Remedial Action Report – Carteret Avenue (AOC CAR-1A) Soil Garfield Avenue Group PPG, Jersey City, New Jersey

Appendix H

Boring Logs

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

ENICD	15001	Client: PPG Industries		BORII	NG ID:		
ENSR	AECOM	Site: Site 114		114	114-MW22B		
Start Da	nte:	Project: Site Investigation		Page: 1 of 5			
11/15/20	006	Coordinates: X-610693.8 Y-68325	5.1	Depth of Bori	ng: 35.00		
End Dat	te:	Elevation: 12.6		Geologist: M			
11/21/20		Drill Subcontractor: ADI		Driller:			
Depth (ft)	Lithology	Description	PID	Sample ID	Sample Parameters		
0					Ī		
	× × × × × × × × × CC	NCRETE: CONCRETE					
		L: Dark Reddish Brown (5YR 3/2) SILT, some fine nd, little Clay, Fill material (brick, tile, rock), dry. No or.					
	NF	2: No Sample	0.0 ppm				
2—							
	× × fine	L: Reddish Brown (5YR 4/4) SILT, little Clay and e Sand, Fill Material (rounded and angular rocks, tile gments, slag), ~1% COPR, moist. No odor.	0.0 ppm				
4	NF	2: No Sample					
4—		L: Black Cinders, Ash, Slag and Rock fragments, ster shell, trace Red (10R 4/6) Clay, moist. No odor.					
	NF	2: No Recovery					
		L: Black and Very Dark Gray Brown (10YR 3/2) ndy SILT, glass, dry. No odor.	2.3 ppm	114-MW22BA (5.0-5.5)	Cr+6, TAL Metals		
	XXX	L: Light Olive Brown (2.5Y 5/6) SILT, medium					

NR: No Recovery

ENSR AECO				NG ID: 4-MW22B	
0	Unto:				
Start Date:	Project: Site Investigation		Page: 2 of 5		
11/15/2006	Coordinates: X-610693.8 Y-683255	.1	Depth of Bor		
End Date:	Elevation: 12.6			M. Merdinger	
11/21/2006	Drill Subcontractor: ADI		Driller:	_	
Debty (41) rithology	Description	PID	Sample ID	Sample Parameters	
× × × × × ×	FILL: Reddish Gray (10YR 5/1) silty SAND, coarse fill Sand, Fill material (slag, concrete), wet. No odor. FILL: Dark Grayish Brown (10YR 4/2) SILT, little Clay,	0.3 ppm			
8+	race Gray rounded medium Gravel, wet. No odor.				
	FILL: Very Dark Gray (7.5YR 3/1) SILT, some coarse Sand, wet. No odor.	0.0 ppm			
	FILL: Dark Brown (7.5YR 3/2) SILT, trace to little Clay lown gradient, oyster shell, moist, loose. No odor.		114-MW22BB (9.5-10.0)	MS/MSD, Cr+6, TAL Me	
\times \times \wedge	FILL: Dark Brown (7.5YR 3/2) SILT, little Sand, trace to ttle Clay down gradient, oyster shell, moist, loose. No odor.	0.0 ppm			
× × × × × × × × × × × × × × × × × × ×	JND: Olive (5Y 4/3) SAND, little Silt, moist. No odor.				
	JND: Olive Brown (2.5 Y 4/3) silty CLAY, trace fine Gravel, wet. No odor.	0.0 ppm	114-MW22BC (13.0-14.0) 114-MW22BCD (13.0-14.0)	Cr+6, TAL Metals Cr+6, TAL Metals	

(13.0-14.0)

ENSR AECOM	Client: PPG Industries			NG ID:		
ENSK AECON	Site: Site 114		11	114-MW22B		
Start Date:	Project: Site Investigation		Page: 3 of 5			
11/15/2006	Coordinates: X-610693.8 Y-683255	Depth of Bor	ing: 35.00			
End Date:	Elevation: 12.6		Geologist: N	M. Merdinger		
11/21/2006	Drill Subcontractor: ADI		Driller:			
Depth (ft) Lithology	Description	PID	Sample ID	Sample Parameters		
$ \hspace{.05cm} $		I		I		
$\begin{array}{c} \times \times \times \\ \times \times \end{array}$						
× × UN	ND: Reddish Brown (5YR 4/4) very fine SAND, some	1				

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

ENCD AFCOM	Client: PPG Industries	BORIN			
ENSR AECOM	Site: Site 114	114	- MW22B		
Start Date:	Project: Site Investigation		Page: 4 of 5		
11/15/2006	Coordinates: X-610693.8 Y-683255.	1	Depth of Boring: 35.00		
End Date:	Elevation: 12.6		Geologist: M	-	
11/21/2006	Drill Subcontractor: ADI		Driller:		
Depth (ft) Lithology	Description	PID	Sample ID	Sample Parameters	
××× Red	ldish Brown SILT at 22.2 feet, little rounded fine to dium Gravel, moist. No odor.				
	ND: Strong Brown (7.5YR 5/8) SAND, trace Silt, st. No odor. (Native)		114-MW22BE (22.5-23.0)	Cr+6, TAL Metals	
<u> </u>	T: Reddish Brown (5YR 4/4) SILT and fine to dium angular and rounded GRAVEL, trace Clay, No odor.	0.0 ppm			
24 — NR:	No Recovery				
med med	T: Reddish Brown (5YR 4/4) SILT and fine to dium angular and rounded GRAVEL, trace Clay, . No odor.	0.2 ppm	114-MW22BF	Cr+6, TAL Metals	
	AY: Reddish Brown (5YR 4/4) CLAY, little Silt, st, medium stiff. No odor.		(25.5-26.0)		
	ND: Reddish Brown (5YR 4/4) coarse SAND, some Gravel and Silt, wet. No odor.				
SILT	T: Reddish Brown (5YR 4/4) SILT, moist. No odor.				
NR:	No Recovery	0.3 ppm			
	ND: Reddish Brown (5YR 4/4) coarse SAND, some Gravel and Silt, moist. No odor.				
28 + SILT	T: Reddish Brown (5YR 4/4) SILT, moist. No odor.				

ENSR AECON	Client: PPG Industries Site: Site 114		ING ID: 4-MW22B	
Start Date:	Project: Site Investigation		Page: 5 of 5	
11/15/2006	Coordinates: X-610693.8 Y-683255	: 1	Depth of Bo	
End Date:	Elevation: 12.6	·- I		M. Merdinger
11/21/2006	Drill Subcontractor: ADI		Driller:	
		Т Т		1
Debth (41) Tithology	Description	PID	Sample ID	Sample Parameters
<u> </u>	R: No Recovery			
	LT: Reddish Brown (5YR 4/4) SILT, little Clay, trace	0.0 ppm	114-MW22BG (29.0-29.5)	MS/MSD, Cr+6, TAL Metals
fil	e Gravel, moist. No odor.			
30 — N	R: No Recovery			
	RAVEL: Reddish Brown (5YR 4/4) GRAVEL, little lt, wet. No odor.	0.2 ppm		
	LT AND GRAVEL: Reddish Brown (5YR 4/4) SILT and GRAVEL, trace Clay, wet. No odor.			
_ N	R: No Recovery			
34 —				
	LTSTONE: Gray Rock, angular, trace Silt and coarse and, wet. No odor.			

NULL: End of boring at 35 feet.

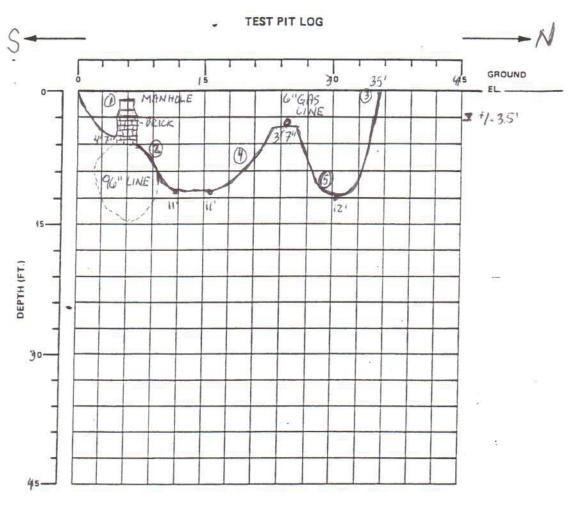
FIGURE 1. TEST PIT LOG

JOB NO. (60158739.0408)
PROJECT PC 5 ITE 114

DATE 10/31-11/1/11

LOCATION CARTERET AVE NEAR GARFIELD LOGGED BY PAPAGIAN KANTOR

Metcalf & Eddy, Inc.



NOTES: MANHOLE W/ PRESSULZ

RELIEFVALVE C/L 6'5"

FROM SOUTH WALL, TOP OF

96" LINE 5'8" BGS.
6" ACTIVE GASLINE, 10'5 of

NORTHWALL 3' 7" AGS

NO. DEPTH

SAMPLES () 114-TP-15 12-19" 70/30

() 114-TP-N 84-89"

() 114-TP-N 4-60"

() 114-TP-N 90-96"

() 114-TP-N 126-132"

SAMPLES COLLECTED AT SUSPECTED "CLEAN" ZONES

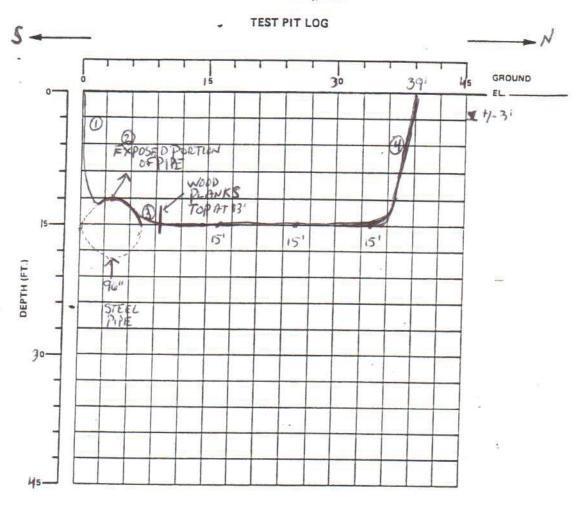
	**	DESCRIPT	PROJECT ON PPG SITE III CONTERED AVE. SETSE	TEST PT	No. 1		
	hita Papagian	CONTRACTOR	Charles and the control of the contr	PYC THE COM	TED 10-31	-11 0831 -11 1130	0)
DEPTH		OIL DESCRI	PTION	EXCAV. EFFORT		INT	REMARK No.
0	9-411-ASP hall	- csand & cgi	one 1	M			
-1'-		rown f-c sand		M	1		
_ 2'	25"-31"-	Ash & concre	te	D			
- 3' -	wood debo	Brown f-C san	d a grower, brick			-	
- 4' -	36"-68"	ent, Ash debi	and + glavel, B	DO6-1	12")		
_ 5'	10						
— 6' —	65-96"-	Brown sitt		₩ M			3
7'					+		
8'	96-132" -	Brown silt w	of little chay	-	-		
— 9' —			O.	1			
—10°—			2		-		9
-11'-	Bott - 11.2	, .			+-		
-12'	114TP-1N-(2): G	round surface	elevation = 11.7	ft NAVD88	-		
-13'-	114TP-1N-(4): G			1		8.	
_14'	114TP 1S-(1): G						
REMARKS:	114TP-1S-(1): GI 114TP-1N-(5): G w seeping in At 3.5 as line found at	round surface	elevation = 12.0	ft NAVD88	3 "uncove	s the	96" 1
TEST P		LEGEND: ULDER COUNT	PROPORTIONS USE	F-FINE	ONS EX	MM	ASY IODERATE
	6"	RANCE LETTER FICATION DESIGNATION -18° A -36° 8	. UTTLE (U.) 10-20% SOME (SO) 20-35%	C-COARSE F/M-FINE TO M F/C-FINE TO C V-VERY	COARSE EL	GROUNDW APSED TIME	
VOLUME=	RTH 36" a	nd Larger C	AND 35-50%	GRGRAY BNBROWN YEL-YELLOW	0	RS.) No Groun	

FIGURE 1. TEST PIT LOG

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

TP-2 CAR LOCATION CARTERET AVE. WEST OF CANALL LOGGED BY KANTOR / PAPASIAN

Metcalf & Eddy, Inc.



DEPTH SAMPLES: 114-TP2-5 NOT VISUALLY LONFIRMED 160-174" DUE tO WATER/SLOUGHING OF SIDEWALLS MTERBEDDED ASH AND DEDRIS Samples Collected From Suspected AND BEOWN tO BRODISH BROWN SILT AND F-CSAND "CLEAN" ZONES WITHIN TEST PIT Gray to brown SILT WITH 29 PRBRIS from 90-120 FEET.

	*	DESCRIPT	PROJECT TON PRO SITE HY LOCATES AVE. SOLO	TEST PIT N		
n ==	ita Papagian -62'F light wind Sunny	EXCAVA CONTRACTO OPERATOR	TION EQUIPMENT	GROUND ELEV	10185111 (1) (1) ED 10127111 (1)	1825 <u></u>
DEPTH	0	L DESCR		EXCAV. EFFORT	BOULDER COUNT GTY, CLASS	REMARK No.
0	0-4" Asphalt 4-7" Grave 1 7-12" Mc 1t	brown SAND 1	few casavol	М		
7	12"-15"-Grey is	in whire Ash,	Porcelain Debris, Glass - Sand w coment t			
	brick der	ocis m-	c sand w coment t	ML8-40")		
4'	40-48" ASh					
5'	48-62"-200	dish brown	SILT W/ f-in gravei	D(40-48") E(48-62")		
6'	62-68"- Gr 68-72"- DK	eyish white brown sitt	145h W/m sand of Blackf	sand E		
— 7' —	72-96" - Red	ush brown	SILT	E		
8'	94-108" - 600	ou Silt word	tleash, 61055, bric			-
9,	cement debit	>	wim-c sand, cem	4		-
—10'—	blocks and	wood debr	is	E		
11'	(47					-
12'	BOH - 12.1	p'				
-13'-	` '		rface elevation = 12			
-14'-	` '		face elevation = 12 face elevation = 12	1		
REMARKS: H 12' We e wither Flowing	ncountered a rife	the norther but could e were unab	nt exose it because the continue w/	ern walls Had - 2 pumps couldn't the executation	keep up wo	ghing. A the the
TEST P		EGEND: DER COUNT MOSE LETTER CATION DESIGNATION	PROPORTIONS USED TRACE (TR.) 0-10%	ABBREVIATIONS F-FINE M-MEDIUM C-COARSE	E	EASY MODERATE DIFFICULT
VOLUME=	18°-	18" A	SOME (SO) 20-35% AND 35-50%	F/M-RINE TO MEDII F/C-FINE TO COAR V-VERY GR-GRAY BN-BROWN YEL-YELLOW	ELAPSED READING (HRS.)	



