM moist 9 SP-SM Reddish Brown (2.5YR 4/4) fine SAND and SILT, little fine moist 10 angular Gravel, medium dense. No odor. 0 10 No Recovery 10 SP-SM moist Same as above, fine to coarse SAND. 0 11 EF-B40_11.0 12 2 moist 10 SP-SM No Recovery STD US LAB.GDT - 9/21/11 12:04 - C:\DOCUMENTS AND SETTINGS\STANCHAKM\MY DOCUMENTS\MY EQUIS WORK\PPG 13 14 0 15 EF-B40 15.0 10 SP-SM Same as above, fine to coarse SAND moist 16 SP-SM moist 10 No Recovery

17 0.3 18 19 0 20 10 SP-SM Reddish Brown (2.5YR 4/4) SILT and medium SAND, some fine wet 0 21 to medium angular Gravel and coarse Sand, dense. No odor. Core liner shattered in Core Barrel. 0 22 wet 10 SP-SM No Recovery 2.5 23 24 25 End of boring at 25 ft. 26

27 28 29 30

34 GINT Comments: No COPR/GGM identified at this location.

31 32 33 ATION/FIELD WORK/BORING LOGS/GINT L

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: EF-41

Page: 1 Project Name: PPG Soil RIWP Drilling Company: SGS Project Number: 6015-4801 **Drilling Method:** Airknife/Geoprobe Coordinates (NJSPNAD83) x: 610927.99 Date Started Drilling: 4/26/2011 Rig Type: Airknife/Geoprobe **Coordinates (NJSPNAD83) y:** 683804.273 Date Finished Drilling: 4/29/2011 Core Size: 2 in Boring Total Depth: 22 ft Logged By: B. Daniels, M. Merdinger Depth to Water: 3.3 ft Project Manager: Robert Cataldo

	LUCALIUII.	Gani	eiu Averiu	ie, nea	i i iciicii i c	ark Parking	LOI (Note bgs = below ground si	urface)
Depth Range (ft bgs)	Recovery (ft/ft)		Moisture Content		USCS	Graphic Log	Surface Cover and Thickness:	Sample Number
		0	dry	2	Fill		Black Asphalt	EF-B41_0.
		0	dry	3	Fill		Brown (7.5YR 4/3) fine to medium SAND, little Silt and fine to medium angular Gravel, little Fill Material (ash, cinders, slag),	FF D44 24
2		0	moist	3	Fill		\loose. No odor. \to Black (7.5YR 2.5/1) fine SANDY SILT, trace fine angular Gravel	EF-B41_2.0 EF-B41_2.5
3			moist	3	Fill		and Fill Material (debris), soft. Organic odor. Brown (7.5YR 4/3) CLAYEY SILT, trace fine to coarse angular	EF-B41_2.
4		0	wet	3	Fill		\Gravel, medium stiff. No odor.	EF-B41_4.
5		0					Strong Brown (7.5YR 5/6) SILT and very fine SAND, soft. No odor.	
6		0						
7	0.7	0	wet wet	10	SP SP		Reddish Brown (5YR 4/4) very fine and fine SAND, trace Silt, loose. No odor.	EF-B41_7.
8	2.7		WCt	10	Oi		No Recovery	
-9 -								
10		0						
		0	moist	10	SP-SM		Weak Red (10YR 4/4) fine SAND and fine sub-round GRAVEL,	
		0	moist to	10	SP-SM		\little Silt, medium dense. No odor. Black to Strong Brown (7.5YR 5/6) to Reddish Brown (5YR 4/4)	
12	5		wet				SILT graded to fine Sand, trace Shells, medium firm to loose. No odor.	EF-B41_12
_13		0					110 0001.	
14		0	moist	10	ML	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	Reddish Brown (5YR 4/4) SILT, some fine sub-angular Gravel,	
15		0	ot	10	ML		dense. No odor.	
16		0	wet	10	IVIL		Strong Brown to Reddish Brown SILT, some fine to medium Sand, trace fine angular Gravel, loose. No odor.	
17		0						
18	3.8		moist	11	GP-GM		Reddish Brown (2.5YR 4/4) fine to medium SAND and GRAVEL,	EF-B41_17.
- 19						000	angular, some Silt, dense. No odor.	
20		0	moist	11	GP-GM		No Recovery	EF-B41 20.
21	0.5		moist	11	GP-GM		Same as above.	
	0.5		moist	11	GP-GM	60	No Recovery	
22						12 N Ma	Refusal at 22 ft.	
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								
33								
34								

STD US LAB GDT - 1/13/11 14:35 - "USPSW2VFP001/DATA USPSW2VFP001/ENVIRONMENT/PISCATAWAY/PROJECT/PPG-NJCPROGRAM/9-WORKFILES/PROJECT MANAGER-CATALDOBIGA RI-SOIL INVESTIGATION/FIELD WORKBORING LOGS/GINT

GINT

Comments: No COPR/GGM identified at this location

Boring ID: EF-42

Page: 1 Project Name: PPG Soil RIWP Drilling Company: SGS Project Number: 6015-4801 Drilling Method: Airknife/Geoprobe Coordinates (NJSPNAD83) x: 611001.931 Date Started Drilling: 4/26/2011 Rig Type: Airknife/Geoprobe Coordinates (NJSPNAD83) y: 683907.586 Date Finished Drilling: 4/29/2011 Core Size: 2 in Boring Total Depth: 25 ft Project Manager: Robert Cataldo Logged By: B. Daniels, M. Merdinger Depth to Water: 3.5 ft Physical Location: Garfield Avenue, near Light Rail (Note bgs = below ground surface) Depth PID Moisture GΑ Graphic Recovery Sample Range **USCS** Surface Cover and Thickness: (ft/ft) (ppm) Content Class Log Number (ft bgs) dry 3 Fill Brown (7.5YR 4/2) fine to coarse angular GRAVEL and fine to EF-B42_0.5 0 medium SAND, trace Fill Material (brick) and organics, loose. 0 2 EF-B42 2.0 EF-B42_2.5 3 Fill Very Dark Brown (7.5YR 2.5/2) CLAY and SILT, trace fine to moist 0 3 coarse angular Gravel and Fill Material (brick), medium stiff. No odor. 0 4 EF-B42 4.0 wet 3 Fill Same as above. 0 5 Fill Dark Brown (7.5YR 3/4) fine to medium angular GRAVEL, trace wet 0 6 EF-B42_6.0 3 Fill Silt, loose. No odor. moist Dark Grayish Brown (10YR 4/2) SILT, grading to very fine Sand 0 moist 3 Fill and Silt, trace Shells, soft. No odor. 1.6 No Recovery 8 9 0 10 EF-B42 10.5 3 Fill Dark Gray (10YR 4/1) SILT, some interbedded medium Sand moist 0 11 and fine angular Gravel, soft. No odor. to wet 3 Fill No Recovery 12 wet 1.2 13 14 0 15 10 SP-SM Reddish Brown (2.5YR 4/4) fine SAND, little Silt, trace fine moist 0 16 EF-B42_16.0 angular Gravel, dense. No odor. 17 No Recovery moist 10 SP-SM 1.8 18 19 0 20 10 ML Reddish Brown (2.5YR 4/4) SILT, some very fine Sand, little moist 0 EF-B42_21.0 21 medium angular Gravel, dense. No odor. 22 moist 10 ML No Recovery 1.6 23 24 25 End of boring at 25 ft. 26 27 28 29 30 31 32 33 34

Boring ID: EF-43

30 Knig	ECO htsbridge Roa	d, Piscat	taway, NJ 088	54					Boring	ID: EF-4
	732.564.3200	office te	elephone		D.:::::	0		000	T	Page:
	l <mark>ame:</mark> PP lumber: 6				Drilling (rknife/Geoprobe	Coordinates (NJSPNAD83) x: 611069.834	
	ted Drillin				Rig Type			Geoprobe	Coordinates (NJSPNAD83) y: 683962.263	
	sned Drilli 3y: B. Da			ger				Robert Cataldo	Boring Total Depth: 25 ft Depth to Water: 3.5 ft	
	Location:								(Note bgs = below ground	eurfaca)
Depth									(ITOLE MGS - MEINT GLOWING	
Range (ft bgs)	Recovery (ft/ft)	(ppm)	Moisture Content	GA Class	USCS	Graph Log		Su	rface Cover and Thickness:	Sample Number
- ₁ -		0	dry	1 3	Fill Fill	- 1		Concrete	ine to coarse SAND and SILT, some-little	EF-B43_0.
2		0	to moist	3	FIII				ar Gravel, trace Fill Material (slag) and	EF-B43_2. EF-B43_2.
3		0	moist	3	Fill				CLAY and Silt, little fine to medium Sand and	
4 		0	wet	3	Fill				sterial, soft. No odor. SILT and fine Sand, little fine to medium use. No odor.	EF-B43_4.
6		0	moist	3	Fill			Dark Grayish Browr angular Gravel and	(10YR 4/2) SILT, some fine Sand, trace fine Cobbles, soft. No odor.	EF-B43_6
7	1.7		moist	3	Fill			No Recovery		
8	1							-		
9							\bowtie			
10		0					\boxtimes			
		0	moist	3	Fill			Same as above, so	me Gray to Green mottling, trace Shells.	EF-B43_11
12							\boxtimes			
 	2		moist moist	10	SP-SM SP-SM	_		Reddish Brown (2.5 dense. No odor.	YR 4/4) fine SAND and SILT, medium	
14			1110101		0. 0			No Recovery		
15		0								
16		0	moist	10	ML				YR 4/4) to Weak Red (10R 4/4) SILT, some medium angular Gravel, dense. No odor.	EF-B43_16
17	1.7		moist	10	ML			No Recovery		
18	1.7							,		
19										
		0								
		0	wet	10	ML ML	++	H	Black SILT, semi-co Reddish Brown (2.5	phesive, firm. No odor. YR 4/4) SILT, some fine to coarse Sand and	EF-B43_21
	2.3		to moist					fine to medium angu	ular Gravel, soft to medium dense. No odor.	
23	2.5		moist	10	ML		\prod	No Recovery		
24										
25										
								End of boring at 25	ft.	
30										
32										
33										
34										
35										

A=COM

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone **Boring ID: EF-118**

Page: 1

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

Project Number: 60154801 Drilling Method: Soft Dig/Geoprobe Coordinates (NJSPNAD83) x: 610626.8125

Date Started Drilling: 8/31/2012 9:07:00 AM Rig Type: Geoprobe Coordinates (NJSPNAD83) y: 683334.4375

Date Finished Drilling: 8/31/2012 11:00:00 AM Core Size: 2 in Boring Total Depth: 20 ft

Logged By: Ben Daniels Project Manager: Chris Martell Depth to Water:

Logged By: Be					Projec	t Manager: Chris Martell Depth to Water:	
Physical Locati	on:					(Note bas =	elow ground surface)
Depth Range (ft bgs)		Moisture Content		USCS	Graphic Log		Sample ID
			1 C	ONCRET	PA A PA	CONCRETE	
- 1		moist	3	FILL		silty SAND, and fine to coarse gravel trace fill material, (7.5YR 4/3) brown, moist, no odor, subangular, (coal, concrete, asphalt) trace organics.	
- 3 4		wet	3	FILL		SILT, little fine to medium sand and fine to coarse gravel, (7.5YR 5/4) brown, wet, no odor, angular, Trace fill material (wood fragments). Wet at 2 f t.	
- 5 <u>33.</u> - 6 —	5	moist	10	ML		SILT, little fine to medium gravel, (7.5YR 4/4) brown, stiff, moist, no odor, angular	EF-B118-5.0-5.5
- 7 -		moist	10	ML		SILT, little fine to medium gravel, (5YR 4/4) reddish brown, soft, moist, no odor, angular	EF-B118-7.0-7.5
8 —							
- 10	4	dry	10	ML		SILT, little fine to coarse sand and fine to coarse gravel, (5YR 4/3) reddish brown, stiff, dry, no odor, angular	
- 12 - - 13 -							
- 14 							
- 15 - 30		wet	10	SW		fine to medium SAND, little fine to coarse gravel, (5YR 4/3) reddish brown, dense, wet, no odor, angular	
- 16		wet	10	SP		fine SAND, (5YR 4/3) reddish brown, dense, wet, no	EF-B118-16.0-16.5
17 —		wet	10	SP		odor	EF-B118-17.0-17.5
- - 18 —		wet	11	GW		fine SAND, little coarse sand and fine to medium gravel, (7.5YR 4/4) brown, dense, wet, no odor, angular medium to coarse GRAVEL, (5YR 4/3) reddish brown,	2. 2 17.0
_ - 19 						loose, wet, no odor, angular, Pulverized rock.	
- 20							
omments:							

AECOM 30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone **Boring ID: EF-119**

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60154801	Drilling Method: Soft Dig/Geoprobe	Coordinates (NJSPNAD83) x: 610579
Date Started Drilling: 8/31/2012 9:06:00 AM	Rig Type: Geoprobe	Coordinates (NJSPNAD83) y: 683356.6875
Date Finished Drilling: 8/31/2012 10:33:00 AM	Core Size: 2 in	Boring Total Depth: 7.40000009536743 ft
Logged By: Ben Daniels	Project Manager: Chris Martell	Depth to Water:
Physical Location:		

	by: Ben D Location:	arriers				Projec	Manager: Chris Martell Depth to Water:	
Pnysicai	Location:						(Note bgs =	below ground surface)
Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	GA Class	USCS	Graphi Log	Surface Cover and Thickness:	Sample ID
				1 C	ONCRET	PA A A A A A A A A A A A A A A A A A A	CONCRETE	
-		0.0	moist	3	FILL		fine to medium SAND, little silt and fine to medium gravel, (7.5YR 5/3) brown, moist, no odor, angular, Trace fill material (coal, brick)	
- 2 -		0.0	moist	10	ML		SILT, little fine to coarse sand and fine to coarse gravel,	
- 3							(5YR 5/4) reddish brown, moist, angular	
_								
- 4 								EF-B119-4.0-4.5
- 5 -								
— 6 —	16.8							
_			moist	10	ML		SILT, little fine to medium sand and fine to medium gravel, (5YR 4/4) reddish brown, medium soft, moist, no odor, angular	EF-B119-6.0-6.5
- 7 —								
omments	:							

ENSR AECOM		Client: PPG		BORII	NG ID:		
		Site: PPG - Jersey City, NJ	G	GA			
Start Da	te:	Project: Site Investigation	Page: 1 o	Page: 1 of 2			
3/15/200)4	Coordinates: X-610700.73	Depth of I	Depth of Boring: 20.00			
End Dat		Elevation: 13.94		Geologist	Geologist: R. Feinberg		
3/15/200		Drill Subcontractor: ADI		Driller:	· -		
Depth (ft)	Lithology	Description .	PID	Sample ID	Sample Parameters		
0							
	CE	MENT: Concrete (2"")		GA (0.1-0.5)	Cr+6, TI, Zn		
	little roc	L: Grayish brown (10YR 5/2) coarse to fine e coarse to fine gravel, trace silt, trace crust k/Red and weak red (10R 4/6 and 2.5Y 4/2) T, trace fine sand, trace coal	hed	GA (0.8-1.8)	Cr+6, TI, Zn		
2—							
4		L: Reddish gray, black and reddish brown (GA (4.0-4.5)	Cr+6, TI, Zn		
-	P△ Z COS	, 5YR 2.5/1 and 4/4) coarse to fine SAND, s arse to fine gravel, trace silt, (coal ash), dry !"")/Very dark gray, dark brown and black (1					
	and	d 3/3, GLEY1 2.5/N) SILT, some coarse to f	ine sand	GA (5.2-6.2)	Cr+6, Tl, Zn (includes duplicate)		
6—							
8—		.L: Dusky red (2.5YR 3/2) coarse to fine SA	0.6 ppm	GA (8.0-8.5)	Cr+6, TI, Zn		
		ce coarse to fine gravel, trace silt, trace veg		GA (8.5-9.0)	Cr+6, TI, Zn		
10 —	<u>∵</u> —∵— we	T: Very dark grayish brown (10YR 3/2) clay t (27"")/Dark brown (7.5YR 3/2) coarse to fi ND, little silt					

ENSR AECON		Client:	PPG	BORING ID:			
		Site:	PPG - Jersey City, NJ				
Start Dat		Project:	Site Investigation	Page: 2 of 2			
3/15/200			es: X-610700.73 Y-683335	· ·	Boring: 20.00		
End Date 3/15/2004		Elevation:		Geologist: R. Feinberg			
		Drill Subco	ontractor: ADI		Driller:		
Depth (ft)	Lithology		Description	PID	දින්	mple ID	Sample Parameters
12				ا ا		GA	Cr+6, TI, Zn
			dusky red (10R 5/6 and 3/4) coarse to coarse to fine gravel, little silt	0.2 ppm	(1)	2.0-12.5)	CI+0, II, ZN
14 —			· ·	0 ppm		GA	Cr+6, TI, Zn
18 —			dish brown (5YR 3/4) coarse to fine rse to fine gravel (rounded), trace silt	(pp		GA 7.0-17.5)	Cr+6, TI, Zn
20							

NULL: End of Boring at 20 ft.

AECOM

Boring ID: GAR-PDI-A`1B

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Drilling Method: Direct Push Coordinates (NJSPNAD83) x: 610894.693 Date Started Drilling: 10/30/2016 11:40:00 AM Rig Type: Coordinates (NJSPNAD83) y: 683689.094 Date Finished Drilling: 10/30/2016 12:40:00 PM Core Size: 3.0 in Boring Total Depth: 21 ft Depth to Water: 3.5 Logged By: Kyle Willis Project Manager: Scott Mikaelian Physical Location: Actual- GA PDI Surface Elevation: 10.302 ft NAVD88 Depth PID Recovery Moisture Graphic Sample **USCS** Surface Cover and Thickness: Range (ft/ft) Content ΙD (ppm) Log (ft bgs) 0.0 **ASPHALT ASPHALT** CONCRETE Concrete slab GAR-PDI-A'1B-1.5-2.0 FILL fine silty SAND, little fill debris, (5YR 2.5/1) black, medium moist dense, moist, no odor, no staining, water at 3.5 feet. 4.5 GAR-PDI-A'1B-3.5-4.0 NR NO RECOVERY 0.0 wet **FILL** SILT, trace fill debris, (5YR 4/1) dark gray, firm, wet, no odor, no staining. GAR-PDI-A'1B-5.5-6.0 GAR-PDI-A'1B-6.5-7.0 FILL WOOD, no odor, no staining. 5 GAR-PDI-A'1B-10 0-10 5 0.0 SW fine to coarse silty SAND, trace fine to coarse gravel, (5YR wet 3/2) dark reddish brown, medium dense, wet, no odor, no staining. Soils consistent with UNDno. GAR-PDI-A'1B-11.5-12.0 12 5 GAR-PDI-A'1B-13.5-14.0 0.0 SW fine to coarse SAND, trace fine to coarse gravel, (5YR 4/3) wet reddish brown, medium dense, wet, no odor, no staining. GAR-PDI-A'1B-15 5-16 0 Soils consistent with UNDno. 16 GAR-PDI-A'1B-17.5-18.0 GAR-PDI-A'1B-19.5-20.0 GAR-PDI-A'1B-20.0-20.5 0.0 1 -21

Notes

A.GDT - 4/7/17

2012-09 RA PPG LOGS

bgs - below surface grade MM - meadow mat COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits UNDorg - organic undisturbed native deposits

MGP - manufactured gas plant CCPW - chromate chemical production waste

A.GDT - 4/7/17

2012-09 RA PPG LOGS

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: GAR-PDI-A`2B

Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Drilling Method: Direct Push Coordinates (NJSPNAD83) x: 610909.636 Date Started Drilling: 10/30/2016 10:20:00 AM Rig Type: Coordinates (NJSPNAD83) y: 683713.76 Date Finished Drilling: 10/30/2016 11:20:00 AM Core Size: 3.0 in Boring Total Depth: 21 ft Depth to Water: 3.0 Logged By: Kyle Willis Project Manager: Scott Mikaelian Physical Location: Actual- GA PDI Surface Elevation: 10.378 ft NAVD88 Depth PID Recovery Moisture Graphic Sample **USCS** Surface Cover and Thickness: Range Content (ft/ft) (ppm) Log (ft bgs) 0.0 **ASPHALT ASPHALT** CONCRETE A SAME Concrete slab GAR-PDI-A'2B-1.5-2.0 FILL fine to medium SAND, little fill debris, (7.5YR 3/4) dark moist brown, moist, no odor, no staining. **FILL** moist medium to coarse GRAVEL, little ash, trace cinders, (5YR 2.5/1) black, medium dense, moist to wet, no odor, no staining, water at 3.0 feet. GAR-PDI-A'2B-3.5-4.0 SILT, trace wood, fill debris and shells, (5YR 6/1) gray, soft, **FILL** wet wet, no odor, no staining. NR NO RECOVERY 0.0 wet **FILL** SILT, some fill debris, little wood, (5YR 6/1) gray, soft, wet, no odor, no staining. GAR-PDI-A'2B-5.5-6.0 5 GAR-PDI-A'2B-7.5-8.0 GAR-PDI-A'2B-8.0-8.5 SILT, trace fine sand, (5YR 6/3) light reddish brown, firm, ML wet wet, no odor, no staining. Soils consistent with UNDno. wet SM fine to coarse silty SAND, trace fine to coarse gravel, (5YR 4/3) reddish brown, medium dense, wet, no odor, no staining. Soils consistent with UNDno. GAR-PDI-A'2B-9.5-10.0 0.0 GAR-PDI-A'2B-11 5-12 0 12 5 13 GAR-PDI-A'2B-13.5-14.0 0.0 SM fine silty SAND, little fine gravel, (5YR 4/3) reddish brown, wet medium dense, wet, no odor, no staining. Soils consistent GAR-PDI-A'2B-15 5-16 0 with UNDno. 16 5 GAR-PDI-A'2B-17.5-18.0 19 GAR-PDI-A'2B-19.5-20.0 GAR-PDI-A'2B-20.0-20.5 0.0 1 -21 bgs - below surface grade MM - meadow mat COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits UNDorg - organic undisturbed native deposits MGP - manufactured gas plant CCPW - chromate chemical production waste

nts: 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: GAR-PDI-A`3B

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Drilling Method: Direct Push Coordinates (NJSPNAD83) x: 610925.569 Date Started Drilling: 10/23/2016 12:20:00 PM Rig Type: Coordinates (NJSPNAD83) y: 683740.349 Date Finished Drilling: 10/23/2016 1:10:00 PM Core Size: Boring Total Depth: 21 ft Depth to Water: 3.5 Logged By: KW Project Manager: Scott Mikaelian Physical Location: Actual - GA PDI Surface Elevation: 10.448 ft NAVD88 Depth Recovery PID Moisture Graphic Sample **USCS** Surface Cover and Thickness: Range ΙĎ (ft/ft) (ppm) Content Log (ft bgs) 0.0 **ASPHALT ASPHALT** CONCRETE Concrete slab GAR-PDI-A'3B-1.0-1.5 **FILL** fine silty SAND, trace fill debris, (7.5YR 3/3) dark brown, dry dense, dry to moist, no odor, no staining. moist 4.5 CINDERS, some ash, (5YR 6/1) gray, loose, saturated, no GAR-PDI-A'3B-3.0-3.5 saturated FILL odor, no staining, water at 3.5 feet. FILL fine to medium silty SAND, trace fill debris, (5YR 2.5/1) saturated black, medium dense, saturated, no odor, no staining. NR No Recovery GAR-PDI-A'3B-5.0-5.5 0.0 saturated **FILL** CINDERS, some ash, little wood, (5YR 2.5/1) black, loose, saturated, no odor, no staining. GAR-PDI-A'3B-6.0-6.5 GAR-PDI-A'3B-6.5-7.0 ML SILT, (5YR 6/1) gray, stiff, saturated, no odor, no staining. saturated Soils consistent with UNDno. GAR-PDI-A'3B-7.0-7.5 5 SILT, (7.5YR 6/3) light brown, stiff, saturated, no odor, no saturated ML staining. Soils consistent with UNDno. GAR-PDI-A'3B-9.0-9.5 SM fine to coarse silty SAND, little fine to coarse gravel, (5YR 0.0 saturated 4/3) reddish brown, dense, saturated, no odor, no staining. Soils consistent with UNDno. GAR-PDI-A'3B-11.0-11.5 12 5 13 GAR-PDI-A'3B-13.0-13.5 GAR-PDI-A'3B-15.0-15.5 0.0 saturated SW fine to coarse SAND, little fine to coarse gravel, (5YR 4/3) reddish brown, loose, saturated, no odor, no staining. Soils consistent with UNDno. 16 GAR-PDI-A'3B-17.0-17.5 5 19 GAR-PDI-A'3B-19.0-19.5 saturated fine SAND, some fine to coarse gravel, (5YR 4/3) reddish brown, very dense, saturated, no odor, no staining. Soils consistent with UNDno. GAR-PDI-A'3B-20.0-20.5 0.0 1 -21

Notes

A.GDT - 4/7/17

2012-09 RA PPG LOGS

bgs - below surface grade COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits MM - meadow mat GGM - green grey mud UNDorg - organic undisturbed native deposits

MGP - manufactured gas plant CCPW - chromate chemical production waste

30 Knightsbridge Road, Piscataway, NJ 08854

Boring ID: GAR-PDI-A`4B

732.564.3200 office telephone Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Drilling Method: Direct Push Coordinates (NJSPNAD83) x: 610941.377 **Date Started Drilling:** 10/23/2016 11:20:00 AM Rig Type: Coordinates (NJSPNAD83) y: 683767.313 Date Finished Drilling: 10/23/2016 12:15:00 PM Core Size: Boring Total Depth: 21 ft Logged By: KW Depth to Water: 5.5 Project Manager: Scott Mikaelian

hysica							
epth ange bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
		0.0		ASPHALT		ASPHALT	
, 7				CONCRETE	P 5 4 P	Concrete slab	
2-	3.5		dry to moist	FILL		fine to medium silty SAND, trace fill debris, (5YR 2.5/1) black, dense, dry to moist, no odor, no staining.	GAR-PDI-A'4B-1.0-1.5
3—							GAR-PDI-A'4B-3.0-3.5
4-				NR		No Recovery	
5—		0.0	saturated	FILL		fine to medium silty SAND, trace fill debris, (5YR 2.5/1)	GAR-PDI-A'4B-5.0-5.5
$\lceil \rceil$						black, medium dense, saturated, no odor, no staining, water at 5.5 feet.	GAR-PDI-A'4B-5.5-6.0
6			saturated	ML		SILT, little fine sand, (7.5YR 6/3) light brown, firm, saturated, no odor, no staining. Soils consistent with UNDno.	GAR-PDI-A'4B-6.0-6.5
7— 8—	4.5						GAR-PDI-A'4B-7.0-7.5
9—							GAR-PDI-A'4B-9.0-9.5
0				NR	• • • • • • • • • • • • • • • • • • • •	No Recovery	
		0.0	wet	SP		fine to coarse SAND, trace fine to coarse gravel, (5YR 4/3) reddish brown, loose, wet, no odor, no staining. Soils consistent with UNDno.	
2	4		saturated	SM		fine to medium silty SAND, little fine to coarse gravel, (5YR 4/3) reddish brown, dense, saturated, no odor, no staining. Soils consistent with UNDno.	GAR-PDI-A'4B-11.0-11.5 GAR-PDI-A'4B-13.0-13.5
🕇							
4—				NR		No Recovery	
5		0.0	wet	ML		SILT, (7.5YR 6/3) light brown, soft, wet, no odor, no	GAR-PDI-A'4B-15.0-15.5
6-			saturated	SP		staining. Soils consistent with UNDno. fine to coarse SAND, some fine to coarse gravel, (5YR 4/3) reddish brown, dense, saturated, no odor, no staining. Soils consistent with UNDno.	
7— 8—	5						GAR-PDI-A'4B-17.0-17.5
9—							GAR-PDI-A'4B-19.0-19.5
20	1	0.0					GAR-PDI-A'4B-20.0-20.5
21							
tes: - bel	ow surface adow mat	grade	COPR - chi GGM - gree	omite ore proce	essing resi	due UNDno - non-organic undisturbed native deposits MGP - manu UNDorg - organic undisturbed native deposits CCPW - chro	factured gas plant omate chemical production w

Boring ID: GAR-PDI-A`5B

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Drilling Method: Direct Push Coordinates (NJSPNAD83) x: 610954.148 Date Started Drilling: 10/23/2016 10:25:00 AM Rig Type: Coordinates (NJSPNAD83) y: 683788.677 Date Finished Drilling: 10/23/2016 11:15:00 AM Core Size: Boring Total Depth: 21 ft Depth to Water: 5.0 Logged By: KW Project Manager: Scott Mikaelian Physical Location: Actual - GA PDI Surface Elevation: 10.732 ft NAVD88 Depth PID Recovery Moisture Graphic Sample **USCS** Surface Cover and Thickness: Range Content ΙĎ (ft/ft) (ppm) Log (ft bgs) 0.0 **ASPHALT ASPHALT** CONCRETE Concrete slab GAR-PDI-A'5B-1.5-2.0 FILL SILT, little cinders, trace ash and fill debris, (7.5YR 3/3) dark moist brown, soft, moist, no odor, no staining. GAR-PDI-A'5B-3.5-4.0 NR No Recovery SILT, trace ash and fill debris, (5YR 2.5/1) black, soft, wet, no odor no staining, water at 5.0 feet. GAR-PDI-A'5B-5.0-5.5 0.0 wet **FILL** GAR-PDI-A'5B-5.5-6.0 wet MLSILT, trace fine sand, (5YR 6/3) light reddish brown, firm, wet, no odor, no staining. Soils consistent with UNDno. 5 GAR-PDI-A'5B-7.5-8.0 GAR-PDI-A'5B-9.5-10.0 SM 0.0 saturated fine silty SAND, trace fine gravel, (5YR 4/3) reddish brown, loose, saturated, no odor, no staining. Soils consistent with GAR-PDI-A'5B-11 5-12 0 12 5 13 GAR-PDI-A'5B-13.5-14.0 fine to medium silty SAND, some fine to coarse gravel, (5YR 0.0 saturated SM 4/3) reddish brown, dense, saturated, no odor, no staining. GAR-PDI-A'5B-15 5-16 0 Soils consistent with UNDno. 16 5 GAR-PDI-A'5B-17.5-18.0 GAR-PDI-A'5B-19.5-20.0 GAR-PDI-A'5B-20.0-20.5 0.0 1 -21

Notes

A.GDT - 4/7/17

2012-09 RA PPG LOGS

bgs - below surface grade COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits MM - meadow mat GGM - green grey mud UNDorg - organic undisturbed native deposits

MGP - manufactured gas plant CCPW - chromate chemical production waste

30 Knightsbridge Road, Piscataway, NJ 08854

Boring ID: GAR-PDI-A`6A

732.564.3200 office telephone

Page: 1

Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Coordinates (NJSPNAD83) x: 610801.306 Drilling Method: direct push Date Started Drilling: 11/17/2016 11:45:00 AM Rig Type: Coordinates (NJSPNAD83) y: 683501.142 Date Finished Drilling: 11/17/2016 12:15:00 PM Core Size: 3.0 in Boring Total Depth: 21 ft Depth to Water: 4.0 Logged By: ES Project Manager: Scott Mikaelian Physical Location: Actual - GA PDI Surface Elevation: 10.478 ft NAVD88 Depth PID Recovery Moisture Graphic Sample **USCS** Surface Cover and Thickness: Range Content (ft/ft) (ppm) Log (ft bgs) 0.0 CONCRETE Concrete sidewalk **FILL** DGA, fine to coarse SAND, some fine to medium gravel, (5Y wet 5/1) gray, medium dense, wet, no odor, no staining, water at 4.0 feet. 5 0.0 GAR-PDI-A'6A-6.0-6.5 FILL fine to medium SAND, some ash, little fill debris, (5Y 2.5/2) wet black, loose, wet, no odor, no staining. GAR-PDI-A'6A-6.5-7.0 SP moist fine to medium SAND, trace silt, (7.5YR 4/3) brown, medium dense, moist, no odor, no staining. Soils consistent with 4 MLwet SILT, (7.5YR 4/3) brown, soft, wet, no odor, no staining. GAR-PDI-A'6A-8.0-8.5 Soils consistent with UNDno. NR NO RECOVERY GAR-PDI-A'6A-10 0-10 5 0.0 SM fine silty SAND, (2.5Y 5/2) grayish brown, medium dense, wet wet, no odor, no staining. Soils consistent with UNDno. 12 SP fine to coarse SAND, some fine to medium gravel, (5YR 4/4) wet 5 reddish brown, medium dense, wet, no odor, no staining. Soils consistent with UNDno. 13

16

1

0.0

0.0

fine to medium silty SAND, (5YR 4/4) reddish brown, medium dense, wet, no odor, no staining. Soils consistent with UNDno.