PPG - PPG_LOGS.GDT - 4/24/13 13:27

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: 132-P3A-H15A

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

 Project Number:
 60240739
 Drilling Method:
 Geoprobe
 Coordinates (NJSPNAD83) x:
 610896.125

 Date Started Drilling:
 4/11/2013 1:45:00 PM
 Rig Type:
 Coordinates (NJSPNAD83) y:
 683151.125

 Date Finished Drilling:
 4/12/2013 10:00:00 AM
 Core Size: 3 in
 Boring Total Depth:
 16 ft

_	tarted Drill			1:45:00 PM		Rig Type:		AD83) y: 683151.125
				3 10:00:00 AN	Л	Core Size: 3 in	Boring Total Depth:	
	d Bv: MI		17 12/2010	7 10.00.00 7 11		Project Manager: Chris Martell	Depth to Water: NA	
	al Location	n: Site	132 - H1	5A			Surface Elevation:	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,								e bgs = below ground surface)
Depth Range (ft bgs)		PID (ppm)	Moisture Content	USCS	Graphi Log	c Surface Cover and Thick	ness:	Sample ID
		0.0	P 1 4	ASPHALT	XXXX	ASPHALT		
— 1—	2	0.0	slightly moist	FILL		fine to medium SAND, some fine grave fragments, (10YR 5/6) yellowish brown	, non plastic,	
 2-	-	0.0	slightly moist	FILL		loose, slightly moist, no odor, no staining fine SAND, little cinders, coal, (7.5YR gray, non plastic, loose, slightly moist,	3/1) very dark	
_ 3	2	0.0	slightly moist	FILL		\staining. fine SAND, little cinders, coal, (7.5YR gray, non plastic, loose, slightly moist,	3/1) very dark	
		5.5	dry	FILL		staining. fine SAND, little medium gravel, trace	tar-like material	
4 5	1.2	0.0	moist	FILL		(7.5YR 2.5/1) black, non plastic, loose, odor, no staining. fine to medium SAND, with fine gravel,	dry slight tar	
-				NR		2.5/3) very dark brown, non plastic, loo no staining.		
6 	1.3	0.0	slightly moist	FILL		NO RECOVERY SILT, little fine sand, trace fine gravel, non plastic, soft, slightly moist, no odor		
		0.0	slightly moist	FILL NR		fine to coarse GRAVEL, with ash, little dark gray, non plastic, loose, slightly m	brick, (7.5YR 4/1)	
8 9	1	0.0	slightly moist	FILL		\staining. \NO RECOVERY \ASH, with wood fragments, some cera (7.5YR 5/1) gray, medium plasticity, lo		
 10				NR		\no odor, no staining. NO RECOVERY		
- 11	0.9	0.0	slightly moist	FILL NR		ASH, with wood fragments, some cera (7.5YR 5/1) gray, medium plasticity, loon odor, no staining.		132-P3A-H15A-10.0-10.5
<u> </u>	_			TW.		NO RECOVERY		
 12 	0.6	0.0	slightly moist	FILL NR		ASH, with wood fragments, some cera (7.5YR 5/1) gray, medium plasticity, lo		132-P3A-H15A-12.0-12.5
 13 	0.0			IVIX		\no odor, no staining. NO RECOVERY		
14-		0.0	slightly	FILL		fine silty SAND, little fine to coarse gra	vel, trace ash,	132-P3A-H15A-14.1-14.6
F	2	2.3	moist	PT	<u> </u>	(5YR 4/4) reddish brown, medium plas	ticity, soft to soft,	132-P3A-H15A-14.6-15.1
—15— — —			dry		<u> </u>	20% organic silt, (7.5YR 3/4) dark brov	vn, non plastic,	132-P3A-H15A-14.6-15.1X
16						stiff, dry, moderate organic odor, no sta consistent with MM.	aining. Soils	
:								



30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: 132-P3A-I15A

gged	IBy: EW	'				Project Manager: Chris Martell	Depth to Water:	NA	
ysic	al Location	n: Site	e 132 - I15	A			Surface Elevation		
								(Note	bgs = below ground surface)
epth	D = = =	PID	N 4 a i a tu una		Casabi				Camania
ange	Recovery (ft/ft)	(ppm)	Moisture Content	USCS	Graphi Log	Surface Cover and Thickr	ess:		Sample ID
bgs)	(IUIL)	(ppiii)	Content		Log				ID
		0.0		ASPHALT		ASPHALT		_	
_		0.0	dry	FILL		fine to medium SAND, with fine to medi	um gravel some		
1 ——	1.6		to	1166	\bowtie	brick, (7.5YR 5/6) strong brown, non pla			
•		0.0	moist	FILL		moist, no odor, no staining.	, out, 10000, any 10	/	
			dry	NR	\sim	fine to medium SAND, trace silt and bri	ck fragments,	\sqcap	
2		0.0	to	FILL		(7.5YR 3/1) very dark gray, non plastic,	loose, dry to	/	
_		0.0	moist	1122		moist, no odor, no staining, with fill mate	erial and glass	//	
3	2	0.0	dry to	FII.I		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		/H	
_		0.0	moist	FILL	\bowtie	\NO RECOVERY fine silty SAND, with fine gravel, little br	ick and canhalt	/ [
			moist		\bowtie	fragments, (7.5YR 3/2) dark brown, nor		/	
1		0.0	moist	FILL		to moist, no odor, no staining.	plastic, soit, dry		
_		0.0			\bowtie	medium SAND, trace silt, (7.5YR 3/4) d	ark brown, non	/ —	
5	1.4	0.0	wet	FILL	\bowtie	plastic, soft, moist, no odor, no staining	. /	7	
					pxxxx	fine to medium SAND, little silt with woo	od fragments,	/	
,				NR		$\setminus (7.5YR 3/1)$ very dark gray, non plastic,	soft to loose,	//	
; —		0.0	wet	FILL		moist, no odor, no staining, and some fi	ne gravel.		
_		0.0	moist	FILL		fine to medium SAND, little COPR and		// -	
<i>'</i>	1.5	0.0	moist	FILL	\otimes	4/3) reddish brown, non plastic, loose, v	vet, no odor, no	//	
		0.0			\bowtie	\\staining. \NO RECOVERY		\mathbb{Z}	
^				NR		fine to medium SAND, little COPR and	fine gravel (5VR	///	
8		0.0	saturated	FILL	\bowtie	4/3) reddish brown, non plastic, loose, v		Ш	
_	_				\bowtie	staining.	101, 110 0001, 110		
9 —	2	0.0	4	FII I		fine to medium SAND, little ash and fine	e gravel, (7.5YR	\mathbb{I}	
_		0.0	wet	FILL FILL		4/1) dark gray, non plastic, loose, moist	, no odor, no	Ш	
0			wet	FILL	\bowtie	staining.		$\parallel \perp \parallel$	
U		0.0	wet	FILL	\bowtie	fine to medium silty SAND, some fine g		1111	132-P3A-I15A-10.0-10
_	,				\bowtie	fragments, (7.5YR 2.5/3) very dark brov	vn, non plastic,	#	
1	1			NR	KXXXX	Soft, moist, no odor, no staining.		llH	
_				INIX		fine to medium silty SAND, with fine gra	vel (7.5YR 4/2)		
2						brown, non plastic, soft to loose, satura			
_		0.0	wet	FILL		staining.		$\parallel \parallel \parallel$	132-P3A-I15A-12.0-12
_	0.7			NR	XXXX	medium SAND, some silt, trace fine gra			
3	0.7			INK		gray, non plastic, soft, wet, no odor, no	staining.	W I	
_						fine to medium SAND, little silt and fine			
4		0.0			——————————————————————————————————————	3/4) dark brown, non plastic, soft, wet, r	io odor, no	\parallel \perp	400 DOA 1454 44 0 44
_		0.0	moist	FILL	\bowtie	fine to medium SAND, and ash with fine	to medium		132-P3A-I15A-14.0-14
	2	0.0		F	\bowtie	gravel, (7.5YR 6/1) gray, non plastic, lo		\mathbb{Z}	
15—	-	0.0	moist	FILL	\bowtie	no staining.	,		122 D2A 14EA 4E 2 4E
_				_		NO RECOVERY		_ -	132-P3A-I15A-15.2-15
6		0.4	moist	OL	11, 11	fine to coarse SAND, with fine to coarse		$\parallel \vdash \parallel$	132-P3A-I15A-15.2-15
_	1	1.4	moist	PT		[] [] (7.5YR 5/1) gray, non plastic, loose, we	t, no odor, no	W L	132-P3A-I15A-15.7-16
7					1/ 1/1/			11	
,						NO RECOVERY medium to coarse SAND, with fine to m	edium gravel		
						little ash, (7.5YR 4/1) dark gray, non pla		$\parallel \parallel$	
						no odor, no staining.	10.10, 10000, 1110181,		
						SILT, with roots, some wood fragments	, (7.5YR 2.5/3)		
						very dark brown, non plastic, soft, mois			
						staining, disturbed native material.			
						UNDorg SILT, with organics, (7.5YR 2.5			
						brown, non plastic, soft, moist, slight or	ganic odor, no		
						staining. Soils consistent with UNDorg.	ith 90% organia		
						PEAT (degraded vegetated material), w fibers and 20% organic silt, (7.5YR 2.5/			
						brown, non plastic, stiff, moist, moderat			
						no staining. Soils consistent with MM.	o organio odor,		
						C. T.			

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: 133-P3C-Z20AR

Page: 1

Project Name: PPG Garfield Ave Drilling Company: SGS Project Number: 60240739 Coordinates (NJSPNAD83) x: 611312.962 Drilling Method: Geoprobe

Date Started Drilling: 11/25/2014 10:00:00 AM Rig Type: Coordinates (NJSPNAD83) y: 682776.76 **Date Finished Drilling:** 11/25/2014 11:00:00 AM Core Size: 3.0 in Boring Total Depth: 20 ft

Depth to Water: NA Surface Elevation:	11 0 # NAV/D00
	ote bgs = below ground surface)
nickness:	Sample ID
le medium gravel, vn, loose, dry, no odor,	_
nts, trace debris, trace	133-P3C-Z20AR-4.5-5
wn, loose, slightly	
sh, trace roots, (7.5YR tly moist, no odor, no	133-P3C-Z20AR-6.5-7
	133-P3C-Z20AR-8.5-9
oal, trace fine to loose, dry to slightly	133-P3C-Z20AR-10.5-1
	133-P3C-Z20AR-12.5-1
.5YR 4/3) brown,	-
al), 50% organic silt, own, medium stiff, or, no staining. Soils	133-P3C-Z20AR-16.3-1 133-P3C-Z20AR-16.8-1
t, 10% organic fibers, , slightly moist, no with UNDorg.	-
or (GGM present in any interval

ENCD	ECOM	Client: PPG Industries			NG ID:	
ENSR A	ECOM	Site: Site 135	13	35-B19		
Start Date:		Project: Site Investigation		Page: 1 o	f 3	
12/13/2006		Coordinates: X-611417.0 Y-68265	1.9	Depth of Boring: 32.00		
End Date:		Elevation: 9.9 ft NAVD88			P. Kelly, M. Merdinger	
1/2/2007		Subcontractor: EB/TPI	1	Driller: He	eath Kneller	
Depth (ft) Lith	leolo)	Description	PID	Sample ID	Sample Parameters	
1 0 →						
	ASI	PHALT: ASPHALT				
- ×	X X FILI X X	L: Gray fine COBBLES.				
2		L: Brown coarse SAND, some Silt and Clay, little Gravel.	0.0 ppm	135-B19A (1.3-1.8)	Cr+6, TAL Metals	
2— ^	× × FILI	L: Grey fine COBBLES	1.4 ppm	135-B19B (2.1-2.6)	Cr+6, TAL Metals	
×		L: Gray-Brown ASH, some fine Gravel, little woody anics. Heavy petroleum odor.				
×	×× FILI	L: Red Brick pieces		135-B19C (3.3-3.8)	Cr+6, TAL Metals	
4- × ×	x x frag	L: Black-Gray ASH, some fine Gravel, little brick ments.	0.0 ppm			
- × ×	× Fill	L: Dark Grayish Brown, (2.5Y 4/2) SILT and ASH, materials (shells, clinkers, wood particles), wet, se. No odor.	0.0 ppm	135-B19D	Cr+6, TAL Metals	
×	× ×			(5.1-5.6)		
6+ ×		L: Black and Dark Grayish Brown (2.5Y 4/2) SILTY AY, trace coarse Sand and Topsoil, moist, firm.	0.0 ppm			
	NR:	No Recovery				
8-		L: Dark Grayish Brown (10YR 4/2) SAND CLAY, e Silt, wet, semi-firm. No odor.	0.0 ppm			
×		L: Black medium SANDY SILT, Fill material, little rbedded Clay, wet, loose. No odor.	0.0 ppm	135-B19E	Cr+6, TAL Metals	
10 — ××	×× FIL	L: Dark Yellowish Brown (10YR 4/4) SANDY SILT, e Clay, moist, semi-firm. No odor.	0.1 ppm	(9.4-9.9)		
	NR:	No Recovery				