GAR-PDI-A'6A-20.0-20.5

GAR-PDI-A'6A-18.0-18.5

GAR-PDI-A'6A-14.0-14.5

GAR-PDI-A'6A-16.0-16.5

-21

A.GDT - 4/7/17 19

2012-09 RA PPG LOGS bgs - below surface grade MM - meadow mat COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits UNDorg - organic undisturbed native deposits

wet

SM

MGP - manufactured gas plant CCPW - chromate chemical production waste

nts: 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: GAR-PDI-A`6B

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Drilling Method: Direct Push Coordinates (NJSPNAD83) x: 610971.311 Date Started Drilling: 10/23/2016 9:30:00 AM Rig Type: Coordinates (NJSPNAD83) y: 683816.329 Date Finished Drilling: 10/23/2016 10:25:00 AM Core Size: Boring Total Depth: 21 ft Logged By: KW Project Manager: Scott Mikaelian Depth to Water: 5.0 Physical Location: Actual - GA PDI Surface Elevation: 10.968 ft NAVD88 Depth Recovery PID Moisture Graphic Sample **USCS** Surface Cover and Thickness: Range Content ΙĎ (ft/ft) (ppm) Log (ft bgs) 0.0 **ASPHALT ASPHALT** CONCRETE Concrete slab GAR-PDI-A'6B-1.5-2.0 FILL SILT, some ash, cinders, concrete and fill debris, (7.5YR moist 3/4) dark brown, firm, moist, no odor, no staining. GAR-PDI-A'6B-3.5-4.0 NR No Recovery GAR-PDI-A'6B-5.0-5.5 SILT, some ash and cinders, (5YR 2.5/1) black, soft, 0.0 saturated **FILL** saturated, no odor, no staining, water at 5.0 feet. GAR-PDI-A'6B-5.5-6.0 saturated MLSILT, trace fine sand, (5YR 6/3) light reddish brown, firm, saturated, no odor, no staining. Soils consistent with UNDno. 5 GAR-PDI-A'6B-7.5-8.0 GAR-PDI-A'6B-9.5-10.0 saturated SM fine to medium silty SAND, trace fine to medium gravel, 0.0 (5YR 4/3) reddish brown, very dense, saturated, no odor, no staining. Soils consistent with UNDno. GAR-PDI-A'6B-11 5-12 0 12 ML SILT, little fine sand, trace fine gravel, (5YR 4/4) reddish saturated 4 brown, stiff, saturated, no odor, no staining. Soils consistent with UNDno. 13 GAR-PDI-A'6B-13.5-14.0 NR No Recovery 0.0 SM fine to medium silty SAND, some fine to coarse gravel, (5YR wet 3/2) dark reddish brown, very dense, wet, no odor, no GAR-PDI-A'6B-15 5-16 0 staining. Soils consistent with UNDno. 16 5 GAR-PDI-A'6B-17.5-18.0 19 GAR-PDI-A'6B-19.5-20.0 GAR-PDI-A'6B-20.0-20.5 0.0 1 -21

Notes

A.GDT - 4/7/17

2012-09 RA PPG LOGS

bgs - below surface grade COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits MM - meadow mat GGM - green grey mud UNDorg - organic undisturbed native deposits

MGP - manufactured gas plant CCPW - chromate chemical production waste

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

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: GAR-PDI-A`7B

Project	Number:	60240	739			Drilling Method: Direct Push	Coordinates (NJSPI	NAD83) x: 610966.756
Date St	arted Dril	ling:	/29/2017	1:30:00 PM	I	Rig Type:		IAD83) y: 683855.766
				2:30:00 PM		Core Size: 3.0 in	Boring Total Depth:	21 ft
	lBy: ⊺l				J	Project Manager: Scott Mikaelian	Depth to Water: 4.5	5
Physica	al Locatio	n: Act	ual - GA Pl	DI		<u> </u>	Surface Elevation:	11.468 ft NAVD88
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thick	ness:	Sample ID
		0.0		CONCRETE	P 1 4 P	Concrete sidewalk		
-1-		0.0	moist	FILL		fine to medium SAND, little fine to mediu 4/2) brown, loose, moist, no odor, no sta	ım gravel, (7.5YR ining.	GAR-PDI-A'7B-0.5-1.0
-2	4.5		moist to wet	FILL		SILT, little fine sand and fill debris, (7.5Y brown, medium stiff, moist to wet, no odwater at 4.5 feet.		GAR-PDI-A'7B-2.0-2.5
-3 - -4								
_				NR		NO RECOVERY		
-5		0.0	wet	FILL		SILT, little fine sand, (7.5YR 5/1) gray, n odor, no staining.	nedium stiff, wet, no	
-b					XXX			GAR-PDI-A'7B-6.0-6.5
\dashv					XXX			GAR-PDI-A'7B-6.5-7.0
-7-	5		wet	SM	\mathcal{W}	fine SAND, little silt, (5YR 4/3) reddish b	rown medium	GAR-PDI-A'7B-7.0-7.5
-8 -9 -10						dense, wet, no odor, no staining. Soils of UNDno.	onsistent with	
-11 -12 -13	4.5	0.0	wet	SM		fine SAND, some medium to coarse grave 4/3) reddish brown, medium dense, wet, staining. Soils consistent with UNDno.	vel, trace silt, (5YR no odor, no	GAR-PDI-A'7B-10.0-10.5
-14								GAR-PDI-A'7B-14.0-14.5
, T				NR		NO RECOVERY		
-15 -16 -17	5	0.0	wet	SP		fine to coarse SAND, little fine to mediun reddish brown, medium dense, wet, no c Soils consistent with UNDno.		
-18 -								GAR-PDI-A'7B-18.0-18.5
-19 -								
20		0.0						GAR-PDI-A'7B-20.0-20.5
21	1	5.5						
otes:	ou ourtee	arod-	CODD sta	amita a		noidus. LINDas papagestis undistrubed all all	Nonceite MOD	ufactured and plant
	ow surface adow mat			omite ore proce n grey mud	ssing re	sidue UNDno - non-organic undisturbed native of UNDorg - organic undisturbed native depo	ueposits IVIGP - mant	ufactured gas plant romate chemical production wa

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: GAR-PDI-A`8A

t Name: PPo t Number: 6					Drilling Company: SGS North America Drilling Method: direct push	Coordinates (N.ISP	NAD83) x: 610770.426
Started Drillin			8.40.00 414		Rig Type:		NAD83) y: 683450.248
inished Drill					Core Size: 3.0 in		
	my:	11/10/201	10 9.40.00 AIV		Project Manager: Scott Mikaelian	Boring Total Depth: Depth to Water: 5.	
d By: ES cal Location:	۸۰۰	ual CA D	DI		Froject wanager: Scott Wikaelian		
al Location:	ACT	uai - GA Pl	וכ			Surface Elevation:	10.010 IL INAVD88
	PID ppm)	Moisture Content	USCS	Graphi Log	c Surface Cover and Thic	kness:	Sample ID
	0.0		CONCRETE	p N. A	Concrete sidewalk		
-		dny	FILL		DGA, fine to coarse SAND, some fine	to modium gravel (5V	-
		dry	FILL		5/1) gray, medium dense, dry to wet, n water at 5.0 feet.	o odor, no staining,	
5							
	0.0						
5		moist	FILL		fine to medium SAND, little fill debris, t (7.5YR 4/3) brown, medium dense, mo staining.		GAR-PDI-A'8A-6.0-6.5
				\bowtie	\		GAR-PDI-A'8A-7.5-8.0
		moist	SM		fine silty SAND, little organics, (7.5YR medium dense, moist, no odor, no stail with UNDorg.	3/3) dark brown, ning. Soils consistent	GAR-PDI-A'8A-8.0-8.5
 	0.0	wet	SM		fine silty SAND, (7.5YR 4/3) brown, me	adium dense wet no	GAR-PDI-A'8A-10.0-10.5
5	0.0	wet	SIVI		odor, no staining. Soils consistent with		GAR-PDI-A'8A-12.0-12.5
		wet	SW		fine to coarse SAND, some fine to coareddish brown, dense, wet, no odor, no consistent with UNDno.	rse gravel, (5YR 4/4) staining. Soils	
]							GAR-PDI-A'8A-14.0-14.5
1					4		
+ + ,	0.0			l: ::::::	;}		
-	0.0			::::::			
1					:1		045 551 1151
							GAR-PDI-A'8A-16.0-16.5
5							
1							GAR-PDI-A'8A-18.0-18.5
_					4		GAK-PDI-A'8A-18.0-18.5
					4		
7							
					:1		
							CAP DDI AIOA 20 0 20 E
」 1	0.0				.}		GAR-PDI-A'8A-20.0-20.5
					4		
 					1		
					- IND		· Continued in
elow surface gra	ade	COPR - chr	omite ore proce	essing r	esidue UNDno - non-organic undisturbed native	deposits MGP - man	utactured gas plant
eadow mat		GGM - gree	n grey mud		esidue UNDno - non-organic undisturbed native UNDorg - organic undisturbed native de ft thick 3) No CCPW (COPR or GGM) present in any interval of this br	posits CCPW - ch	ufactured gas plant romate chemical pro

Project Number: 60240739

Project Name: PPG Garfield Ave

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Date Started Drilling: 2/19/2017 11:15:00 AM

Boring ID: GAR-PDI-A`8B

Page: 1 Coordinates (NJSPNAD83) x: 610979.949 Coordinates (NJSPNAD83) y: 683876.395 Boring Total Depth: 21 ft

ate Fi	nished Dr	rilling:	2/19/2017	7 12:15:00 PN		Core Size: 3.0 in	Boring Total Depth:	21 ft
	By: TI					Project Manager: Scott Mikaelian	Depth to Water: 6.0	
hysica	I Locatio	n: Act	ual - GA Pl	DI	1		Surface Elevation:	11.565 ft NAVD88
epth ange bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphi Log	Surface Cover and Thick	iness:	Sample ID
		0.0		ASPHALT		ASPHALT		
. 7			dry	FILL		fine to coarse SAND, little fine to coarse	gravel, (7.5YR 4/2)	GAR-PDI-A'8B-0.5-1.0
-1 - -2 	3.5		to moist moist	FILL		brown, loose, dry to moist, no odor, no s fine to medium sandy SILT, little fine to fill debris, (7.5YR 3/2) dark brown, medi odor, no staining.	medium gravel and	GAR-PDI-A'8B-1.0-1.5
3-				NID.		NO PEROVERY		GAR-PDI-A'8B-3.0-3.5
4-				NR		NO RECOVERY		
-5- 		0.0	moist to wet	FILL		fine to medium sandy SILT, little fill debr (7.5YR 3/2) dark brown, medium stiff, n no staining, water at 6.0 feet.		GAR-PDI-A'8B-5.0-5.5
-								GAR-PDI-A'8B-6.5-7.0
7	4.5		wet	SM		fine SAND, little silt, trace fine gravel, (5 medium dense, wet, no odor, no staining with UNDno.	Y 5/2) olive gray, g. Soils consistent	GAR-PDI-A'8B-7.0-7.5
9—			wet	SM		fine SAND, little silt, trace coarse gravel reddish brown, medium dense, wet, no of Soils consistent with UNDno.	, (5YR 6/3) light odor, no staining.	GAR-PDI-A'8B-9.0-9.5
\dashv				NR		NO RECOVERY		-
10		0.0	wet	SM		fine SAND, little silt, trace coarse gravel	(5YR 6/3) light	_
11—		0.0		SP		reddish brown, medium dense, wet, no o Soils consistent with UNDno.	odor, no staining.	GAR-PDI-A'8B-11.0-11.5
12	4		wet	56		fine to medium SAND, little fine to medium reddish brown, medium dense, wet, no of Soils consistent with UNDno.		
14								GAR-PDI-A'8B-13.0-13.5
' '				NR		NO RECOVERY		
15 - - 16 - -		0.0	wet	SP		fine to medium silty SAND, little fine to reddish brown, medium dense, wet staining. Soils consistent with UNDno.		GAR-PDI-A'8B-15.0-15.5
17—	5							GAR-PDI-A'8B-17.0-17.5
18—								
19—								GAR-PDI-A'8B-19.0-19.5
20 -	1	0.0						GAR-PDI-A'8B-20.0-20.5
/I - mea	adow mat		GGM - gree	n grey mud		esidue UNDno - non-organic undisturbed native UNDorg - organic undisturbed native dep) present in any interval of this boring 3) MM/UND confirmed to be 1 ft thi	osits CCPW - ch	ufactured gas plant romate chemical production w

Drilling Company: SGS North America

Drilling Method: Direct Push

Rig Type:

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: GAR-PDI-A`9A

roject	Number:	60240	1739			Drilling Method: direct push	Coordinates (Noori	NAD83) x: 610754.846
ate St	arted Dril	ling:	11/10/2016	9:45:00 AN				IAD83) y: 683423.274
			11/10/2016				Boring Total Depth:	
	By: ES						Depth to Water: 6.0	
hysica	al Locatio	n: Act	ual - GA PD	I			Surface Elevation:	
Depth Range It bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphi Log	Surface Cover and Thicknes	SS:	Sample ID
_		0.0	dry	FILL		DGA, fine to coarse SAND, some fine to m (7.5YR 4/3) brown, medium dense, dry, no		
-1— -2— -3— -4— -5—	5		dry	FILL		DGA, fine to coarse SAND, some fine to m 5/1) gray, medium dense, dry, no odor, no		
-6 -7 -8	3.5	0.0	wet	FILL		fine to medium silty SAND, little fine to med fill debris, (7.5YR 4/2) brown, medium dens no staining, water at 6.0 feet.	dium gravel, trace se, wet, no odor,	GAR-PDI-A'9A-8.0-8.5
_						8		9,11,11,21,10,110,10
-9 - -10				NR		NO RECOVERY		CAR RRI AIDA 40 0 40 5
_		0.0	moist	FILL	-	fine sandy SILT, little organics, trace fill det		GAR-PDI-A'9A-10.0-10.5
-11 - -12	5		wet	SM		dark brown, soft, moist, no odor, no staining fine silty SAND, (7.5YR 6/3) light brown, m wet, no odor, no staining. Soils consistent v	edium dense,	GAR-PDI-A'9A-10.5-11.0 GAR-PDI-A'9A-12.0-12.5
-13 -14	3		wet	SW		fine to coarse SAND, some fine to medium reddish brown, medium dense, wet, no odo Soils consistent with UNDno.		GAR-PDI-A'9A-14.0-14.5
-								Grace Broker and This
-15 - -16		0.0	wet	SP		fine to medium SAND, little fine gravel, (7.5 brown, medium dense, wet, no odor, no state consistent with UNDno.	5YR 3/3) dark aining. Soils	-
10 _								GAR-PDI-A'9A-16.0-16.5
-17 	5		wet	SW		fine to coarse SAND, some fine to coarse greddish brown, dense, wet, no odor, no stai		
19—								GAR-PDI-A'9A-18.0-18.5
20-						∛		GAR-PDI-A'9A-20.0-20.5
-	1	0.0						GAIN-F DI-M 9A-20.0-20.5
-21						-4		
otes:	ow surface	arada	COPR - chro	mite ore pro	cessing r	esidue UNDno - non-organic undisturbed native dep	nosits MGP - manı	ıfactured gas plant

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: GAR-PDI-A`9B

Project Number Date Started Di Date Finished I Dogged By: Ti Physical Locati Depth Range (ft/ft) 1	rilling: : Drilling: ion: Act	2/12/2017 2/12/2017	7 2:00:00 PM	Graphic Log	Rig Type: Coordinates (NJSPI Core Size: 3.0 in Boring Total Depth: Project Manager: Scott Mikaelian Depth to Water: 3. Surface Elevation:	0
Date Finished Degged By: Ti Physical Location Physical L	Orilling: ion: Act y PID (ppm) 0.0	ual - GA Pl Moisture Content dry to moist wet wet	USCS CONCRETE FILL FILL NR FILL SM	Graphic Log	Core Size: 3.0 in Project Manager: Scott Mikaelian Surface Elevation: Surface Cover and Thickness: Concrete sidewalk fine to medium SAND, some fine to coarse gravel, little silt, (7.5YR 3/2) dark brown, medium dense, dry to moist, no odor, no staining. fine to coarse SAND, some fine to coarse gravel, (7.5YR 5/4) brown, medium dense, moist, no odor, no staining. fine to coarse silty SAND, little coarse gravel, (7.5YR 2.5/3) very dark brown, medium dense, wet, no odor, no staining, water at 3.0 feet. NO RECOVERY SILT, some fine to medium sand, little fine to coarse gravel, (7.5YR 2.5/2) very dark brown, medium stiff, wet, no odor, no staining. SILT, little seashells, trace fine sand, (7.5YR 3/2) dark brown, medium stiff, wet, slight organic odor, no staining. Soils consistent with UNDno.	21 ft 0 11.717 ft NAVD88 Sample ID GAR-PDI-A'98-6.0-6.5 GAR-PDI-A'98-6.5-7.0
Description Recover	y PID (ppm) 0.0	Moisture Content dry to moist wet wet	USCS CONCRETE FILL FILL NR FILL SM	Graphic Log	Project Manager: Scott Mikaelian Surface Elevation: Surface Cover and Thickness: Concrete sidewalk fine to medium SAND, some fine to coarse gravel, little silt, (7.5YR 3/2) dark brown, medium dense, dry to moist, no odor, no staining. fine to coarse SAND, some fine to coarse gravel, (7.5YR 5/4) brown, medium dense, moist, no odor, no staining. fine to coarse silty SAND, little coarse gravel, (7.5YR 2.5/3) very dark brown, medium dense, wet, no odor, no staining, water at 3.0 feet. NO RECOVERY SILT, some fine to medium sand, little fine to coarse gravel, (7.5YR 2.5/2) very dark brown, medium stiff, wet, no odor, no staining. SILT, little seashells, trace fine sand, (7.5YR 3/2) dark brown, medium stiff, wet, slight organic odor, no staining. Soils consistent with UNDno.	0 11.717 ft NAVD88 Sample ID GAR-PDI-A'9B-6.0-6.5 GAR-PDI-A'9B-6.5-7.0
Physical Location Physication Physical Location Physication Physical Location Physical Location Physical Location Physic	y PID (ppm) 0.0	Moisture Content dry to moist moist wet wet	USCS CONCRETE FILL FILL NR FILL SM	Graphic Log	Surface Cover and Thickness: Concrete sidewalk fine to medium SAND, some fine to coarse gravel, little silt, (7.5YR 3/2) dark brown, medium dense, dry to moist, no odor, no staining. fine to coarse SAND, some fine to coarse gravel, (7.5YR 5/4) brown, medium dense, moist, no odor, no staining. fine to coarse silty SAND, little coarse gravel, (7.5YR 2.5/3) very dark brown, medium dense, wet, no odor, no staining, water at 3.0 feet. NO RECOVERY SILT, some fine to medium sand, little fine to coarse gravel, (7.5YR 2.5/2) very dark brown, medium stiff, wet, no odor, no staining. SILT, little seashells, trace fine sand, (7.5YR 3/2) dark brown, medium stiff, wet, slight organic odor, no staining. Soils consistent with UNDno.	Sample ID GAR-PDI-A'9B-6.0-6.5 GAR-PDI-A'9B-6.5-7.0
Depth Recover (ft/ft) -1	y PID (ppm) 0.0	Moisture Content dry to moist moist wet wet	USCS CONCRETE FILL FILL NR FILL SM	Log	Surface Cover and Thickness: Concrete sidewalk fine to medium SAND, some fine to coarse gravel, little silt, (7.5YR 3/2) dark brown, medium dense, dry to moist, no odor, no staining. fine to coarse SAND, some fine to coarse gravel, (7.5YR 5/4) brown, medium dense, moist, no odor, no staining. fine to coarse silty SAND, little coarse gravel, (7.5YR 2.5/3) very dark brown, medium dense, wet, no odor, no staining, water at 3.0 feet. NO RECOVERY SILT, some fine to medium sand, little fine to coarse gravel, (7.5YR 2.5/2) very dark brown, medium stiff, wet, no odor, no staining. SILT, little seashells, trace fine sand, (7.5YR 3/2) dark brown, medium stiff, wet, slight organic odor, no staining. Soils consistent with UNDno.	Sample ID GAR-PDI-A'9B-6.0-6.5 GAR-PDI-A'9B-6.5-7.0
Range (ft/ft) -1 -2 -3.5 -3 -4 -6 -7 -3.5 -8 -9 -10 -11 -12 -4.5 -13	0.0 0.0	dry to moist wet wet	FILL FILL SM	Log	Concrete sidewalk fine to medium SAND, some fine to coarse gravel, little silt, (7.5YR 3/2) dark brown, medium dense, dry to moist, no odor, no staining. fine to coarse SAND, some fine to coarse gravel, (7.5YR 5/4) brown, medium dense, moist, no odor, no staining. fine to coarse silty SAND, little coarse gravel, (7.5YR 2.5/3) very dark brown, medium dense, wet, no odor, no staining, water at 3.0 feet. NO RECOVERY SILT, some fine to medium sand, little fine to coarse gravel, (7.5YR 2.5/2) very dark brown, medium stiff, wet, no odor, no staining. SILT, little seashells, trace fine sand, (7.5YR 3/2) dark brown, medium stiff, wet, slight organic odor, no staining. Soils consistent with UNDno.	GAR-PDI-A'9B-6.0-6.5 GAR-PDI-A'9B-6.5-7.0
3.5 -34567- 3.5 -89101112131313	0.0	wet wet	FILL FILL NR FILL SM		fine to medium SAND, some fine to coarse gravel, little silt, (7.5YR 3/2) dark brown, medium dense, dry to moist, no odor, no staining. fine to coarse SAND, some fine to coarse gravel, (7.5YR 5/4) brown, medium dense, moist, no odor, no staining. fine to coarse silty SAND, little coarse gravel, (7.5YR 2.5/3) very dark brown, medium dense, wet, no odor, no staining, water at 3.0 feet. NO RECOVERY SILT, some fine to medium sand, little fine to coarse gravel, (7.5YR 2.5/2) very dark brown, medium stiff, wet, no odor, no staining. SILT, little seashells, trace fine sand, (7.5YR 3/2) dark brown, medium stiff, wet, slight organic odor, no staining. Soils consistent with UNDno.	GAR-PDI-A'9B-6.5-7.0
3.5 -3 -4 -4 -5 -6 -7 -3.5 -8 -9 -10 -11 -12 -4.5 -13		wet wet	FILL NR FILL SM		(7.5YR 3/2) dark brown, medium dense, dry to moist, no odor, no staining. fine to coarse SAND, some fine to coarse gravel, (7.5YR 5/4) brown, medium dense, moist, no odor, no staining. fine to coarse silty SAND, little coarse gravel, (7.5YR 2.5/3) very dark brown, medium dense, wet, no odor, no staining, water at 3.0 feet. NO RECOVERY SILT, some fine to medium sand, little fine to coarse gravel, (7.5YR 2.5/2) very dark brown, medium stiff, wet, no odor, no staining. SILT, little seashells, trace fine sand, (7.5YR 3/2) dark brown, medium stiff, wet, slight organic odor, no staining. Soils consistent with UNDno.	GAR-PDI-A'9B-6.5-7.0
3.5 -3 -4 -4 -5 -6 -7 -3.5 -8 -9 -10 -11 -12 -4.5 -13		wet wet	FILL NR FILL		odor, no staining. fine to coarse SAND, some fine to coarse gravel, (7.5YR 5/4) brown, medium dense, moist, no odor, no staining. fine to coarse silty SAND, little coarse gravel, (7.5YR 2.5/3) very dark brown, medium dense, wet, no odor, no staining, water at 3.0 feet. NO RECOVERY SILT, some fine to medium sand, little fine to coarse gravel, (7.5YR 2.5/2) very dark brown, medium stiff, wet, no odor, no staining. SILT, little seashells, trace fine sand, (7.5YR 3/2) dark brown, medium stiff, wet, slight organic odor, no staining. Soils consistent with UNDno.	GAR-PDI-A'9B-6.5-7.0
3.5 -3 -4 -5 -6 -7 -3.5 -8 -9 -10 -11 -12 -4.5 -13		wet	FILL NR FILL		5/4) brown, medium dense, moist, no odor, no staining. fine to coarse silty SAND, little coarse gravel, (7.5YR 2.5/3) very dark brown, medium dense, wet, no odor, no staining, water at 3.0 feet. NO RECOVERY SILT, some fine to medium sand, little fine to coarse gravel, (7.5YR 2.5/2) very dark brown, medium stiff, wet, no odor, no staining. SILT, little seashells, trace fine sand, (7.5YR 3/2) dark brown, medium stiff, wet, slight organic odor, no staining. Soils consistent with UNDno.	GAR-PDI-A'9B-6.5-7.0
-6 3.5 -8101112 4.5		wet	NR FILL SM		very dark brown, medium dense, wet, no odor, no staining, water at 3.0 feet. NO RECOVERY SILT, some fine to medium sand, little fine to coarse gravel, (7.5YR 2.5/2) very dark brown, medium stiff, wet, no odor, no staining. SILT, little seashells, trace fine sand, (7.5YR 3/2) dark brown, medium stiff, wet, slight organic odor, no staining. Soils consistent with UNDno.	GAR-PDI-A'9B-6.5-7.0
-6 3.5 -8101112 4.5		wet	FILL		water at 3.0 feet. NO RECOVERY SILT, some fine to medium sand, little fine to coarse gravel, (7.5YR 2.5/2) very dark brown, medium stiff, wet, no odor, no staining. SILT, little seashells, trace fine sand, (7.5YR 3/2) dark brown, medium stiff, wet, slight organic odor, no staining. Soils consistent with UNDno.	GAR-PDI-A'9B-6.5-7.0
-6 3.5 -8101112 4.5		wet	SM		(7.5YR 2.5/2) very dark brown, medium stiff, wet, no odor, no staining. SILT, little seashells, trace fine sand, (7.5YR 3/2) dark brown, medium stiff, wet, slight organic odor, no staining. Soils consistent with UNDno.	GAR-PDI-A'9B-6.5-7.0
-8 —	0.0				brown, medium stiff, wet, slight organic odor, no staining. Soils consistent with UNDno.	GAR-PDI-A'9B-6.5-7.0
-8 —	0.0				brown, medium stiff, wet, slight organic odor, no staining. Soils consistent with UNDno.	
12	0.0	wet	NR		NO RECOVERY	GAR-PDI-A'9B-8.0-8.5
11— 12— 13— 13—	0.0	wet	NR		NO RECOVERY	
11— 12— 13— 13—	0.0	wet		1		
12— 4.5	0.0		SP	X 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4	fine to coarse SAND, little fine to coarse gravel, (7.5YR 5/4)	GAR-PDI-A'9B-10.0-10.5
13		wet	SP		brown, medium dense, wet, no odor, no staining. Soils consistent with UNDno.	
14-		WOL	, Oi		fine to medium SAND, little medium to coarse gravel, (5YR 3/2) dark reddish brown, medium dense, wet, no odor, no staining. Soils consistent with UNDno.	GAR-PDI-A'9B-12.0-12.5
						CAR DDI AIOR 14 0 14 5
4					1	GAR-PDI-A'9B-14.0-14.5
15			NR	ļ.,	NO RECOVERY	
16—	0.0	wet	SP		fine SAND, little coarse gravel, (5YR 3/2) dark reddish brown, medium dense, wet, no odor, no staining. Soils consistent with UNDno.	GAR-PDI-A'9B-16.0-16.5
17—		wet	SP		fine to coarse SAND, some fine to coarse gravel, (5YR 3/2) dark reddish brown, dense, wet, no odor, no staining. Soils consistent with UNDno.	5. 3.7 5.7 55-10.0-10.0
18		wet	SM		fine SAND, little fine to coarse gravel, trace silt, (5YR 3/2) dark reddish brown, medium dense, wet, no odor, no staining. Soils consistent with UNDno.	GAR-PDI-A'9B-18.0-18.5
20						
1	0.0					GAR-PDI-A'9B-20.0-20.5
21						
otes: gs - below surfac M - meadow ma			romite ore procen grey mud	essing re		ufactured gas plant

Boring ID: GAR-PDI-A`10A

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Coordinates (NJSPNAD83) x: 610744.567 Drilling Method: direct push Date Started Drilling: 11/10/2016 10:40:00 AM Rig Type: Coordinates (NJSPNAD83) y: 683395.283 Date Finished Drilling: 11/10/2016 11:15:00 AM Core Size: 3.0 in Boring Total Depth: 21 ft Logged By: ES Project Manager: Scott Mikaelian Depth to Water: 6.0 Physical Location: Actual - GA PDI Surface Elevation: 11.288 ft NAVD88 Depth PID Recovery Moisture Graphic Sample **USCS** Surface Cover and Thickness: Range Content ΙD (ft/ft) (ppm) Log (ft bgs) 0.0 **FILL** DGA, fine to coarse SAND, some fine to medium gravel, dry (7.5YR 4/3) brown, medium dense, dry, no odor, no staining. DGA, fine to coarse SAND, some fine to medium gravel, (5Y dry FILL 5/1) gray, medium dense, dry, no odor, no staining. 5 0.0 FILL fine SAND, little silt, (7.5YR 4/3) brown, medium dense, moist moist, no odor, no staining, water at 6.0 feet. 5 **FILL** fine to medium SAND, little organics, (7.5YR 4/3) brown, moist medium dense, moist, no odor, no staining. GAR-PDI-A'10A-9.5-10.0 GAR-PDI-A'10A-10 0-10 5 0.0 SM fine sandy SILT, little organics, (7.5YR 3/3) dark brown, firm, moist moist, no odor, no staining. Soils consistent with UNDorg. wet SM fine silty SAND, (7.5YR 4/3) brown, medium dense, wet, no odor, no staining. Soils consistent with UNDno. 12 GAR-PDI-A'10A-12.0-12.5 5 wet SW fine to coarse SAND, some fine to medium gravel, (5YR 4/4) reddish brown, medium dense, wet, no odor, no staining. 13 Soils consistent with UNDno. GAR-PDI-A'10A-14.0-14.5 0.0 16 GAR-PDI-A'10A-16.0-16.5 GAR-PDI-A'10A-18.0-18.5 A.GDT - 4/7/17 SP fine to medium SAND, little fine to medium gravel, (5YR 4/3) wet reddish brown, medium dense, wet, no odor, no staining. Soils consistent with UNDno. GAR-PDI-A'10A-20.0-20.5 0.0 2012-09 RA PPG LOGS 1 -21

Notes:

bgs - below surface grade COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits MM - meadow mat GGM - green grey mud UNDorg - organic undisturbed native deposits

MGP - manufactured gas plant CCPW - chromate chemical production waste

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: GAR-PDI-A`11A

Project								NAD83) x: 610729.203
Date Started Drilling: 11/10/2016 11:20:00 AM Date Finished Drilling: 11/10/2016 11:50:00 AM Logged By: ES Physical Location: Actual - GA PDI							oordinates (NJSPN	IAD83) y: 683370.564
						Core Size: 3.0 in Bo	oring Total Depth:	21 ft
							epth to Water: 5.0	
		n: Act	ual - GA PD	ı				11.482 ft NAVD88
		,	J.J. J. (1 D	•				
Depth Range It bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness	:	Sample ID
		0.0	dry	FILL		DGA, fine to coarse SAND, some fine to med (7.5YR 4/3) brown, medium dense, dry, no or		
-2 -3 -4 -5	5		dry	FILL		DGA, fine to coarse SAND, some fine to med 5/1) gray, medium dense, dry to wet, no odor water at 5.0 feet.	lium gravel, (5Y , no staining,	
-6 -7	3.5	0.0	wet	FILL		fine to medium silty SAND, trace fill debris, (7 brown, medium dense, wet, no odor, no stain		
\Box	5.0							GAR-PDI-A'11A-7.5-8.0
-8-			moist	SP		fine to medium SAND, little organics, (7.5YR	4/3) brown,	GAR-PDI-A'11A-8.0-8.5
-9- 				NR	<u> </u>	medium dense, moist, no odor, no staining. S with UNDorg. NO RECOVERY	Soils consistent	
10-		0.0	wat	CNA	<u> </u>	fine oilty CAND little engaging topic fine	rol (7 EVD 6/0)	GAR-PDI-A'11A-10.0-10.5
_ 11—		0.0	wet	SM		fine silty SAND, little organics, trace fine grav light brown, medium dense, wet, no odor, no consistent with UNDorg.	el, (7.5YR 6/3) staining. Soils	GARY DIPA 11A-10.0-10.3
-12 - -13	5		moist	SW		fine to medium SAND, some fine to medium silt, (7.5YR 4/3) brown, dense, moist, no odo Soils consistent with UNDno.		GAR-PDI-A'11A-12.0-12.5
14— —								GAR-PDI-A'11A-14.0-14.5
15 — — 16 —		0.0	wet	SM		fine to coarse SAND, some fine to medium g reddish brown, medium dense, wet, no odor, Soils consistent with UNDno.		CAR BRIAKE
_								GAR-PDI-A'11A-16.0-16.5
-17						1		
	5					1		
,						1		
18								GAR-PDI-A'11A-18.0-18.5
\dashv					1.44.44	1		
-19				05	1:::::	Grant CAND PHILIP IN CO.	attende a t	4
			wet	SP	1:::::::::	fine to medium SAND, little silt and fine to me		
						(5YR 4/3) reddish brown, dense, wet, no odo	r, no staining.	
-20		0.0				Soils consistent with UNDno.		GAR-PDI-A'11A-20.0-20.5
4	1	0.0				•		
24						1		
-21								
otes:	au af	ara -1 :	CODD -1-	mita		sidue UNDno - non-organic undisturbed native depos	site MOD	ufactured gas plant
						with the transfer of the control of		

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: GAR-PDI-A`12A

roiect	Name: F	PPG Ga	rfield Ave			Drilling Company: SGS North America		Page
	Number:					Drilling Method: direct push	Coordinates (NJSPI	NAD83) x: 610714.524
				9:10:00 AM		Rig Type:		AD83) y: 683344.057
				6 10:30:00 A		Core Size: 3.0 in	Boring Total Depth:	
	IBy: ES	g.	11/0/2010	70.00.007		Project Manager: Scott Mikaelian	Depth to Water: 3.0	
		n: Act	ual - GA P[ור		Toject Manager: Ocott Mikaciian	Surface Elevation:	
	ai Locatio	ii. Act	uai - OATI	<u> </u>			Ourrace Lievation.	11.100 1(14/4/200
epth ange bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickr	ess:	Sample ID
1		0.0	dry	FILL		DGA, fine to coarse SAND, some fine to (7.5YR 4/2) brown, medium dense, dry, r		
2—	3		dry	FILL		DGA, fine to coarse SAND, some fine to 5/1) gray, medium dense, dry to wet, no water at 3.0 feet.		
3— - 4—				NR		NO RECOVERY		
5—		0.0	wet	FILL		DGA, fine to coarse SAND, some fine to 5/1) gray, medium dense, wet, no odor, n		GAR-PDI-A'12A-5.0-5.5
6—			wet	FILL		fine to medium SAND, some fine to medi		GAR-PDI-A'12A-6.0-6.5
7	3.5		wet	SM	XXXX	brick, (5YR 4/3) reddish brown, medium no staining. fine silty SAND, (7.5YR 3/3) dark brown, wet, no odor, no staining. Soils consisten	medium dense,	GAR-PDI-A'12A-6.5-7.0
"						}		GAR-PDI-A'12A-8.0-8.5
0—				NR		NO RECOVERY		
1		0.0	wet	SP		fine to medium silty SAND, some fine grabrown, medium dense, wet, no odor, no sconsistent with UNDno.	taining. Soils	GAR-PDI-A'12A-10.0-10.5
			wet	SP		fine to medium SAND, trace silt, (5YR 4/medium dense, wet, no odor, no staining with UNDno.		GAR-PDI-A'12A-12.0-12.5
	5		wet	SM		fine SAND, little silt, (5YR 4/4) reddish br		GAR-PDI-A 12A-12.0-12.5
3 -			wet	SP		dense, wet, no odor, no staining. Soils cound und no. fine to medium SAND, trace silt, (5YR 4/4 medium dense, wet, no odor, no staining	1) reddish brown,	
4— 5—						with UNDno.		GAR-PDI-A'12A-14.0-14.
6 -		0.0	wet	SP		fine to medium SAND, some fine to medi 4/4) reddish brown, medium dense to der no staining. Soils consistent with UNDno	nse, wet, no odor,	GAR-PDI-A'12A-16.0-16.9
7— - 8—	5							GAR-PDI-A'12A-18.0-18.9
9-								GAIXT DPA 12A-10.0-10.3
0	1	0.0						GAR-PDI-A'12A-20.0-20.8
es:								
- bel	ow surface adow mat		COPR - chr GGM - gree		cessing re	sidue UNDno - non-organic undisturbed native d UNDorg - organic undisturbed native depo		ufactured gas plant romate chemical production w

Boring ID: GAR-PDI-A`13A

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Coordinates (NJSPNAD83) x: 610704.17 Drilling Method: direct push Date Started Drilling: 11/9/2016 10:35:00 AM Rig Type: Coordinates (NJSPNAD83) y: 683323.773 Date Finished Drilling: 11/9/2016 11:30:00 AM Core Size: 3.0 in Boring Total Depth: 21 ft Logged By: ES Project Manager: Scott Mikaelian Depth to Water: 3.0 Physical Location: Actual - GA PDI Surface Elevation: 11.049 ft NAVD88 Depth PID Recovery Moisture Graphic Sample **USCS** Surface Cover and Thickness: Range Content ΙD (ft/ft) (ppm) Log (ft bgs) 0.0 **FILL** DGA, fine to coarse SAND, some fine to medium gravel, dry (7.5YR 4/3) brown, dry, no odor, no staining. DGA, fine to coarse SAND, some fine to medium gravel, dry FILL (5Y 5/1) gray, medium dense, dry to wet, water at 3.5 feet. 3.5 NR NO RECOVERY 0.0 wet **FILL** DGA, fine to coarse SAND, some fine to medium gravel, (5Y 5/1) gray, wet, no odor, no staining. GAR-PDI-A'13A-5.5-6.0 FILL wet fine to medium SAND, little silt and ash, (5YR 4/4) reddish GAR-PDI-A'13A-6.0-6.5 SM brown, medium dense, wet, no odor, no staining. fine silty SAND, (7.5YR 3/3) dark brown, medium dense, wet wet, no odor, no staining. Soils consistent with UNDno. 4.5 fine silty SAND, some fine gravel, (7.5YR 4/3) brown, SM wet medium dense, wet, no odor, no staining. Soils consistent with UNDno. NO RECOVERY NR 0.0 SP fine to medium SAND, some fine to medium gravel, (5YR wet 4/4) reddish brown, medium dense to dense, wet, no odor, no staining. Soils consistent with UNDno. 12 GAR-PDI-A'13A-12.0-12.5 5 GAR-PDI-A'13A-14.5-15.0 0.0 16 GAR-PDI-A'13A-16.5-17.0 GAR-PDI-A'13A-17.0-17.5 GAR-PDI-A'13A-17.5-18.0 GAR-PDI-A'13A-18.5-19.0 GAR-PDI-A'13A-19.5-20.0 GAR-PDI-A'13A-20.0-20.5 0.0 1 -21

2012-09 RA PPG LOGS

A.GDT - 4/7/17

bgs - below surface grade COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits MM - meadow mat GGM - green grey mud UNDorg - organic undisturbed native deposits

MGP - manufactured gas plant CCPW - chromate chemical production waste

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: GAR-PDI-A0

Droino+	Number	60240	1730			Drilling Method: direct puch	Coordinates (MIRC	מסכי בארות יא (בארות אוא MADDS)	
	Number:			12:10:00 📭		Drilling Method: direct push		NAD83) x: 610903.388	
				12:10:00 PN		Rig Type: Core Size: 3.0 in		NAD83) y: 683651.358	
	nisnea Dr I By: ES	ming:	1 1/2 1/2076	6 1:40:00 PN		Project Manager: Scott Mikaelian	Boring Total Depth: Depth to Water: 5.		
-ogge0 Dhyeir	allocatio	n: Act	ual - GA PD	<u> </u>		Froject Manager. Scott Mikaelian	Surface Elevation:		
	ui Localio	ii. Act	uai - GA PD	'1	1	1	Juliace Elevation.	I I J I J IL INAVDOO	
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphi Log	C Surface Cover and Thic	ckness:	Sample ID	
-1	5	0.0	dry	FILL		DGA, fine to coarse SAND, some fine (2.5Y 5/2) grayish brown, medium den odor, no staining, water at 5.0 feet.			
-5 -6 -7	5	0.0							
-8-		0.0	-	moist	FILL		fine silty SAND, little ash, trace brick, (7.5YR 4/2) brown.	GAR-PDI-A0-8.0-8.5
-9 -10			moist	ML		medium dense, moist, no odor, no stai SILT, (7.5YR 3/2) dark brown, soft, mo staining. Soils consistent with UNDno.	ning.		
-11 -12 -12	5	0.0							
-13 - -14			wet	SP		fine to coarse SAND, some fine to med 5/2) grayish brown, medium dense, we staining. Soils consistent with UNDno.	dium gravel, (2.5Y et, no odor, no		
-15			wet	SP		fine to medium SAND, (5YR 4/3) reddi			
-16 — -16 — -17—	_	0.0				dense, wet, no odor, no staining. Soils UNDno.	consistent with		
-18 -18	5								
-19 -20								0.42.22	
	1	0.0						GAR-PDI-A0-20.0-20.5	
otes:	ow surface	grade	COPR - chro	mite ore proc	essing re	esidue UNDno - non-organic undisturbed native de UNDorg - organic undisturbed native de	e deposits MGP - man	ufactured gas plant romate chemical production wa	
ıvı - me	adow mat		-I-N/I Groom			LUNI JORG - ORGANIC LINGISTURNED NATIVE DE	DOUBLE L'UDIN - Ch		

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: GAR-PDI-A1A

Date Sta	Number: arted Dril					Drilling Method: direct push		NAD83) x: 610888.266
	arted Drii					n. -		1
Jate Fir						Rig Type:		IAD83) y: 683625.194
		illing:	11/17/2010	6 9:15:00 AI		Core Size: 3.0 in	Boring Total Depth:	
	By: ES					Project Manager: Scott Mikaelian	Depth to Water: 5.0	
nysica	I Locatio	n: Act	ual - GA PD	l .	1	1	Surface Elevation:	11.923 ft NAVD88
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphi Log	Surface Cover and Thickr	ness:	Sample ID
		0.0		FILL		TRAP ROCK		
-1 -1 -2			dry	FILL		DGA, fine to coarse SAND, some fine to 5/1) gray, medium dense, dry to moist, n water at 5.0 feet.		
-3	5							
-5-								
-6-		0.0						
-7-								CAR BRIAGA TO T
.]	5		moist	FILL		SILT, some to little fine sand, little fine gr	avel, (7.5YR 4/3)	GAR-PDI-A1A-7.0-7.5
-8-			moist	SM		brown, soft, moist, no odor, no staining. Organic SILT, 90% organic silt, 10% organic	anic fibers (7.5VR	GAR-PDI-A1A-7.5-8.0
-910 -11		0.0				4/2) brown, soft, moist to wet, no odor, n consistent with UNDorg.	Ü	
13	5		wet	SP		fine to medium SAND, (2.5Y 5/2) grayish dense, wet, no odor, no staining. Soils country UNDno.	n brown, medium onsistent with	
-14			wet	SP		fine SAND, (5Y 5/1) gray, medium dense staining. Soils consistent with UNDno.	e, wet, no odor, no	
15 - -16 - -		0.0	wet	SP		fine to coarse SAND, some fine to coarse grayish brown, medium dense, wet, no o Soils consistent with UNDno.	e gravel, (2.5Y 5/2) dor, no staining.	
-17	5		wet	SP		fine to coarse SAND, some fine to mediu		GAR-PDI-A1A-17.0-17.5
\dashv	5		wet	SP		reddish brown, medium dense, wet, no o	dor, no staining.	GAR-PDI-A1A-17.5-18.0
-18 - - -19 -						Soils consistent with UNDno. fine to medium SAND, (5YR 4/4) reddish dense, wet, no odor, no staining. Soils country UNDno.		
20						4		
-20	1	0.0				:		GAR-PDI-A1A-20.0-20.5
21						<u>'</u>		
	ow surface		COPR - chro		cessing re	esidue UNDno - non-organic undisturbed native c UNDorg - organic undisturbed native depo		l ufactured gas plant comate chemical production wa

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: GAR-PDI-A1B

1/22/2016 7:45:00 AM		Coordinates (NJSPN	IAD83) x: 610917.444 AD83) v: 683678.148
	rig type:	Coordinates (NJSPN	AUASIV: NX3N/X 14X
	a a: a a:		
		Boring Total Depth:	
		Depth to Water: 5.0	
al - GA PDI		Surface Elevation:	10.994 ft NAVD88
Moisture Content USCS Graphi Log	Surface Cover and Thickne	ss:	Sample ID
dry FILL	TRAP ROCK DGA, fine to coarse SAND, some fine to m (2.5Y 5/2) grayish brown, medium dense, o odor, no staining, water at 5.0 feet.		
			CAR PRIAMP 75 9 0
wet FILL	fine to medium silty SAND, little fine gravel reddish brown, medium dense, wet, no odd		GAR-PDI-A1B-7.5-8.0
moist ML wet SM	SILT, (7.5YR 3/3) dark brown, soft, moist, staining. Soils consistent with UNDno. fine silty SAND, little fine gravel, (7.5YR 6/2) medium dense, wet, no odor, no staining. Swith UNDno.	no odor, no 3) light brown,	GAR-PDI-A1B-8.0-8.5
wet SP	fine to coarse SAND, some fine to coarse or reddish brown, medium dense, wet, no odd Soils consistent with UNDno.		GAR-PDI-A1B-12.0-12.5
			GAR-PDI-A1B-14.0-14.5
			GAR-PDI-A1B-16.0-16.5
			GAR-PDI-A1B-18.0-18.5
			GAR-PDI-A1B-20.0-20.5
			chromite ore processing residue UNDno - non-organic undisturbed native deposits MGP - manu

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Boring ID: GAR-PDI-A2A

roject	t Number:	00/40	ມວອ					
			11/17/2016	9:20:00 AM		Drilling Method: _direct push Rig Type:		NAD83) x: 610873.824 IAD83) y: 683599.743
			11/17/2016			Core Size: 3.0 in	Boring Total Depth:	
	d By: ES	iiiiig.	11/1//2010	3.30.00 A		Project Manager: Scott Mikaelian	Depth to Water: 5.0	
		n: Act	ual - GA PD			Froject Manager. Scott Mikaelian	Surface Elevation:	
TIYSIC	ai Locatio	II. ACI	uai - GA FD	<u> </u>	1		Surface Elevation.	12.005 IL NAVD66
Depth Range t bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphi Log	Surface Cover and Thickn	ess:	Sample ID
		0.0		FILL	XXXX	TRAP ROCK		
-1 - -2	5		dry	FILL		DGA, fine to coarse SAND, some fine to to 5/1) gray, medium dense, dry to wet, no cowater at 5.0 feet.		
-3 -4 -								
-5— — -6—		0.0						
-7— —	3.5							CAR PRIAMA 7.5.0.0
8]		wet	FILL		fine to medium SAND, little brick, (5YR 4/		GAR-PDI-A2A-7.5-8.0
0			wet	SP		medium dense, wet, no odor, no staining. fine to medium SAND, little to trace organ	ice (7.5VD 4/3)	GAR-PDI-A2A-8.0-8.5
-9— -				NR		brown, medium dense, wet, no odor, no s consistent with UNDorg. NO RECOVERY		
-10 - - -11 -		0.0	wet	SM		fine silty SAND, (2.5Y 5/2) grayish brown wet, no odor, no staining. Soils consistent	, medium dense, with UNDno.	
12— 13— 14— –	2			NR	7.1	NO RECOVERY		
15 — —		0.0	wet	SM		fine silty SAND, (5Y 5/1) gray, medium de no staining. Soils consistent with UNDno.	ense, wet, no odor,	
16— — 17— —	. 5		wet	SP		fine to medium SAND, (5YR 4/4) reddish dense, wet, no odor, no staining. Soils col UNDno.	brown, medium nsistent with	- GAR-PDI-A2A-16.0-16.5
18 — —			wet	SP		fine to coarse SAND, some fine to mediur	m gravel. (5YR 4/4)	GAR-PDI-A2A-18.0-18.5
19— - 20—				٠.		reddish brown, dense, wet, no odor, no st consistent with UNDno.	aining. Soils	
-21	. 1	0.0						GAR-PDI-A2A-20.0-20.5
otes:								
gs - bel	low surface eadow mat		COPR - chro		cessing re	esidue UNDno - non-organic undisturbed native de UNDorg - organic undisturbed native depos		ufactured gas plant romate chemical production w

PPG - 2012-09 RA PPG_LOGS_A.GDT - 4/7/17 12:02

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: GAR-PDI-A2B

	Name: F			_	l	Drilling Company: SGS North America		
	Number:					Drilling Method: direct push		IAD83) x: 610932.132
				9:30:00 AM		Rig Type:		AD83) y: 683705.148
	inisned Dr I By : ES	illing:	11/22/201	6 11:00:00 A		Core Size: 3.0 in Project Manager: Scott Mikaelian	Boring Total Depth: Depth to Water: 5.0	
		n: Act	ual - GA PI	ור	Į.	Project Manager. Scott Mikaelian	Surface Elevation:	
	ai Locatio	ii. 7.0t	uai - OATI	<u> </u>			Our lace Lievation.	10.733 11 14/4 / 1500
Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickn	ess:	Sample ID
		0.0		FILL		TRAP ROCK		
			dry	FILL		DGA, fine to coarse SAND, some fine to (2.5Y 5/2) grayish brown, medium dense,		
 1						odor, no staining, water at 5.0 feet.	dry to wet, no	
					\bowtie	3,		
<u> </u>	_							
	5							
 3								
<u> </u>								
4					\bowtie			
5								
3		5.5						
6					\bowtie			
 7	_							
	5		moist	FILL	\bowtie	fine to medium SAND, little silt and brick,	trace coal (7 5VR	
8			moist	I ILL		4/3) brown, medium dense, moist, no odo	r, no staining.	
							,	
<u> </u>								
L _			wet	SM		fine silty SAND, (2.5Y 4/2) dark grayish b dense, wet, strong organic odor, no staini	rown, medium	
10						with UNDno.	ng. Sons consistent	
L 10		5.5						
11								
						<u> </u>		
12	_							
	5		wet	SP		fine to coarse SAND, some fine to mediur	m gravel. (5YR 4/4)	
13-						reddish brown, medium dense, wet, no oc		
						Soils consistent with UNDno.		
 14						•		
 15					ļ:::::::::::::::::::::::::::::::::::::		100 - 100 /=> /=> /->	
L -		0.0	wet	SP		fine to medium SAND, some fine gravel, I reddish brown, medium dense, wet, no oc		
—16—						Soils consistent with UNDno.	ioi, no stailing.	
L								
						<u> </u>		
	5		wet	SP		fine to coarse SAND, some fine to coarse	gravel, (5YR 4/4)	
						reddish brown, dense, wet, no odor, no st consistent with UNDno.	aining. Soils	
18						COHSISTERIT WITH CINDHO.		
 					1: 2: 2:			
 19								
⊢ –						1		
20		0.0						GAR-PDI-A2B-20.0-20.5
<u> </u>	1	0.0				1		Onix-i Di -7 420-20.0-20.0
21 								
Notes:			0000			aidus LINDas assassas a traditional aidus		fact, and one of the
	low surface adow mat		COPR - chr GGM - gree		essing re	sidue UNDno - non-organic undisturbed native de UNDorg - organic undisturbed native depos	eposits MGP - manu sits CCPW - chr	factured gas plant omate chemical production waste
					irmed to be 1	ft thick 3) No CCPW (COPR or GGM) present in any interval of this boring		

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30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: GAR-PDI-A3A

Project	t Number:	00240	1138			Drilling Company: SGS North America Drilling Method: direct push Coordinates (NJS)		PNAD83) x: 610858.194		
				10:50:00 AN		Rig Type:	Coordinates (NJSPNAD83) y: 683573.297			
ate Fi	inished Dr	illina:	11/17/2010	6 11:40:00 A	AM.	Core Size: 3.0 in	Boring Total Depth:			
	d By: ES					Project Manager: Scott Mikaelian	Depth to Water: 5.0			
		n: Act	ual - GA PD)			Surface Elevation:			
	ui Locatio	7.00	uai O/(1 D	4			Ouridoc Elevation.	11.556 1(14,14266		
Depth Range It bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickn	ess:	Sample ID		
		0.0		FILL		TRAP ROCK				
-1 -1 -2			dry	FILL		DGA, fine to coarse SAND, some fine to 5/1) gray, medium dense, dry to wet, no owater at 5.0 feet.				
-3 -4 -	5									
-5— -6— -		0.0	0.0	0.0						
-/-	4									
	1 1		wet	FILL		fine to medium SAND, little silt, trace fine	gravel, (7.5YR	GAR-PDI-A3A-7.5-8.0		
-8- <u>-</u> -	-		wet	SM		4/2) brown, medium dense, wet, no odor, fine sandy SILT, trace organics, (7.5YR 4 wet, no odor, no staining. Soils consisten	no staining. (/3) brown, soft,	GAR-PDI-A3A-8.0-8.5		
-9— —	-			NR		NO RECOVERY	t with ONDOIG.	-		
-10					0.000000			GAR-PDI-A3A-10.0-10.5		
 11 12 13 14	5	0.0	wet	SM		fine SAND, little silt, (5Y 5/1) gray, mediu odor, no staining. Soils consistent with UI	M derise, wet, no NDno.	GAR-PDI-A3A-11.0-11.5		
15 <u> </u>		0.0	wet	SM		fine silty SAND, (7.5YR 6/3) light brown, wet, no odor, no staining. Soils consisten	medium dense, t with UNDno.	GAR-PDI-A3A-15.0-15.5		
-16 - -17 -	5		wet	SP		fine to coarse SAND, some fine to mediu reddish brown, medium dense, wet, no or Soils consistent with UNDno.		GAR-PDI-A3A-16.0-16.5		
18— — 19— —								GAR-PDI-A3A-18.0-18.5		
20-		0.0				N		GAR-PDI-A3A-20.0-20.5		
_ -21	. 1	0.0						3 317.6.(20.0-20.0		
otes: gs - bel M - me		grade	COPR - chro	mite ore prod	essing re	esidue UNDno - non-organic undisturbed native d UNDorg - organic undisturbed native depo	eposits MGP - man	ufactured gas plant romate chemical production w		

A=COM

Boring ID: GAR-PDI-A3B

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Coordinates (NJSPNAD83) x: 610946.617 Drilling Method: direct push Date Started Drilling: 11/22/2016 10:50:00 AM Rig Type: Coordinates (NJSPNAD83) y: 683730.138 Date Finished Drilling: 11/22/2016 12:20:00 PM Core Size: 3.0 in Boring Total Depth: 21 ft Depth to Water: 6.0 Logged By: ES Project Manager: Scott Mikaelian Physical Location: Actual - GA PDI Surface Elevation: 10.856 ft NAVD88 Depth PID Recovery Moisture Graphic Sample **USCS** Surface Cover and Thickness: Range (ft/ft) Content ΙD (ppm) Log (ft bgs) 0.0 FILL TRAP ROCK dry FILL DGA, fine to coarse SAND, some fine to medium gravel, (2.5Y 5/2) grayish brown, medium dense, dry to wet, water at 6.0 feet. 5 0.0 GAR-PDI-A3B-7.0-7.5 FILL CINDERS, little ash, (5YR 2.5/1) black, loose, moist, no moist 5 odor, no staining. GAR-PDI-A3B-7.5-8.0 GAR-PDI-A3B-8.0-8.5 **FILL** fine to medium SAND, some cinders, (10YR 3/2) very dark wet grayish brown, medium dense, wet, no odor, no staining. GAR-PDI-A3B-8.5-9.0 FILL fine silty SAND, little fine to medium gravel, (5YR 4/4) wet reddish brown, medium dense, wet, no odor, no staining. moist Soils consistent with MM. SILT, (7.5YR 2.5/3) very dark brown, soft, moist, no odor, no 0.0 SM wet staining. Soils consistent with UNDno. fine silty SAND, little fine gravel, (7.5YR 6/3) light brown. medium dense, wet, no odor, no staining. Soils consistent with UNDno. 12 5 wet SP fine to coarse SAND, some fine to coarse gravel, (5YR 4/4) reddish brown, medium dense, wet, no odor, no staining. Soils consistent with UNDno. 0.0 16 5 GAR-PDI-A3B-20.0-20.5 0.0 1 -21

Notes

A.GDT - 4/7/17

2012-09 RA PPG LOGS

bgs - below surface grade COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits MM - meadow mat GGM - green grey mud UNDorg - organic undisturbed native deposits UNDorg - organic undisturbed native deposits 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.

MGP - manufactured gas plant CCPW - chromate chemical production waste

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: GAR-PDI-A4B

	t Number:					Drilling Method: Direct Push	PNAD83) x: 610962.057		
Date St	tarted Dril	ling:	11/28/2016			Rig Type:	PNAD83) y: 683755.566		
			11/28/2016			Core Size: 3.0 in	Boring Total Depth:	n: 21 ft	
	d By: Kyle					Project Manager: Scott Mikaelian Depth to Water:			
			ual - GA PD	1			Surface Elevation:		
-		, 101	O, () D	•					
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickn	ess:	Sample ID	
-1	4	0.0	moist	FILL		DGA, fine to coarse SAND, some fine to r (7.5YR 4/2) brown, medium dense, moist staining.			
-4- -	-			NR	- XXXXX	NO RECOVERY			
-5 -6 -7	. 5	0.0	moist	FILL		DGA, fine to coarse SAND, some fine to r 5/1) gray, medium dense, moist to wet, no water at 6.5 feet.			
-8-	-		wet	FILL		fine to medium silty SAND, little fill debris,	(5YR 2.5/1) black,	GAR-PDI-A4B-8.0-8.5	
-9 -10		0.0	wet	OL		medium dense, wet, no odor, no staining. organic SILT, 95% organic silt, 5% organi 2.5/1) black, soft, wet, slight organic odor, consistent with UNDorg.	c fibers, (5YR , no staining. Soils	GAR-PDI-A4B-8.5-9.0	
- -11 - -12	5	0.0	3.0	moist	ML		SILT, trace fine sand and fine to medium	gravel. (5YR 6/3)	GAR-PDI-A4B-11.0-11.5
13 <u> </u>	-					light reddish brown, firm, moist, no odor, r consistent with UNDno.		GAR-PDI-A4B-13.0-13.5	
14 -			moist	GW		fine to coarse GRAVEL, some fine to coar 3/2) dark reddish brown, medium dense, i staining. Soils consistent with UNDno.		GAR-PDI-A4B-14.0-14.5	
-15 -16 -17 	. 5	0.0	moist	SW		fine to coarse SAND, little fine to medium reddish brown, medium dense, moist, no Soils consistent with UNDno.		GAR-PDI-A4B-16.0-16.5	
-18 -19	5					• • • • • • • • • • • • •		GAR-PDI-A4B-18.0-18.5	
20-						•		CAR DDI A4D 00 0 00 5	
_	. 1	0.0				•		GAR-PDI-A4B-20.0-20.5	
-21									
otes: gs - bel M - me			COPR - chro GGM - green		cessing re	esidue UNDno - non-organic undisturbed native de UNDorg - organic undisturbed native depos		ufactured gas plant romate chemical production w	

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: GAR-PDI-A5B

Drilling N			JSPNAD83) x: 610977.806	
	:45:00 AM		SPNAD83) y: 683781.507	
	1:40:00 AM	Boring Total Dep		
Project M		tt Mikaelian Depth to Water:		
		Surface Elevation	on: 11.004 ft NAVD88	
Graphic Log	USCS	face Cover and Thickness:	Sample ID	
	FILL	e SAND, some fine to medium gravel, medium dense, moist no odor no		
NO F	NR			
	FILL	e SAND, some fine to medium gravel, (5Y dense, moist, no odor, no staining.		
fine t	FILL	SAND, trace fill debris, (5YR 2.5/1)		
	FILL	se, wet, no odor, no staining, water at 7.5	\overline{A}	
	TILL X	is, (7.5YR 2.5/3) very dark brown, firm, aining.		
2.5/1	OL -	organic silt, 5% organic fibers, (5YR vet, slight organic odor, no staining. Soils Dorg.		
	SM :	ND, little silt, (5YR 2.5/1) black, medium		
UND	SW	r, no staining. Soils consistent with D, trace fine gravel, (5YR 4/3) reddishnse, wet, no odor, no staining. Soils Dno.		
NO F	NR			
reddi reddi	SW	ND, little fine to coarse gravel, (5YR 4/3) dium dense, wet, no odor, no staining. h UNDno.		
			GAR-PDI-A5B-18.0-18.5	
	\			
			GAR-PDI-A5B-20.0-20.5	
	•			
	te ore proces		manufactured gas plant	
d UN	rey mud	nic undisturbed native deposits MGP - undisturbed native deposits CCPW present in any interval of this boring.		