ENCD AFCOL	Client: PPG Industries		BORIN	IG ID:
ENSR AECOM	Site: Site 135		13	85-B19
Start Date:	Project: Site Investigation		Page: 2 of	3
12/13/2006	Coordinates: X-611417.0 Y-68265	1.9		Boring: 32.00
End Date:	Elevation: 9.9 ft NAVD88		· · · · · · · · · · · · · · · · · · ·	P. Kelly, M. Merdinger
1/2/2007	Drill Subcontractor: EB/TPI		Driller: He	ath Kneller
اد اده			0	10 105
Depth (ft) Lithology	Description	PID SS	imple ID	Sample Parameters
× × tra × × × × × ×	LL: Dark Yellowish Brown (10YR 4/4) SANDY SILT, ace Clay and fine semi-rounded Gravel, wet, loose. EAT: PEAT, organics, moist, firm. Sulfur odor. R: No Recovery		35-B19F 3.2-13.7)	MS/MSD, Cr+6, TAL Metals
	EAT: Dark Gray (Gley N4/0) organic CLAY, some ganics, moist, firm. Sulfur odor.	34.8 ppm		
18 +		13	35-B19G 7.2-18.2) 5-B19GD 7.2-18.2)	Cr+6, TAL Metals
	LT AND CLAY: Black and Dusky Red (2.5YR 3/2) ganic SILTY CLAY, trace organics, moist, semi-firm. ulfur odor.	164.0 ppm		
1 1 1	R: No Recovery	_ ppm		
□□□□□ or	LT AND CLAY: Black and Dusky Red (2.5YR 3/2) ganic SILTY CLAY, trace organics, moist, semi-firm. ulfur odor.		35-B19H 0.2-20.7)	Cr+6, TAL Metals
	LTY SAND: Gray (5Y 5/1) very fine SILTY SAND, ace Clay, moist, semi-firm (native). Slight sulfur odor.	2.1 ppm		

ENCD AFC	Client: PPG Industries			NG ID:
ENSR AECO	Site: Site 135		1 3	35-B19
Start Date:	Project: Site Investigation		Page: 3 o	f 3
12/13/2006	Coordinates: X-611417.0 Y-68265	1.9	<u> </u>	Boring: 32.00
End Date:	Elevation: 9.9 ft NAVD88			P. Kelly, M. Merdinger
1/2/2007	Drill Subcontractor: EB/TPI	1	Driller: H	eath Kneller
Depth (ft) Lithology	Description	PID	Sample ID	eath Kneller Sample Parameters
22 +	CLAYEY SAND: Gray (5Y 6/1) medium to coarse SAND, some to little Clay, trace fine semi-rounded Gravel, moist, firm. Slight naptha odor.	6.6 ppm		
_	NR: No Recovery	0.0 ppm		
24 —	SAND: Dark Gray (10YR 4/1) fine to coarse SAND, trace fine to medium rounded Pebbles, wet, loose to	0.0 ppm	135-B19I (24.2-24.7)	Cr+6, TAL Metals
	semi-firm. No odor.	0.0 ppm		
26 +		0.0 ppm		
-		0.0 ppm		
28 +	NR: No Recovery			
	SAND: Reddish Gray (5YR 5/2) very fine to medium SAND, wet, semi-firm. No odor.	0.0 ppm	135-B19J (28.2-28.7)	Cr+6, TAL Metals
	SAND: Reddish Brown (5YR 5/4) very fine SAND, little to trace Silt, wet, semi-firm. No odor.	0.0 ppm		
30 +		0.0 ppm		
	NR: No Recovery			
32	NULL: End of Boring at 28 ft.			

 $\underline{\textbf{NOTES:}} \quad \text{Coordinates are provided in New Jersey State Plane NAD 1983 Feet.}$

ENICD	AECOM	Client: PPG Industries		BORIN	
ENSR	AECON	Site: Site 143		143	3-B5
Start Da		Project: Site Investigation		Page: 1 of 3	
1/9/200		Coordinates: X-610774.0 Y-68320	8.0	Depth of Bori	ng: 24.00
End Da		Elevation: 12.9		Geologist: P	
1/11/20		Drill Subcontractor: Eichelberger/Terra Pro			Kneller
Depth (ft)	Lithology	Description	PID (bbw)	Sample ID	Sample Sample
0	× × × FIL × × ×	SPHALT: Asphalt L: Black (5YR 2.5/1) fine SAND, some fine Gravel d Silt, little brick fragments and coarse Gravel, no			
-	× × × × × × × × × × ×	or	0.0 ppm	143-B5A (1.0-1.5)	Cr+6, TAL Metals
2—	××× fine	L: Dark Brown (7.5YR 2.5/1) coarse SAND, some e Gravel, and little fine gravel sized COPR (10%), ce brick fragments, no odor	0.0 ppm	143-B5B (2.0-2.5)	Cr+6, TAL Metals
-		L: White (7.5YR 8/1) SILT/CLAY, some black ining, no odor	0.0 ppm	143-B5C (2.9-3.4)	Cr+6, TAL Metals
4—	× ^ × ^ coa	LL: Brown (7.5YR 4/3) CLAY, some silt, little fine to arse Gravel and medium gravel sized Slag, black DYR 2/1), no odor	0.0 ppm	143-B5D (3.5-4.1)	Cr+6, TAL Metals
	FIL	L: Cobbles			
-	×××	R: No Sample			
6—		LL: Red-Brown (2.5YR 3/4) SILT/CLAY, some fine avel, trace glass pieces, no odor	0.1 ppm		
-	~			143-B5E (6.5-7.0)	Cr+6, TAL Metals
	NF	R: No Recovery			
8+	Y Y		_		

ENCD	A ECON	Client: PPG Industries		BORIN	
ENSR	AECOM	Site: Site 143		143	8-B5
Start Da	te:	Project: Site Investigation		Page: 2 of 3	
1/9/2007	,	Coordinates: X-610774.0 Y-683208	3.0	Depth of Borir	ng: 24.00
End Date	e:	Elevation: 12.9		Geologist: P.	Kelly
1/11/200		Drill Subcontractor: Eichelberger/Terra Pro		ted Driller: Heath	Kneller
Depth (ft)	Lithology	Description	PID (bbw)	Sample ID	Kneller Sample Parameters
		LL: Red-Brown (2.5YR 3/4) SILT/CLAY, some fine avel, trace glass pieces, no odor			
_		LL: Dark Brown (7.5YR 2.5/2) SILT, some fine avel, little woody organics, no odor	0.7 ppm	143-B5F (8.8-9.5)	Cr+6, TAL Metals
	^×^× FI	LL: White (5Y 8/1) SILT/CLAY, very soft, some	†	143-B5G (9.5-9.9)	Cr+6, TAL Metals
10 —		own (5YR 2.5/1) Silt and fine Sand, no odor	 	143-B5H(9.9-10.6)	Cr+6, TAL Metals
		LL: Red-Black (2.5YR 2.5/1) coarse SAND, some t, little fine Gravel, trace glass fragments, no odor		143-B5HD(9.9-10.6)	Cr+6, TAL Metals
_	NI	R: No Recovery			
12 —		LL: Red-Black (2.5YR 2.5/1) coarse SAND, some t, little fine Gravel, trace glass fragments, no odor	_		
	× × FI	LL: Dark Gray (N31 gley) SILT/Ash, some fine avel little debris, no odor	0.7 ppm	143-B5I (12.6-13.1)	Cr+6, TAL Metals
		EAT: Meadow Mat, dark Brown (2.5YR 2.5/2) CLAY, th Organics, no odor	ο.τ ρριτι	143-B5J (13.1-13.9)	Cr+6, TAL Metals
14 —			0.6 ppm		
			- 0.4 ppm		
	NI	R: No Recovery			
16 —	::±:± SI	LT AND CLAY: Green Gray (5BG 5/1) with little Dark			

ENSR AECOM	Client: PPG Industries		BORIN			
LINON ALCOHO	Site: Site 143		143	8-B5		
Start Date:	Project: Site Investigation		Page: 3 of 3			
1/9/2007	Coordinates: X-610774.0 Y-683208.	0	Depth of Boring: 24.00			
End Date:	Elevation: 12.9		Geologist: P.	Kelly		
1/11/2007	Drill Subcontractor: Eichelberger/Terra Prob	e Incorporated	Driller: Heath	Kneller		
Debty (4) Tithology	Description	PID (ppm)	Sample ID	Sample Sample		
	(5YR 4/6) CLAY/SILT, little fine Sand, trace Dark d (2.5YR 3/6) medium Gravel from 18.1' to 19.1', no	0.4 ppm	143-B5K (17.1-17.9)	Cr+6, TAL Metals		
20 — NR	t: No Recovery	0.0 ppm				
=:±:± SIL ±:±: Rd	T AND CLAY: Green Gray (5BG 5/1) with little Dark (5YR 4/6) CLAY/SILT, little fine Sand, trace Dark d (2.5YR 3/6) medium Gravel, no odor					
	ND: Reddish Brown (2.5YR 4/6) coarse SAND, ne fine to coarse Gravel, no odor	0.4 ppm				
NR	: No Recovery					
24 — NU	ILL: End of Boring					

 $\underline{\textbf{NOTES:}} \hspace{0.2in} \textbf{Coordinates are provided in New Jersey State Plane NAD 1983 Feet.}$



30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: 143-P3A-A`15A

Page: 1

Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Drilling Method: Soft Dig/Geoprobe Coordinates (NJSPNAD83) x: 610681.8125 Date Started Drilling: 4/8/2013 8:30:00 AM Rig Type: Coordinates (NJSPNAD83) y: 683259 Date Finished Drilling: 4/8/2013 2:59:00 PM Core Size: 3 in Boring Total Depth: 21 ft

	I By: MI al Location	: Site	143 - A'1	5A		Fioje	ct Manager: Chris Martell	Depth to Water: NA Surface Elevation: 12.			
					(Note bgs = 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		
	1	0.0		1 C	ONCRET		CONCRETE				
_		0.0	dry	3	FILL		fine to medium SAND, little fine gra				
-1	2	0.0	dry	3	FILL		brown, non plastic, loose, dry, no c fine to medium SAND, little fine gra brown, non plastic, loose, dry, no c	vel, (7.5YR 3/2) dark			
-2 <i>-</i> -		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- <u>-</u>	1	0.0	moist	6	FILL		loose, dry, no odor, no staining. fine SAND, with ash, little cinders, gray, non plastic loose, moist no o	coal, (7.5YR 4/1) dark	-		
-6- <u>-</u>	1			6	NR	XXXXXX	NO RECOVERY	io no otaning	-		
-7 <i>-</i>		0.0	moist	6	FILL		SILT, some cinders, coal,fine sand dark brown, non plastic soft, moist				
-8 -	0.8			NR	NR		NO RECOVERY				
-9 -10	. 2	0.0	moist	3	FILL		SILT, little fine sand, trace roots, (7 brown, non plastic, soft, moist, no				
-11 - -12	2	0.0	moist	3	FILL		SILT, little fine sand, trace roots, (7 brown, non plastic, soft, moist, no		_		
_		0.0	slightly	3	FILL		fine to medium SAND, some fine to	o coarse gravel, trace	_		
-13 - -14 -	1.8	0.0	moist slightly moist	3	FILL		cobbles, (5YR 4/3) reddish brown, slightly moist, no odor. fine to medium SAND, some fine to cobbles, (5YR 4/3) reddish brown, slightly moist, no odor.	o coarse gravel, trace			
-15		0.0	slightly	NR	NR		NO RECOVERY				
_ -16 	1.3	0.0	moist	3	FILL		fine to medium SAND, some fine to cobbles,fill material, (2.5YR 4/6) re brown, non plastic, hard, slightly m	d (5YR 4/3) reddish			
_				NR	NR		NO RECOVERY				
-17 18	2	0.0	slightly moist	3	FILL		fine to medium SAND, some fine to cobbles,fill material, (2.5YR 4/6) rebrown, non plastic, hard, slightly m	d (5YR 4/3) reddish	143-P3A-A`15A-17.5-		
-18 -19		0.0	slightly moist	10	SM		fine SAND, with medium gravel, tra red, non plastic, dense, slightly mo	ice silt, (2.5YR 4/8) ist, no odor, no	143-P3A-A`15A-18.0- 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 mo staining. Soils consistent with UND	ice silt, (2.5YR 4/8) ist, no odor, no	143-P3A-A`15A-18.5- 143-P3A-A`15A-20.0-		
				NR	NR		NO RECOVERY				
omma	te: 1\ 2 a#a=	moto vice-	o mada ta -	htain h-	et receive	(2) 8484/1/8	ID confirmed to be 1 ft thick 3) No CCPW (CC	DD or CCM) propert in arriving	tonual of this boring		

A=COM

Project Number: 60240739

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Date Started Drilling: 4/1/2014 9:20:00 AM

Boring ID: 143-P3A-A`15AR2

Page: 1

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

Drilling Method:GeoprobeCoordinates (NJSPNAD83) x:610689.8125Rig Type:Coordinates (NJSPNAD83) y:683255.1875

Date Finished Drilling: 4/1/2014 10:10:00 AM Core Size: 2 in Boring Total Depth: 20 ft