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Boring ID: GAR-PDI-A6B

Project Project	t Number:					Drilling Company: SGS North America Drilling Method: Direct Push	Coordinates (N ISD	NAD83) x: 610991.939
				8:00:00 AM		Rig Type:		NAD83) y: 683808.813
						Core Size: 3.0 in		
			11/29/20	16 9:10:00 AM			Boring Total Depth:	
	d By: Kyle		ual CA D	DI		Project Manager: Scott Mikaelian	Depth to Water: 6.	
nysic	al Locatio	n: Act	uai - GA Pi	וט		1	Surface Elevation:	11.139 π ΝΑΥΔ88
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphi Log	Surface Cover and Thic	kness:	Sample ID
		0.0		CONCRETE	P & 4	Concrete sidewalk		
-1 -2 -3	3.5	S.S.	moist	FILL		DGA, fine to coarse SAND, some fine t (7.5YR 4/2) brown, medium dense, mo staining.		
-4- -				NR		NO RECOVERY		
-5 - -6- 		0.0	moist	FILL		DGA, fine to coarse SAND, some fine t 5/1) gray, medium dense, moist, no odo	or, no staining.	
- -7			wet	FILL		ASH, little cinders, (5YR 6/1) gray, loos staining, water at 6.0 feet.	e, wet, no odor, no	
_	5		moist	FILL		SILT, little fill debris, trace ash, (7.5YR moist, no odor, no staining.	3/2) dark brown, soft,	040 001 112
-8					XXX	X		GAR-PDI-A6B-7.5-8.0 GAR-PDI-A6B-8.0-8.5
-9 9			wet	ML		SILT, little fine sand, trace fine to coars light reddish brown, stiff, wet, no odor, to consistent with UNDno.		GAR-PDI-A6B-10.0-10.5
-11 -12 -12	5	0.0						GAR-PDI-A6B-12.0-12.5
-13 — - -14 —			wet	SM		fine to medium silty SAND, trace fine to 5/3) reddish brown, dense, wet, no odo consistent with UNDno.	o coarse gravel, (5YR r, no staining. Soils	GAR-PDI-A6B-14.0-14.5
- -15		0.0	wet	SM		fine to coarse silty SAND, little fine to co	parse gravel (5YR	-
- -16		5.5				4/3) reddish brown, medium dense, we staining. Soils consistent with UNDno.	t, no odor, no	045 551455 155
 	_							GAR-PDI-A6B-16.0-16.5
-17— -	5							
-18 								GAR-PDI-A6B-18.0-18.5
-19 -								
20		0.0				4		GAR-PDI-A6B-20.0-20.5
_ -21	. 1	0.0						2.40.7 517.05-20.0-20.0
otes: gs - be M - me	low surface	grade	COPR - chr	omite ore proce	essing re	esidue UNDno - non-organic undisturbed native UNDorg - organic undisturbed native dep	deposits MGP - man	ufactured gas plant romate chemical production w

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: GAR-PDI-A8B

	: Number: tarted Drill			9:45:00 AM		Drilling Method: direct push Rig Type:	PNAD83) x: 611026.355 PNAD83) y: 683856.04										
				16 10:20:00 A		Core Size: 3.0 in	Boring Total Depth:										
	By: ES					Project Manager: Scott Mikaelian	Depth to Water: 6.0										
hysic	al Location	n: Act	ual - GA Pl	PΙ			Surface Elevation:										
Depth Range It bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphi Log	Surface Cover and Thickn	ess:	Sample ID									
		0.0		CONCRETE		Concrete sidewalk											
-1	5		dry	FILL	S	DGA, fine to coarse SAND, some fine to respect to the coarse SAND, some fine to respect to the coarse sample of th	medium gravel, wet, no odor, no										
-5 -6 -7		0.0															
-8 -9 -10	5		moist	FILL		fine to medium SAND, little fill debris and gravel, trace ash, (7.5YR 4/3) brown, med no odor, no staining.		GAR-PDI-A8B-8.0-8.5									
10 - 11 - 12	5	0.0	moist	FILL		fine to medium SAND, trace ash, (7.5YR medium dense, moist, no odor, no stainin		GAR-PDI-A8B-10.0-10.5 GAR-PDI-A8B-12.0-12.5									
13— — 14— —	3											wet	SW	****	fine to coarse SAND, some fine to mediur (5YR 6/3) light reddish brown, medium de no staining. Soils consistent with UNDno.	ense, wet, no odor,	GAR-PDI-A8B-12.5-13.0 GAR-PDI-A8B-14.0-14.5
15		0.0				3											
- 16 - - 17	5							GAR-PDI-A8B-16.0-16.5									
-18 -19 -)**O*	SW		fine to coarse SAND, some fine to seems	arayal (EVD 2/2)	GAR-PDI-A8B-18.0-18.5									
20— — 21—	1	0.0	wet	Svv		fine to coarse SAND, some fine to coarse dark reddish brown, dense, wet, no odor, consistent with UNDno.		GAR-PDI-A8B-20.0-20.5									
ĭM - me	adow mat		GGM - gree	en grey mud		esidue UNDno - non-organic undisturbed native de UNDorg - organic undisturbed native depos ft thick 3) No CCPW (COPR or GGM) present in any interval of this boring	sits CCPW - chr	rfactured gas plant omate chemical production w									

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: GAR-PDI-A9B

	Number:					Drilling Method: Direct Push	NAD83) x: 611038.039	
				9:00:00 AM		Rig Type:	NAD83) y: 683884.987	
		illing:	2/12/2017	7 10:00:00 AM		Core Size: 3.0 in	Boring Total Depth:	
	IBy: TI					Project Manager: Scott Mikaelian	Depth to Water: 5.0	
hysica	al Locatio	n: Act	ual - GA P	DI		 	Surface Elevation:	11.114 ft NAVD88
Depth Range t bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphi Log	Surface Cover and Thickn	ess:	Sample ID
		0.0		ASPHALT		Asphalt and gravel sub-base.		
-			dry	FILL		fine to medium SAND, little coarse gravel,	(7 5YR 2 5/2)	GAR-PDI-A9B-0.5-1.0
-1-			to		XXX	very dark brown, loose, dry to moist, no or		
\dashv			moist		XXX			GAR-PDI-A9B-1.5-2.0
-2-					XXX			G/4(1 B17(0B 1.0 2.0
	4				XXX			
,					XXX			
-3				CONCRETE	P & 4	Concrete debris, green staining.		
\dashv			moist	FILL		fine to medium SAND, little silt and fine to	coarse gravel.	GAR-PDI-A9B-3.5-4.0
-4				NR	(XXXX)	(7.5YR 4/2) brown, medium dense, moist		1
4				1417		staining.		
-5-					XXXX	NO RECOVERY	Prof. 90 - ****	1
		0.0	wet	FILL	XXX	fine to coarse SAND, some coarse gravel debris and seashells, (7.5YR 3/2) dark bro		0/5-55-5-5
-6-					XXX	debris and seasnells, (7.5 kg 3/2) dark brodense, wet, no odor, no staining, water at		GAR-PDI-A9B-5.5-6.0
0					XXX	A state of the sta		
_ 7					XXX	8		
-7-	_				XXX	8		
\dashv	5				XXX	8		GAR-PDI-A9B-7.5-8.0
-8-					XXX	8		
-					XXX	8		
-9					XXX	8		
Ĭ					XXX	8		
10					XXX	8		GAR-PDI-A9B-9.5-10.0
-10		0.0	wet	FILL		fine to coarse SAND, little fine to coarse g		
٦					XXX	dark reddish gray, medium dense, wet, no	odor, no staining.	
-11					XXX	8		GAR-PDI-A9B-11.0-11.5
\dashv			wet	SP	XXXXX	fine to coarse SAND, some coarse gravel.	little cobbles	GAR-PDI-A9B-11.5-12.0
-12			WCt	Oi		(5YR 4/3) reddish brown, medium dense,		
4	4.5					staining. Soils consistent with UNDno.		
-13						<u></u>		
						:		
-14						<u> </u>		GAR-PDI-A9B-13.5-14.0
14								
_ 7				NR	• • • •	NO RECOVERY		1
15		0.0	wet	OL		SILT, (7.5YR 2.5/2) very dark brown, med	dium stiff, wet,	1
\dashv		-				moderate organic odor, no staining. Soils		GAR-PDI-A9B-15.5-16.0
16-						UNDorg.		
\dashv								
-17			wet	SM		fine sandy SILT, little fine to coarse grave	I, (7.5YR 3/2) dark	1
_	5					brown, stiff, wet, no odor, no staining. Soi	ls consistent with	CAR BRIAGE 47.5.42.2
-18						UNDno.		GAR-PDI-A9B-17.5-18.0
.5			wet	SP		fine to coarse SAND, little coarse gravel, t		
, T						dark reddish brown, medium dense, wet, staining. Soils consistent with UNDno.	no odor, no	
-19						.] Stairing. Sons consistent with GNDHO.		
\dashv								GAR-PDI-A9B-19.5-20.0
20		0.0						GAR-PDI-A9B-20.0-20.5
\dashv	1	0.0				:1		
21-						:1		
otes:						LINDRA DAN AND AND AND AND AND AND AND AND AN	MOD :	afanta and annual and and
n hali	ow surface	grade	COPR - chr	omite ore proce	essing re	esidue UNDno - non-organic undisturbed native de	eposits MGP - mani	ıfactured gas plant

Boring ID: GAR-PDI-A10B 30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Drilling Method: Direct Push Coordinates (NJSPNAD83) x: 611036.252 Date Started Drilling: 2/19/2017 9:00:00 AM Rig Type: Coordinates (NJSPNAD83) y: 683924.239 Date Finished Drilling: 2/19/2017 10:00:00 AM Core Size: 3.0 in Boring Total Depth: 21 ft Depth to Water: 5.5 Logged By: TI Project Manager: Scott Mikaelian Physical Location: Actual - GA PDI Surface Elevation: 11.845 ft NAVD88 Depth Recovery PID Moisture Graphic Sample USCS Surface Cover and Thickness: Range (ft/ft) Content Log ΙD (ppm) (ft bgs)

		0.0		CONCRETE		Concrete sidewalk	
. 7			moist	FILL		fine to coarse SAND, little fine to coarse gravel, (5Y 5/2)	GAR-PDI-A10B-0.5-1.0
-			moist	FILL		olive gray, loose, moist ,no odor, no staining. fine sandy SILT, little coarse gravel and wood, (7.5YR 3/2) dark brown, medium stiff, moist, no odor, no staining.	GAR-PDI-A10B-1.0-1.5
3	3.5		moist	FILL		fine to medium silty SAND, some fill debris, (5YR 4/3) reddish brown, medium dense, moist, no odor, no staining.	
-							GAR-PDI-A10B-3.0-3.5
4		•		NR		NO RECOVERY	
1		0.0	moist	FILL		fine to coarse SAND, little ash, (7.5YR 4/1) dark gray, loose,	GAR-PDI-A10B-5.0-5.5
_			wet	FILL		moist, no odor, no staining. fine to medium sandy SILT, little coarse gravel, (7.5YR 3/2) dark brown, medium stiff, wet, no odor, no staining, water at 5.5 feet.	
٦.							GAR-PDI-A10B-7.0-7.5
'	1.5						GAR-PDI-A10B-7.5-8.0
			wet	ML		SILT, trace fine sand and fine to medium gravel, (7.5YR 2.5/2) very dark brown, medium stiff, wet, no odor, no staining. Soils consistent with UNDno.	GAR-PDI-A10B-8.0-8.5
				NR		NO RECOVERY	
		0.0	wet	ML		SILT, trace fine sand, (7.5YR 2.5/2) very dark brown, medium stiff, wet, no odor, no staining. Soils consistent with UNDno.	GAR-PDI-A10B-10.0-10.
		•	wet	ML		SILT, trace fine sand, (10Y 5/2) grayish olive, medium stiff, wet, no odor, green staining. Soils consistent with UNDno.	
	1.5						GAR-PDI-A10B-12.0-12.5
			wet	SP		fine to coarse SAND, little fine to coarse gravel, (5YR 3/2) dark reddish brown, medium dense, wet, no odor, no	0.40.00.44.0.44.0
4						staining. Soils consistent with UNDno.	GAR-PDI-A10B-14.0-14.5
		0.0	wet	NR SP		NO RECOVERY fine to coarse SAND, little fine to coarse gravel, (5YR 4/3)	
						reddish brown, medium dense, wet, no odor, no staining. Soils consistent with UNDno.	
4	5						GAR-PDI-A10B-16.0-16.5
- -			wet	SP		fine to coarse SAND, some medium to coarse gravel, (5YR 4/3) reddish brown, medium dense, wet, no odor, no staining. Soils consistent with UNDno.	GAR-PDI-A10B-18.0-18.5
-	1	0.0					GAR-PDI-A10B-20.0-20.5
					rus zesti		

30 Knightsbridge Road, Piscataway, NJ 08854

Boring ID: GAR-PDI-A11B

732.564.3200 office telephone Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Drilling Method: Direct Push Coordinates (NJSPNAD83) x: 611057.994 Date Started Drilling: 2/12/2017 10:50:00 AM Rig Type: Coordinates (NJSPNAD83) y: 683942.359 Date Finished Drilling: 2/12/2017 11:50:00 AM Boring Total Depth: 21 ft Core Size: 3.0 in Depth to Water: 5.0 Logged By: TI Project Manager: Scott Mikaelian

Depth Lange t bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
		0.0		CONCRETE		Concrete sidewalk	
-1-			dry	FILL		fine to coarse SAND, little fine to coarse gravel, (7.5YR 4/1) dark gray, loose, dry to moist, no odor, no staining.	GAR-PDI-A11B-0.5-1.0
-2-			moist	FILL		fine to medium SAND, little silt, trace coarse gravel, (7.5YR 3/2) dark brown, medium dense, moist, no odor, no staining.	GAR-PDI-A11B-2.0-2.5
-3	4.5		moist	FILL		fine silty SAND, little coarse gravel, (7.5YR 2.5/2) very dark brown, medium dense, moist, no odor, no staining.	
4-							GAR-PDI-A11B-4.0-4.5
-5-				NR		NO RECOVERY	
-		0.0	wet wet	FILL FILL		fine to coarse SAND, some fine to coarse gravel, (7.5YR 4/2) brown, medium dense, wet, no odor, no staining, water	GAR-PDI-A11B-5.5-6.0
-6-			wet	OL		\at 5.0 feet. fine sandy SILT, little coarse gravel, (7.5YR 3/2) dark brown,	GAR-PDI-A11B-6.0-6.5
-7 -8	3.5					medium stiff, wet, no odor, no staining. SILT, trace fine sand and organics, (7.5YR 4/2) brown, medium stiff, wet, no odor, no staining. Soils consistent with UNDorg.	GAR-PDI-A11B-8.0-8.5
9-				NR		NO RECOVERY	GAR-PUI-ATTB-6.0-6.5
10		0.0	wet	OL		SILT, trace fine sand and organics, (7.5YR 4/2) brown,	GAR-PDI-A11B-10.0-10.5
11—		0.0	wet	OL		medium stiff, wet, no odor, no staining. Soils consistent with UNDorg.	
-			wet	ML		SILT, little coarse gravel, trace fine sand, (7.5YR 6/1) gray, medium stiff, wet, no odor, no staining. Soils consistent with UNDno.	
12—	4.5		wet	SP		fine to medium SAND, some fine to coarse gravel, (7.5YR 5/1) gray, medium dense, wet, no odor, no staining. Soils consistent with UNDno.	GAR-PDI-A11B-12.0-12.5
14			wet	SP		fine to coarse SAND, some fine to coarse gravel, (7.5YR 2.5/2) very dark brown, medium dense, wet, no odor, no staining. Soils consistent with UNDno.	GAR-PDI-A11B-14.0-14.5
15				NR		NO RECOVERY	
-		0.0	wet	SM		SILT, some fine to coarse gravel, (7.5YR 4/1) dark gray, soft, wet, no odor, no staining. Soils consistent with UNDno.	
16— — 17— —	5		wet	SP		fine to coarse SAND, some fine to coarse gravel, (5YR 3/2) dark reddish brown, medium dense, wet, no odor, no staining. Soils consistent with UNDno.	GAR-PDI-A11B-16.0-16.5
18 19							GAR-PDI-A11B-18.0-18.5
20							
21	1	0.0					GAR-PDI-A11B-20.0-20.5
otes: s - belo M - mea			COPR - chr GGM - gree		essing resi	idue UNDno - non-organic undisturbed native deposits MGP - manufa	actured gas plant nate chemical production wa

Boring ID: GAR-PDI-B'0 30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Drilling Method: Direct Push Coordinates (NJSPNAD83) x: 610856.369 Date Started Drilling: 1/15/2017 12:25:00 PM Rig Type: Coordinates (NJSPNAD83) y: 683675.046 Date Finished Drilling: 1/15/2017 1:35:00 PM Core Size: 3.0 in Boring Total Depth: 21 ft Depth to Water: 4.5 Logged By: Kyle Willis Project Manager: Scott Mikaelian Physical Location: Actual - GA PDI Surface Elevation: 10.552 ft NAVD88 Depth PID Recovery Moisture Graphic Sample **USCS** Surface Cover and Thickness: Range (ft/ft) Content ΙĎ (ppm) Log (ft bgs) 0.0 CONCRETE Concrete sidewalk GAR-PDI-B'0-0.5-1.0 FILL fine to medium silty SAND, little fill debris, (5YR 2.5/1) black, dry medium dense, dry to moist, no odor, no staining. to **FILL** SILT, little fine to medium sand, trace fill debris, (7.5YR 4/2) moist brown, firm, moist to wet, no odor, no staining, water at 4.5 moist to 5 wet GAR-PDI-B'0-2.5-3.0 GAR-PDI-B'0-4 5-5 0 0.0 GAR-PDI-B'0-6.5-7.0 5

SM wet 0.0 12 5

0.0

0.0

fine to coarse silty SAND, little fine to coarse gravel, (5YR 4/3) reddish brown, medium dense, wet, no odor, no staining. Soils consistent with UNDno.

GAR-PDI-B'0-12.0-12.5

GAR-PDI-B'0-10 0-10 5

GAR-PDI-B'0-7.5-8.0 GAR-PDI-B'0-8.0-8.5

GAR-PDI-B'0-14.0-14.5

GAR-PDI-B'0-16.0-16.5

GAR-PDI-B'0-18.0-18.5

GAR-PDI-B'0-20.0-20.5

-21

A.GDT - 4/19/17

2012-09 RA PPG LOGS

16

5

1

bgs - below surface grade MM - meadow mat COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits UNDorg - organic undisturbed native deposits

MGP - manufactured gas plant CCPW - chromate chemical production waste

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

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: GAR-PDI-B`1A

Project	Humber.		7100			Drilling Method: Direct Push	PNAD83) x: 610840.04					
				11:15:00 AM				NAD83) y: 683650.307				
				7 12:20:00 PM			Boring Total Depth:					
			1/13/201	7 12.20.00 1 IV		Project Manager: Scott Mikaelian Depth to Water:						
	d By: Kyle		uol CAD	DI								
nysic	al Locatio	ii. ACT	uai - GA P	ا <u>ر</u>	l		Surface Elevation:	10.393 IL INAVDOS				
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickne	ss:	Sample ID				
		0.0		CONCRETE	P 4 4 F	Concrete sidewalk						
-1 -1			dry	FILL		fine to medium silty SAND, little fill debris, 3/3) dark brown, medium dense, dry to moi staining.		GAR-PDI-B'1A-0.5-1.0				
-2 -	. 5			FILL		CILT little fire aged trace fill debrie (FVD	2.5/4) block 2.54	GAR-PDI-B'1A-2.5-3.0				
-3 -4 -			moist to wet	FILL		SILT, little fine sand, trace fill debris, (5YR moist to wet, no odor, no staining, water at		GAR-PDI-B'1A-4.5-5.0				
-5 -6		0.0	wet	FILL		SILT, trace fine sand and fill debris, (5Y 2.9 wet, no odor, no staining.	SILT, trace fine sand and fill debris, (5Y 2.5/1) black, soft, wet, no odor, no staining.					
-7	_							GAR-PDI-B'1A-6.5-7.0				
-	5				\bowtie			GAR-PDI-B'1A-7.5-8.0				
-8— -9—							wet	SW		fine to medium SAND, little silt, (5YR 4/3) loose, wet, no odor, no staining. Soils cons UNDno.		GAR-PDI-B'1A-8.0-8.5
-10						•						
-11— -12— -12— -13—	5	0.0	wet	SM		fine to coarse silty SAND, little fine to medi 4/3) reddish brown, medium dense, wet, no staining. Soils consistent with UNDno.		GAR-PDI-B'1A-10.0-10.5 GAR-PDI-B'1A-12.0-12.5				
-14						`∤		GAR-PDI-B'1A-14.0-14.5				
-15 <u> </u>		0.0										
-16 -17	5							GAR-PDI-B'1A-16.0-16.5				
-18 -								GAR-PDI-B'1A-18.0-18.5				
-19 -												
-20 -	. 1	0.0						GAR-PDI-B'1A-20.0-20.5				
21						:						
otes: gs - bel	low surface	grade	COPR - ch	romite ore proc	essina re	sidue UNDno - non-organic undisturbed native der UNDorg - organic undisturbed native deposit	posits MGP - man	ufactured gas plant				

Boring ID: GAR-PDI-B`1B

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Drilling Method: Direct Push Coordinates (NJSPNAD83) x: 610876.645 Date Started Drilling: 1/15/2017 1:40:00 PM Rig Type: Coordinates (NJSPNAD83) y: 683707.462 Date Finished Drilling: 1/15/2017 2:35:00 PM Core Size: 3.0 in Boring Total Depth: 21 ft Logged By: Kyle Willis Project Manager: Scott Mikaelian Depth to Water: 4.0 Physical Location: Actual - GA PDI Surface Elevation: 10.528 ft NAVD88 Depth PID Recovery Moisture Graphic Sample **USCS** Surface Cover and Thickness: Range (ft/ft) Content ΙD (ppm) Log (ft bgs) 0.0 CONCRETE Concrete sidewalk FILL fine to medium SAND, trace ash, (5YR 2.5/1) black, medium dry to dense, dry to moist, no odor, no staining. FILL fine to medium silty SAND, trace fine gravel, (5YR 4/3) mosit reddish brown, medium dense, moist, no odor, no staining. moist 4.5 **FILL** SILT, trace fill debris, (5YR 2.5/1) black, soft, moist to wet, moist to no odor, no staining, water at 4.0 feet. wet NR NO RECOVERY GAR-PDI-B'1B-5.0-5.5 0.0 wet FILL SILT, trace fill debris, (5YR 2.5/1) black, soft, wet, no odor, no staining. GAR-PDI-B'1B-5.5-6.0 wet MLSILT, trace fine sand, (5YR 6/3) light reddish brown, firm, wet, no odor, no staining. Soils consistent with UNDno. SM fine to coarse silty SAND, trace fine to coarse gravel, (5YR wet 5 4/3) reddish brown, medium dense, wet, no odor, no staining. Soils consistent with UNDno. GAR-PDI-B'1B-8.0-8.5 GAR-PDI-B'1B-10 0-10 5 0.0 12 GAR-PDI-B'1B-12.0-12.5 5 GAR-PDI-B'1B-14.0-14.5 0.0 16 GAR-PDI-B'1B-16.0-16.5 5 GAR-PDI-B'1B-18.0-18.5 GAR-PDI-B'1B-20.0-20.5 0.0 1 -21

A.GDT - 4/19/17

2012-09 RA PPG LOGS

bgs - below surface grade bgs - below surface grade GGM - green grey mud UNDno - non-organic undisturbed native deposits UNDorg - organic undisturbed native deposits

MGP - manufactured gas plant CCPW - chromate chemical production waste

Boring ID: GAR-PDI-B'2A

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Coordinates (NJSPNAD83) x: 610825.372 Project Number: 60240739 Drilling Method: direct push Date Started Drilling: 12/11/2016 11:35:00 AM Rig Type: Coordinates (NJSPNAD83) y: 683625.87 Date Finished Drilling: 12/11/2016 12:35:00 PM Core Size: 3.0 in Boring Total Depth: 20 ft Logged By: Eric Stone Depth to Water: 5.0 Project Manager: Scott Mikaelian Physical Location: Actual - GA PDI Surface Elevation: 10.319 ft NAVD88 Depth PID Recovery Moisture Graphic Sample **USCS** Surface Cover and Thickness: Range ΙD (ft/ft) (ppm) Content Log (ft bgs) 0.0 CONCRETE Concrete sidewalk slightly fine to medium SAND. little ash and fine to medium gravel. FILL moist (5YR 4/4) reddish brown, medium dense, slightly moist, no odor, no staining. FILL fine silty SAND, little brick, trace ash and coal, (7.5YR 4/3) moist brown, medium dense, moist, no odor, no staining. 5 FILL moist SILT, little concrete debris, trace fine gravel, ash and coal, (7.5YR 4/3) brown, soft, moist to wet, no odor, no staining, water at 5.0 feet. 0.0 GAR-PDI-B'2A-6.0-6.5 GAR-PDI-B'2A-6.5-7.0 GAR-PDI-B'2A-7.0-7.5 SM fine to medium silty SAND, some fine to medium gravel, wet 5 (5YR 4/4) reddish brown, medium dense, wet, no odor, no staining. Soils consistent with UNDno. GAR-PDI-B'2A-8.0-8.5 GAR-PDI-B'2A-10 0-10 5 0.0 ML SILT, (7.5YR 4/3) brown, soft, wet, no odor, no staining. wet Soils consistent with UNDno. fine to medium silty SAND, little fine gravel, (5YR 4/4) wet SM reddish brown, medium dense, wet, no odor, no staining. Soils consistent with UNDorg. 12 SP wet fine to coarse SAND, some fine to medium gravel, trace silt, 5 (5YR 4/4) reddish brown, dense, wet, no odor, no staining. Soils consistent with UNDno. 13 GAR-PDI-B'2A-13.0-13.5 GAR-PDI-B'2A-15.0-15.5 0.0 16 fine silty SAND. (5YR 4/4) reddish brown, medium dense. wet wet, no odor, no staining. Soils consistent with UNDno. GAR-PDI-B'2A-18.0-18.5

20

A.GDT - 4/7/17

2012-09 RA PPG LOGS

bgs - below surface grade COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits MM - meadow mat GGM - green grey mud UNDorg - organic undisturbed native deposits

MGP - manufactured gas plant CCPW - chromate chemical production waste

Boring ID: GAR-PDI-B`2B

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Coordinates (NJSPNAD83) x: 610886.772 Drilling Method: direct push Date Started Drilling: 1/22/2017 9:20:00 AM Rig Type: Coordinates (NJSPNAD83) y: 683724.811 Date Finished Drilling: 1/22/2017 10:20:00 AM Core Size: 3.0 in Boring Total Depth: 21 ft Logged By: ES Project Manager: Scott Mikaelian Depth to Water: 5.0 Physical Location: Actual - GA PDI Surface Elevation: 10.890 ft NAVD88 Depth PID Recovery Moisture Graphic Sample **USCS** Surface Cover and Thickness: Range Content ΙĎ (ft/ft) (ppm) Log (ft bgs) 0.0 CONCRETE Concrete sidewalk GAR-PDI-B'2B-0.5-1.0 FILL fine to coarse SAND, some cinders, (5Y 2.5/2) black, moist medium dense, moist, no odor, no staining. moist FILL fine to medium SAND, little silt, trace ash, (5YR 4/4) reddish brown, medium dense, moist, no odor, no staining. 5 GAR-PDI-B'2B-2.5-3.0 fine to medium sandy SILT, little ash, (7.5YR 3/3) dark slightly FILL brown, firm, slightly moist, no odor, no staining. moist GAR-PDI-B'2B-4.0-4.5 GAR-PDI-B'2B-4 5-5 0 MI fine sandy SILT, (2.5Y 5/1) gray, soft, wet, no odor, no wet staining, water at 5.0 feet. Soils consistent with UNDno. 0.0 SM fine to medium silty SAND, little fine to medium gravel, (5YR wet 4/4) reddish brown, dense, wet, no odor, no staining. Soils GAR-PDI-B'2B-6.5-7.0 consistent with UNDno. 5 GAR-PDI-B'2B-8.5-9.0 moist SM fine to coarse silty SAND, some to little fine to coarse gravel, (5YR 4/3) reddish brown, medium dense, moist to wet, no to wet odor, no staining. Soils consistent with UNDno. 0.0 GAR-PDI-B'2B-10.5-11.0 12 5 GAR-PDI-B'2B-12.5-13.0 13 GAR-PDI-B'2B-14.5-15.0 0.0 16 GAR-PDI-B'2B-16.5-17.0 5 A.GDT - 4/19/17 GAR-PDI-B'2B-18 5-19 0 19

Notes

-21

2012-09 RA PPG LOGS

0.0

1

bgs - below surface grade COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits MM - meadow mat GGM - green grey mud UNDorg - organic undisturbed native deposits

MGP - manufactured gas plant CCPW - chromate chemical production waste

GAR-PDI-B'2B-20.0-20.5

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

Boring ID: GAR-PDI-B'3A

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Coordinates (NJSPNAD83) x: 610814.856 Drilling Method: direct push Date Started Drilling: 12/11/2016 1:15:00 PM Rig Type: Coordinates (NJSPNAD83) y: 683606.098 Date Finished Drilling: 12/11/2016 2:30:00 PM Core Size: 3.0 in Boring Total Depth: 21 ft Depth to Water: 5.0 Logged By: Eric Stone Project Manager: Scott Mikaelian Physical Location: Actual - GA PDI Surface Elevation: 10.352 ft NAVD88 Depth PID Recovery Moisture Graphic Sample **USCS** Surface Cover and Thickness: Range (ft/ft) Content ΙĎ (ppm) Log (ft bgs) 0.0 CONCRETE Concrete sidewalk GAR-PDI-B'3A-0.5-1.0 FILL fine to medium SAND, some ash, little fine gravel, (2.5Y 4/2) dry dark grayish brown, medium dense, dry, no odor, no dry FILL fine to medium SAND, some fine to medium gravel, little silt and ash, trace coal, (7.5YR 4/3) brown, medium dense, dry, GAR-PDI-B'3A-2.0-2.5 5 no odor, no staining. FILL SILT, little brick, trace coal, (7.5YR 4/3) brown, soft, moist to moist wet, no odor, no staining, water at 5.0 ft bgs. 0.0 GAR-PDI-B'3A-6.5-7.0 GAR-PDI-B'3A-7.0-7.5 SP fine to coarse SAND, some fine to medium gravel, (5YR 4/3) wet 5 reddish brown, medium dense, wet, no odor, no staining. Soils consistent with UNDno. GAR-PDI-B'3A-10 0-10 5 0.0 GW fine to coarse GRAVEL, some fine to medium sand, (5YR wet 4/4) reddish brown, dense, wet, no odor, no staining. Soils consistent with UNDno. 12 GAR-PDI-B'3A-12.0-12.5 5 13 GAR-PDI-B'3A-14.0-14.5 0.0 16 GAR-PDI-B'3A-16.0-16.5 wet SP fine to coarse SAND, some fine to medium gravel, (5YR 4/4) reddish brown, medium dense, wet, no odor, no staining. Soils consistent with UNDno. GAR-PDI-B'3A-18.0-18.5

2012-09 RA PPG LOGS Notes:

-21

0.0

1

A.GDT - 4/7/17

bgs - below surface grade COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits MM - meadow mat GGM - green grey mud UNDorg - organic undisturbed native deposits

MGP - manufactured gas plant CCPW - chromate chemical production waste

GAR-PDI-B'3A-20.0-20.5

ents: 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: GAR-PDI-B'3B

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Coordinates (NJSPNAD83) x: 610902.605 Drilling Method: direct push Date Started Drilling: 1/22/2017 10:25:00 AM Rig Type: Coordinates (NJSPNAD83) y: 683754.158 Date Finished Drilling: 1/22/2017 11:00:00 AM Core Size: 3.0 in Boring Total Depth: 21 ft Depth to Water: 5.5 Logged By: ES Project Manager: Scott Mikaelian Physical Location: Actual - GA PDI Surface Elevation: 10.451 ft NAVD88 Depth PID Recovery Moisture Graphic Sample **USCS** Surface Cover and Thickness: Range ΙĎ (ft/ft) (ppm) Content Log (ft bgs) 0.0 CONCRETE Concrete sidewalk GAR-PDI-B'3B-0.5-1.0 **FILL** fine to coarse SAND, some fine to medium gravel, little coal, dry (2.5Y 5/2) grayish brown, medium dense, dry, no odor, no staining. GAR-PDI-B'3B-2.0-2.5 **FILL** fine to coarse SAND, some concrete debris, trace brick, dry 4.5 (2.5Y 5/2) grayish brown, medium dense, dry, no odor, no moist FILL fine to medium sandy SILT, little ash, (7.5YR 2.5/3) very dark brown, soft, moist, no odor, no staining. GAR-PDI-B'3B-4.0-4.5 NR NO RECOVERY GAR-PDI-B'3B-5.0-5.5 fine to medium sandy SILT, little ash, (7.5YR 2.5/3) very 0.0 moist FILL dark brown, soft, moist, no odor, no staining. GAR-PDI-B'3B-5.5-6.0 wet MLfine sandy SILT, (7.5YR 6/3) light brown, soft, wet, no odor, GAR-PDI-B'3B-6.0-6.5 no staining, water at 5.5 feet. Soils consistent with UNDno. SM fine to medium silty SAND, little fine to medium gravel, (5YR wet 4/4) reddish brown, dense, wet, no odor, no staining. Soils 5 consistent with UNDno. GAR-PDI-B'3B-8.0-8.5 SP fine to coarse SAND, some fine to medium gravel, little silt, wet (5YR 4/4) reddish brown, medium dense, wet, no odor, no staining. Soils consistent with UNDno. 10 GAR-PDI-B'3B-10 0-10 5 0.0 SP wet fine to medium SAND, (5YR 4/4) reddish brown, medium dense, wet, no odor, no staining. Soils consistent with UNDno. wet SM fine to medium silty SAND, some fine to medium gravel, (5YR 4/4) reddish brown, medium dense, wet, no odor, no staining. Soils consistent with UNDno. 12 GAR-PDI-B'3B-12.0-12.5 5 13 GAR-PDI-B'3B-14.0-14.5 0.0 16 GAR-PDI-B'3B-16.0-16.5 5 GAR-PDI-B'3B-18.0-18.5 A.GDT - 4/19/17 SP fine to medium SAND, little silt, trace fine to medium gravel, slightly 19 (5YR 4/4) reddish brown, dense, slightly moist, no odor, no moist staining. Soils consistent with UNDno. GAR-PDI-B'3B-20.0-20.5 0.0 2012-09 RA PPG LOGS 1 -21

bgs - below surface grade COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits MM - meadow mat GGM - green grey mud UNDorg - organic undisturbed native deposits

MGP - manufactured gas plant CCPW - chromate chemical production waste

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: GAR-PDI-B`4A

Page: 1

ect Name: PPG	Garfield Ave			Drilling Company: SGS North America		Page
ect Number: 60				Drilling Method: Direct Push	Coordinates (NJSP	NAD83) x: 610814.81
Started Drilling	1/8/2017 9	9:35:00 AM	ı	Rig Type:	Coordinates (NJSP)	NAD83) y: 683557.229
Finished Drillin				Core Size: 3.0 in	Boring Total Depth:	8 ft
ged By: Kyle Wil	lis			Project Manager: Scott Mikaelian	Depth to Water: 6.	5
sical Location:	Actual - GA F	PDI		1	Surface Elevation:	10.082 ft NAVD88
th ge gs) Recovery PI (ft/ft) (pp			Graphic Log	Surface Cover and Thic	ekness:	Sample ID
_ 0.)	ASPHALT		ASPHALT		
5		CONCRETE		Concrete slab		
_	dry	FILL		SILT, little fine to medium sand and fill wood, (7.5YR 4/2) brown, firm, dry to n staining.	debris, trace coal and noist, no odor, no	GAR-PDI-B'4A-3.0-3.5
0.	0					GAR-PDI-B'4A-5.0-5.5
3	moist	FILL		SILT, little fine to medium sand, ash an 3/4) dark brown, soft, moist to wet no o at 6.5 feet, refusal at 8.0 feet.	nd cinders, (7.5YR odor no staining, water	CAR PRIBIA 7075
_						GAR-PDI-B'4A-7.0-7.5

PPG - 2012-09 RA PPG_LOGS_A.GDT - 4/19/17 12:05

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: GAR-PDI-B`4AR

Project	Number:	60240	739			Drilling Method: Direct Push	Coordinates (NJSPN	IAD83) x: 610794.453
				0:20:00 AM		Rig Type:		AD83) y: 683571.349
				11:20:00 AM		Core Size: 3.0 in	Boring Total Depth:	
	By: TI					Project Manager: Scott Mikaelian	Depth to Water: 5.0	
		n: Act	ual - GA P	DI			Surface Elevation:	
	=55ati0	/٦٠١	OAT	T'			, Januaro Elevationi.	
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickr	ness:	Sample ID
		0.0		CONCRETE	P 1 4	Concrete sidewalk		
\dashv			dry	FILL		fine to medium SAND, some brick and fil	L debris (7.5YR	
-1-			moist	FILL	\bowtie	2.5/2) very dark brown, loose, dry to mois		
4			moist	FILL		\staining.	/	
-2-			moist	FILL	\bowtie	fine to medium silty SAND, little brick, (7.		
-3-	4.5					\brown, medium dense, moist, no odor, no fine to medium SAND, (7.5YR 6/3) light I no odor, no staining. fine to medium silty SAND, little fine grav brown, medium dense, moist, no odor, no	orown, loose, moist, el, (7.5YR 3/2) dark	
-4			moist	FILL		SILT, little fine sand, trace brick and fill d dark brown, medium stiff, moist, no odor,	ebris, (7.5YR 3/2)	
_ ٦				NR	×	NO RECOVERY		
-5 -6- 		0.0	wet	FILL		fine to medium silty SAND, some ash, litt gravel, (7.5YR 4/1) dark gray, loose, wet, staining, water at 5.0 feet.		
-7 -8	4.5		wet	FILL		fine to medium silty SAND, little fine to or (7.5YR 4/2) brown, medium dense, wet, staining.		GAR-PDI-B'4AR-8.0-8.5
-			4	CNA	\bowtie	fine to moditive CAND come fine to com		GAR-PDI-B'4AR-8.5-9.0
-9-			wet	SM		fine to medium SAND, some fine to coans (5YR 4/3) reddish brown, medium dense staining. Soils consistent with UNDno.		GAR-PDI-B'4AR-9.0-9.5
40				NR		NO RECOVERY		
-10 -11 -12 -	5	0.0	wet	SP		fine to medium SAND, little fine to mediu reddish brown, medium dense, wet, no o Soils consistent with UNDno.		GAR-PDI-B'4AR-11.0-11.5
-13 -14 -			wet	SP		fine to medium SAND, some fine to coars reddish brown, medium dense, wet, no o Soils consistent with UNDno.		GAR-PDI-B'4AR-13.0-13.5
15		0.0				[]		GAR-PDI-B'4AR-15.0-15.5
\dashv						<u> </u>		
-16						4		
4							L (E) (E) ((A)	
_17			wet	SP		fine to medium SAND, little fine to mediu reddish brown, dense, wet, no odor, no s		048 ====================================
-18	5					consistent with UNDno.	can in ig. Julio	GAR-PDI-B'4AR-17.0-17.5
. 7						4		
-19								GAR-PDI-B'4AR-19.0-19.5
20		0.0				.}		GAR-PDI-B'4AR-20.0-20.5
4	1	0.0				4		
-21								
otes:								
	ow surface	grade	COPR - chr	omite ore proce	essina re	esidue UNDno - non-organic undisturbed native d	eposits MGP - manu	factured gas plant

Boring ID: GAR-PDI-B`4B

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Drilling Method: Direct Push Coordinates (NJSPNAD83) x: 610918.538 Date Started Drilling: 1/29/2017 9:20:00 AM Rig Type: Coordinates (NJSPNAD83) y: 683779.746 Date Finished Drilling: 1/29/2017 10:20:00 AM Core Size: 3.0 in Boring Total Depth: 21 ft Depth to Water: 6.0 Logged By: TI Project Manager: Scott Mikaelian Physical Location: Actual - GA PDI Surface Elevation: 10.768 ft NAVD88 Depth PID Recovery Moisture Graphic Sample **USCS** Surface Cover and Thickness: Range Content ΙĎ (ft/ft) (ppm) Log (ft bgs) 0.0 CONCRETE Concrete sidewalk GAR-PDI-B'4B-1.0-1.5 dry FILL fine to medium SAND, little fine gravel, (7.5YR 4/2) brown, loose, dry, no odor, no staining. FILL dry fine to medium SAND, little fine to medium gravel and silt, to (7.5YR 4/2) brown, medium dense, dry to moist, no odor, no 4.5 moist staining. GAR-PDI-B'4B-3.0-3.5 moist FILL SILT, little fine sand, trace seashells, (7.5YR 2.5/2) very dark brown, medium stiff, moist, no odor, no staining. FILL SILT, trace fine sand, (7.5YR 4/2) brown, soft, moist, no moist odor, no staining. NR NO RECOVERY GAR-PDI-B'4B-5.0-5.5 0.0 moist **FILL** SILT, little fine sand and gravel, (7.5YR 4/2) brown, medium stiff, moist, no odor, no staining. GAR-PDI-B'4B-5.5-6.0 SP moist fine SAND, some silt, (7.5YR 6/3) light brown, medium dense, moist to wet, no odor, no staining, water at 6.0 feet. Soils consistent with UNDno. GAR-PDI-B'4B-7.0-7.5 SP fine gravelly SAND, trace silt, (5YR 4/3) reddish brown, wet 5 dense, wet, no odor, no staining. Soils consistent with UNDno GAR-PDI-B'4B-9.0-9.5 0.0 GAR-PDI-B'4B-11.0-11.5 12 13 GAR-PDI-B'4B-13.0-13.5 NR NO RECOVERY GAR-PDI-B'4B-15.0-15.5 0.0 SP fine to medium SAND, little fine to coarse gravel, (5YR 4/3) wet reddish brown, dense, wet, no odor, no staining. Soils consistent with UNDno. 16 GAR-PDI-B'4B-17.0-17.5 5 A.GDT - 4/19/17 19 GAR-PDI-B'4B-19.0-19.5 GAR-PDI-B'4B-20.0-20.5 0.0 2012-09 RA PPG LOGS 1 -21

bgs - below surface grade COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits MM - meadow mat GGM - green grey mud UNDorg - organic undisturbed native deposits

MGP - manufactured gas plant CCPW - chromate chemical production waste

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

Project Name: PPG Garfield Ave

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: GAR-PDI-B`5A

Page: 1 Coordinates (NJSPNAD83) x: 610800.544

Project Number: 60240739 Drilling Method: direct push Date Started Drilling: 11/6/2016 8:30:00 AM Rig Type: Coordinates (NJSPNAD83) y: 683534.266

Drilling Company: SGS North America

Date Started Dri Date Finished D					Core Size: 3.0 in	Boring Total Depth:	7 ft
ogged By: Eri		11/0/2010	9.30.00 AIVI		Project Manager: Scott Mikaelian	Depth to Water: 7.0	
Physical Location	on: Act	ual - GA P	DI		Toject Manager. Scott Mikaellan	Surface Elevation:	10 014 ft NAVD88
	JII. ACI	uai - OA i				Surface Lievation.	10.0141(1)AVD00
Depth lange t bgs) Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thick	ness:	Sample ID
	0.0		ASPHALT		ASPHALT		
-1- -			CONCRETE		Concrete slab		
-2		dry	FILL		fine to medium SAND, some fine gravel, brown, dense, dry, no odor, no staining.	(5YR 4/4) reddish	GAR-PDI-B'5A-1.5-2.0
-3		moist	FILL		fine to medium SAND, some ash, (7.5YF medium dense, moist, no odor, no stainir	R 4/1) dark gray, ng.	GAR-PDI-B'5A-3.5-4.0
-4			NR		NO RECOVERY		_
-5	-		-	XXXXX	5 34 OAND 1344 1 (7.57/D 0/0) 1	1.1 P	GAR-PDI-B'5A-5.0-5.5
-62	0.0	wet	FILL		fine silty SAND, little ash, (7.5YR 3/3) da dense, wet, no odor, no staining, water a 7.0 feet.	ark brown, medium it 5.0 feet, refusal at	GAR-PDI-B'5A-6.5-7.0
otes: gs - below surface M - meadow mat	e grade	COPR - chr GGM - aree	omite ore proc	essing re	sidue UNDno - non-organic undisturbed native o UNDorg - organic undisturbed native depo	deposits MGP - manu	ufactured gas plant romate chemical production was

AECOM

Boring ID: GAR-PDI-B`5AR

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Drilling Method: Direct Push Coordinates (NJSPNAD83) x: 610780.537 Date Started Drilling: 2/5/2017 11:25:00 AM Coordinates (NJSPNAD83) y: 683547.703 Rig Type: Date Finished Drilling: 2/5/2017 12:25:00 PM Core Size: 3.0 in Boring Total Depth: 21 ft Project Manager: Scott Mikaelian Depth to Water: 6.0 Logged By: TI Physical Location: Actual - GA PDI Surface Elevation: 10.466 ft NAVD88 Depth PID Recovery Moisture Graphic Sample **USCS** Surface Cover and Thickness: Range ΙĎ (ft/ft) (ppm) Content Log (ft bgs) 0.0 CONCRETE Concrete sidewalk fine to medium SAND, little fine to coarse gravel, trace silt, FILL dry to (7.5YR 3/2) dark brown, medium dense, dry to moist, no FILL odor, no staining moist FILL fine to medium SAND, little fine to medium gravel, trace silt, moist moist (7.5YR 2.5/2) very dark brown, loose, moist, no odor, no **FILL** 5 moist fine to medium SAND, some asphalt, little fine to medium gravel, (7.5YR 2.5/1) black, loose, moist, no odor, no fine to medium silty SAND, little fine to medium gravel, trace fill debris, (5YR 4/1) dark gray, medium dense, moist, no odor, no staining. SILT, trace fine sand and fill debris, (5YR 4/1) dark gray, 0.0 moist **FILL** soft, moist to wet, no odor, no staining, water at 6.0 feet. to wet 5 GAR-PDI-B'5AR-8.0-8.5 GAR-PDI-B'5AR-8.5-9.0 wet SM SILT, some fine gravel, little fine sand, (7.5YR 6/3) light brown, medium stiff, wet, no odor, no staining. Soils consistent with UNDno. 10 GAR-PDI-B'5AR-10 0-10 5 0.0 SP fine to medium SAND, (5YR 4/3) reddish brown, medium wet dense, wet, no odor, no staining. Soils consistent with UNDno. 12 GAR-PDI-B'5AR-12.0-12.5 SP fine SAND, (5YR 4/3) reddish brown, medium dense, wet, wet 4.5 no odor, no staining. Soils consistent with UNDno. 13 GAR-PDI-B'5AR-14.0-14.5 SP fine to coarse SAND, little fine to coarse gravel, (5YR 4/3) wet reddish brown, medium dense, wet, no odor, no staining. NR Soils consistent with UNDno. 0.0 SP wet NO RECOVERY fine to coarse SAND, little fine to coarse gravel, (5YR 4/3) reddish brown, medium dense, wet, no odor, no staining. 16 GAR-PDI-B'5AR-16.0-16.5 Soils consistent with UNDno. 5 GAR-PDI-B'5AR-18.0-18.5 A.GDT - 4/19/17 SP wet fine to medium SAND, some fine to coarse gravel, little 19 cobbles, (5YR 4/3) reddish brown, medium dense, wet, no odor, no staining. Soils consistent with UNDno. GAR-PDI-B'5AR-20.0-20.5 0.0 LOGS 1 -21 RA PPG

Notes bgs -

bgs - below surface grade MM - meadow mat COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits UNDorg - organic undisturbed native deposits UNDorg - organic undisturbed native deposits Comments: 1) 3 attempts were made to obtain best recovery 2) No CCPW (COPR or GGM) present in any interval of this boring 3) MM/UND confirmed to be 1 ft thick.

MGP - manufactured gas plant CCPW - chromate chemical production waste

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: GAR-PDI-B`5B

	Name: F					Drilling Company: SGS North America		
	Number:			10.00		Drilling Method: direct push		NAD83) x: 610933.475
				12:30:00 PM		Rig Type:	-	MAD83) y: 683802.483
		illing:	1/22/2017	7 1:30:00 PM		Core Size: 3.0 in	Boring Total Depth:	
	IBy: ES al Locatio	n: Act	ual - CA D	DI		Project Manager: Scott Mikaelian	Depth to Water: 5. Surface Elevation:	
	ui LUCALIU	ii. Act	uai - GA F	וק			Juliace Elevation.	IO.OTI ILINAVDOO
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphi Log	Surface Cover and Thick	kness:	Sample ID
		0.0		CONCRETE	P	Concrete sidewalk		
, 7			dry	FILL		fine to coarse SAND, little concrete debi	ris, (2.5Y 5/2)	1
-1			moist	FILL		grayish brown, medium dense, dry, no c	odor, no staining.	1
-2-						SILT, some cinders, little fine to coarse reddish brown, soft, moist, no odor, no s		
\dashv	2.5			NR	XXXX	NO RECOVERY		+
-3 - -4				NIX		NONESOVEKI		
-5-		0.0	wet	FILL	XXX	SILT, trace ash and cobbles, (2.5Y 5/2)	gravish brown, soft.	_
\dashv					\bowtie	wet, no odor, no staining, water at 5.0 fe		
-6					\bowtie	8		GAR-PDI-B'5B-6.0-6.5
\dashv			wet	SM	XXXX	fine to medium silty SAND, some fine to	medium gravel.	GAR-PDI-B'5B-6.5-7.0
-7 	5					(5YR 4/4) reddish brown, medium dense staining. Soils consistent with UNDno.		
-8 								GAR-PDI-B'5B-8.0-8.5
-9 								
-10		0.0						GAR-PDI-B'5B-10.0-10.5
-11		0.0						
-								
-12	_					4		
-	5							
-13 -								
-14								GAR-PDI-B'5B-14.0-14.5
-15 						4		
١٠ _		0.0						
-16						<u> </u>		
10 _			moist	SP		fine to coarse SAND, some fine to coars	se gravel, little silt,	GAR-PDI-B'5B-16.0-16.5
_17						(5YR 4/3) reddish brown, dense, moist, Soils consistent with UNDno.	no odor, no staining.	
17	5					3		
						:}		
-18						4		GAR-PDI-B'5B-18.0-18.5
10						:1		
-19						3		
						:]		
-20	1	0.0				3		GAR-PDI-B'5B-20.0-20.5
_ +	1							
-21						1		
otes:				<u> </u>				1
gs - bel		grade	COPR - chr	romite ore proce	essing re	esidue UNDno - non-organic undisturbed native	deposits MGP - man	ufactured gas plant
IIVI - me	adow mat		GGM - aree	en grey mud		UNDorg - organic undisturbed native dep	osits CCPW - ch	romate chemical production wa

AECOM

Boring ID: GAR-PDI-B'6A

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Coordinates (NJSPNAD83) x: 610785.222 Drilling Method: direct push Date Started Drilling: 11/6/2016 9:35:00 AM Rig Type: Coordinates (NJSPNAD83) y: 683508.949 Date Finished Drilling: 11/6/2016 10:15:00 AM Core Size: 3.0 in Boring Total Depth: 21 ft Logged By: Eric Stone Depth to Water: 4.0 Project Manager: Scott Mikaelian Physical Location: Actual - GA PDI Surface Elevation: 10.305 ft NAVD88 Depth PID Recovery Moisture Graphic Sample **USCS** Surface Cover and Thickness: Range (ft/ft) Content ΙĎ (ppm) Log (ft bgs) 0.0 **ASPHALT ASPHALT** CONCRETE Concrete slab GAR-PDI-B'6A-1.5-2.0 FILL fine to medium SAND, some fine gravel, trace brick, (5YR dry 4/4) reddish brown, medium dense, dry, no odor, no 5 staining. FILL fine to medium SAND, some ash, little silt, (7.5YR 3/3) dark dry brown, medium dense, dry to moist, no odor, no staining. GAR-PDI-B'6A-3.5-4.0 FILL wet ASH, (5Y 5/1) gray, loose, wet, no odor, no staining, water at 0.0 moist **FILL** fine to medium SAND, some ash, little fine gravel, (7.5YR 4/3) brown, medium dense, moist, no odor, no staining. GAR-PDI-B'6A-5.5-6.0 FILL wet fine silty SAND, little wood debris, (7.5YR 4/3) brown, medium dense, wet, no odor, no staining. 5 GAR-PDI-B'6A-7.5-8.0 GAR-PDI-B'6A-9.5-10.0 0.0 GAR-PDI-B'6A-11.5-12.0 12 5 13 GAR-PDI-B'6A-13.0-13.5 GAR-PDI-B'6A-13.5-14.0 SP fine to coarse SAND, some fine to medium gravel, trace silt, wet (5YR 4/4) reddish brown, medium dense, wet, no odor, no staining. Soils consistent with UNDno. GAR-PDI-B'6A-15.0-15.5 0.0 16 GAR-PDI-B'6A-17.0-17.5 wet SP fine to medium SAND, little fine gravel and silt, (5YR 4/4) reddish brown, medium dense, wet, no odor, no staining. Soils consistent with UNDno. GAR-PDI-B'6A-19.0-19.5 GAR-PDI-B'6A-20.0-20.5 0.0 1 -21

Notes:

A.GDT - 4/7/17

2012-09 RA PPG LOGS

bgs - below surface grade COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits MM - meadow mat GGM - green grey mud UNDorg - organic undisturbed native deposits

MGP - manufactured gas plant CCPW - chromate chemical production waste

A E COM

Boring ID: GAR-PDI-B`6B

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Drilling Method: Direct Push Coordinates (NJSPNAD83) x: 610950.257 Date Started Drilling: 1/29/2017 12:20:00 PM Rig Type: Coordinates (NJSPNAD83) y: 683830.971 Date Finished Drilling: 1/29/2017 1:20:00 PM Core Size: 3.0 in Boring Total Depth: 21 ft Depth to Water: 3.0 Logged By: TI Project Manager: Scott Mikaelian Physical Location: Actual - GA PDI Surface Elevation: 11.325 ft NAVD88 Depth PID Recovery Moisture Graphic Sample **USCS** Surface Cover and Thickness: Range Content ΙĎ (ft/ft) (ppm) Log (ft bgs) 0.0 CONCRETE Concrete sidewalk GAR-PDI-B'6B-1.0-1.5 moist FILL fine to medium SAND, some fine gravel, (7.5YR 3/2) dark brown, medium dense, moist, no odor, no staining. 5 GAR-PDI-B'6B-3.0-3.5 fine SAND, little silt, trace seashells, (7.5YR 3/2) dark wet FILL brown, medium dense, wet, no odor, no staining, water at 3.0 feet. GAR-PDI-B'6B-5.0-5.5 0.0 wet **FILL** SILT, little fine sand, trace fine gravel, (7.5YR 6/3) light brown, soft, wet, no odor, no staining. fine to medium SAND, little silt, (7.5YR 6/3) light brown, FILL wet medium dense, wet, no odor, no staining. GAR-PDI-B'6B-7.0-7.5 5 CONCRETE Concrete slab GAR-PDI-B'6B-9.0-9.5 **FILL** fine to medium SAND, little silt and fine to medium gravel, wet (7.5YR 6/3) light brown, medium dense, wet, no odor, no GAR-PDI-B'6B-9.5-10.0 GAR-PDI-B'6B-10 0-10 5 0.0 SP wet fine to medium SAND, little fine to medium gravel, trace cobbles, (5YR 4/3) reddish brown, medium dense, wet, no odor, no staining. Soils consistent with UNDno. GAR-PDI-B'6B-11.0-11.5 12 13 GAR-PDI-B'6B-13.0-13.5 NR NO RECOVERY GAR-PDI-B'6B-15.0-15.5 0.0 SP fine to medium SAND, little fine to coarse gravel, (5YR 5/3) wet reddish brown, dense, wet, no odor, no staining. Soils consistent with UNDno. 16 GAR-PDI-B'6B-17.0-17.5 5 19 GAR-PDI-B'6B-19.0-19.5 GAR-PDI-B'6B-20.0-20.5 0.0 1 -21

Notes

A.GDT - 4/19/17

2012-09 RA PPG LOGS

bgs - below surface grade COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits MM - meadow mat GGM - green grey mud UNDorg - organic undisturbed native deposits

MGP - manufactured gas plant CCPW - chromate chemical production waste

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

Boring ID: GAR-PDI-B`7A

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Coordinates (NJSPNAD83) x: 610769.589 Drilling Method: direct push Date Started Drilling: 11/6/2016 10:45:00 AM Rig Type: Coordinates (NJSPNAD83) y: 683483.33 Date Finished Drilling: 11/6/2016 11:20:00 AM Core Size: 3.0 in Boring Total Depth: 21 ft Depth to Water: 4.0 Logged By: Eric Stone Project Manager: Scott Mikaelian Physical Location: Actual - GA PDI Surface Elevation: 10.472 ft NAVD88 Depth PID Recovery Moisture Graphic Sample **USCS** Surface Cover and Thickness: Range Content ΙĎ (ft/ft) (ppm) Log (ft bgs) 0.0 **ASPHALT ASPHALT** CONCRETE Concrete slab GAR-PDI-B'7A-1.5-2.0 FILL fine to medium SAND, some fine gravel, trace brick and dry coal, (7.5YR 4/3) brown, medium dense, dry, no odor, no 5 staining. FILL moist fine to medium SAND, (2.5Y 5/2) grayish brown, medium dense, moist, no odor, no staining. fine to medium SAND, some ash, little coal, (7.5YR 4/2) drv FILL GAR-PDI-B'7A-3.5-4.0 **FILL** wet brown, medium dense, dry, no odor, no staining. ASH, (5Y 5/1) gray, loose, wet, no odor, no staining, water at 4.0 feet. 0.0 **FILL** fine to medium SAND, some ash, little coal, (7.5YR 4/3) dry brown, medium dense, dry, no odor, no staining. GAR-PDI-B'7A-5.5-6.0 **FILL** fine silty SAND, little concrete debris, (7.5YR 4/3) brown, wet medium dense, wet, no odor, no staining. 5 GAR-PDI-B'7A-7.5-8.0 **FILL** fine silty SAND, trace ash, (7.5YR 4/3) brown, medium wet dense, wet, no odor, no staining. GAR-PDI-B'7A-9.5-10.0 0.0 GAR-PDI-B'7A-11.5-12.0 12 GAR-PDI-B'7A-12.0-12.5 5 GAR-PDI-B'7A-12.5-13.0 SP fine to coarse SAND, some fine to medium gravel, trace silt, wet 13 (5YR 4/4) reddish brown, medium dense, wet, no odor, no staining. Soils consistent with UNDno. GAR-PDI-B'7A-13.5-14.0 0.0 GAR-PDI-B'7A-15 5-16 0 16 SM fine to medium silty SAND, some fine gravel, (5YR 4/4) wet 5 reddish brown, medium dense, wet, no odor, no staining. GAR-PDI-B'7A-17.5-18.0 Soils consistent with UNDno. A.GDT - 4/7/17 19 GAR-PDI-B'7A-19.5-20.0 GAR-PDI-B'7A-20.0-20.5 0.0 2012-09 RA PPG LOGS 1 -21

bgs - below surface grade COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits MM - meadow mat GGM - green grey mud UNDorg - organic undisturbed native deposits

MGP - manufactured gas plant CCPW - chromate chemical production waste

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: GAR-PDI-B`8A

Project Project	Number:	60240	739		I	Drilling Method: direct push	Coordinates (NISP	NAD83) x: 610751.853
				11:30:00 AM		Rig Type:		NAD83) y: 683456.963
				6 12:30:00 PM		Core Size: 3.0 in	Boring Total Depth:	
			11/0/2010	12.30.00 FIV		Project Manager: Scott Mikaelian	Depth to Water: 6.	
	l By: Eric al Locatio		ual CA D	DI		FIOJECT MATIAGET. SCOTT MIKACHATI	Surface Elevation:	
nysic	ai Locatio	n: ACI	uai - GA Pi	וכ			Surface Elevation:	10.020 IL NAVD00
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphio Log	Surface Cover and Thick	iness:	Sample ID
_		0.0		ASPHALT		ASPHALT		
-1				CONCRETE	P 4 4	Concrete slab		
-2-			dry	FILL		fine to medium SAND, some fine gravel 4/3) brown, medium dense, dry, no odor		GAR-PDI-B'8A-1.5-2.0
-3	5		dry	FILL		fine to medium SAND, little fine gravel, t 4/4) reddish brown, medium dense, dry, staining.	race brick, (5YR	
-4- -			dry	FILL		ASH, some fine to medium sand, (2.5Y medium dense, dry to moist, no odor, no		GAR-PDI-B'8A-3.5-4.0 GAR-PDI-B'8A-4.5-5.0
-5 -		0.0	moist	FILL		fine to medium SAND, some fill debris, brown, medium dense, moist, no odor, r		_
-6— -7— -8—	4		wet	FILL		fine silty SAND, little wood, trace brick, medium dense, wet, no odor, no staining		GAR-PDI-B'8A-6.5-7.0
-9 -				NR		NO RECOVERY		GAR-PDI-B'8A-8.5-9.0
-10 — —		0.0	wet	FILL		fine silty SAND, some wood, (7.5YR 4/3 dense, wet, no odor, no staining.	s) brown, medium	GAR-PDI-B'8A-10.5-11.0
-11 - -12			wet	FILL		fine silty SAND, little fine gravel, (7.5YR medium dense, wet, no odor, no staining		GAR-PDI-B'8A-12.0-12.5
_	5				$\times\!\!\times\!\!\times$	×		
-13 - -14			wet	SP		fine to medium SAND, little fine gravel, (brown, medium dense, wet, no odor, no consistent with UNDno.		GAR-PDI-B'8A-12.5-13.0
15 — —		0.0	wet	SP		fine to coarse SAND, some fine to medi (5YR 4/4) reddish brown, medium dense staining. Soils consistent with UNDno.		GAR-PDI-B'8A-14.5-15.0
-16 -17 -18	5							GAR-PDI-B'8A-16.5-17.0
_ -19 								GAR-PDI-B'8A-18.5-19.0
-20 - -21	1	0.0						GAR-PDI-B'8A-20.0-20.5
otes:	low ourfor-	grada	CODD at-	romito ara pre-	ooina =	poiduo IINDoo pop organio undicturbod anti-	donosito MCD	urfactured and plant
	eadow mat			en grey mud	sooniy fe	esidue UNDno - non-organic undisturbed native UNDorg - organic undisturbed native dep		ufactured gas plant romate chemical production w