Logged By: MI

Project Manager: Chris Martell

Depth to Water: NA

Depth Range (ft bgs)	Moisture Content O.0 O.0 Slightly moist O.0 O.0 O.0 O.0 O.0 O.0 O.0 O.	GA Class 1 (3) NR	USCS ONCRET FILL NR FILL FILL FILL NR	Graphic Log		12.6 ft NAVD88 te bps = below ground surface) Sample ID
Range (ft bgs) (ft/ft) (ppm (ft/ft) (ppm (ft/ft)) (ppm (ft/ft)) (ppm (ft/ft)) (ppm (ppm (ft/ft)) (ppm (ppm (ft/ft)) (ppm (ppm (ft/ft)) (ppm (ppm (ppm (ppm (ppm (ppm (ppm (p	pm) Content 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	3 NR 3 3 NR	FILL FILL FILL FILL FILL FILL FILL	Log	CONCRETE fine to medium SAND, some fine to coarse gravel, (2.5YR 4/2) weak red, loose, slightly moist, no odor, no staining. fine to medium SAND, with cinders, some silt, little ash, (7.5YR 2.5/1) black, loose to dense, slightly moist, no odor, no staining. NO RECOVERY fine to medium SAND, little cinders, (7.5YR 2.5/1) black, loose to dense, dry to slightly moist, no odor, no staining. fine to medium silty SAND, trace ash, (10YR 5/4) yellowish brown, loose to dense, slightly moist, no odor, no staining. fine silty SAND, and ash, little fine gravel, trace ceramics, (7.5YR 5/1) gray, loose, slightly moist, no odor, no staining. SILT, some fine sand, trace cinders, roots, (7.5YR 3/4) dark brown, non plastic, soft, moist to wet, no odor, no staining.	Sample
0.0 -1 — -2 — -3 — -4 — -5 — -6 — -7 — -8 — -10 — -12 — -13 — -14 — -15 — 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	3.0 slightly moist slightly moist slightly moist slightly moist to wet 0.0 moist to wet 0.0 moist to wet	3 NR 3 3 3 NR	FILL FILL FILL FILL NR		fine to medium SAND, some fine to coarse gravel, (2.5YR 4/2) weak red, loose, slightly moist, no odor, no staining. fine to medium SAND, with cinders, some silt, little ash, (7.5YR 2.5/1) black, loose to dense, slightly moist, no odor, no staining. NO RECOVERY fine to medium SAND, little cinders, (7.5YR 2.5/1) black, loose to dense, dry to slightly moist, no odor, no staining. fine to medium silty SAND, trace ash, (10YR 5/4) yellowish brown, loose to dense, slightly moist, no odor, no staining. fine silty SAND, and ash, little fine gravel, trace ceramics, (7.5YR 5/1) gray, loose, slightly moist, no odor, no staining. SILT, some fine sand, trace cinders, roots, (7.5YR 3/4) dark brown, non plastic, soft, moist to wet, no odor, no staining.	143-P3A-A`15A-R2-7.0-
-1 —	noist to wet noist noist to wet noist noist to wet noist noist to wet	3 NR 3 3 3 NR	FILL FILL FILL FILL NR		fine to medium SAND, some fine to coarse gravel, (2.5YR 4/2) weak red, loose, slightly moist, no odor, no staining. fine to medium SAND, with cinders, some silt, little ash, (7.5YR 2.5/1) black, loose to dense, slightly moist, no odor, no staining. NO RECOVERY fine to medium SAND, little cinders, (7.5YR 2.5/1) black, loose to dense, dry to slightly moist, no odor, no staining. fine to medium silty SAND, trace ash, (10YR 5/4) yellowish brown, loose to dense, slightly moist, no odor, no staining. fine silty SAND, and ash, little fine gravel, trace ceramics, (7.5YR 5/1) gray, loose, slightly moist, no odor, no staining. SILT, some fine sand, trace cinders, roots, (7.5YR 3/4) dark brown, non plastic, soft, moist to wet, no odor, no staining.	143-P3A-A`15A-R2-7.0-
0.0 -3 -	moist no.0 dry to slightly moist slightly moist slightly moist to wet no.0 moist to wet no.0 moist to wet	3 3 3 NR	FILL FILL FILL NR		(7.5YR 2.5/1) black, loose to dense, slightly moist, no odor, no staining. NO RECOVERY fine to medium SAND, little cinders, (7.5YR 2.5/1) black, loose to dense, dry to slightly moist, no odor, no staining. fine to medium silty SAND, trace ash, (10YR 5/4) yellowish brown, loose to dense, slightly moist, no odor, no staining. fine silty SAND, and ash, little fine gravel, trace ceramics, (7.5YR 5/1) gray, loose, slightly moist, no odor, no staining. SILT, some fine sand, trace cinders, roots, (7.5YR 3/4) dark brown, non plastic, soft, moist to wet, no odor, no staining.	143-P3A-A`15A-R2-7.0-
-5 - 0.0 -6 - 0.0 -7 - 3.5 -8 - 0.0 -10 - 0.0 -11 - 0.0 -12 - 5 -13 - 0.0 -14 - 0.0	0.0 dry 10 slight moist slightly moist slightly moist to wet 0.0 moist to wet 0.0 moist to wet	3 3 3 NR	FILL FILL FILL NR		no staining. NO RECOVERY fine to medium SAND, little cinders, (7.5YR 2.5/1) black, loose to dense, dry to slightly moist, no odor, no staining. fine to medium silty SAND, trace ash, (10YR 5/4) yellowish brown, loose to dense, slightly moist, no odor, no staining. fine silty SAND, and ash, little fine gravel, trace ceramics, (7.5YR 5/1) gray, loose, slightly moist, no odor, no staining. SILT, some fine sand, trace cinders, roots, (7.5YR 3/4) dark brown, non plastic, soft, moist to wet, no odor, no staining.	143-P3A-A`15A-R2-7.0-
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 slight moist slightly moist slightly moist slightly moist to wet 0.0 moist to wet 0.0 moist to wet	3 3 NR	FILL FILL NR		loose to dense, dry to slightly moist, no odor, no staining. fine to medium silty SAND, trace ash, (10YR 5/4) yellowish brown, loose to dense, slightly moist, no odor, no staining. fine silty SAND, and ash, little fine gravel, trace ceramics, (7.5YR 5/1) gray, loose, slightly moist, no odor, no staining. SILT, some fine sand, trace cinders, roots, (7.5YR 3/4) dark brown, non plastic, soft, moist to wet, no odor, no staining.	143-P3A-A`15A-R2-7.0-
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 slight moist slightly moist slightly moist slightly moist to wet 0.0 moist to wet 0.0 moist to wet	3 3 NR	FILL FILL NR		loose to dense, dry to slightly moist, no odor, no staining. fine to medium silty SAND, trace ash, (10YR 5/4) yellowish brown, loose to dense, slightly moist, no odor, no staining. fine silty SAND, and ash, little fine gravel, trace ceramics, (7.5YR 5/1) gray, loose, slightly moist, no odor, no staining. SILT, some fine sand, trace cinders, roots, (7.5YR 3/4) dark brown, non plastic, soft, moist to wet, no odor, no staining.	143-P3A-A`15A-R2-7.0
0.0 -7 -	moist slightly moist slightly moist slightly moist to wet 0.0 moist to wet 0.0 moist to wet 0.0 moist to wet	3 NR	FILL NR		brown, loose to dense, slightly moist, no odor, no staining. fine silty SAND, and ash, little fine gravel, trace ceramics, (7.5YR 5/1) gray, loose, slightly moist, no odor, no staining. SILT, some fine sand, trace cinders, roots, (7.5YR 3/4) dark brown, non plastic, soft, moist to wet, no odor, no staining.	143-P3A-A`15A-R2-7.0·
0.0 -9	moist moist to wet 0.0 moist to wet 0.0 moist to wet 0.0 moist to wet 0.0 wet	NR	NR		brown, non plastic, soft, moist to wet, no odor, no staining.	
-9 - 0.0 -10 - 0.0 -11 - 0.0 -12 - 5 -13 - 0.0 -14 0.0	0.0 moist to wet 0.0 moist to wet 0.0 moist to wet	NR	NR	*****	brown, non plastic, soft, moist to wet, no odor, no staining.	
-11	to wet 0.0 moist to wet	3	FILL			
5 -13 -14 -15 - 0.0	0.0 moist to wet				SILT, some fine sand, trace cinders, roots, (7.5YR 3/4) dark brown, non plastic, soft, moist to wet, no odor, no staining.	
-12	to wet	10	00.014		100	143-P3A-A`15A-R2-11.0
-14— -15— -0.0		10	SP-SM		UNDno fine to medium SAND, trace silt, (10YR 5/4) yellowish brown, loose to dense, moist to wet, no odor, no staining. Soils consistent with UNDno.	143-P3A-A`15A-R2-11.5
- 0.0	0.0 moist to wet	10	SP-SM		UNDno fine to medium SAND, some fine to coarse gravel, little silt, (5YR 5/2) reddish gray, loose to dense, moist to wet, no odor, no staining. Soils consistent with UNDno.	
	0.0 moist to wet	10	SP-SM		UNDno fine to coarse SAND, with fine to medium gravel, trace silt, (2.5YR 5/6) red, loose, moist to wet, no odor, no staining. Soils consistent with UNDno.	
-17— -18— 4	0.0 slightly moist	10	SP-SM		UNDno fine to coarse SAND, with fine to coarse gravel, (2.5YR 4/6) red, loose to hard, slightly moist, no odor, no staining. Soils consistent with UNDno.	143-P3A-A`15A-R2-16.5 143-P3A-A`15A-R2-17.0 143-P3A-A`15A-R2-17.5 143-P3A-A`15A-R2-18.0
 -19 						143-P3A-A`15A-R2-18.5
-20		NR	NR		NO RECOVERY	



0 Knightsbridge Road, Piscataway, NJ 08854

Boring ID: 143-P3A-A15A

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

 Project Number:
 60240739
 Drilling Method:
 Geoprobe
 Coordinates (NJSPNAD83) x:
 610708.5625

 Date Started Drilling:
 4/5/2013 9:00:00 AM
 Rig Type:
 Coordinates (NJSPNAD83) y:
 683245.625

 Date Finished Drilling:
 4/5/2013 10:40:00 AM
 Core Size: 3 in
 Boring Total Depth:
 21 ft

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

Physical Location: Site 143 - A15A Surface Elevation: 12.8 ft NAVD88 Depth Recovery PID GΑ Moisture Graphic Sample Range **USCS** Surface Cover and Thickness: (ft/ft) (ppm) Content Class Log ID (ft bgs) 0.0 2 ASPHAL^{*} ASPHALT 1 dry 3 fine to medium SAND, some medium gravel, (7.5YR 0.0 FILL 2.5/3) very dark brown, non plastic, loose, dry, no odor, 0.0 slightly 3 **FILL** no staining moist fine to medium SAND, some medium gravel, (5YR 4/4) 2 reddish brown, non plastic, loose, slightly moist, no 0.0 3 FILL slightly odor, no staining moist fine to medium SAND, some medium gravel, (5YR 4/4) reddish brown, non plastic, loose, slightly moist, no 0.0 slightly 3 **FILL** odor, no staining. fine to medium SAND, some medium gravel, (5YR 4/4) moist 2 0.0 slightly 3 FILL reddish brown, non plastic, loose, slightly moist, no odor, no staining. fine to medium SAND, some medium gravel, (5YR 4/4) moist 143-P3A-A15A-5.0-5.5 0.0 slightly 6 **FILL** reddish brown, non plastic, loose, slightly moist, no moist odor, no staining. 1.4 fine SAND, trace fine gravel, trace coal, cinders, (7.5YR 2.5/1) black, non plastic, loose, slightly moist, no odor, NR NR no sta<u>ining</u> NO RECOVERY 0.0 143-P3A-A15A-7.0-7.5 **FILL** moist 3 SILT, little fine sand, (7.5YR 5/6) strong brown, non 143-P3A-A15A-7.0-7.5X 17 0.0 plastic, soft, moist, no odor, no staining slightly 6 **FILL** ASH, some fine sand, some wood fragments, trace moist cinders, brick, non plastic, loose, slightly moist, no odor, NR NR no staining. NO RECOVERY 0.0 143-P3A-A15A-9.0-9.5 moist FILL 3 fine silty SAND, little medium gravel, trace concrete, 1.5 10 (7.5YR 3/2) dark brown, non plastic, dense, moist, no odor, no staining. NO RECOVERY NR NR 0.0 143-P3A-A15A-11.0-11.5 fine silty SAND, little fine gravel, trace brick, (7.5YR 3/2) moist 3 FILL dark brown, non plastic, soft, moist, no odor, no staining. 2 0.0 143-P3A-A15A-13.0-13.5 moist 3 **FILL** fine silty SAND, trace fine gravel, (7.5YR 3/2) dark brown, non plastic, soft, moist, no odor, no staining. 2 0.0 slightly 3 FILL fine SAND, some silt, (10YR 5/2) grayish brown, non plastic, dense, slightly moist, no odor, no staining. moist 0.0 143-P3A-A15A-15.0-15.5 3 **FILL** fine to medium SAND, little fine gravel, trace silt. 2 16 0.0 FILL fine SAND, little silt, (10YR 5/2) grayish brown, non 3 slightly plastic, loose, slightly moist, no odor, no staining. moist fine to medium SAND, little fine to medium gravel, trace 143-P3A-A15A-17.0-17.5 0.0 slightly 3 FILL silt, (2.5YR 4/1) dark reddish gray, non plastic, loose, moist 2 slightly moist, no odor, no staining. 18 143-P3A-A15A-18.0-18.5 143-P3A-A15A-18.5-19.0 0.0 slightly 10 SM fine to medium SAND, little fine to medium gravel, trace 19 silt, (2.5YR 4/6) red, non plastic, loose, slightly moist, no moist 0.0 10 SM odor, no staining. Soils consistent with UNDno. slightly 2 moist fine to medium SAND, little fine to medium gravel, trace 20 silt, (2.5YR 4/6) red, non plastic, loose, slightly moist, no 143-P3A-A15A-20.0-20.5 odor, no staining. Soils consistent with UNDno. -21