Project Number: 60240739

Project Name: PPG Garfield Ave

30 Knightsbridge Road, Piscataway, NJ 08854

Boring ID: GAR-PDI-B`9A

732.564.3200 office telephone

Date Started Drilling: 11/20/2016 8:40:00 AM

Page: 1 Coordinates (NJSPNAD83) x: 610737.491

Coordinates (NJSPNAD83) y: 683432.179

Date Finished Drilling: 11/20/2016 9:40:00 AM Core Size: 3.0 in Boring Total Depth: 21 ft

Rig Type:

Drilling Company: SGS North America

Drilling Method: Direct Push

	nished Dr		11/20/201	10 0. 10.00 7 41		Core Size: 3.0 in Project Manager: Scott Mikaelian	Boring Total Depth:	
	IBy: ⊺l al Locatio	n: Act	ual - GA PI	DI	ļ	Froject wariager: Scott wikaelian	Depth to Water: 5. Surface Elevation:	
	ai Locatio	i. Act	uai - OA i i	וכ			Surface Lievation.	10.000 11 11 11 100
Depth lange t bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickn	ess:	Sample ID
-		0.0		ASPHALT		ASPHALT		
-1— - -2— -	5			FILL		fine to medium SAND, little SILT and coa shell fragments and metal, (5YR 3/2) darl medium dense, moist, no odor, no stainin	k reddish brown,	GAR-PDI-B'9A-1.0-1.5
3			moist	FILL		ASH, (10YR 5/1) gray, loose, moist, no o	dor, no staining.	GAR-PDI-B'9A-3.0-3.5
_			moist	FILL		fine to medium SAND, little coarse gravel	, (5YR 3/2) dark	
6		0.0	moist	FILL		reddish brown, medium dense, moist, no fine silty SAND, little wood, trace fine grav reddish brown, medium dense, moist to w staining, water at 5.5 feet.	vel, (5YR 4/3)	GAR-PDI-B'9A-5.0-5.5
7—	_							GAR-PDI-B'9A-7.0-7.5
\dashv	5							GAR-PDI-B'9A-7.5-8.0
9			wet	SM	××××	fine SAND, trace silt and fine gravel, (7.5' brown, medium dense, wet, no odor, no s consistent with UNDno.		GAR-PDI-B'9A-8.0-8.5
10 - 11 - 12		0.0						GAR-PDI-B'9A-10.0-10.5
13-	5		wet	SP		fine SAND, trace coarse gravel, (5YR 4/3 medium dense, wet, no odor, no staining. with UNDno.) reddish brown, Soils consistent	GAR-PDI-B'9A-12.0-12.5
14— — 15—		0.0						GAR-PDI-B'9A-14.0-14.5
16						1		GAR-PDI-B'9A-16.0-16.5
17—	5		wet	SP		fine to coarse SAND, some coarse gravel brown, dense, wet, no odor, no staining. \$ with UNDno.	, (5YR 4/3) reddish Soils consistent	
18—								GAR-PDI-B'9A-18.0-18.5
20		0.0						GAR-PDI-B'9A-20.0-20.5
21	1	-				·		
					essing re	sidue UNDno - non-organic undisturbed native de	eposits MGP - man	ufactured gas plant
	adow mat			n grey mud	5	UNDorg - organic undisturbed native depos	cito CCDW ob	romate chemical production w

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: GAR-PDI-B`10A

	DE	20.0-	-C' - I - I - A			Delli a Oceano a con COO North Associat		Page: 1
Project Nam						Drilling Company: SGS North America	Coordinates (N ICD)	MA D02) *** 610701 E70
Project Num				40.45.00 44		Drilling Method: Direct Push		NAD83) x: 610721.578
				10:15:00 AM 6 11:20:00 A		Rig Type: Core Size: 3.0 in		IAD83) y: 683406.246
ogged By:		iiiig.	11/20/201	0 11.20.00 A		Project Manager: Scott Mikaelian	Boring Total Depth: Depth to Water: 5.0	
hysical Lo		· Acti	ıal - GA DI)I		Froject Manager. Scott Mikacilan	Surface Elevation:	
	cation.	. Acu	uai - GA Fi	<u>ال</u>			Surface Elevation.	10.990 II NAVD88
		PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickn	ess:	Sample ID
		0.0		ASPHALT		ASPHALT		
-1 - -2			dry	FILL		fine to medium SAND, little fine to coarse 3/2) dark brown, loose, dry to moist, no or	dor, no staining.	GAR-PDI-B'10A-0.5-1.0
-3	.5		moist	FILL		ASH, little fine to medium sand, trace coa medium dense, moist, no odor, no stainin		GAR-PDI-B'10A-2.0-2.5
-4		Ī	moist	FILL		fine to coarse SAND, some silt, little coars	se gravel, (5YR	GAR-PDI-B'10A-4.0-4.5
\dashv		-		NR	XXXX	3/2) dark reddish brown, loose, moist, no		1
-5 -6 -7	5	0.0	wet	FILL		NO RECOVERY fine silty SAND, little coarse gravel, trace dark brown, loose, wet, no odor, no staini feet.		GAR-PDI-B'10A-6.0-6.5
	Ŭ					×		
-8-						×		GAR-PDI-B'10A-8.0-8.5
+						×		GAR-PDI-B'10A-8.5-9.0
9—		-	wet	SP	XXXX	fine CAND little seems ground trace silt	7 EVD 6/2) light	GAR-PDI-B'10A-9.0-9.5
4			wet	SF		fine SAND, little coarse gravel, trace silt, brown, medium dense, wet, no odor, no s	taining Soils	
10 -		0.0				consistent with UNDno.		GAR-PDI-B'10A-10.0-10.5
12— - 13— -	5		wet	SP		fine SAND, (5YR 4/3) reddish brown, me no odor, no staining. Soils consistent with		GAR-PDI-B'10A-12.0-12.5
-14]		GAR-PDI-B'10A-14.0-14.5
15		0.0	wet	SP		fine to coarse SAND, (5YR 4/4) reddish be dense, wet, no odor, no staining. Soils co UNDno.	orown, medium nsistent with	
17—	5							GAR-PDI-B'10A-16.0-16.5
18— — 19— —								GAR-PDI-B'10A-18.0-18.5
21	1	0.0						GAR-PDI-B'10A-20.0-20.5
otes:	urface or	rade (COPR - chr	omite ore proc	essing re	esidue UNDno - non-organic undisturbed native d	eposits MGP - man	ufactured gas plant
M - meadow	/ mat	(GGM - gree	n grey mud		UNDorg - organic undisturbed native depos	sits CCPW - ch	romate chemical production waste
omments: 1) 3 atte	empts were	made to	obtain best recov	ery 2) MM/UND confir	med to be 1	ft thick 3) No CCPW (COPR or GGM) present in any interval of this boring	·	

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30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: GAR-PDI-B`11A

	t Number:							NAD83) x: 610711.285
				12:50:00 PM			Coordinates (NJSPN	IAD83) y: 683376.211
Date Fi	inished Dr	illing:	11/20/201	6 1:50:00 PN	1	Core Size: 3.0 in	Boring Total Depth:	21 ft
ogged	d By: TI					Project Manager: Scott Mikaelian	Depth to Water: 5.5	5
Physic	al Locatio	n: Act	ual - GA PI)I			Surface Elevation:	
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickne	ss:	Sample ID
		0.0		ASPHALT		ASPHALT		
_	1	0.0	alm.		XXXXX	-	and bride and fine	GAR-PDI-B'11A-0.5-1.0
-1 2	5		dry	FILL		fine to medium SAND, some to little ash, tr gravel, (7.5YR 4/3) brown, medium dense, odor, no staining.		GAR-PDI-B'11A-2.0-2.5
-3 -4 -								GAR-PDI-B'11A-4.0-4.5
-5— -		0.0	wet	FILL		fine to medium silty SAND, little fine to med ash and wood, (2.5Y 5/2) grayish brown, m wet, no odor no staining, water at 5.5 feet.	dium gravel, trace nedium dense,	-
-6- - -7 -	5					wet, no odor no staining, water at 5.5 feet.		GAR-PDI-B'11A-6.0-6.5
-8 -9 -								GAR-PDI-B'11A-8.0-8.5
-10		0.0	wet	FILL		fine to coarse SAND, little fine to medium	ravel trace wood	GAR-PDI-B'11A-10.0-10.5
_	1	0.0	wet	SW	XXXX	(5YR 4/4) reddish brown, medium dense, v		GAR-PDI-B'11A-10.5-11.0
-11 -12 -13	5		wet	SW		staining. fine to coarse SAND, little fine to coarse gr reddish brown, medium dense, wet, no odd Soils consistent with UNDno.		GAR-PDI-B'11A-12.0-12.5
-14 -	-							GAR-PDI-B'11A-14.0-14.5
-15 -		0.0						
-16 - -17	5							GAR-PDI-B'11A-16.0-16.5
-18 	1							OAD DD: 51444 40.0 10.5
-19 -19	-		wet	SP		fine to medium SAND, little silt, trace fine to (5YR 4/4) reddish brown, dense, wet, no of Soils consistent with UNDno.	o medium gravel, dor, no staining.	GAR-PDI-B'11A-18.0-18.5 -
- 20 	<u> </u>	0.0				1		GAR-PDI-B'11A-20.0-20.5
 21	1	3.3						
	low surface eadow mat		COPR - chr GGM - gree		essing re	esidue UNDno - non-organic undisturbed native der UNDorg - organic undisturbed native deposi	posits MGP - manu	ufactured gas plant

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: GAR-PDI-B`12A

Project	t Nullibei.	00270				Drilling Method: direct push	Coordinate C (140 C)	NAD83) x: 610692.098
				12:00:00 PM	1	Rig Type:		NAD83) y: 683357.124
				6 12:30:00 F		Core Size: 3.0 in	Boring Total Depth:	
	d By: ES			_		Project Manager: Scott Mikaelian	Depth to Water: 5.	
	al Locatio	n: Act	ual - GA PI	DI			Surface Elevation:	
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphi Log	Surface Cover and Thick	ness:	Sample ID
		0.0		ASPHALT		ASPHALT		
_ _1		0.0	dry	FILL		fine to medium SAND, little fill debris, tra (7.5YR 4/3) brown, medium dense, dry,		-
-2— -3— -4—	5							
-5 - -6		0.0	wet	FILL		fine to medium silty SAND, little fine gra (2.5Y 5/2) grayish brown, medium dense staining, water at 5.0 feet.		
7					\bowtie			GAR-PDI-B'12A-6.5-7.0
-7 - -8	3.5		wet	SP		fine to medium SAND, some fine to med (5YR 4/4) reddish brown, medium dense staining. Soils consistent with UNDno.		GAR-PDI-B'12A-7.0-7.5
-9- -				NR		NO RECOVERY		
-10					<u> </u>			
-11	5	0.0	wet	SP		fine to coarse SAND, some fine to coars (5YR 4/4) reddish brown, medium dense staining. Soils consistent with UNDno.		
-15 		0.0				1		
 -16 - -17	5							
-18 - -19								GAR-PDI-B'12A-18.0-18.5
	_							
-20	1	0.0				1		GAR-PDI-B'12A-20.0-20.5
 -21	'							
otes: gs - be lM - me			COPR - chr GGM - gree		essing re	esidue UNDno - non-organic undisturbed native UNDorg - organic undisturbed native dep	deposits MGP - man	ufactured gas plant

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30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: GAR-PDI-B`12AR

Project Number Date Started Dr Date Finished D					Drilling Method: Direct Push	Coordinates (NJSPI	NAD83) x: 610693.955
	illina: `				1	0 " (() () ()	
Jate Finisned L					Rig Type:		IAD83) y: 683356.242
	riiiing:	2/19/2017	7 1:00:00 PM		Core Size: 3.0 in Project Manager: Scott Mikaelian	Boring Total Depth:	
ogged By: Ti Physical Locati	• • · · · · ·	ual CA DI	DI		Project Manager: Scott Mikaelian	Depth to Water: 6.5 Surface Elevation:	
nysicai Locali	on: Act	uai - GA Pi	וכ	1	1	Surface Elevation:	11.363 II NAVD66
Depth Range (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphi Log	c Surface Cover and Thick	ness:	Sample ID
	0.0		ASPHALT		ASPHALT		
-1 -2 _ 0.5	0.0		NR		NO RECOVERY		
-3 — -4 — -							
-5	0.0	moist	FILL		fine to medium SAND, little silt and fine t (7.5YR 4/2) brown, medium dense, mois staining.	to coarse gravel, st, no odor, no	
-6- 7		moist to wet	SP	****	fine to medium SAND, little fine to coars reddish brown, medium dense, moist to staining, water at 6.5 feet. Soils consiste	wet, no odor, no	
2 -8—			NR		NO RECOVERY		
10 - - 11- - - 12- - - 4.5	0.0	wet	SP		fine to medium SAND, little fine to medium reddish brown, medium dense, wet, no consistent with UNDno.	um gravel, (5YR 4/3) odor, no staining.	GAR-PDI-B'12AR-10.0-10.
-14							
·					;		GAR-PDI-B'12AR-14.0-14.
-15			NR		NO RECOVERY		
otes: gs - below surfac M - meadow mat	e grade	COPR - chr GGM - gree	omite ore proc	essing r	esidue UNDno - non-organic undisturbed native o	deposits MGP - manu	ufactured gas plant romate chemical production wa

Project Name: PPG Garfield Ave

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: GAR-PDI-B`13A

Page: 1

	Number:					Drilling Method: direct push	Coordinates (NJSPNAD83) x: 610673.722	
				11:10:00 AM		Rig Type:		
	<u>nısnea Dr</u> I By : ES	ıllıng:	11/13/201	16 11:30:00 A		Core Size: 3.0 in Project Manager: Scott Mikaelian	Boring Total Depth: Depth to Water: 5.0	
		n: Act	ual - GA Pl	DI		Project Manager. Scott Mikaelian	Surface Elevation:	
	u. Locatio	7.00	uai Oitti	<u> </u>			Carrage Elevation	11.000 1(14/1/200
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thick	ness:	Sample ID
		0.0		ASPHALT		ASPHALT		
-1 - -2			dry	FILL		fine to medium SAND, trace coal and as brown, medium dense, dry, no odor, no		
	5							
-5 -		0.0	wet	FILL		fine silty SAND, little fill debris, (7.5YR 4 dense, wet, no odor, no staining, water a	/3) brown, medium at 5.0 feet.	-
-6						<u> </u>		GAR-PDI-B'13A-6.0-6.5
-7 -	5		wet	SP		fine to coarse SAND, some fine to medius trace silt, (5YR 4/4) reddish brown, med odor, no staining. Soils consistent with U	um dense, wet, no	GAR-PDI-B'13A-6.5-7.0
-8 -9 -10								GAR-PDI-B'13A-8.0-8.5
-11 -11 -12	5	0.0	wet	SM		fine to medium silty SAND, some fine gr reddish brown, medium dense, wet, no o Soils consistent with UNDno.		GAR-PDI-B'13A-10.0-10.5 GAR-PDI-B'13A-12.0-12.5
_	5					.}		
-13 - - -14 -			wet	SP		fine to coarse SAND, some fine to media (5YR 4/4) reddish brown, dense, wet, no Soils consistent with UNDno.		GAR-PDI-B'13A-14.0-14.5
								G/400 B/B 16/014.5 14.6
-15 - -16		0.0	wet	SP		fine to coarse silty SAND, some fine to r 4/4) reddish brown, medium dense, wet, staining. Soils consistent with UNDno.		GAR-PDI-B'13A-16.0-16.5
-17	5		wet	SP		fine to coarse SAND, some fine to mediu (5YR 4/4) reddish brown, medium dense staining. Soils consistent with UNDno.		GAR-FUI-D ISA-10.0-10.5
-18 - -19								GAR-PDI-B'13A-18.0-18.5
-						1		
-20 - -21	1	0.0						GAR-PDI-B'13A-20.0-20.5
	ow surface		COPR - chr GGM - gree		essing re	esidue UNDno - non-organic undisturbed native UNDorg - organic undisturbed native depr		ufactured gas plant romate chemical production w
					rmed to be 1	ft thick 3) No CCPW (COPR or GGM) present in any interval of this boring		

Drilling Company: SGS North America

Boring ID: GAR-PDI-B`14A

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Coordinates (NJSPNAD83) x: 610672.235 Drilling Method: direct push Date Started Drilling: 11/13/2016 10:05:00 AM Rig Type: Coordinates (NJSPNAD83) y: 683295.754 Date Finished Drilling: 11/13/2016 11:00:00 AM Core Size: 3.0 in Boring Total Depth: 21 ft Depth to Water: 5.0 Logged By: ES Project Manager: Scott Mikaelian Physical Location: Actual - GA PDI Surface Elevation: 11.415 ft NAVD88 Depth PID Recovery Moisture Graphic Sample **USCS** Surface Cover and Thickness: Range ΙĎ (ft/ft) (ppm) Content Log (ft bgs) 0.0 **ASPHALT ASPHALT** CONCRETE Concrete slab, no odor, no staining. GAR-PDI-B'14A-1.0-1.5 FILL fine to medium SAND, some fine to medium gravel, little dry brick, (7.5YR 6/3) light brown, medium dense, dry, no odor, GAR-PDI-B'14A-2.0-2.5 4.5 **FILL** fine to medium SAND, little fine to medium gravel and silt, dry trace brick, (7.5YR 4/3) brown, medium dense, dry, no odor, GAR-PDI-B'14A-4.0-4.5 no staining.
NO RECOVERY NR 0.0 wet **FILL** fine to medium silty SAND, some fine to medium gravel, little brick, (7.5YR 4/3) brown, medium dense, wet, no odor, no staining, water at 5.0 feet. GAR-PDI-B'14A-6.0-6.5 5 GAR-PDI-B'14A-8.0-8.5 GAR-PDI-B'14A-9.5-10.0 FILL fine to medium silty SAND, some fine to medium gravel, wet trace fill debris, (5YR 4/4) reddish brown, medium dense, GAR-PDI-B'14A-10 0-10 5 0.0 SM wet wet, no odor, no staining.

fine to medium silty SAND, some fine to medium gravel, (5YR 4/4) reddish brown, medium dense, wet, no odor, no wet SP staining. Soils consistent with UNDno. fine to medium SAND, some fine gravel, little silt, (5YR 4/4) 12 GAR-PDI-B'14A-12.0-12.5 reddish brown, dense, wet, no odor, no staining. Soils 5 consistent with UNDno. 13 GAR-PDI-B'14A-14.0-14.5 0.0 SP fine to coarse SAND, some fine to medium gravel, little silt, wet (5YR 4/4) reddish brown, medium dense, wet, no odor, no staining. Soils consistent with UNDno. 16 GAR-PDI-B'14A-16.0-16.5 5 GAR-PDI-B'14A-18.0-18.5 A.GDT - 4/19/17 19 fine to coarse SAND, some fine to coarse gravel, (5YR 4/4) SP wet reddish brown, dense, wet, no odor, no staining. Soils consistent with UNDno. GAR-PDI-B'14A-20.0-20.5 0.0 2012-09 RA PPG LOGS 1

-21

MGP - manufactured gas plant CCPW - chromate chemical production waste

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

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: GAR-PDI-B`15A

Project	Number:	60240)739			Drilling Method: direct push	Coordinates (NJSP	NAD83) x: 610649.004
				9:15:00 AM		Rig Type:		NAD83) y: 683266.306
				16 10:00:00 A		Core Size: 3.0 in	Boring Total Depth:	
	By: ES	3-	. 5. 20			Project Manager: Scott Mikaelian	Depth to Water: 5.	
		n: Act	ual - GA P	DI			Surface Elevation:	
		50						
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphi Log	Surface Cover and Thick	kness:	Sample ID
		0.0		ASPHALT		ASPHALT		
. 4				CONCRETE	p. 6. 4.	Concrete slab, no odor, no staining.		
-1-			dry	FILL		fine to medium SAND, little brick and co	arse gravel (5VR	GAR-PDI-B'15A-1.0-1.5
. 4			ui y	''	\bowtie	4/4) reddish brown, medium dense, dry	no odor, no	
-2-					\bowtie	staining.	•	GAR-PDI-B'15A-2.0-2.5
	5				\bowtie			GAR-PDI-B 13A-2.0-2.3
-3-					\bowtie			
-3-					\bowtie			
					\bowtie			
-4					\bowtie			GAR-PDI-B'15A-4.0-4.5
					\bowtie	$ \lozenge $		
-5-		0.0	1.104	FILL		fine to modium eith, CAND, some fire a	royal little fill debaie	4
4		0.0	wet	FILL	\bowtie	fine to medium silty SAND, some fine g (7.5YR 4/3) brown, medium dense, wet		
-6-					\bowtie	staining, water at 5.0 feet.	, 0001, 110	OAD DDI DICT.
					\bowtie	8		GAR-PDI-B'15A-6.0-6.5
_					\bowtie	8		
-/-	E				\bowtie	8		
\dashv	5				\bowtie	8		
-8-					\bowtie	8		GAR-PDI-B'15A-8.0-8.5
4					\bowtie	8		
-9					\bowtie	8		
					\bowtie	8		047 771 77
-10					\bowtie	\		GAR-PDI-B'15A-9.5-10.0
10		0.0	wet	SM		fine to medium silty SAND, little fine gra	ivel, (5YR 4/4)	GAR-PDI-B'15A-10.0-10.5
]						reddish brown, medium dense, wet, no Soils consistent with UNDno.	odor, no staining.	
-11						:) Solis consistent with ordino.		
					: : : -			
-12 						<u> </u>		GAR-PDI-B'15A-12.0-12.5
\dashv	5							
-13				0.5		: CAND C		
- 4			wet	SP		fine to coarse SAND, some fine to med (5YR 4/4) reddish brown, medium dens	um gravel, trace silt,	
-14						staining. Soils consistent with UNDno.	C, **Ct, 110 0001, 110	
' -						4		GAR-PDI-B'15A-14.0-14.5
, T						;∤		
-15 		0.0						
						.}		
-16								GAR-PDI-B'15A-16.0-16.5
4						<u>.</u>		
-17						4		
. 4	5					:1		
-18						3		CAD DDI DI45A 40.0 40.5
						:1		GAR-PDI-B'15A-18.0-18.5
-19						<u> </u>		
19			wet	GW	7.	fine to coarse sandy GRAVEL, (5Y 5/1)	gray, medium	
·						dense, wet, no odor, no staining. Soils o	consistent with	
-20-		0.0				UNDno.		GAR-PDI-B'15A-20.0-20.5
	1	•			. 4.	<u>'</u>		
- 21 								
lotes:	nw surface	nrade	COPP ob	omite ore proc	aggina r	esidue UNDno - non-organic undisturbed native	denosits MCD man	ufactured gas plant
ua - DelC	ow sundce	graut	OOLK - CUI	omite ore procen grey mud	cooniy M	UNDorg - organic undisturbed native	ucposits inight - itian	uraciureu yas piani

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: GAR-PDI-B9B

Page: 1

Projec	t Name: F	PPG Ga	rfield Ave			Drilling Company: SGS North America		rage.
	t Number:					Drilling Method: direct push	Coordinates (N ISDI	NAD83) x: 611056.216
				3 10:25:00 AM				
						Rig Type:		IAD83) y: 683879.935
			11/21/20	16 11:00:00 A		Core Size: 3.0 in	Boring Total Depth:	
	d By: Eric					Project Manager: Scott Mikaelian	Depth to Water: 6.0	
Physic	al Locatio	n: Act	ual - GA P	DI	·	1	Surface Elevation:	11.595 ft NAVD88
Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickn	ess:	Sample ID
		0.0		CONCRETE	p 1 4 6	Concrete sidewalk		
	5	0.0	dry	FILL	S - 2	DGA, fine to coarse SAND, some fine to (2.5Y 5/2) grayish brown, medium dense, odor, no staining.	medium gravel, dry to moist, no	
<u> </u>								
"			wet	FILL	\bowtie	fine to medium SAND, some fine to media		GAR-PDI-B9B-6.0-6.5
	3.5		wet	FILL		2.5/2) dark reddish brown, medium dense staining, water at 6.0 feet. ASH, some fine sand, (2.5Y 5/1) gray, loc	/	
8	3.3		moist	FILL		no staining. fine to medium SAND, trace ash, (5YR 4/ medium dense, moist, no odor, no stainin	(4) reddish brown,	GAR-PDI-B9B-8.0-8.5
<u> </u>	1			NR	$\sim\sim$	NO RECOVERY, Refusal at 8.5 feet.	9.	1
	elow surface eadow mat			romite ore proce en grey mud		esidue UNDno - non-organic undisturbed native de UNDorg - organic undisturbed native depos		ufactured gas plant romate chemical production waste

PPG - 2012-09 RA PPG_LOGS_A.GDT - 4/19/17 12:05

A.GDT - 4/7/17

2012-09 RA PPG LOGS

ents: Groundwater 10-15 ft bgs has green staining

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: GAR-PDI-B10B

Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Coordinates (NJSPNAD83) x: 611076.525 Drilling Method: direct push Date Started Drilling: 12/2/2016 8:00:00 AM Rig Type: Coordinates (NJSPNAD83) y: 683895.019 Date Finished Drilling: 12/8/2016 1:00:00 PM Core Size: 3.0 in Boring Total Depth: 21 ft Depth to Water: 5.0 Logged By: Eric Stone Project Manager: Scott Mikaelian Physical Location: Actual - GA PDI Surface Elevation: 11.595 ft NAVD88 Depth PID Recovery Moisture Graphic Sample **USCS** Surface Cover and Thickness: Range Content (ft/ft) (ppm) Log (ft bgs) 0.0 **FILL** DGA, fine to coarse SAND, some fine to medium gravel, (5Y dry 5/1) gray, medium dense, dry to wet, no odor, no staining, water at 5.0 feet. 5 0.0 FILL fine to coarse SAND, some brick, little cinders, (7.5YR 4/3) wet brown, medium dense, wet, no odor, no staining. FILL wet 4 CINDERS, some coarse gravel, (5YR 2.5/1) black, loose, GAR-PDI-B10B-7.5-8.0 wet, no odor, no staining. GAR-PDI-B10B-8.0-8.5 fine to medium SAND, (7.5YR 4/3) brown, medium dense, SP moist moist, no odor, no staining. Soils consistent with UNDno. NR NO RECOVERY, refusal at 9.0 feet. GAR-PDI-B10B-10 0-10 5 fine SAND, little wood, (7.5YR 4/3) brown, medium dense, 0.0 SP wet wet, no odor, no staining, green colored groundwater. Soils consistent with UNDno. 12 GAR-PDI-B10B-12.0-12.5 5 13 SM Organic SILT, 90% organic silt, 10% organic fibers, (7.5YR wet 2.5/3) very dark brown, soft, wet, strong organic odor, no GAR-PDI-B10B-14.0-14.5 ML moist staining. Soils consistent with UNDorg. SILT, some fine to medium sand, little fine gravel, (2.5YR 4/2) weak red, soft, moist, no odor, no staining. Soils 0.0 SM wet consistent with UNDno. fine silty SAND, little fine to medium gravel, (7.5YR 4/3) 16 brown, medium dense, wet, no odor, no staining. Soils GAR-PDI-B10B-16.0-16.5 consistent with UNDno. SP fine to coarse SAND, some fine to coarse gravel, (5YR 4/4) wet 5 reddish brown, dense, wet, no odor, no staining. Soils consistent with UNDno. GAR-PDI-B10B-18.0-18.5 19 GAR-PDI-B10B-20.0-20.5 0.0 1 -21 bgs - below surface grade bgs - below surface grade GGM - green grey mud

COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits UNDorg - organic undisturbed native deposits MGP - manufactured gas plant CCPW - chromate chemical production waste

AECOM

PPG - 2012-09 RA PPG_LOGS_A.GDT - 4/7/17 12:03

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: GAR-PDI-B11B

Page: 1

Project	Name: F	PPC Ca	rfield Ave			Drilling Company: SGS North America		Page		
	Number:					Drilling Method: Direct Push	Coordinates (NJSP)	NAD83) x: 611100.253		
			11/30/2016	1		Rig Type:		Coordinates (NJSPNAD83) y: 683913.901		
			11/30/201			Core Size: 3.0 in	Boring Total Depth:			
	By: Kyle					Project Manager: Scott Mikaelian	Depth to Water: 3.5			
			ual - GA Pl	DI			Surface Elevation:			
Depth lange t bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphi Log	Surface Cover and Thick	iness:	Sample ID		
_		0.0		ASPHALT		ASPHALT				
1-										
.2-	5		moist	FILL		fine to coarse silty SAND, some fill debr black, medium dense, moist, no odor, no				
-4			moist	FILL		ASH, some cinders and fill debris, trace gray, medium dense, moist to wet, no or water at 3.5 feet.				
-6		0.0						GAR-PDI-B11B-6.0-6.5		
-8	5		wet	FILL		SILT, little fill debris, (7.5YR 3/2) dark b odor, no staining.	rown, firm, wet, no	GAR-PDI-B11B-8.0-8.5		
9										
10				FILL	\bowtie	Concrete debris, no odor, green staining		OAD DDI D44D 40 0 40 5		
11—		0.0	wet	FILL		CINDERS, some ash, little fine to mediu 2.5/1) black, loose, wet, no odor, no stai		GAR-PDI-B11B-10.0-10.5		
12—	5		wet	FILL		ASH, trace fill debris, (5YR 2.5/1) black, wet, no odor, no staining.	medium dense,	GAR-PDI-B11B-12.0-12.5		
			moist	ML		SILT, (7.5YR 3/2) dark brown, stiff, moi	st, no odor, no	GAR-PDI-B11B-13.0-13.5 GAR-PDI-B11B-13.5-14.0		
14—						staining. Soils consistent with UNDno.				
15			wet	OL		organic SILT, 95% organic silt, 5% orga 2.5/1) black, firm, wet, moderate organic sampler refusal at 15.0 feet. Soils consi	c odor, no staining,	GAR-PDI-B11B-14.5-15.0		
	ow surface adow mat		COPR - chr GGM - gree		essing re	esidue UNDno - non-organic undisturbed native UNDorg - organic undisturbed native dep		lufactured gas plant romate chemical production wa		

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: GAR-PDI-C`7A

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Drilling Method: Direct Push Coordinates (NJSPNAD83) x: 610748.272 Date Started Drilling: 1/8/2017 11:10:00 AM Rig Type: Coordinates (NJSPNAD83) y: 683497.664 Date Finished Drilling: 1/8/2017 12:45:00 PM Core Size: 3.0 in Boring Total Depth: 21 ft Depth to Water: 7.5 Logged By: Kyle Willis Project Manager: Scott Mikaelian Physical Location: Actual - GA PDI Surface Elevation: 10.744 ft NAVD88 Depth PID Recovery Moisture Graphic Sample **USCS** Surface Cover and Thickness: Range (ft/ft) Content ΙĎ (ppm) Log (ft bgs) 0.0 CONCRETE Concrete sidewalk GAR-PDI-C'7A-0.5-1.0 FILL fine to medium SAND, trace fill debris, (7.5YR 2.5/1) black, dry to medium dense, dry to moist, no odor, no staining. FILL fine to medium silty SAND, (5YR 4/3) reddish brown, moist medium dense, moist, no odor, no staining. moist 5 GAR-PDI-C'7A-2.5-3.0 FILL SILT, trace fill debris, (7.5YR 2.5/1) black, firm, moist, no moist odor, no staining. GAR-PDI-C'7A-4.5-5.0 0.0 GAR-PDI-C'7A-6.0-6.5 GAR-PDI-C'7A-6.5-7.0 SILT, little fine to medium sand, (5YR 6/3) light reddish moist MI brown, soft, moist to wet, no odor, no staining, water at 7.5 5 wet feet. Soils consistent with UNDno. GAR-PDI-C'7A-8.5-9.0 SW fine to coarse SAND, little fine to medium gravel, (5YR 4/3) wet reddish brown, medium dense, wet, no odor, no staining. Soils consistent with UNDno. 0.0 GAR-PDI-C'7A-10.5-11.0 12 5 GAR-PDI-C'7A-12.5-13.0 13 GAR-PDI-C'7A-14.5-15.0 0.0 SM fine to medium silty SAND, little fine to coarse gravel, (5YR wet 3/2) dark reddish brown, medium dense, wet, no odor, no staining. Soils consistent with UNDno. 16 GAR-PDI-C'7A-16.5-17.0 5 GAR-PDI-C'7A-18.5-19.0 19 GAR-PDI-C'7A-20.0-20.5 0.0 1 -21