PPG LOGS.GDT - 4/10/13 06:53

Road, Piscataway, NJ 08854

Boring ID: 143-P3A-B15A

Page: 1 Drilling Company: SGS North America Project Name: PPG Garfield Ave Project Number: 60240739 Drilling Method: Geoprobe Coordinates (NJSPNAD83) x: 610735.3125 Date Started Drilling: 4/5/2013 11:10:00 AM Coordinates (NJSPNAD83) y: 683232.125 Rig Type: Date Finished Drilling: 4/5/2013 2:20:00 PM Core Size: 3 in Boring Total Depth: 17 ft Depth to Water: NA Logged By: MI Project Manager: Chris Martell Surface Elevation: 12.8 ft NAVD88 Physical Location: Site 143 - B15A (Note bas = below ground surface) Depth Recovery PID Moisture GA Graphic Sample Range **USCS** Surface Cover and Thickness: (ft/ft) (ppm) Content Class Log ID (ft bgs) 0.0 2 ASPHAL^{*} ASPHALT 1 dry fine silty SAND, little medium gravel, trace ash, cinders, 6 0.0 FILL coal, (7.5YR 2.5/2) very dark brown, non plastic, loose, 0.0 3 **FILL** slightly dry, no odor, no staining. moist fine SAND, some fine to coarse gravel, trace wood 2 fragments, (5YR 4/4) reddish brown, non plastic, loose, 0.0 3 FILL slightly slightly moist, no odor, no staining. moist fine SAND, some fine to coarse gravel, trace wood fragments, (5YR 4/4) reddish brown, non plastic, loose, 0.0 dry 6 **FILL** slightly moist, no odor, no staining. 2 fine silty SAND, some medium gravel, some coal, 0.0 3 FILL cinders, (7.5YR 3/1) very dark gray, non plastic, loose, dry dry, no odor, no staining. fine silty SAND, some medium gravel, some coal, 143-P3A-B15A-5.0-5.5 0.0 moist 3 **FILL** cinders, (7.5YR 3/1) very dark gray, non plastic, loose, dry, no odor, no staining. 1.5 fine to medium SAND, little fine to medium gravel, trace 0.0 moist 6 **FILL** silt, clay, (5YR 4/3) reddish brown, moist, no odor, no staining $\overline{\mathsf{NR}}$ NR 0.0 fine SAND, little fine to medium gravel, trace coal, 143-P3A-B15A-7.0-7.5 moist 6 **FILL** cinders, (5YR 4/3) reddish brown (7.5YR 2.5/1) black, 0.0 slightly 3 FILL 17 moist, no odor, no staining. moist NO RECOVERY fine SAND, little fine to medium gravel, trace coal, NR NR cinders, (5YR 4/3) reddish brown (7.5YR 2.5/1) black, 9 0.0 143-P3A-B15A-9.0-9.5 moist FILL moist, no odor, no staining. 6 fine SAND, little silt, trace wood fragments, (10YR 5/2) 0.6 10 grayish brown, non plastic, hard, slightly moist, no odor, no staining. NO RECOVERY 0.0 fine silty SAND, with ash trace ceramics, cinders, (10YR 143-P3A-B15A-11.0-11.5 moist 3 **FILL** 4/1) dark gray, non plastic loose, moist no odor no 2 0.0 **FILL** moist 3 fine silty SAND, with ash, little wood fragments, trace ceramics, cinders, (10YR 4/1) dark gray, non plastic, 0.0 moist 3 **FILL** loose, moist, no odor, no staining. 0.0 143-P3A-B15A-13.0-13.5 moist 3 **FILL** fine SAND, little silt, (7.5YR 3/2) dark brown, non plastic, 143-P3A-B15A-13.5-14.0 0.0 moist 9 OL loose, moist, no odor, no staining. 2 10 МН SILT, little fine sand, trace roots, (7.5YR 3/2) dark 0.0 moist brown, non plastic, soft, moist, no odor, no staining. SILT, little fine sand, trace roots, (7.5YR 3/2) dark 0.0 10 SM brown, non plastic, soft, moist, no odor, no staining moist UNDorg SILT, 90% organic silt, 10% organic fibers, 2 (7.5YR 2.5/1) black, low plasticity, soft, moist, moderate 16 organic odor, no staining. Soils consistent with UNDorg. UNDno SILT, some roots, (10YR 5/4) yellowish brown, 17 low plasticity, soft, moist, no odor, no staining. Soils consistent with UNDno. fine silty SAND, trace roots, trace fine to coarse gravel, (10YR 4/2) dark grayish brown, non plastic, loose, moist, no odor, no staining. Soils consistent with UNDno.



Boring ID: 143-P3A-C15A

30 Knightsbridge Road, Piscataway, NJ 08854 Page: 1 Project Name: PPG Garfield Ave **Drilling Company:** SGS North America Project Number: 60240739 Drilling Method: Soft Dig/Geoprobe Coordinates (NJSPNAD83) x: 610762.125 Date Started Drilling: 4/10/2013 10:15:00 AM Coordinates (NJSPNAD83) y: 683218.625 Rig Type: Date Finished Drilling: 4/10/2013 2:25:00 PM Core Size: 3 in Boring Total Depth: 15 ft Depth to Water: NA Logged By: MI Project Manager: Chris Martell Surface Elevation: 12.7 ft NAVD88 Physical Location: Site 143 - C15A Depth Recovery PID GΑ Moisture Graphic Sample Range **USCS** Surface Cover and Thickness: (ft/ft) (ppm) Content Class Log ID (ft bgs) 0.0 0.2 2 ASPHAL1 ASPHALT dry 6 medium SAND, with fine to coarse gravel, little coal, 8.0 0.0 FILL to cinders, (7.5YR 2.5/1) black, non plastic, loose, dry to 0.0 sl. 3 **FILL** slightly moist. 1 moist fine SAND, little gravel, trace brick, (7.5YR 3/2) dark drv brown, non plastic, loose, dry, no odor, no staining 0.0 6 FILL slightly 1 fine to medium SAND, some fine gravel, trace cinders, moist ash, coal, (7.5YR 2.5/1) black, non plastic, loose, slightly moist, no odor, no staining. 0.0 slightly 6 **FILL** 1 fine to medium SAND, some fine gravel, trace cinders, moist ash, coal, (7.5YR 2.5/1) black, non plastic, loose, 0.0 slightly 6 FILL slightly moist, no odor, no staining. 1 fine to medium SAND, some fine gravel, trace cinders, moist ash, coal, (7.5YR 2.5/1) black, non plastic, loose, 143-P3A-C15A-5.0-5.5 0.0 moist 3 **FILL** slightly moist, no odor, no staining.
SILT, some fine to medium sand, little fine to coarse 13 gravel, (5YR 4/3) reddish brown, non plastic, soft, moist, 0.0 FILL slightly no odor, no staining NR NR moist fine to medium SAND, trace fine to coarse gravel. 143-P3A-C15A-7.0-7.5 0.0 3 **FILL** (7.5YR 4/1) dark gray, non plastic, loose, slightly moist, moist no odor, no staining 2 NO RECOVERY 0.0 SILT, some fine sand, little fine to medium gravel, slightly 3 **FILL** (10YR 4/2) dark grayish brown, non plastic, soft, moist, moist no odor, no staining. fine to medium SAND, some wood fragments,trace fine 0.0 143-P3A-C15A-9.0-9.5 6 **FILL** to coarse gravel, (7.5YR 2.5/1) black, non plastic loose, 1.3 10 slightly moist, no odor, no staining. fine silty SAND, with ash, some cinders, coal, brick, NR NR trace wood fragments, (7.5YR 4/1) dark gray, non 0.0 plastic, loose. 143-P3A-C15A-11.0-11.5 moist 3 **FILL** NO RECOVERY 2 SILT, little fine sand, fine to coarse gravel, trace brick, (10YR 3/6) dark yellowish brown, non plastic, soft, 0.0 143-P3A-C15A-12.3-12.8 moist 3 FILL moist, no odor, no staining. 143-P3A-C15A-12.8-13.3 0.0 fine to medium SAND, and ash, little fine gravel, (7.5YR 13 moist 9 3/1) very dark gray (10YR 4/2) dark grayish brown, non plastic, dense, moist, no odor, no staining. 9 ŌL 0.0 moist 2 UNDorg SILT, 90% organic silt, 10% organic fibers, 11/11/ 2.1 PT 7 dry (7.5YR 2.5/1) black, low plasticity, soft, moist, slight 1, 11, 1 organic odor, no staining. Soils consistent with UNDorg. UNDorg SILT, 90% organic silt, 10% organic fibers, (7.5YR 2.5/1) black, low plasticity soft, moist, slight organic odor, no staining. Soils consistent with UNDorg. PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (7.5YR 3/3) dark brown, non plastic, stiff, dry, strong organic odor. Soils consistent with MM.



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

Road, Piscataway, NJ 08854

Boring ID: 143-P3A-E15A

Page: 1 Project Name: PPG Garfield Ave **Drilling Company:** SGS North America Project Number: 60240739 Drilling Method: Soft Dig/Geoprobe Coordinates (NJSPNAD83) x: 610815.8125 Date Started Drilling: 4/9/2013 9:15:00 AM Coordinates (NJSPNAD83) y: 683191.625 Rig Type: Date Finished Drilling: 4/9/2013 11:45:00 AM Core Size: 3 in Boring Total Depth: 17 ft Depth to Water: NA Logged By: MI Project Manager: Chris Martell Surface Elevation: 12.6 ft NAVD88 Physical Location: Site 143 - E15A (Note bas = below ground surface) Depth Recovery PID GΑ Moisture Graphic Sample Range **USCS** Surface Cover and Thickness: (ft/ft) (ppm) Content Class Log ID (ft bgs) 0.0 dry 6 FILL medium SAND, some coal, cinders, (7.5YR 3/1) very 1 dark gray, non plastic, loose, dry, no odor, no staining. 0.0 **FILL** medium SAND, some coal, cinders, (7.5YR 3/1) very drv 6 dark gray, non plastic, loose, dry, no odor, no staining. 2 0.0 6 FILL medium to coarse SAND, some coal, cinders, (7.5YR dry 3/1) very dark gray, non plastic, loose, dry, no odor, no 0.0 6 **FILL** dry fine to medium SAND, some coal, cinders, little wood fragments, (7.5YR 3/1) very dark gray, non plastic, 2 loose, dry, no odor, no staining. 0.0 3 FILL dry fine to medium SAND, some fine to coarse gravel, little wood fragments, (7.5YR 3/1) very dark gray, non plastic, loose, dry, no odor, no staining. 143-P3A-E15A-5.0-5.5 0.0 saturated **FILL** fine silty SAND, little fine to coarse gravel, trace coal, 6 FILL 0.0 moist (7.5YR 3/3) dark brown, non plastic, soft, saturated, no 12 saturated 6 FILL 0.0 òdor, no stáining. NR NR fine SAND, little fine to coarse gravel, little coal, (7.5YR 2.5/1) black, non plastic, loose, moist, no odor, no 0.0 saturated 6 **FILL** fine silty SAND, little fine to coarse gravel, trace coal. (7.5YR 3/3) dark brown, non plastic, soft, saturated, no 0.0 slightly 3 FILL odor, no staining. moist NR NR NO RECOVERY 0.0 fine silty SAND, some fine to coarse gravel, little coal, 143-P3A-E15A-9.0-9.5 6 **FILL** moist (7.5YR 2.5/2) very dark brown, non plastic, soft, saturated, no odor, no staining.
medium SAND, little fine to medium gravel, little brick, 1.3 10 NR NR (5YR 3/2) dark reddish brown, non plastic, loose, slightly moist, no odor, no staining 0.0 143-P3A-E15A-11.0-11.5 moist 6 FILL NO RECOVERY fine to medium SAND, some ash, little 2 0.0 moist 3 **FILL** coal,cinders,brick,wood fragments, (7.5YR 3/1) very dark gray, non plastic, loose, moist, no odor, no staining. fine to medium SAND, little fine gravel, trace coal, cinders, (7.5YR 3/1) very dark gray, non plastic, loose, 0.0 143-P3A-E15A-13.0-13.5 moist 3 **FILL** 2 moist, no odor, no staining. 0.0 143-P3A-E15A-14.1-14.6 3 FILL fine SAND, some wood fragments, little silt, (7.5YR 3/4) moist dark brown, non plastic, loose to hard, moist, no odor, 143-P3A-E15A-14.6-15.1 0.0 moist 9 OL no staining. PΤ 1.3 dry fine SAND, some fine to medium gravel, little silt, brick 1.3 to 11/2 /1 silt, (7.5YR 3/4) dark brown, non plastic, loose to hard, 2 sl. 16 moist, no odor, no staining. 11/11/ moist SILT, little fine sand, trace roots, (7.5YR 2.5/3) very dark dry 11, brown, low plasticity, soft, moist, no odor, no staining. UNDorg SILT, 90% organic silt, 10% organic fibers, 17 to sl. (7.5YR 2.5/1) black, low plasticity, soft, moist, slight moist organic odor, no staining. Soils consistent with UNDorg. PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (7.5YR 3/2) dark brown, non plastic stiff, dry to slightly moist, strong organic odor, no staining. Soils consistent with MM. PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (7.5YR 3/2) dark brown, non plastic, stiff, dry to slightly moist, strong organic odor, no staining. Soils consistent with MM.



30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: 143-P3A-F15A

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

 Project Number:
 60240739
 Drilling Method:
 Soft Dig/Geoprobe
 Coordinates (NJSPNAD83) x:
 610842.5

 Date Started Drilling:
 4/9/2013 9:00:00 AM
 Rig Type:
 Coordinates (NJSPNAD83) y:
 683178.125

 Date Finished Drilling:
 4/11/2013 10:25:00 AM
 Core Size: 3 in
 Boring Total Depth:
 13 ft

Date Fi	nished Dri	lling:	4/11/2013	10:25	:00 AM		Size: 3 in	Boring Total Depth: 1	3 ft
	d By: MI					Proj	ect Manager: Chris Martell	Depth to Water: NA	
Physic	al Location	n: Site	143 - F15	iA				Surface Elevation: 12	
								(Note b	gs = below ground surface)
Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content			Graphic Log	Surface Cover and Th	ickness:	Sample ID
	1	0.0	dry	3	FILL		fine to medium SAND, with medium fragments, little fill material, (7.5YR plastic, loose, dry, no odor, no stair	3/2) dark brown, non	
F , -	1	0.0	slightly moist	3	FILL		medium SAND, with ash and fine g material, (7.5YR 4/1) dark gray, nor	ravel, trace fill	
- 3	2	0.0	dry	6	FILL		slightly moist, no odor, no staining. fine silty SAND, with medium to coacinders, brick, (7.5YR 3/1) very darl loose, dry, no odor, no staining.		
- 4 -	1	0.0	dry	6	FILL		fine silty SAND, with medium to coacinders, brick, (7.5YR 3/1) very dark		
<u></u>		0.0	moist	6	FILL		loose, dry, no odor, no staining. fine silty SAND, with ash, little cinde	ers. coal. brick.	143-P3A-F15A-5.0-5.5
] 1	0.0	moist	6	FILL		(10YR 4/2) dark grayish brown, non		
- 6 - 	•			NR	NR		loose, moist, no odor, no staining. fine SAND, little fine to coarse grav brick, coal, (7.5YR 3/2) dark brown,	el, little ash, cinders, non plastic, loose.	
F7-		0.0	moist	6	FILL		moist, no odor, no staining. NO RECOVERY		143-P3A-F15A-7.0-7.5
8-	2	0.0	moist	6	FILL		ASH, some cinders, coal, brick, little gravel, (7.5YR 3/1) very dark gray, moist, no odor, no staining.	non plastic, loose,	
9 10	2	0.0	moist	6	FILL		SILT, little fine to coarse gravel, tradark yellowish brown, non plastic, sono staining. SILT, little fine to medium gravel, lit (10YR 4/2) dark grayish brown, non	oft, moist, no odor, tle coal and cinders,	143-P3A-F15A-9.0-9.5
11		0.0	moist	3	FILL		no odor, no staining. SILT, some fine to medium sand, li	tle roots, fine to	143-P3A-F15A-11.0-11.5
 12 -13	2	1.9		7	PT	\(\frac{1}{1}\) \(\frac{1}\) \(coarse gravel, (10YR 6/2) light brow plastic, soft, moist, no odor, no stail PEAT (degraded vegetated materia fibers, 25% organic silt, (7.5YR 3/2 plastic, stiff. Soils consistent with M	nish gray, non ning. I), 75% oragnic dark brown, non	143-P3A-F15A-11.5-12.0

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



30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: 143-P3A-G15A

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

		iiiiig.	47 1072010	0.30.00 AIV		Due to at Management Olemia Mantall	Dorning Total Deptil.	
	d By: MI					Project Manager: Chris Martell	Depth to Water: NA	
Physic	al Location	n: Site	e 143 - G1	5A			Surface Elevation:	
-					1	I	(No	te bgs = below ground surface)
Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickr	ness:	Sample ID
	. 1	0.0		FILL		fine SAND, trace silt with fill material, a 3/2) dark brown, non plastic, loose.	nd brick, (7.5YR	
- 1 -	. 1	0.0	dry to	FILL		fine to medium silty SAND, with mediur material, brick, (7.5YR 3/3) dark brown,		
	1	0.0	moist wet to	FILL		loose, dry to moist. coarse SAND, little silt, little fine to med (7.5YR 3/2) dark brown, non plastic, loo		
3	. 1	0.0	moist wet to	FILL		coarse SAND, little silt, little fine to med (7.5YR 3/2) dark brown, non plastic, lod		
4	. 1	0.0	moist	FILL		fine SAND, with silt and medium gravel brown, non plastic, loose.	, (7.5YR 3/2) dark	
5 6	1.3	0.0	moist	FILL		ASH, some ceramics, little coal, brick a (7.5YR 4/1) dark gray, non plastic, loos no staining.		143-P3A-G15A-5.0-5.5
<u> </u>	-			NR	XXXXX	NO RECOVERY		
7- 8-	1.6	0.0	moist	FILL		ASH, some fine gravel, little coal, brick fragments, (7.5YR 4/1) dark gray, non proist, no odor, no staining.		143-P3A-G15A-7.0-7.5
				NR	<u></u>	NO RECOVERY		
9- 10-	1.4	0.0	moist	FILL		fine silty SAND, some ash, little fine to (7.5YR 4/1) dark gray, non plastic, loos no staining.		143-P3A-G15A-9.0-9.5
	_			NR		NO RECOVERY		
11		0.0	moist	FILL		SILT, some fine to coarse gravel, little a dark reddish gray, non plastic, loose, m		143-P3A-G15A-11.0-11.5
12-	2	1.4	moist dry	FILL		staining. fine silty SAND, little fine to coarse gravereddish brown, non plastic, loose, mois		143-P3A-G15A-12.0-12.5 143-P3A-G15A-12.0-12.5X
—13— ——14—	. 1	1.6		PT	<u> </u>	PFAT (degraded vegetated material) 8	n, non plastic, ng. Soils 0% organic fibers, n, non plastic,	143-P3A-G15A-12.5-13.0

AECOM

A.GDT - 9/17/20

LOGS

2012-09 RA PPG

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: A4MW4V

Page: 1 Project Name: PPG Garfield Ave **Drilling Company:** Ameridrill Project Number: 60580814 Drilling Method: Geoprobe Coordinates (NJSPNAD83) x: 610800 Date Started Drilling: 10/3/2005 Coordinates (NJSPNAD83) y: 683259 Rig Type: Date Finished Drilling: 10/3/2005 Core Size: 2 inches Boring Total Depth: 44 ft Depth to Water: Logged By: Richard Firely Project Manager: Surface Elevation: 12.5 ft NAVD88 Physical Location: as drilled Depth Recovery PID Moisture Graphic Sample Range **USCS** Surface Cover and Thickness: (ft/ft) ΙD (ppm) Content Log (ft bgs) FILL Not Logged 4.8 Very dark gray (10YR 3/1) silt and fine sand, trace saturated FILL saturated NULL organics, trace gravel FILL End of Boring saturated Yellowish brown (10YR 5/6) silt and gravel, loose Dark brown (7.5YR 3/2) silt, little fine sand and medium FILL to coarse gravel, loose NR No recovery 2.8 saturated FILL Black (7.5YR 2.5/1) gravel, little fine sand and silt, loose Black (7.5YR 2.5/1) fine sand and silt, trace gravel, loose **FILL** saturated **FILL** Strong brown (7.5YR 3/2) fine sand and silt, trace gravel, 114-A4MW4VB10-10.5 loose FILL $\overline{\mathsf{Wood}}$ NR No recovery Black (7.5YR 2.5/1) fine to coarse sand and gravel, loose Dark brown (7.5YR 3/3) fine sand and silt, slight cohesive saturated FILL 2.2 moist FILL Gray (7.5YR 6/1) gravel, loose Dark brown (7.5YR 3/3) silt, little fine sand and clay, 13 saturated **FILL** FILL moist slight cohesive NR No recovery 16 114-A4MW4-VC-16-16.5 PEAT 71 71 Black (7.5YR 2.5/1) peat moist SILT Dark gray (7.5YR 4/1) fine sand and silt, little clay, trace saturated organics, slight cohesive 2.2 Gray (7.5YR 5/1) clay, some silt, trace organics, moist CLAY A4MW-4VD 18 cohesive NR No recovery UNDno - non-organic undisturbed native deposits UNDorg - organic undisturbed native deposits bgs - below surface grade MM - meadow mat MGP - manufactured gas plant COPR - chromite ore processing residue CCPW - chromate chemical production waste GGM - green grey mud

A.GDT - 9/17/20 15:19

LOGS

2012-09 RA PPG

Boring ID: A4MW4V

Page: 2 Project Name: PPG Garfield Ave Drilling Company: Ameridrill Project Number: 60580814 Drilling Method: Geoprobe Coordinates (NJSPNAD83) x: 610800 Date Started Drilling: 10/3/2005 Coordinates (NJSPNAD83) y: 683259 Rig Type: Date Finished Drilling: 10/3/2005 Core Size: 2 inches Boring Total Depth: 44 ft Logged By: Richard Firely Project Manager: Depth to Water: Surface Elevation: 12.5 ft NAVD88 Physical Location: as drilled Depth Recovery PID Moisture Graphic Sample USCS Range Surface Cover and Thickness: (ft/ft) Content ΙD (ppm) Log (ft bgs) Gray (7.5YR 5/1) silt and clay, trace strong brown color moist SILT (7.5YR 4/6), cohesive -21 saturated SAND Dark reddish brown (2.5YR 3/4) fine to medium sand, A4MW-4VE little silt and medium to coarse gravel, loose -22 NR No recovery 3 -23 -24 SAND Dark reddish brown (2.5YR 3/4) fine sand, loose saturated -25 -26 NR No recovery -27 3.3 -28 saturated SAND Dark reddish brown (2.5YR 3/4) fine sand, loose -29 NR No recovery -30 -31 -32 SAND saturated Dark reddish brown (2.5YR 3/4) fine sand, little silt, slight 1.6 cohesive 33 NR No recovery -34 35 36 114-A4MW4VG-36-36.5 SILT Dark reddish brown to weak red (2.5YR 3/4 to 2.5YR 4/2) moist silt and clay, cohesive -372 114-A4MW4-VH-37.4-37 -38 NR No recovery -39 UNDno - non-organic undisturbed native deposits bgs - below surface grade MM - meadow mat COPR - chromite ore processing residue MGP - manufactured gas plant CCPW - chromate chemical production waste GGM - green grey mud UNDorg - organic undisturbed native deposits

		M
4	ECO	N

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: A4MW4V

Page: 3

Project Name:					Drilling Company: Ameridrill		
Project Number					Drilling Method: Geoprobe		NJSPNAD83) x: 610800
Date Started Dri					Rig Type:		JSPNAD83) y: 683259
Date Finished D	rilling:	10/3/2005	<u> </u>		Core Size: 2 inches	Boring Total De	epth: 44 ft
ogged By: Ric	chard Fi	rely			Project Manager:	Depth to Water	
Physical Location	n: as	drilled					ion: 12.5 ft NAVD88
Depth Range ft bgs)		Moisture	USCS	Graphi Log	Surface Cover an		Sample ID
-41— -41— -42— 2.5			SILT		Dark reddish brown to weak red silt and clay, cohesive	d (2.5YR 3/4 to 2.5YR 4/2	
-43 43			NR		No recovery		A4MW-4VJ
44			NULL		End of Boring		
otes: gs - below surface M - meadow mat	grade	COPR - chro	omite ore prod n grey mud	essing res	idue UNDno - non-organic undisturbed UNDorg - organic undisturbed nati	native deposits MGP -	manufactured gas plant - chromate chemical production was

AECOM

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone **Boring ID: B4S**

Page: 1

Date Sta		ing: _^	12/2/2003		R	rilling Method: Hollow Stem Auger ig Type:	Coordinates (NJSPN	NAD83) x: 610816.41 NAD83) y: 683245.47
			12/2/2003			ore Size: 4.25 inches	Boring Total Depth:	20 ft
	I By: D. S		an		P	roject Manager:	Depth to Water:	
Physica	al Location	n:			1 1		Surface Elevation:	12.4 ft NAVD88
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickr	ness:	Sample ID
				ASPHALT		Asphalt		
 - 1 			dry	FILL		Very dark gray (7.5YR 3/1) coarse to fir gravel, little silt. Fill-coal ash, clinker, m	netal	B4\$(0.5-1)
-3	5		wet	FILL		Dark reddish brown (2.5YR 3/3) SILT, s fine sand, little gravel. Fill-coal ash, clir COPR	nker, cinder, 50%	
 5			wet	FILL		Brown (7.5YR 5/4) SILT, some clay, littl Fill-soda ash, plastic, shells	le fine sand.	
٦, ٦								B4S(5.5-6)
-6 7 	5		wet	FILL		Very dark gray (10YR 3/1) SILT, some gravel. Fill-brick, clinker, cinder	fine sand, little	
-8-			wet	FILL		Weak red (2.5YR 4/2) medium to fine S	AND, some silt.	
 -9 						Fill-root, lime ash, soda ash-like		B4S(9.5-10)
10			wet	FILL		Weak red (10R 4/4) fine SAND, some g Fill-brick, wood, lignite, root, cinder	gravel, little silt.	
-12 -13	5		wet to saturated	FILL		Dark reddish brown (2.5YR 3/4) fine SA little gravel. Fill-brick, cinder, lignite	ND, some silt,	B4S(13.5-14)
_14								D43(13.3-14)
-15 <u></u>			dry	PEAT		Very dark grayish brown (10YR 3/2) PE some silt	AT(meadow mat),	
10					<u> </u>			B4S(15.5-16)
-16 -17	3			NR		No Recovery		
-18 - -19 - 			wet	SAND		Weak red (10R 4/3) coarse to fine SAN little silt, till, native	D, some gravel,	
	ow surface g adow mat		COPR - chro	omite ore proce	essing resid	lue UNDno - non-organic undisturbed native dep UNDorg - organic undisturbed native deposit		I Ifactured gas plant Omate chemical production was

ENICD A ECONA	Client: PPG		BORING ID:			
ENSR AECOM	Site: PPG - Jersey City, NJ					
Start Date:	Project: Site Investigation	Page: 1	Page: 1 of 2			
8/27/2003	Coordinates: X-611046.58 Y-683115	Depth o	Depth of Boring: 16.00			
End Date:	Elevation: 12.5 ft NAVD88		Geologist:			
8/27/2003	Drill Subcontractor: S&S		Driller:	Driller:		
Depth (ft) Lithology	Description	PID	Sample ID	Sample Parameters		
0_				1		
AS	PHALT		C3	TAL Metals, Cr+6		
FIL	L: COPR, yellow (staining), concrete		(0.5-1.0)	TAL Metals, CI+0		
		0.0 ppm				
			C3 (1.5-2.0)	TAL Metals, Cr+6		
2+		0.0 ppm	(1.5-2.0)			
		0.0 ppm				
4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		0.0 ppm				
	L: COKE/SLAG, brick, wood	0.0 pp				
		0.0 ppm	C3 (5.0-5.5)	TAL Metals, SVOCs, PCBs, VOCs, Cyanide		
			(6.6 6.6)	. 328, 1338, 374		
6+		0.0 ppm				
		0.0 ppiii				
		-				
	L: Gray silt (green staining), fine, some fine sand	0.0 ppm				
8 8		00000				
FIL	L: COKE/SLAG	0.0 ppm				
	L: Gray silt, (yellow staining), fine, some fine sand	0.0 ppm				
	LL. Gray siit, (yellow stallling), lille, some lille sand					
10 + 10						
		0.0 ppm				
		0.0 ppm	C3	TAL Metals, Cr+6		
		''	(11.0-11.5)			

ENICD A ECONA	Client: PPG	BORII	BORING ID:			
ENSR AECOM	Site: PPG - Jersey City, NJ	C				
Start Date:	Project: Site Investigation	Page: 2 o	Page: 2 of 2			
8/27/2003	Coordinates: X-611046.58 Y-683115	.86	Depth of Boring: 16.00			
End Date:	Elevation: 12.6 ft NAVD88		:			
8/27/2003	Drill Subcontractor: S&S		Driller:	Driller:		
Depth (ft) Lithology	Description	PID	Sample ID	Sample Parameters		
12 FIL	L: Dark brown and black silt, fine, trace fine sand, oble, brick	0.0 ppm				
		0.0 ppm				
PE	AT: Brown, organic material (meadow mat)	0.0 ppm				
		0.0 ppm	C3 (15.0-15.5)	TAL Metals, Cr+6, SVOCs, PCBs, VOCs, Cyanide		
1 16 [⊥] NU	LL: End of Boring at 16 ft.					