A.GDT - 4/19/17

2012-09 RA PPG LOGS

bgs - below surface grade bgs - below surface grade GGM - green grey mud UNDno - non-organic undisturbed native deposits UNDorg - organic undisturbed native deposits

MGP - manufactured gas plant CCPW - chromate chemical production waste

AECOM

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: GAR-PDI-C`8A

Project Project	Number:	60240)739		- 1	Drilling Method: Direct Push	Coordinates (N.ISP	NAD83) x: 610730.532		
	tarted Dril			:00:00 PM		Rig Type:	Coordinates (NJSPNAD83) y: 683468.738			
				2:50:00 PM		Core Size: 3.0 in	Boring Total Depth:			
	By: Kyle					Project Manager: Scott Mikaelian	Depth to Water: 7.			
	al Locatio		ual - GA Pi	DI			Surface Elevation:			
		, ιοι	O/ (I				,			
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphio Log	Surface Cover and Thic	ckness:	Sample ID		
		0.0		CONCRETE	P & 4 F	Concrete sidewalk				
_ _1			dry to moist	FILL		SILT, little fine to medium sand and fill black, firm, dry to moist, no odor, no st	debris, (7.5YR 2.5/1) aining.	GAR-PDI-C'8A-0.5-1.0 GAR-PDI-C'8A-1.5-2.0		
-2-					\bowtie			GAR-PDI-C'8A-2.0-2.5		
	4.5		moist	ML		SILT, trace fine sand, (5YR 6/3) light r moist, no odor, no staining. Soils consi	eddish brown, stiff, istent with UNDno.			
7								GAR-PDI-C'8A-4.0-4.5		
_ 7				NR		NO RECOVERY				
-5		0.0	moist	ML		SILT, little fine to medium sand, (5YR brown, firm, moist, no odor, no staining UNDno.	6/3) light reddish g. Soils consistent with			
-6— - -7— -	5		moist to wet	SM		UNDno. fine to medium silty SAND, (5YR 6/3) medium dense, moist to wet, no odor, 7.0 feet. Soils consistent with UNDno.	light reddish brown, no staining, water at	GAR-PDI-C'8A-6.0-6.5		
-8						.]		GAR-PDI-C'8A-8.0-8.5		
_ _9 _ _10		0.0	wet	SM		fine to coarse silty SAND, (5YR 4/3) redense, wet, no odor, no staining. Soils UNDno.	eddish brown, medium consistent with	GAR-PDI-C'8A-10.0-10.5		
-11 -12 -13 -	5	0.0						GAR-PDI-C'8A-12.0-12.5		
-14								GAR-PDI-C'8A-14.0-14.5		
\dashv						1				
-15		0.0				:				
\dashv		0.0				1				
-16 -17	-							GAR-PDI-C'8A-16.0-16.5		
-	5					1				
-18 - -								GAR-PDI-C'8A-18.0-18.5		
-19 -										
-20								045 55: 224 224		
	1	0.0				4		GAR-PDI-C'8A-20.0-20.5		
-21	-									
otes:										
gs - bel	low surface adow mat	grade	COPR - chr	romite ore proce en grey mud	essing re	esidue UNDno - non-organic undisturbed native UNDorg - organic undisturbed native de	e deposits MGP - man	ufactured gas plant romate chemical production w		

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: GAR-PDI-C`9A

Project	t Number:	60240	739			Drilling Method: Direct Push	Coordinates (NJSP	NAD83) x: 610715.218
				2:30:00 PM		Rig Type:		NAD83) y: 683444.096
	inished Dr					Core Size: 3.0 in	Boring Total Depth:	21 ft
ogged	d By: Kyle	Willis				Project Manager: Scott Mikaelian	Depth to Water: 4.	0
Physica	al Locatio	n: Act	ual - GA P	DΙ			Surface Elevation:	10.732 ft NAVD88
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphio Log	Surface Cover and Thic	kness:	Sample ID
_		0.0		CONCRETE		Concrete sidewalk		
-1 - -2			moist	FILL		SILT, some ash, cinders and fill debris, brown, firm, moist, no odor, no staining		GAR-PDI-C'9A-1.0-1.5 GAR-PDI-C'9A-2.0-2.5
-3- -	4.5		moist	ML		fine sandy SILT, (5YR 4/3) reddish bro no odor, no staining, water at 4.0 feet. UNDno.	wn, soft, moist to wet, Soils consistent with	GAR-PDI-C'9A-2.5-3.0
-4				NR		NO RECOVERY		GAR-PDI-C'9A-4.0-4.5
-5		0.0	wet	ML		fine to medium sandy SILT, trace fine t (7.5YR 4/2) brown, firm, wet, no odor,		1
-6						consistent with UNDno.	3	GAR-PDI-C'9A-6.0-6.5
-7-	. 5		wet	GW		fine to coarse GRAVEL, little fine to coarse dish brown, medium dense, wet, no Soils consistent with UNDno.		
-8-						Soils consistent with ondro.		GAR-PDI-C'9A-8.0-8.5
-9			wet	SM		fine to coarse silty SAND, little fine to c 4/4) reddish brown, dense, wet, no odo consistent with UNDno.		
-10 -11 -12 -13 -14	5	0.0						GAR-PDI-C'9A-10.0-10.5 GAR-PDI-C'9A-12.0-12.5
15		0.0						GAR-PDI-C'9A-14.0-14.5
-16 -17		0.0						GAR-PDI-C'9A-16.0-16.5
_ -18	5							GAR-PDI-C'9A-18.0-18.5
-19 -								
-20 - -21	. 1	0.0						GAR-PDI-C'9A-20.0-20.5
otes:								
gs - bel	low surface eadow mat			romite ore proce en grey mud	essing re	esidue UNDno - non-organic undisturbed native UNDorg - organic undisturbed native de	e deposits MGP - man posits CCPW - ch	ufactured gas plant romate chemical production w

A E COM

Boring ID: GAR-PDI-C`10A

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Drilling Method: Direct Push Coordinates (NJSPNAD83) x: 610698.579 Date Started Drilling: 12/4/2016 1:00:00 PM Rig Type: Coordinates (NJSPNAD83) y: 683415.997 Date Finished Drilling: 12/4/2016 2:20:00 PM Core Size: 3.0 in Boring Total Depth: 21 ft Logged By: Kyle Willis Project Manager: Scott Mikaelian Depth to Water: 4.0 Physical Location: Actual - GA PDI Surface Elevation: 11.090 ft NAVD88 Depth PID Recovery Moisture Graphic Sample **USCS** Surface Cover and Thickness: Range Content ΙĎ (ft/ft) (ppm) Log (ft bgs) 0.0 CONCRETE Concrete sidewalk GAR-PDI-C'10A-0.5-1.0 FILL ASH, little cinders, (5YR 2.5/1) black, medium dense, moist, moist no odor, no staining. moist FILL SILT, trace cinders and fine sand, (5YR 4/3) reddish brown, soft, moist, no odor, no staining. GAR-PDI-C'10A-2.0-2.5 4.5 GAR-PDI-C'10A-3.0-3.5 GAR-PDI-C'10A-3.5-4.0 moist ML SILT, little fine to medium sand, (5YR 4/3) reddish brown, soft, moist to wet, no odor, no staining, water at 4.0 feet. GAR-PDI-C'10A-4.0-4.5 Soils consistent with UNDno. NR NO RECOVERY 0.0 wet ML SILT, little fine to medium sand, (5YR 4/3) reddish brown, firm, wet, no odor, no staining. Soils consistent with UNDno. SM wet fine to coarse silty SAND, little fine to coarse gravel, (5YR GAR-PDI-C'10A-6.0-6.5 4/3) reddish brown, medium dense, wet, no odor, no staining. Soils consistent with UNDno. 5 GAR-PDI-C'10A-8.0-8.5 GAR-PDI-C'10A-10 0-10 5 0.0 12 GAR-PDI-C'10A-12.0-12.5 5 13 SW fine to medium SAND, trace fine to coarse gravel, (5YR 4/3) wet reddish brown, medium dense, wet, no odor, no staining. GAR-PDI-C'10A-14.0-14.5 Soils consistent with UNDno. 0.0 16 GAR-PDI-C'10A-16.0-16.5 GAR-PDI-C'10A-18.0-18.5 GAR-PDI-C'10A-20.0-20.5 0.0 1 -21

Notes

A.GDT - 4/7/17

2012-09 RA PPG LOGS

bgs - below surface grade COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits MM - meadow mat GGM - green grey mud UNDorg - organic undisturbed native deposits

MGP - manufactured gas plant CCPW - chromate chemical production waste

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

Boring ID: GAR-PDI-C`12A

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Proiect	Number:	60240	1739		ı	Drilling Method: Direct Push	COOLUIIIALES INDUSTI	IAD83) x: 610668.07
				11:20:00 AM				AD83) y: 683366.607
				3 12:00:00 PM			Boring Total Depth:	
	d By: Eric						Depth to Water: 4.0	
	al Locatio			DI I			Surface Elevation:	
-	LUCALIO		uai - UA FI	٠.		1	Carrace Lievation.	11.071 ILIVAVDO0
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphio Log	Surface Cover and Thickne	ss:	Sample ID
		0.0		CONCRETE	P 1 1	Concrete sidewalk		
_ _1			moist	FILL		fine to coarse SAND, some cinders, (5YR 2 medium dense, moist, no odor, no staining	. ′ ′	GAR-PDI-C'12A-0.3-0.8
_			moist	FILL		fine to medium SAND, little silt and brick, (sbrown, medium dense, moist, no odor, no s	5YR 4/4) reddish staining.	
-2-	5		wet	FILL		ASH, (2.5Y 5/1) gray, loose, wet, no odor,	no staining.	GAR-PDI-C'12A-2.0-2.5
-3 -4			moist	SM		fine to medium silty SAND, (7.5YR 4/3) brodense, moist to wet, no odor, no staining, v Soils consistent with UNDno.		GAR-PDI-C'12A-2.5-3.0 GAR-PDI-C'12A-4.0-4.5
_ -5— _		0.0						GAR-PDI-C 12A-4.0-4.5
-6 - -7	_		wet	SP		fine to coarse SAND, some fine to medium	gravel little silt	GAR-PDI-C'12A-6.0-6.5
-8 -9	5		<i></i>	. Oi		(5YR 4/4) reddish brown, medium dense, v staining. Soils consistent with UNDno.		GAR-PDI-C'12A-8.0-8.5
		0.0						GAR-PDI-C'12A-10.0-10.5
-11 -12 -13 -14	5							GAR-PDI-C'12A-12.0-12.5 GAR-PDI-C'12A-14.0-14.5
- -15		0.0						
_ -16 - -17	5	0.0						GAR-PDI-C'12A-16.0-16.5
-18 - -19	, 5 ,			0	8 8 8 8			GAR-PDI-C'12A-18.0-18.5
-			wet	SW		fine to coarse SAND, some coarse gravel, brown, medium dense, wet, no odor, no state consistent with UNDno.	(5YR 4/4) reddish aining. Soils	
-20 - -21	. 1	0.0				CONSISTENT WITH UNDING.		GAR-PDI-C'12A-20.0-20.5
Notes:	low surface	grade	COPR - chr GGM - gree	omite ore proc	essing re	sidue UNDno - non-organic undisturbed native der UNDorg - organic undisturbed native deposit	posits MGP - manu	rfactured gas plant

Boring ID: GAR-PDI-C`13A

30 Knightsbridge Road, Piscataway, NJ 08854

732.564.3200 office telephone Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Drilling Method: Direct Push Coordinates (NJSPNAD83) x: 610652.855 Date Started Drilling: 11/20/2016 2:00:00 PM Rig Type: Coordinates (NJSPNAD83) y: 683340.155 Date Finished Drilling: 11/20/2016 3:00:00 PM Core Size: 3.0 in Boring Total Depth: 21 ft Depth to Water: 6.0 Logged By: TI Project Manager: Scott Mikaelian Physical Location: Actual - GA PDI Surface Elevation: 11.696 ft NAVD88 Depth PID Recovery Moisture Graphic Sample **USCS** Surface Cover and Thickness: Range Content ΙĎ (ft/ft) (ppm) Log (ft bgs) 0.0 CONCRETE Concrete sidewalk GAR-PDI-C'13A-0.3-0.8 moist fine silty SAND, little coarse gravel, (7.5YR 3/2) dark brown, FILL medium dense, moist, no odor, no staining. FILL moist ASH, (2.5Y 5/1) gray, loose, moist, no odor, no staining. GAR-PDI-C'13A-2.0-2.5 fine silty SAND, trace brick, (7.5YR 6/3) light brown, medium **FILL** moist 4.5 dense, moist, no odor, no staining. GAR-PDI-C'13A-4.0-4.5 NR NO RECOVERY 0.0 moist **FILL** fine silty SAND, little coarse gravel, (7.5YR 6/3) light brown, medium dense, moist to wet, no odor, no staining, water at 6.0 feet. GAR-PDI-C'13A-6.0-6.5 GAR-PDI-C'13A-6.5-7.0 GAR-PDI-C'13A-7.0-7.5 SM fine silty SAND, little fine to coarse gravel, (5YR 4/3) reddish wet 5 brown, medium dense, wet, no odor, no staining. Soils consistent with UNDno. GAR-PDI-C'13A-8.0-8.5 GAR-PDI-C'13A-10 0-10 5 0.0 12 GAR-PDI-C'13A-12.0-12.5 5 13 SM fine to medium silty SAND, little fine to coarse gravel, (5YR wet 4/3) reddish brown, medium dense, wet, no odor, no staining. Soils consistent with UNDno. GAR-PDI-C'13A-14.0-14.5 0.0 SP fine to medium SAND, little fine to coarse gravel, (5YR 4/3) wet reddish brown, dense, wet, no odor, no staining. Soils consistent with UNDno. 16 GAR-PDI-C'13A-16.0-16.5 5 GAR-PDI-C'13A-18.0-18.5 19 GAR-PDI-C'13A-20.0-20.5 0.0 1 -21

2012-09 RA PPG LOGS

A.GDT - 4/7/17

bgs - below surface grade bgs - below surface grade GGM - green grey mud UNDno - non-organic undisturbed native deposits UNDorg - organic undisturbed native deposits nts: 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.

MGP - manufactured gas plant CCPW - chromate chemical production waste

Boring ID: GAR-PDI-C11B

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Coordinates (NJSPNAD83) x: 611107.27 Drilling Method: direct push Date Started Drilling: 12/2/2016 10:25:00 AM Rig Type: Coordinates (NJSPNAD83) y: 683924.662 Date Finished Drilling: 12/8/2016 11:05:00 AM Core Size: 3.0 in Boring Total Depth: 21 ft Logged By: Eric Stone Depth to Water: 5.0 Project Manager: Scott Mikaelian Physical Location: Actual - GA PDI Surface Elevation: 11.987 ft NAVD88 Depth PID Recovery Moisture Graphic Sample **USCS** Surface Cover and Thickness: Range Content (ft/ft) (ppm) Log (ft bgs) 0.0 **FILL** DGA, fine to coarse SAND, some fine to medium gravel, dry (2.5Y 5/1) gray, medium dense, dry to wet, no odor, no staining, water at 5.0 feet. 5 0.0 **FILL** fine to medium SAND, some ash, little cinders, (7.5YR 4/3) moist brown, medium dense, moist, no odor, no staining. 5 **FILL** fine to medium SAND, some cinders, little coarse gravel, wet (5YR 3/3) dark reddish brown, medium dense, wet, no odor, no staining moist FILL fine to medium SAND, little cinders, (7.5YR 4/3) brown, medium dense, moist, no odor, no staining. GAR-PDI-C11B-9.0-9.5 SP fine to coarse SAND, some fine to medium gravel, (5YR 3/3) wet dark reddish brown, dense, wet, no odor, green staining, 0.0 green colored groundwater. Soils consistent with UNDno. 12 5 fine to medium SAND, little fine to medium gravel, (7.5YR SP moist 13 4/3) brown, medium dense, moist, no odor no staining. Soils consistent with UNDno. SILT, little fine sand and clay, trace organics, (7.5YR 3/3) moist SC dark brown, stiff, moist, no odor, no staining, sampler lodged in boring at 15 feet. Soils consistent with UNDorg. 0.0 SP wet fine to medium SAND, little silt, (5YR 4/3) reddish brown, medium dense, wet, no odor, no staining, green colored groundwater. Soils consistent with UNDno. 16 GAR-PDI-C11B-16.0-16.5 wet ML SILT, (7.5YR 4/3) brown, soft, wet, no odor, no staining. Soils consistent with UNDno. SM wet fine to medium silty SAND, little fine to medium gravel, (5YR 4/4) reddish brown, medium dense, wet, no odor, no staining. Soils consistent with UNDno. GAR-PDI-C11B-18.0-18.5 A.GDT - 4/7/17 GAR-PDI-C11B-20.0-20.5 0.0 SP fine to medium SAND, little fine to medium gravel, (2.5YR 2012-09 RA PPG LOGS dry 5 4/2) weak red, dense, dry, no odor, no staining. Soils consistent with UNDno. -21

bos - below surface grade bgs - below surface grade GGM - green grey mud

COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits UNDorg - organic undisturbed native deposits

MGP - manufactured gas plant CCPW - chromate chemical production waste

nts: 1) 4 attempts were made to obtain best recovery 2) MM/UND confirmed to be 1 ft thick 3) No CCPW (COPR or GGM) present in any interval of this boring.

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: GAR-PDI-C12B

Project	Number	60240	17.39			Drilling Method: direct priso	COOMMANDE	NAD83) x: 611130.197
	tarted Dril					Drilling Method: direct push Rig Type:		NAD83) v: 683937.53
			2/15/2017			Core Size: 3.0 in	Boring Total Depth:	
	d By: E. A		2/13/2017			Project Manager: Scott Mikaelian	Depth to Water: 7.	
			ual - GA P	NI		Project Manager. Scott Mikaellan	Surface Elevation:	
riiySiC	ai Locatio	n. Act	uai - GA FL	//	1		Surface Elevation.	12.292 II NAVD88
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphi Log	Surface Cover and Thic	kness:	Sample ID
-1	5	0.0	dry	FILL		DGA, fine to coarse SAND, some fine to (7.5YR 4/3) brown, medium dense, dry	o medium gravel, , no odor, no staining.	
-5 - -6		0.0	moist	FILL		fine SAND, trace fine to medium grave medium dense, moist, no odor, no stair	, (7.5YR 2.5/1) black, ning.	_
-7 -8	5		moist to wet	FILL		fine to medium SAND, little silt, trace b brown, dense, moist to wet, no odor, no 7.5 feet.		GAR-PDI-C12B-6.5-7.0
_					\bowtie			GAR-PDI-C12B-8.5-9.0
-9					_XXXX	S CAND : 5	(7.5)(D.6(6) " · · ·	GAR-PDI-C12B-9.0-9.5
- -10 -11 -12		0.0	moist	SP		fine SAND, trace fine to medium gravel brown, dense, moist, no odor, no staini with UNDno.		GAR-PDI-C12B-10.5-11.0
12 — -13 — -14 —	5		moist	OL		Organic SILT, 95% organic silt, 5% org 2.5/1) black, soft, moist, moderate orga Soils consistent with UNDorg.	anic fibers, (7.5YR nic odor, no staining.	GAR-PDI-C12B-14.0-14.5
_						-		OAK-F DI-0 (ZD-14.0-14.0
-15 -16		0.0	moist	SP		fine SAND, trace fine to medium gravel brown, medium dense, moist, no odor, consistent with UNDno.	, (5YR 4/3) reddish no staining. Soils	_
-17— -17—	5							GAR-PDI-C12B-16.0-16.5
-18 — - -19 —								GAR-PDI-C12B-18.0-18.5
20						4		
-20 - -21	1	0.0						GAR-PDI-C12B-20.0-20.5
	low surface		COPR - chro GGM - greer		cessing r	esidue UNDno - non-organic undisturbed native UNDorg - organic undisturbed native de	deposits MGP - man	ufactured gas plant romate chemical production was
n/I mo	adour mat							

Boring ID: GAR-PDI-C14B

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Drilling Method: Direct Push Coordinates (NJSPNAD83) x: 611148.399 Date Started Drilling: 10/30/2016 9:15:00 AM Rig Type: Coordinates (NJSPNAD83) y: 683986.489 Date Finished Drilling: 10/30/2016 10:20:00 AM Core Size: 3.0 in Boring Total Depth: 21 ft Depth to Water: 4.0 Logged By: Kyle Willis Project Manager: Scott Mikaelian Physical Location: Actual- GA PDI Surface Elevation: 12.539 ft NAVD88 Depth PID Recovery Moisture Graphic Sample **USCS** Surface Cover and Thickness: Range Content ΙĎ (ft/ft) (ppm) Log (ft bgs) 0.0 **ASPHALT ASPHALT** CONCRETE Concrete slab GAR-PDI-C14B-2.0-2.5 **FILL** fine to medium silty SAND, little fill debris, trace ash and moist 4.5 coal, (7.5YR 2.5/2) very dark brown, dense, moist, no odor, no staining. GAR-PDI-C14B-4.0-4.5 FILL wet fine SAND, little cinders and ash, (7.5YR 3/2) dark brown, medium dense, wet, no odor, no staining, water at 4.0 feet NR NO RECOVERY 0.0 wet **FILL** fine to medium silty SAND, little fill debris, (7.5YR 4/2) brown, medium dense, wet, no odor, no staining. GAR-PDI-C14B-6.0-6.5 FILL CINDERS, some ash, (5YR 6/1) gray, loose, wet, no odor, wet FILL wet fine to coarse silty SAND, little fill debris, (5YR 3/2) dark reddish brown, medium dense, wet, no odor, no staining. 3.5 GAR-PDI-C14B-8.0-8.5 NO RECOVERY NR GAR-PDI-C14B-10 0-10 5 0.0 FILL wet SILT, some shells, (5YR 2.5/1) black, loose, wet, no odor, GAR-PDI-C14B-10.5-11.0 GAR-PDI-C14B-11.0-11.5 SILT, some fine sand, (5YR 6/3) light reddish brown, firm, wet ML wet, no odor, no staining. Soils consistent with UNDno. 12 GAR-PDI-C14B-12.0-12.5 4.5 13 GAR-PDI-C14B-14.0-14.5 SW fine to coarse SAND, trace fine to coarse gravel, (5YR 3/4) wet dark reddish brown, medium dense, wet, no odor, no NR staining. Soils consistent with UNDno. 0.0 SW wet NO RECOVERY fine to coarse SAND, little fine to coarse gravel, (5YR 4/3) reddish brown, dense, wet, no odor, no staining. Soils 16 GAR-PDI-C14B-16.0-16.5 consistent with UNDno. 5 GAR-PDI-C14B-18.0-18.5 wet GW fine to coarse GRAVEL, trace fine sand, (5YR 6/3) light A.GDT - 4/7/17 reddish brown, dense, wet, no odor, no staining. Soils consistent with UNDno. 19 GAR-PDI-C14B-20.0-20.5 0.0 RA PPG LOGS 1 -21 2012-09

MGP - manufactured gas plant CCPW - chromate chemical production waste



30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Project N	lame. 🗅	PG Ga	rfield Ave		Г	Orilling Company: Advanced Drilling Inc.		Page
Project N						Orilling Method: Geoprobe	Coordinates (NJSP)	NAD83) x: 610777.75
			3/14/2004			Rig Type:	Coordinates (NJSPN	
			3/14/2004			Core Size: 1.25 inches	Boring Total Depth:	
Logged E						Project Manager: Scott Mikaelian	Depth to Water: NA	
Physical							Surface Elevation:	
	decovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickr	ness:	Sample ID
		0.3		CEMENT		Concrete (5")		
· _ -1-		0.0	moist	FILL		Black and red (GLEY1 2.5/N and 2.5YR 3 SAND, trace coarse to fine gravel, trace of	3/3) coarse to fine coal.	GB0.4-0.9
-2-						Gray (5YR 6/1) coarse to fine SAND, little trace silt.		GB1.5-2
-3-						Reddish brown (5YR 4/4) SILT and CLA fine sand and gravel.	Y, trace coarse to	
-4 -5		0	wet to moist	FILL		Black and weak red (GLEY1 2.5/N and 1 coarse to fine SAND and SILT, little coal/	0R 4/2) mottled coal ash,	GB4-4.5
-6- - - -7- -		0				Brown (10YR 5/3) coarse to fine SAND a	and SILT, trace clay.	GB6.0-6.5-727916
-8 -9		0	wet	FILL		Brown, dark grayish brown and black (7.5 and GLEY1 2.5/N) SILT, some clay.	5YR 4/2, 10YR 5/4	GB8.0-8.5-727917
-10 -								GB10.0-10.5-727918
-11 - -12						End of Boring		
						Lite of Borning		
lotes: lgs - below //M - mead	w surface of		COPR - chro GGM - gree		essing res	sidue UNDno - non-organic undisturbed native d UNDorg - organic undisturbed native depo	eposits MGP - man	l ufactured gas plant romate chemical production wa
IIICal				OPR or GGM) prese			5.15 JOI VV - CIII	ato onormous production wa

	g gyrgynarid is	Client:	PPG			BORII	NG ID:	
ENSR	AECOM	Site:	PPG - Jersey City, NJ			G	С	
Start Dat	te:	Project:	Site Investigation			Page: 1 o	f 2	
3/16/200				X-610826.34 Y-683596.44				
End Date 3/16/200		Elevation				Geologist		
		Dilli Subc	contractor: ADI			Driller:	10 1015	
Depth (H)	Lithology		Description	PID	Sar	mple ID	Sample Parameters	
0_	Δ	PHALT: Aspl	halt (6"")					
		MENT: Cond						
	NR	: Soft Dig to	48"" bgs.	1				
2—								
4—	SIL	.T: Dark vello	wish brown (10YR 4/6) SILT	0.0 ppm	(GC4.0	CR+6, As, TI	
		j	,					
	<u></u>							
6—	· · · · · · · · · · · · · · · · · · ·				(GC6.0	CR+6, As, TI	
_								
8—	SIL	T: Strong bro	own (7.5YR 5/6) SILT, trace coarse to	NA NA		GC8.0	CR+6, As, TI	
	 (10	YR 4/4 and 7	(Dark yellowish brown and dark gray 7.5YR 4/1) crushed SHALE (6"")/Strong (6) SILT, trace coarse to fine sand (8"")					
		(, , , , , , , , , , , , , , , , , , , ,					
10 —	<u> </u>				G	GC10.0	As, TI	
	· · · · · ·							

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

THIS IS A PRELIMINARY DRAFT. IT HAS BEEN PREPARED BASED ON PRELIMINARY INFORMATION AND ON ASSUMPTIONS. NO ONE MAY RELY ON THIS DRAFT. IT IS SUBJECT TO CHANGE AS ADDITIONAL INFORMATION BECOMES AVAILABLE OR IS CLARIFIED.

ENSR AECOM	Client:	PPG	BORING ID:				
ENSK AECOM	Site:	PPG - Jersey City,	NJ	GC			
Start Date:	Project:	Site Investigation				Page: 2 of	2
3/16/2004	Coordinat	es: X-610826.34	Y-683596.	44		Depth of E	Boring: 12.00
End Date:	Elevation:	6.93				Geologist:	R. Firely
3/16/2004	Drill Subc	ontractor: ADI				Driller:	
Depth (ft) Lithology		Description		PID	Sar	mpleID	Sample Parameters

. 12 ___

NULL: End of Boring at 12 ft.

	Client: PPG	Client: PPG							
ENSR AECOM	Site: PPG - Jersey City, NJ	G	i D						
Start Date:	Project: Site Investigation		Page: 1 c	nf 2					
3/16/2004	Coordinates: X-610901.24 Y-683725								
End Date:	Elevation: 11.39	.55	Geologist						
3/16/2004	Drill Subcontractor: ADI		Driller:						
Debth (tr) Lithology	Description	PID	Sample ID	Sample Parameters					
0_		<u> </u>							
AS	SPHALT: Asphalt (6"")								
CI	EMENT: Concrete (3"")								
2+									
-									
4-									
SI	LT: Very dark yellow brown (10YR 3/2) SILT, coarse fine sand, little fine gravel/Olive gray (5Y 5/2) SILT "")/Reddish yellow (7.5YR 7/6) SILT (1"")/Dark	NA	GD4.0	Cr+6, Sb, As, Pb, Tl, Zn (Duplicate analyzed for Cr+6, Pb)					
-	llowish brown (5YR 2.5/2) crushed SHALE, medium avel (5"")/Reddish yellow (7.5YR 7/6) SILT (1"")								
6-		-	GD5.9	Cr+6, Sb, As, Pb, Tl, Zn					
- 									
	LT: Reddish yellow (7.5YR 7/6) medium to fine AND, clayey silt, trace medium to fine gravel	0.1 ppm	GD8.0	Cr+6, Sb, As, Pb, Tl, Zn					
	3		GD9.0	Sb, As, Pb, Tl, Zn					
10 —									

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

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ENSR AECOM	Client:	PPG	BORING ID:				
ENSK AECOM	Site:	PPG - Jersey City,	NJ		GD		
Start Date:	Project:	Site Investigation				Page: 2 of	2
3/16/2004	Coordinat	es: X-610901.24	Y-683725.	55		Depth of B	oring: 12.00
End Date:	Elevation:	11.39				Geologist:	R. Firely
3/16/2004	Drill Subc	ontractor: ADI				Driller:	
Depth (th) Lithology		Description		PID	Sar	mple ID	Sample Parameters

. 12 ___

NULL: End of Boring at 12 ft.