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: CAR-PDI-AA19A

Page: 1

Project Number: 60240739 Date Started Drilling: 6/13/2016 8:30:00 AM								PNAD83) x: 611350.91 NAD83) y: 682789.21	
Date Finished Drilling: 6/13/2016 9:30:00 AM						Core Size: 3.0 in Boring Total Depth:			
	By: ES	y.	3 S. E. O T.	. 5.00.00 / HVI			Depth to Water: NA		
	al Locatio	n: Act	ual - CAR I	PDI			Surface Elevation: 1		
Depth Range It bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thicknes	SS:	Sample ID	
		0.0		ASPHALT		Asphalt and gravel sub-base			
-1 - -2	4.5		dry	FILL		ASH, some coal, trace glass, (7.5YR 4/1) d dry, no odor, no staining.	ark gray, loose,	CAR-PDI-AA19A-0.5-1.0 CAR-PDI-AA19A-2.0-2.5	
-3 -4			dry FILL			fine to medium SAND, little to trace ash, tra (7.5YR 6/3) light brown, medium dense, dry staining.	CAR-PDI-AA19A-4.0-4.5		
				NR		NO RECOVERY			
-5-		0.0	wet	FILL		fine silty SAND, little fine gravel, trace ash,			
_			wet	FILL		reddish brown, medium dense, wet, no odor			
-6 -7						\water at 5.0 feet. ASH, some silt and fine sand, trace wood, (black, medium dense, wet, no odor, no stair	ning.	CAR-PDI-AA19A-6.0-6.5	
-8	3.5		wet FILL			fine silty SAND, fine little gravel, (5YR 4/4) reddish brown, medium dense, wet, no odor, no staining.		CAR-PDI-AA19A-8.0-8.5	
-				NR		NO RECOVERY		0,411 21,74110,1 0.0 0.0	
-9				INIX		NO RECOVERT			
-10		0.0	wet	FILL		fine silty SAND, little organics, trace fine gra	nvol (EVD 4/2)	CAR-PDI-AA19A-10.0-10.	
-11 -12 -13	5		wet	1122		reddish brown, medium dense, wet, no odoi		CAR-PDI-AA19A-12.0-12.9	
-14								CAR-PDI-AA19A-14.0-14.	
15					\bowtie			CAR-PDI-AA19A-14.7-15.2	
-16 -17 -18	5	5		FILL PT OL		fine silty SAND, trace metal, (5YR 4/3) redomedium dense, wet, no odor, no staining. PEAT (degraded vegetated material), 75% of 25% organic silt, (5YR 3/3) dark reddish broodor, no staining. Soils consistent with MM. Organic SILT, 75% organic silt, 25% organic 4/3) brown, medium stiff, dry, no odor, no staining.	organic fibers, own, stiff, dry, no c fibers, (7.5YR	CAR-PDI-AA19A-15.2-15.7	
_ -19						-			
20			moist	SM		fine to medium silty SAND, (5Y 5/1) gray, m moist, no odor, no staining. Soils consistent			
otes:	low surface	grade	COPR - chr	omite ore proc	essina re	sidue UNDno - non-organic undisturbed native dep	osits MGP - manu	factured gas plant	

A.GDT - 10/14/16 09:

2012-09 RA PPG LOGS

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Boring ID: CAR-PDI-AA20A

Page: 1

30 Knightsbridge Road, Piscataway, NJ 08854

Project Name: PPG Garfield Ave Drilling Company: SGS North America Coordinates (NJSPNAD83) x: 611330.21 Project Number: 60240739 Drilling Method: direct push Date Started Drilling: 6/9/2016 11:05:00 AM Rig Type: Coordinates (NJSPNAD83) y: 682753.43 Date Finished Drilling: 6/9/2016 12:00:00 PM Core Size: 3.0 in Boring Total Depth: 20 ft Project Manager: Scott Mikaelian Depth to Water: NA Logged By: ES Physical Location: Actual - CAR PDI Surface Elevation: 10.7 ft NAVD88 Depth PID Recovery Moisture Graphic Sample **USCS** Surface Cover and Thickness: Range Content ΙĎ (ft/ft) (ppm) Log (ft bgs) 136 **ASPHALT** Asphalt CONCRETE Concrete CAR-PDI-AA20A-1.0-1.5 dry fine to medium SAND, (7.5YR 6/3) light brown, medium FILL dense, dry, no odor, no staining. CAR-PDI-AA20A-2.0-2.5 4.5 dry **FILL** ASH, (5Y 5/1) gray, loose, dry, slight petroleum odor, no staining. CAR-PDI-AA20A-4.0-4.5 NR NO RECOVERY fine to medium SAND, some ash, (5Y 5/1) gray, medium 0.0 wet FILL dense, wet, no odor, no staining. CAR-PDI-AA20A-6.0-6.5 FILL SILT, (5Y 5/1) gray, soft, wet, slight petroleum odor and wet 3.5 staining. CAR-PDI-AA20A-8.0-8.5 NO RECOVERY NR CAR-PDI-AA20A-10 0-10 5 0.0 FILL fine to medium silty SAND, some fine gravel, (5YR 4/3) wet reddish brown, medium dense, wet, no odor, no staining. 12 CAR-PDI-AA20A-12.0-12.5 4.5 13 CAR-PDI-AA20A-14.0-14.5 NR NO RECOVERY CAR-PDI-AA20A-15.0-15.5 0.0 FILL fine to medium silty SAND, trace fine gravel, (5YR 4/3) wet reddish brown, medium dense, wet, no odor, no staining. CAR-PDI-AA20A-15 5-16 0 PT dry PEAT (degraded vegetated material), 80% organic fibers, 16 1/ 1/ V 20% organic silt, (5YR 3/3) dark reddish brown, stiff, dry, moderate organic odor, no staining. Soils consistent with 11, 11, 1/ 1/1/ 1 5 1/ 1/ V <u>\\ \\ \\ \\ \\</u> 19 OL Organic SILT, 80% organic SILT, 20% organic fibers, moist (7.5YR 4/2) brown, soft, moist, no odor, no staining. Soils consistent with UNDorg COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits UNDorg - organic undisturbed native deposits bgs - below surface grade MM - meadow mat MGP - manufactured gas plant CCPW - chromate chemical production waste

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: CAR-PDI-BB20A

Page: 1

Project Name: P Project Number: Date Started Drill Date Finished Dri Logged By: ES Physical Location Depth Range (ft bgs) Recovery (ft/ft)	60240 ling: 6 illing:	0739 6/10/2016 6/10/2016	6 9:00:00 AM		Drilling Company: SGS North America Drilling Method: direct push Rig Type: Core Size: 3.0 in Project Manager: Scott Mikaelian	Coordinates (NJSPN Boring Total Depth: Depth to Water: NA	
Date Started Drill Date Finished Dri Logged By: ES Physical Location Depth Range (ft bgs) Recovery (ft/ft)	ling: (illing: n: Act PID (ppm)	6/10/2016 6/10/2016 ual - CAR Moisture	9:00:00 AM		Rig Type: Core Size: 3.0 in	Coordinates (NJSPN Boring Total Depth: Depth to Water: NA	AD83) y: 682749.54 15 ft
Date Finished Dri Logged By: ES Physical Location Depth Range (ft/ft)	illing: n: Act PID (ppm)	6/10/2016 ual - CAR Moisture	9:00:00 AM		Core Size: 3.0 in	Boring Total Depth: Depth to Water: NA	15 ft
Logged By: ES Physical Location Depth Range ff bgs)	n: Act PID (ppm)	ual - CAR Moisture	PDI	<u> </u>		Depth to Water: NA	
Physical Location Depth Range ff bgs) Recovery (ft/ft)	PID (ppm)	Moisture			r ojost managori - cost minasian		
Depth Range (ft/ft)	PID (ppm)	Moisture				Surface Elevation: 1	
4		Content		Graphi Log	Surface Cover and Thic	•	Sample ID
_	0.0		ASPHALT	Log	Asphalt and gravel sub-base		
4							
4			CONCRETE		Concrete		
-3		dry	FILL		fine to medium SAND, little ash, trace of brown, medium dense, dry, no odor, no		
_4		dry	FILL		ASH, little coal, (5Y 4/1) dark gray, loos staining.	se, dry, no odor, no	
			NR		NO RECOVERY		
-5 -6 6 7 5	3.2	moist to wet	FILL		ASH, little wood, trace coal, (5Y 5/1) gr wet, slight petroleum odor, no staining,	ay, loose, moist to water at 6.0 feet.	
-8 -9 -10	207						CAR-PDI-BB20A-10.0-10.5
-11 -12 -13 -13	307	wet	FILL		fine silty SAND, trace fine gravel, (5YR medium dense, wet, strong petroleum of sheen.		CAR-PU-BB2UA-10.0-10.5
_ _14			NR	****	NO RECOVERY		
15							
lotes:							
gs - below surface of the surface of		GGM - gree	en grey mud		esidue UNDno - non-organic undisturbed native UNDorg - organic undisturbed native deply present in any interval of this boring.	deposits MGP - manu posits CCPW - chr	ıfactured gas plant omate chemical production wa

Boring ID: CAR-PDI-CC20A

Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Coordinates (NJSPNAD83) x: 611393.78 Drilling Method: direct push Date Started Drilling: 6/10/2016 9:10:00 AM Rig Type: Coordinates (NJSPNAD83) y: 682735.13 Date Finished Drilling: 6/10/2016 9:45:00 AM Core Size: 3.0 in Boring Total Depth: 15 ft Depth to Water: NA Logged By: ES Project Manager: Scott Mikaelian Physical Location: Actual - CAR PDI Surface Elevation: 10.1 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 and gravel sub-base dry **FILL** fine to medium SAND, some fine gravel, (7.5YR 4/2) brown, medium dense, dry, no odor, no staining. 3.5 NR NO RECOVERY 12.2 moist **FILL** fine to coarse SAND, some fine to medium gravel, (5Y 5/1) gray, moist to wet, slight petroleum odor and staining, water to wet at 6.0 feet. FILL fine silty SAND, little fine gravel, (5YR 4/3) reddish brown, wet 3 medium dense, wet, no odor, no staining. NO RECOVERY NR CAR-PDI-CC20A-10 0-10 5 1.4 FILL fine silty SAND, little fine gravel, (5YR 4/3) reddish brown, wet medium dense, wet, no odor, no staining. 12 CAR-PDI-CC20A-12.0-12.5 5 CAR-PDI-CC20A-12.5-13.0 dry PT PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (5YR 3/3) dark reddish brown, stiff, dry, CAR-PDI-CC20A-13.0-13.5 OL moist slight petroleum odor, no staining. Soils consistent with MM. Organic SILT, 80% organic silt, 20% organic fibers, (7.5YR 4/2) brown, soft, moist, slight organic odor, no staining. Soils consistent with UNDorg. NR NO RECOVERY 15

2012-09 RA PPG LOGS A.GDT - 9/20/16 16:54

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

MGP - manufactured gas plant CCPW - chromate chemical production waste

Boring ID: CAR-PDI-CC21A

	Number: arted Drill			0:30:00 AM		Drilling Method: direct push Rig Type:	Coordinates (NJSPN Coordinates (NJSPN														
				11:30:00 AM		Core Size: 3.0 in	Boring Total Depth:														
	By: ES					Project Manager: Scott Mikaelian	Depth to Water: NA														
Physica	al Locatio	n: Act	ual - CAR I	PDI		+	Surface Elevation: 1	0.7 ft NAVD88													
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphi Log	c Surface Cover and Thickn	ness:	Sample ID													
-		0.0		ASPHALT		Asphalt and gravel sub-base															
-1			moist	FILL		fine to medium SAND, little wood, trace a medium dense, moist, no odor, no stainin															
-3 -	4.5		moist	FILL		fine to medium SAND, (7.5YR 6/3) light be dense, moist, no odor, no staining.	orown, medium	CAR-PDI-CC21A-2.0-2.5													
-4			moist	FILL		ASH, trace metal, (5Y 4/1) dark gray, loos	se, moist, no odor,	CAR-PDI-CC21A-4.0-4.5													
\dashv				NR	*xxxx	no staining.															
-5 -6 -		0.0	0.0	wet	FILL		NO RECOVERY ASH, some fine to medium sand, trace w loose, wet, no odor, no staining, water at	ood, (5Y 5/1) gray, 5.0 feet.													
-7— - -8—	3.5		wet	FILL		fine to medium silty SAND, some gravel, 4/3) reddish brown, medium dense, wet, staining.		CAR-PDI-CC21A-8.0-8.5													
-9-				NR	××××	NO RECOVERY															
-10 - -11		0.0	0.0	0.0	wet	FILL		fine to medium silty SAND, some fine graredish brown, dense, wet, no odor, no st													
														<u> </u>			CAR-PDI-CC21A-11.0-11.5 CAR-PDI-CC21A-11.5-12.0				
-12	4												-	-		dry	PT	<u> </u>	20% organic silt, (5YR 3/3) dark reddish l	brown, stiff, dry, sistent with MM.	OAR-FUI-002 IA-11.5-1.
-13 -																	moist	OL		Organic SILT, 80% organic SILT, 20% or 5/1) gray, soft, moist, no odor, no staining with UNDorg.	
-14 - -15				NR		NO RECOVERY															
	ow surface adow mat		COPR - chr GGM - gree		essing re	esidue UNDno - non-organic undisturbed native d UNDorg - organic undisturbed native depo	eposits MGP - manu	factured gas plant omate chemical production wa													