ENICE AECOLA	Client: PPG Site: PPG - Jersey City, NJ		BORI	BORING ID:	
ENSR AECOM			G		
Start Date:	Project: Site Investigation		Page: 1	of 3	
3/16/2004	Coordinates: X-610972.35 Y-683842.15		Depth of	Depth of Boring: 27.00	
End Date:	Elevation: 12.46		Geologis	Geologist: R. Firely	
3/16/2004	Orill Subcontractor: ADI		Driller:	Driller:	
Debty (4) rithology	Description	PID	Sample ID	Sample Parameters	
0AS	PHALT: Asphalt (6"")				
1	MENT: Concrete (3"") 2: Soft Dig to 50"" bgs				
4— SII	T: Very dark gray (5YR 3/1) SILT	0.0 ppm	GE4.0	Cr+6, Sb, As, Tl (Duplicat analyzed for Sb)	
			GE5.6	Cr+6, Sb, As, TI	

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

SILT: Dark reddish gray, yellowish red and brownish yellow (5YR 4/2, 4/6 and 10YR 6/8) SILT, some clay

8

10

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0.0 ppm

GE8.1

Cr+6, Sb, As, Tl

ENSR AECOM	Client: PPG		BORIN			
ENSR AECOM	Site: PPG - Jersey City, NJ		G	E		
Start Date:	Project: Site Investigation		Page: 2 o	f 3		
3/16/2004	Coordinates: X-610972.35 Y-683842.	15 Depth of Boring: 27.00				
End Date:	Elevation: 12.46		Geologist:	R. Firely		
3/16/2004	Drill Subcontractor: ADI	ractor: ADI				
Debty (41) Tityology	Description	PID	Sample ID	Sample Parameters		
. 12						
SA little	ND: Yellowish red (5YR 4/6) coarse to fine SAND, e silt, little coarse to fine gravel (10"")/Yellowish red 'R 4/6) SILT and fine SAND, trace fine gravel	0.0 ppm	GE12.1	Cr+6, Sb, As, Tl		
14 —						
16 — SA	ND: Reddish brown (2.5YR 4/4) coarse to fine ND and CLAYEY SILT, trace coarse to fine gravel	0.0 ppm	GE16.1	Cr+6, Sb, As, Tl		
18 —						
20 —		0.0 ppm	GE20.5	Cr+6, Sb, As, Tl		
	ND: Reddish brown (2.5YR 4/4) coarse to fine					
22 — SA	ND and CLAYEY SILT, trace coarse to fine gravel		GE21.0	Sb, As, Tl		
24 -						

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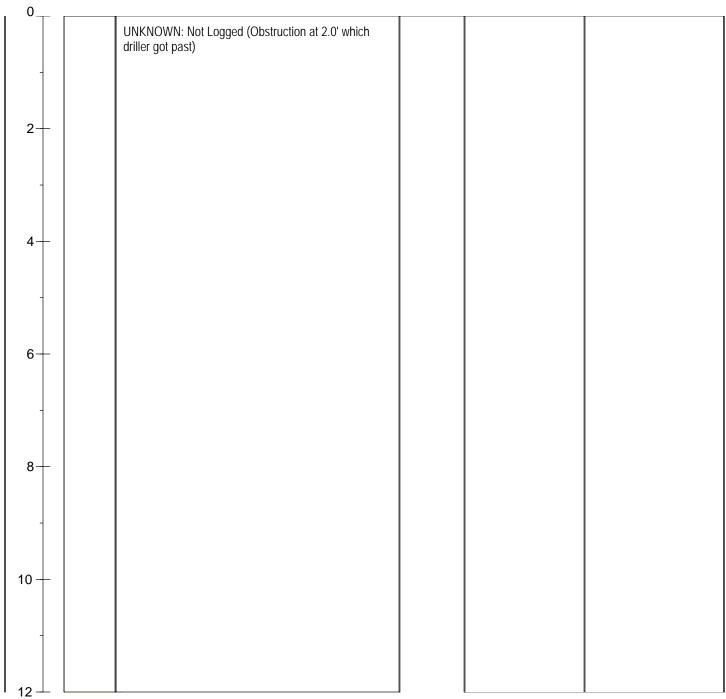
ENCD AECON	Client: PPG			BORIN		
ENSR AECOM	Site: PPG - Jers		GE			
Start Date:	Project: Site Inves	tigation			Page: 3 of	3
3/16/2004	Coordinates: X-61097	2.35 Y-683842	.15		Depth of B	oring: 27.00
End Date:	Elevation: 12.46			(Geologist:	R. Firely
3/16/2004	Drill Subcontractor: A			Driller:		
Debty (4) Tityology	Describ	tion	PID	Samp	_{le} ID	Sample Parameters
26 —				GE2	24.5	Cr+6
NL	LL: End of Boring at 27 ft.				•	

	# 2-720mm =	Client:	PPG		В	BORING ID:	
ENSR	AECOM	Site:	PPG - Jersey City, NJ			GG	
Start Dat	te:	Project:	Site Investigation		Page: 1 of 2		
3/16/200)4		tes: X-611104.59 Y-6839	59.43		oth of Boring: 16.40	
End Date		Elevation	: 12.30		Geo	ologist: R. Firely	
3/16/200		Drill Subo	ontractor: ADI		Drille	er:	
Depth (ft)	Lithology		Description	PID	Sample ID	er: Sample Parameters	
0	AS	PHALT: Asp	nalt				
2—							
4—					GG4.4	Cr+6, As (Duplicate	
6-	D≯⊿ D and		grayish brown (10YR 3/2) fine SAND I (7.5YR 4/3) coarse to fine SAND, littl ravel	e	GG5.5	analyzed for As) Cr+6, As	
8—				0.0 ppm			
10 —	SA	ND: Brown (7.5YR 4/3) fine SAND and SILT		GG8.4	Cr+6, As	

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ENICD AECON	Client: PPG	lient: PPG					
ENSR AECOM	Site: PPG - Jersey City, NJ		G	GG			
Start Date:	Project: Site Investigation		Page: 2 o	f 2			
3/16/2004	Coordinates: X-611104.59 Y-68395	9.43	Depth of E	Boring: 16.40			
End Date:	Elevation: 12.30		Geologist:	R. Firely			
3/16/2004	Drill Subcontractor: ADI		Driller:				
Debty (4) Tityology	Description	PID	Sample ID	Sample Parameters			
	T: Black and greenish gray (GLEY1 2.5/N and	0.0 ppm	GG12.4	Cr+6			
14 - 10	GY 5/1) SILT, little fine sand		GG13.0	Cr+6			
16 -		0.0 ppm					
\ NL	LL: End of Boring at 16.4 ft.						

ENCD AECON	Client: PPG	BORING ID:		
ENSR AECOM	Site: PPG - Jersey City, NJ	MW2AV		
Start Date:	Project: Site Investigation	Page: 1 of 2		
10/6/2005	Coordinates: X-610959.18 Y-683748.42	Depth of Boring: 23.00		
End Date:	Elevation: 13.00	Geologist: McCray, Scott		
10/6/2005	Drill Subcontractor: Ameridrill	Driller:		
Debty (41) rithology	Description PID San	Sample Parameters		
0				
	NKNOWN: Not Logged (Obstruction at 2.0' which iller got past)			



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ENSR	AECO	Client:	PPG				NG ID:	
LIVSI	ALCOI	Site:	PPG - Jersey City, NJ			IVI	IW2AV	
Start Dat		Project:	Site Investigation			Page: 2 of 2		
10/6/200		Coordina	3.42		<u> </u>	Boring: 23.00		
End Date 10/6/2009		Elevation	: 13.00 contractor: Ameridrill			Geologist Driller:		
1		Dilli Gube	ionitacion. Amendini			Dillier.	-\6 +6\6	
Depth (ft)	Lithology		Description	PID	Sa	imple ID	Sample Parameters	
12		SAND: Dusky F Silt, saturated	Red (10R 3/2) medium-fine SAND, some	0.0 ppm	MV	W2AVA12	Cr+6, Sb	
16 —		NR: No Recove	ry	0.0 nnm	MA	V2AVB16	Cr+6, Sb	
18 —	<mark>i</mark> (Red (10R 3/2) medium-fine SAND, some angular to subrounded Gravel,	0.0 ppm	IVIV	VZAVBIO	G1+0, SD	
20 —	1	NR: No Recove	ry					
20 —		SAND: Dusky Red (10R 3/4) medium-fine SAND, some Silt, trace angular to subrounded Gravel, saturated		0.0 ppm	MV	V2AVC20	Cr+6, Sb	
22 —		NR: No Recove	rry					
	1	NULL: Refusal	at 23' bgs.					

Boring ID: P4-GA-A`0

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Drilling Method: Geoprobe Coordinates (NJSPNAD83) x: 610898.4 Date Started Drilling: 8/20/2014 9:41:00 AM Rig Type: Coordinates (NJSPNAD83) y: 683663.7 Date Finished Drilling: 9/5/2014 10:58:00 AM Core Size: 3 in Boring Total Depth: 16 ft Depth to Water: NA Logged By: AG Project Manager: Scott Mikaelian Physical Location: GA Sidewalk Surface Elevation: 9.873 ft NAVD88

Physical Location	n: GA	Sidewalk			Surface Elevation: 9.873 ft NAVD88			
Depth Range (ft bgs) Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID		
5	0.0	dry	FILL		fine to coarse sandy DGA, (10YR 5/1) gray, non plastic, medium dense, dry, no odor.			
5 6	0.0	dry	FILL		fine to coarse sandy DGA, (10R 5/1) reddish gray, (10YR 5/1) gray, non plastic, medium dense, dry, no odor.			
	0.0	moist	FILL		CLAY, some wood fragments, little silt, trace fine sand, (10YR 2/2) very dark brown, medium plasticity, medium stiff, moist, slight ammonia odor.	114-GA-A`0-6.0-6.5		
8 9 	0.0	wet	FILL		SILT, some fine to coarse gravel, little fine to medium sand, trace cobbles, (10YR 4/2) dark grayish brown, non plastic, loose, wet.	114-GA-A`0-8.0-8.5		
10	0.0	wet	FILL		SILT, little fine to medium sand, little fine to coarse gravel,	114-GA-A`0-10.0-10.5		
	0.0	wet to saturated	SW		trace brick, (10YR 4/6) dark yellowish brown, non plastic, loose, wet, iron oxide staining. fine to medium SAND, some fine to coarse gravel, little silt, trace cobbles, (2.5YR 4/3) reddish brown, non plastic, wet to saturated. Soils consistent with UNDno.	114-GA-A`0-10.5-11.0		
12 5 13 					Saturated. Suns consistent with UNDITO.	114-GA-A`0-12.0-12.5		
14 15				**********		114-GA-A`0-14.0-14.5		
_ 16 _ 1	0.0	wet to saturated	SW		fine to medium SAND, some fine to coarse gravel, little silt, (2.5YR 4/3) reddish brown, non plastic, medium dense, wet to saturated. Soils consistent with UNDno. Refusal at 16.0			
						114-GA-A`0-16.0-16.5		

PPG - 2012-09 RA PPG_LOGS_A.GDT - 6/13/17 11:43

WGG 40

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bgs - below surface grade MM - meadow mat COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits UNDorg - organic undisturbed native deposits

MGP - manufactured gas plant CCPW - chromate chemical production waste

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

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: P4-GA-A`1A

Page: 1

Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Drilling Method: Geoprobe Coordinates (NJSPNAD83) x: 610877.9 Date Started Drilling: 8/20/2014 8:15:00 AM Rig Type: Coordinates (NJSPNAD83) y: 683621.4

			<u>8/20/2014 8</u> 8/22/2014	9:40:00 AM	 I	Rig Type: Core Size: 3 in	Boring Total Depth:	NAD83) y: 683621.4 : 20.5 ft		
	By: AG		O/ZZ/ZO14	0.40.00 7 W	•	Project Manager: Scott Mikaelian	Depth to Water: N/			
	I Locatio		Sidewalk				Surface Elevation:			
Conth										
Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graph Log	Surface Cover and Thickr	ness:	Sample ID		
-1	5	0.0	dry	FILL		fine to coarse sandy DGA, (10YR 5/1) gr medium dense, dry, no odor.	ay, non plastic,			
-5		0.0	dry to	FILL		fine to coarse sandy DGA, (10YR 5/1) gr medium dense, dry to moist, no odor.	ay, non plastic,			
-6— -7— -8—	5	0.0	moist moist	FILL		fine to medium sandy SILT, trace gravel, clay, (10YR 3/1) very dark gray, low plast odor.	trace cinders, trace ticity, soft, moist, no	114-GA-A`1A-6.0-6.5		
-9								114-GA-A`1A-8.0-8.5		
10		0.0		FILL		fine to medium sandy SILT, trace cinders (10YR 3/1) very dark gray, low plasticity,		114-GA-A`1A-10.0-10.5		
11		0.0	moist	FILL		fine to medium silty SAND, trace cinders, (10YR 5/1) gray, non plastic, dense, mois oxide staining.	, trace gravel, st, no odor, iron			
'-	5					,g.		114-GA-A`1A-12.0-12.5		
.12					\longrightarrow			114-GA-A`1A-12.5-13.0		
13		0.0	moist	SW		fine to medium SAND, (2.5YR 4/4) reddie plastic, medium dense to dense, moist, n		114-GA-A`1A-13.0-13.5		
						• • •		114-GA-A`1A-14.0-14.5		
15 -		0.0	moist to wet	SW	•	fine to medium SAND, (2.5YR 4/4) reddic plastic, medium dense, moist to wet, no o				
17—	5.5							114-GA-A`1A-16.0-16.5		
18-						•		114-GA-A`1A-18.0-18.5		
19—						•				
20—					*******			114-GA-A`1A-20.0-20.5		
M - mea	adow mat		GGM - greer	n grey mud		esidue UNDno - non-organic undisturbed native d UNDorg - organic undisturbed native depo ft thick 3) No COPR or GGM present in any interval of this boring.	leposits MGP - man sits CCPW - ch	ufactured gas plant romate chemical production wa		

A=COM

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: P4-GA-A`2A

	t Name: F t Number:					Drilling Company: SGS North America Drilling Method: Geoprobe Coordinates (NJSI		NAD83) x: 610869.5
				0:45:00 AM		Rig Type:	NAD83) y: 683608.3	
				11:40:00 AN		Core Size: 3 in	20.5 ft	
	d By: AG					Project Manager: Scott Mikaelian	Depth to Water: NA	4
Physic	al Locatio	n: GA	Sidewalk		1	1	Surface Elevation:	9.002 ft NAVD88
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickn	ess:	Sample ID
	5	0.0	moist	FILL		DGA, (10YR 4/2) dark grayish brown, nor dense, moist. DGA, (10YR 4/2) dark grayish brown, nor		
6 6	-	0.0	moist	FILL		very dense, moist. SILT, little clay, (10YR 4/2) dark grayish by plasticity, medium soft, moist.		114-GA-A`2A-6.0-6.5
-8 -9	5							114-GA-A`2A-8.0-8.5 114-GA-A`2A-9.0-9.5
40		0.0	moist	PT	<u> </u>	1 E/ (1 (degraded vegetated material), 60 /		114-GA-A`2A-9.5-10.0
-10		0.0	moist	PT	11/ 11/	organic fibers, (10YR 3/3) dark brown, lov	v plasticity, moist.	1
-11 -12 -13	5	0.0	wet	ML		Soils consistent with MM. PEAT (degraded vegetated material), 80% organic fibers, (10YR 4/2) dark grayish br medium stiff, moist, slight sulfur odor. So MM. SILT, little coarse gravel, trace fine gravel grayish brown, non plastic, loose, wet. So UNDno.	own, low plasticity, lls consistent with , (10YR 4/2) dark ils consistent with	114-GA-A`2A-10.5-11.0
13			moist to			fine silty SAND, some fine gravel, little co		
]	0.0	moist	SW	<u> </u>	coarse sand, (2.5YR 3/3) dark reddish bro		
-14	1	0.0	moist	SW		 very dense, slightly moist to moist. Soils of \UNDno. 		1
-15 - -16	-	0.0	to wet sl moist to moist	SW		fine to medium SAND, little fine gravel, littrace coarse gravel, (10YR 6/6) brownish dense, moist to wet. Soils consistent with fine to medium silty SAND, some fine grasand, trace coarse gravel, (2.5YR 3/3) da non plastic, dense to very dense, slightly in the same of th	yellow, non plastic, UNDno. vel, trace coarse rk reddish brown,	114-GA-A`2A-14.5-15.0
 17 18	5.5		wet			Soils consistent with UNDno. fine GRAVEL, and fine to medium sand, I coarse gravel, (2.5YR 3/3) dark reddish b very dense, wet. Soils consistent with UN	ittle silt, trace rown, non plastic,	114-GA-A`2A-16.5-17.0
_ _19						• • •		114-GA-A`2A-18.5-19.0
-20 -						• • •		114-GA-A`2A-19.5-20.0
ĭM − me	eadow mat		GGM - gree	n grey mud		esidue UNDno - non-organic undisturbed native de UNDorg - organic undisturbed native depos ft thick 3) No COPR or GGM present in any interval of this boring.		ufactured gas plant romate chemical production wa

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Boring ID: P4-GA-A`3A

	Name: F Number:					Drilling Company: SGS North America Drilling Method: Geoprobe	Coordinates (N.ISPI	NAD83) x: 610849.09		
			3/19/2014 9	:10:00 AM		Rig Type:	Coordinates (NJSPN			
				10:35:00 AN		Core Size: 3 in	Boring Total Depth:			
	By: AG					Project Manager: Scott Mikaelian	Depth to Water: NA	IA		
	al Locatio		Sidewalk			+	Surface Elevation:	8.673 ft NAVD88		
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphi Log	Surface Cover and Thic	ckness:	Sample ID		
-1	5	0.0	dry to moist	FILL		DGA, (10YR 4/2) dark grayish brown, to moist, no odor.	non plastic, loose, dry			
-5 -6 -		0.0	dry moist	FILL		DGA, (10YR 4/2) dark grayish brown, no odor. fine SILT, (10YR 4/2) dark grayish bro moist, no odor.	_	114-GA-A`3A-5.5-6.0		
_7						8		114-GA-A`3A-6.5-7.0		
′ —	5	0.0	moist	OL	E	fine organic SILT, and wood fragments	s, (10YR 4/2) dark	114-GA-A`3A-7.0-7.5		
_ 7		0.0	moist	OL	F	grayish brown, non plastic, soft, moist, fine organic SILT, (10YR 4/2) dark gra	no odor.	114-GA-A`3A-7.5-8.0		
-8 -9		0.0	moist	SM		plasticity, soft, moist, no odor. Soils co fine to medium silty SAND, (10YR 4/2) low plasticity, medium dense, moist, no	nsistent with UNDorg. /) dark grayish brown,	114-GA-A`3A-9.5-10.0		
11	5	0.0	moist to wet	SM		fine to medium silty SAND, (10YR 6/2) low plasticity, medium dense, moist to oxide staining. Soils consistent with UN	wet, no odor, iron	114-GA-A`3A-11.5-12.0		
13		0.0	dry	SP		medium to coarse SAND, trace cobble reddish brown, non plastic, loose, dry, consistent with UNDno.		114-GA-A`3A-13.5-14.0		
-15 16 -17	3	0.0	moist	SP		medium to coarse SAND, little coarse reddish gray, non plastic, loose, moist, 18 ft. Soils consistent with UNDno.		114-GA-A`3A-15.5-16.0		
_ -18 						:		114-GA-A`3A-17.5-18.0		
lotes:										
gs - belo	ow surface adow mat		COPR - chro GGM - greer		essing r	esidue UNDno - non-organic undisturbed native UNDorg - organic undisturbed native de	e deposits MGP - manu	ufactured gas plant romate chemical production wa		
						ft thick 3) No COPR or GGM present in any interval of this boring.	posits CCPVV - CNI	omate chemical production w		

A.GDT - 6/13/17

2012-09 RA PPG LOGS

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Boring ID: P4-GA-A`4A

Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Coordinates (NJSPNAD83) x: 610843.6 Drilling Method: Geoprobe Date Started Drilling: 8/19/2014 8:15:00 AM Rig Type: Coordinates (NJSPNAD83) y: 683554.3 Date Finished Drilling: 8/19/2014 9:00:00 AM Core Size: 3 in Boring Total Depth: 20.5 ft Logged By: AG Project Manager: Scott Mikaelian Depth to Water: NA Surface Elevation: 8.506 ft NAVD88 Physical Location: GA Sidewalk Depth PID Recovery Moisture Graphic Sample **USCS** Surface Cover and Thickness: Range (ft/ft) Content ΙD (ppm) Log (ft bgs) **FILL** DGA, (10YR 4/2) dark grayish brown, non plastic, moist to moist to wet 5 0.0 **FILL** DGA, (10YR 4/2) dark gravish brown, non plastic. 0.0 FILL SILT, trace fine sand, (10YR 4/2) dark grayish brown, low wet plasticity, wet. 114-GA-A`4A-6.0-6.5 0.0 FILL wet SILT, trace fine sand, (10YR 4/2) dark grayish brown, low plasticity, medium stiff, wet. 5 114-GA-A`4A-8.0-8.5 114-GA-A`4A-10 0-10 5 0.0 FILL fine to medium silty SAND, (10YR 4/2) dark grayish brown, moist non plastic, dense to medium dense, moist to wet, iron oxide to wet staining. 12 114-GA-A`4A-12.0-12.5 5 114-A`4A-12.5-13.0 0.0 wet SP medium SAND, little fine sand, (2.5YR 3/3) dark reddish 13 brown, non plastic, dense, wet. Soils consistent with UNDno. 114-GA-A`4A-14.0-14.5 GP 0.0 saturated fine to coarse GRAVEL, (5YR 3/3) dark reddish brown, non plastic, medium dense, saturated. Soils consistent with UNDno. 16 114-GA-A`4A-16.0-16.5 fine to medium SAND, some fine gravel, little silt, trace 0.0 wet SP cobbles, (2.5YR 3/3) dark reddish brown, non plastic, dense to very dense, wet, dark gray (10YR 4/1), sand film at 18 ft. Soils consistent with UNDno. 5.5 114-GA-A`4A-18.0-18.5 114-GA-A`4A-20.0-20.5 Notes: bgs - below surface grade COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits MM - meadow mat GGM - green grey mud UNDorg - organic undisturbed native deposits MGP - manufactured gas plant CCPW - chromate chemical production waste nts: 1) 3 attempts were made to obtain best recovery 2) UND/MM confirmed to be 1 ft thick 3) No COPR or GGM present in any interval of this boring.

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Boring ID: P4-GA-A2B

Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Drilling Method: Geoprobe Coordinates (NJSPNAD83) x: 610924.5 Date Started Drilling: 8/20/2014 11:06:00 AM Rig Type: Coordinates (NJSPNAD83) y: 683702.3 Boring Total Depth: 18.5 ft Date Finished Drilling: 8/22/2014 11:06:00 AM Core Size: 3 in

	By: AG	n: GA	Sidewalk		P	roject Manager: Scott Mikaelian	Depth to Water: NA	NA	
	ii Localio	II. GA	Sidewalk				Surface Elevation.	9.4 12 IL NAVDOO	
pth nge ogs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickn	ess:	Sample ID	
3	5	0.0	dry	FILL		fine to coarse sandy DGA, (10YR 5/1) gramedium dense, dry, no odor.	ay, non plastic,		
_		0.0	dry to moist	FILL		fine to coarse sandy DGA, (10YR 5/1) gramedium dense, dry to moist, no odor.	ay, non plastic,		
,	5	0.9	dry to moist	FILL		fine to medium sandy SILT, trace gravel v fragments, (10YR 3/2) very dark grayish plasticity, medium dense to dense, dry to ammonia odor.	brown, low	114-GA-A2B-6.0-6.5	
								114-GA-A2B-8.0-8.5	
1—		5.7	moist	FILL		fine to coarse SAND, some gravel with ro (10YR 2/1) black, non plastic, medium de ammonia odor.		114-GA-A2B-10.0-10.	
\Box								114-GA-A2B-11.5-12.0	
2 - 3 - 4	5	0.4	moist	SM		fine to medium silty SAND, trace gravel w (2.5YR 4/6) red, low plasticity, medium do odor. Soils consistent with UNDno.	vith rock fragments, ense, moist, no	114-GA-A2B-12.0-12.	
-							(0.7)(7)	114-GA-A2B-14.0-14.	
5—		0.4	moist to wet	SP		fine to medium GRAVEL, trace silt, trace 4/6) red, non plastic, medium dense, moi Refusal at 18.5 ft. Soils consistent with U	st to wet, no odor.	114-GA-A2B-16.0-16.	
7— —	3.5								
8 -								114-GA-A2B-18.0-18.5	
es: - belo	ow surface adow mat		COPR - chro		cessing res	idue UNDno - non-organic undisturbed native d UNDorg - organic undisturbed native depo	eposits MGP - man	ufactured gas plant	

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Boring ID: P4-GA-A3B

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 610942
Date Started Drilling: 8/21/2014 9:02:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 683731
Date Finished Drilling: 8/21/2014 10:00:00 AM	Core Size: 3.0 in	Boring Total Depth: 19 ft
Logged By: AG	Project Manager: Scott Mikaelian	Depth to Water: NA
Physical Location: GA Sidewalk	_	

epth lange	Recovery	PID	Moisture	GA	USCS	Graphic	Surface Cover and Thickness:	Sample
t bgs)	(ft/ft)	(ppm)	Content	Class	0303	Log	Surface Cover and Trilckness.	ID
1 2 3 4	5	0.0	dry	3	FILL		sandy DGA, (10YR 4/1) dark gray, non plastic, medium dense, dry, no odor.	114-GA-A3B-0.0-0.5
5 -		0.0	dry	3	FILL		sandy DGA, (10YR 4/1) dark gray, non plastic, medium dense, dry, no odor.	
7-7-	5	0.0	dry to moist moist	3	FILL		SILT, some fine to medium sand, trace ash, trace gravel, non plastic, medium dense, dry to moist, slight ammonia odor. SILT, trace gravel, trace sand, (10YR 5/2) grayish	114-GA-A3B-6.0-6.5
-8-			1110101				brown, low plasticity, soft, moist, no odor.	114-GA-A3B-8.0-8.5
9 —		0.0	dry to moist	8	SM		UNDno sandy SILT, trace gravel with rock fragments, (10YR 4/2) dark grayish brown, non plastic, medium dense, dry to moist, no odor, iron oxide staining. Soils consistent with UNDno.	114-GA-A3B-8.5-9.0
10		0.0	moist to	8	SM		UNDno sandy SILT, trace gravel with rock fragments, (10YR 4/2) dark grayish brown, non plastic, medium	114-GA-A3B-10.5-11.0
-11— -12— -13— -14— -15—	5	0.0	wet moist to dry	10	SP		dense, moist to wet, no odor, no staining. Soils consistent with UNDno. UNDno fine to coarse SAND, little gravel with rock fragments, trace silt, (10YR 4/6) dark yellowish brown, non plastic, medium dense, moist to dry, no odor. Soils consistent with UNDno.	114-GA-A3B-12.5-13.0 114-GA-A3B-14.5-15.0
-16— -17— -18—	4	0.0	moist to wet	10	SP		UNDno fine to coarse silty SAND, trace gravel with rock fragments, (2.5YR 4/6) red, non plastic, medium dense to dense, moist to wet, no odor, refusal at 19.0 ft. Soils consistent with UNDno.	114-GA-A3B-16.5-17.0
-19								114-GA-A3B-18.5-19.0

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Boring ID: P4-GA-A5B

Project	: Name: F	'PG Ga	II II CIU AVC			Drilling Company: SGS North America		
Project	Number:	60240	739			Drilling Method: Geoprobe	Coordinates (NJSP)	NAD83) x: 610978.5
Date Started Drilling: 8/21/2014 10:30:00 AM						Rig Type: Coordinates (NJSF		IAD83) y: 683787.8
Date Fi	nished Dr	illing:	8/21/2014	12:00:00 PN		Core Size: 3.0 in	Boring Total Depth:	18 ft
	By: AG					Project Manager: Scott Mikaelian	Depth to Water: NA	
Physic	al Locatio	n: GA	Sidewalk				Surface Elevation:	9.505 ft NAVD88
Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphi Log	c Surface Cover and Thick	kness:	Sample ID
	5	0.0	dry	FILL		DGA, (10YR 4/1) dark gray, non plastic	, dense, dry, no odor.	114-GA-A5B-0.0-0.5
-5-		0.0	slightly moist	FILL		DGA, (10YR 4/1) dark gray, non plastic dense, slightly moist.	, dense to very	114-GA-A5B-5.5-6.0
-6	5	0.0	moist	FILL		SILT, little coarse sand, little ash, (10YF low plasticity, stiff, moist.	R 3/1) very dark gray,	
		0.0	saturated	FILL		SILT, little ash, trace cobbles, (10YR 3/brown, low plasticity, very loose to medi		114-GA-A5B-9.5-10.0 114-GA-A5B-10.5-11.0
-11					\bowtie	X		
-12 -13	5	0.0	wet wet	ML SP		UNDno SILT, some fine to coarse grave (10YR 4/4) dark yellowish brown, non pmedium soft, saturated. Soils consisten UNDno SAND, some fine to coarse gracobbles, (2.5YR 4/3) reddish brown, no Soils consistent with UNDno.	blastic, very loose to t with UNDno. vel, trace silt, trace	114-GA-A5B-11.0-11.5
_ _14 _ _ _15		0.0	wet	SP-SM		UNDno fine silty SAND, little fine gravel	trace cobbles	114-GA-A5B-15.0-15.5
-16 - - -17	3	0.0	wet	OI -OIVI		(10YR 4/3) brown, non plastic, very der consistent with UNDno.		114-GA-A5B-17.0-17.5
- 18 						N		
⁄ЙИ - me	ow surface adow mat		COPR - chro		essing r	esidue UNDno - non-organic undisturbed native UNDorg - organic undisturbed native dep	deposits MGP - manu	ufactured gas plant romate chemical production wa

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Boring ID: P4-GA-A7B

7 32.304.3200 office telephone				
Project Name: PPG Garfield Ave	Drilling Company: SGS North America			
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 611001		
Date Started Drilling: 8/22/2014 10:00:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 683829		
Date Finished Drilling: 8/22/2014 10:35:00 AM	Core Size: 3.0 in	Boring Total Depth: 20.5 ft		
Logged By: AG	Project Manager: Scott Mikaelian	Depth to Water: NA		
Physical Location: GA Sidewalk				
		(Note bgs = below ground surface)		
Depth Recovery PID Moisture GA USGS C	Graphic Surface Course and Th	Sample		

Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	GA Class	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
-1-1	5	0.0	slightly moist	3	FILL		DGA, (10YR 4/3) brown, non plastic, very dense, slightly moist.	
-5		0.0	- I' - I- 4I		FILL		DOA (40VD 4/0) because high plantisity damage alighthy	
_	-	0.0	slightly moist	3	FILL		DGA, (10YR 4/3) brown, high plasticity, dense, slightly moist.	114-GA-A7B-5.5-6.0
-6 — -7 — -8 —	5	0.0	slightly moist slightly moist	8	FILL SP-SM		fine silty SAND, trace ash, (10YR 4/2) dark grayish brown, non plastic, dense, slightly moist. fine silty SAND, little fine gravel, trace shells, (10YR 3/2) very dark grayish brown, non plastic, very dense, slightly moist, coarse gravel lense @ 8.0 ft. Soils consistent with UNDno.	114-GA-A7B-8.0-8.5
-9 -9		0.0	moist	9	ML		SILT, (10YR 5/4) yellowish brown, low plasticity, medium stiff, moist. Soils consistent with UNDno.	
-10— - -11— -		0.0	saturated	9	ML		SILT, trace fine to coarse gravel, (10YR 5/4) yellowish brown, low plasticity, medium stiff, saturated. Soils consistent with UNDno.	114-GA-A7B-10.0-10.5
-12	_						H	114-GA-A7B-12.0-12.5
 -13 - -14	5	0.0	wet to saturated	10	SW		fine to coarse SAND, some fine to coarse gravel, trace cobbles, (5YR 4/3) reddish brown, non plastic, dense, wet to saturated. Soils consistent with UNDno.	
-								114-GA-A7B-14.0-14.5
-15 -		0.0	moist to	10	SW-SM		fine to medium silty SAND, little fine to coarse gravel, trace cobbles, (5YR 4/3) reddish brown, non plastic,	
-16 - -17 -	5.5		wet				very dense, moist to wet. Soils consistent with UNDno.	114-GA-A7B-16.0-16.5
-18 -19								114-GA-A7B-18.0-18.5
-20 -								114-GA-A7B-20.0-20.5