Boring ID: CAR-PDI-DD20A

Page: 1

	Name: F Number:					Drilling Company: SGS North America Drilling Method: direct push	Coordinates (N ISD	NAD83) x: 611415.46
				9:40:00 AM		Rig Type:		NAD83) y: 682721.33
				3.40.00 AW 3 10:40:00 AW		Core Size: 3.0 in	Boring Total Depth:	
	By: ES	y.	J/ 1J/2010	, 10.70.00 AIV		Project Manager: Scott Mikaelian	Depth to Water: N/	
		n. Acti	ual - CAR I	PDI		1 Toject manager. Ocott Windellan	Surface Elevation:	
	5041101	/101	ا ۱۸۱۸	וכ			Juliace Lievation.	10.7 10147.00 000
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphi Log	c Surface Cover and Th	ickness:	Sample ID
		23.0	dry	ASPHALT		Asphalt and gravel sub-base.		
-1 - -2			dry	FILL		fine to medium SAND, little ash, trace black, dense, dry, slight solvent odor,		
-3 -4	5							CAR-PDI-DD20A-4.0-4.5
-5 		3.0	wet	FILL		ASH, some fine to medium sand, (5Y dense, wet, slight solvent odor, no sta	7 5/1) gray, medium aining, water at 5.0 feet.	_
						8		CAR-PDI-DD20A-6.0-6.5
-7-			wet	FILL		SILT, (5Y 5/1) gray, soft, wet, no odo		_
-8-	3.5		wet	FILL		fine silty SAND, some fine gravel, (5\ medium dense, wet, no odor, no stair		CAR-PDI-DD20A-8.0-8.5
-9				NR	XXXX	NO RECOVERY		-
-10 -11 		5.0	wet	FILL		fine to medium silty SAND, little fine (5YR 4/4) reddish brown, medium de odor and black staining.	gravel, trace wood, nse, wet, slight solvent	CAR-PDI-DD20A-10.0-10.5
-12	15				\bowtie			CAR-PDI-DD20A-12.0-12.5
\dashv	4.5				\bowtie	8		CAR-PDI-DD20A-12.5-13.0
-13 - -14			dry	PT	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	20% organic silt, (5YR 3/3) dark redd	ish brown, stiff, dry,	CAR-PDI-DD20A-13.0-13.5
-15 -				NR		NO RECOVERY		1
ĬM - mea	adow mat		GGM - gree	n grey mud		esidue UNDno - non-organic undisturbed native out of thick 3) No CCPW (COPR or GGM) present in any interval of this	leposits CCPW - ch	ufactured gas plant romate chemical production wa

Boring ID: CAR-PDI-DD21A

	lame: F					Drilling Company: SGS North America	0	MADON 0111010=
Project N						Drilling Method: direct push	1	NAD83) x: 611401.67
				10:45:00 AM		Rig Type:		IAD83) y: 682689.25
		illing:	6/13/2016	6 11:45:00 AM		Core Size: 3.0 in	Boring Total Depth:	
ogged E						Project Manager: Scott Mikaelian	Depth to Water: NA	
Physical	Location	n: Act	ual - CAR	PDI			Surface Elevation:	10.7 ft NAVD88
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphi Log	Surface Cover and Thic	kness:	Sample ID
_		0.0		ASPHALT		Asphalt and gravel sub-base.		
-1-				CONCRETE		Concrete		
-2- - -3-	4.5		dry	FILL		fine to coarse SAND, little fine to mediu (7.5YR 2.5/1) black, medium dense, dr staining.		CAR-PDI-DD21A-1.5-2.0
-4-			moist	FILL		fine silty SAND, little coal, trace ash, (7 medium dense, moist, no odor, no stair		CAR-PDI-DD21A-3.5-4.0
\dashv				NR	~~~	NO RECOVERY		1
-5-		10.0	moist	FILL		ASH, some fine gravel, little fine to med	lium cand (5VD	-
\dashv		10.0	to	FILL		2.5/1) black, loose, moist to wet, slight		CAR-PDI-DD21A-5.5-6.0
-6- - -7- -	5		wet wet	FILL		staining, water at 6.0 feet. fine to medium silty SAND, some fine g wood, (5YR 2.5/1) black, medium dens MGP-like odor, product staining.	gravel, little ash, trace e, wet, strong	
-8- - -9- -	3							CAR-PDI-DD21A-7.5-8.0 CAR-PDI-DD21A-9.5-10.0
-10 -11 -12		8.0	wet	FILL		SILT, little organics, (7.5YR 4/3) brown MGP-like odor, product staining.	, soft, wet, strong	CAR-PDI-DD21A-11.5-12.0
13	5		wet	FILL		fine silty SAND, little fine gravel, (5YR amedium dense, wet, slight MGP-like od		
					XXX			CAR-PDI-DD21A-13.5-14.0
-14 - -15			dry	РТ	<u>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</u>	1 27 tr (dogradou rogotatou matemar), o	h brown, stiff, dry, no	CAR-PDI-DD21A-14.0-14.5
otes: gs - belov IM - mead				romite ore proce	essing re	esidue UNDno - non-organic undisturbed native UNDorg - organic undisturbed native de		ufactured gas plant
						ft thick 3) No CCPW (COPR or GGM) present in any interval of this bo		omate onemical production wa

A E C O M

Boring ID: CAR-PDI-EE20A

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: 611431.85 Date Started Drilling: 6/14/2016 7:50:00 AM Rig Type: Coordinates (NJSPNAD83) y: 682699.37 Date Finished Drilling: 6/14/2016 8:55:00 AM Core Size: 3.0 in Boring Total Depth: 20 ft Depth to Water: NA Logged By: HBB Project Manager: Scott Mikaelian Physical Location: Actual - CAR PDI Surface Elevation: 10.7 ft NAVD88 Depth Recovery PID Moisture Graphic Sample **USCS** Surface Cover and Thickness: Range ΙĎ (ft/ft) (ppm) Content Log (ft bgs) 19.0 **ASPHALT** Asphalt and gravel sub-base CAR-PDI-EE20A-0.3-0.8 fine GRAVEL, some medium to coarse sand, trace ash and dry FILL to fill debris, (7.5YR 4/2) brown, medium dense, dry to moist, moist no odor, no staining. CAR-PDI-EE20A-2.0-2.5 4.5 CAR-PDI-EE20A-4.0-4.5 FILL moist fine silty SAND, trace fine gravel, (7.5YR 4/2) brown, medium dense, moist, no odor, no staining, slight NR gasoline-like odor, no staining. 60.5 wet **FILL** NO RECOVERY medium to coarse SAND, little silt, trace fine gravel, cinders and fill debris, (5YR 2.5/1) black, medium dense, moderate CAR-PDI-EE20A-6.0-6.5 gasoline-like odor, no staining, water at 5.0 feet. 3.5 CAR-PDI-EE20A-8.0-8.5 **FILL** fine to medium sandy SILT, (7.5YR 4/2) brown, soft, saturated saturated, no staining, slight gasoline-like odor, no staining. NR NO RECOVERY CAR-PDI-FF20A-10 0-10 5 0.2 FILL fine to medium sandy SILT, trace fine gravel and organics, saturated (7.5YR 4/2) brown, medium dense, saturated, no odor, no 12 CAR-PDI-EE20A-12.0-12.5 4.5 13 CAR-PDI-EE20A-14.0-14.5 NO RECOVERY NR CAR-PDI-EE20A-15.0-15.5 0.0 FILL SILT, trace coal, (7.5YR 4/2) brown, medium stiff, wet, slight wet organic odor, no staining. CAR-PDI-FF20A-15 5-16 0 PT dry PEAT (degraded vegetated material), 90% organic fibers, 16 1/ 1/1/ V 10% organic silt, (5YR 3/3) dark reddish brown, stiff, dry, moderate organic odor, no staining. Soils consistent with 11, 11, 1/ 1/1/ 1 Organic SILT, 90% organic silt, 10% organic fibers, (5Y 5/1) moist OL gray, stiff, moist, slight organic odor, no staining. Soils consistent with UNDno. 19 NO RECOVERY NR 20

Notes

A.GDT - 9/20/16

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: CAR-PDI-EE21A

Drainat N.		PG Ga				Drilling Company: SGS North America	Coordinates (N ICE	NA DQ2) v. 611420 42
Project Nu				1.20.00 414		Drilling Method: direct push		NAD83) x: 611430.42
				1:30:00 AM		Rig Type:		NAD83) y: 682677.6
		ıııng:	0///2016	12:30:00 PM		Core Size: 3.0 in	Boring Total Depth:	
ogged B		a. A	ual - CAR F	וח		Project Manager: Scott Mikaelian	Depth to Water: N Surface Elevation:	Α 10 / ft ΝΔ\/D99
-	Location	i. ACT	uai - CAK I	וט			Junace Elevation:	10.4 II IVAVD00
Depth Range ft bgs)	ecovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphi Log	Surface Cover and T	hickness:	Sample ID
-		0.0		ASPHALT		ASPHALT and gravel sub-base.		
-1 -2 	3		dry	FILL		fine to medium SAND, some fine to 6/3) light reddish brown, medium de staining.	medium gravel, (5YR nse, dry, no odor, no	
-3 -4 -		•		NR	·×××	NO RECOVERY		
-5 		11.7	wet	FILL		fine to coarse SAND, some fine graveddish brown, medium dense, wet, product staining, water at 6.0 feet by	slight petroleum odor,	_
-7	3		wet	FILL		SILT, (5Y 2.5/1) black, soft, wet, slig product staining.	ght petroleum odor,	_
-8 -9				NR		NO RECOVERY		
10		0.0	wet	FILL		fine silty SAND, some fine gravel, (5 medium dense, wet, no odor, no sta		CAR-PDI-EE21A-10.5-11.0
-11			dry	PT		PEAT (degraded vegetated material) 20% organic silt, (5YR 3/2) dark red), 80% organic fibers, dish brown, stiff, dry,	CAR-PDI-EE21A-11.0-11.5
-12 - -13	3.5				<u> </u>	MM.	COIS CONSISTENT WITH	
-14 				NR		NO RECOVERY		
-15 								
1M - meado	ow mat		GGM - gree	n grey mud		esidue UNDno - non-organic undisturbed na UNDorg - organic undisturbed native ft thick 3) No CCPW (COPR or GGM) present in any interval of th	deposits CCPW - ch	nufactured gas plant nromate chemical production w

Boring ID: CAR-PDI-EE22A

	: Name: ⊢ : Number:		rfield Ave			Drilling Company: SGS North America Drilling Method: direct push	Coordinates (NJSPN	AD83) v. 611421.8										
				10:25:00 AM		Rig Type:	Coordinates (NJSPN/											
				3 11:15:00 AM		Core Size: 3.0 in	Boring Total Depth:											
	By: ES					Project Manager: Scott Mikaelian	Depth to Water: NA											
		n: Act	ual - CAR I	PDI			Surface Elevation: 9	.8 ft NAVD88										
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphi Log	Surface Cover and Thickn	ess:	Sample ID										
_		0.5		ASPHALT		Asphalt and gravel sub-base.												
-1— _				CONCRETE		Concrete												
-2	4.5		dry	FILL		fine to medium SAND, little fine gravel, (7 medium dense, dry, no odor, no staining.	ŕ											
-3 - -4			dry to moist	FILL		ASH, (5Y 5/1) gray, loose, dry to moist, n	o odor, no staining.											
				NR		NO RECOVERY												
-5 		0.3	moist	FILL		ASH, (5Y 4/1) dark gray, loose, moist, no	odor, no staining.											
-6- -			moist	FILL		SILT, (7.5YR 3/3) dark brown, soft, moist staining.	no odor, no											
-7-	,		wet	FILL		fine to medium silty SAND, trace fine grav	vel, (5YR 4/3)	CAR-PDI-EE22A-7.0-7.5										
-8 -9	2			NR	KXXXX	reddish brown, medium dense, wet, no od water at 7.0 feet. NO RECOVERY	dor, no staining,											
-10 - -11		0.0	wet	FILL		fine to medium silty SAND, little fine grave reddish brown, medium dense, wet, no or		CAR-PDI-EE22A-11.0-11.5										
-12 -	5																	CAR-PDI-EE22A-12.7-13.2
-13					\bowtie			CAR-PDI-EE22A-12.7-13.2										
_ -14 			dry	PT	<u> </u>	20% organic silt, (5YR 3/3) dark reddish l	brown, stiff, dry, no											
-15					<u> </u>													
⁄M - me	adow mat		GGM - gree	n grey mud		esidue UNDno - non-organic undisturbed native d UNDorg - organic undisturbed native depos ft thick 3) No CCPW (COPR or GGM) present in any interval of this boring	sits CCPW - chro	factured gas plant omate chemical production wa										

Boring ID: CAR-PDI-FF21A

Range (ft/ft) ((ff ft bgs) (ft/ft) ((ff ft bgs) (ft/ft) (ff ft/ft)	ng: (lling:	6/7/2016 10 6/7/2016	11:20:00 AM		Drilling Method: direct push Rig Type: Core Size: 3.0 in Boring Total Depth: Project Manager: Scott Mikaelian Surface Cover and Thickness: ASPHALT and gravel sub-base. fine to medium SAND, little coal fragments, trace ash and wood, (7.5YR 3/2) dark brown, medium dense, dry to moist, no odor, no staining. NO RECOVERY fine to medium Gravel, (5Y 5/1) gray, medium dense, dry, no odor, no staining. NO redian Gravel, (5Y 5/1) gray, medium dense, dry, no odor, no staining. NO RECOVERY fine silty SAND, some fine to medium gravel, (5YR 4/3) reddish brown, medium dense, wet to saturated, slight petroleum odor, product staining, water at 6.0 feet bgs. NO RECOVERY fine silty SAND, some fine gravel, (5YR 4/3) reddish brown, medium dense, wet, no odor, no staining, light sheen.	AD83) y: 682658.75 20 ft
Date Finished Drill Logged By: ES Physical Location: Depth Range Recovery (ft/ft) -1	: Act PID (ppm) 0.0	dry dry wet to saturated	DI USCS ASPHALT FILL NR FILL NR	Graphic	Project Manager: Scott Mikaelian Surface Elevation: S Surface Cover and Thickness: ASPHALT and gravel sub-base. fine to medium SAND, little coal fragments, trace ash and wood, (7.5YR 3/2) dark brown, medium dense, dry to moist, no odor, no staining. NO RECOVERY fine to medium Gravel, (5Y 5/1) gray, medium dense, dry, no odor, no staining. fine silty SAND, some fine to medium gravel, (5YR 4/3) reddish brown, medium dense, wet to saturated, slight petroleum odor, product staining, water at 6.0 feet bgs. NO RECOVERY fine silty SAND, some fine gravel, (5YR 4/3) reddish brown,	2.8 ft NAVD88 Sample ID CAR-PDI-FF21A-0.7-1.2 CAR-PDI-FF21A-2.0-2.5 CAR-PDI-FF21A-6.0-6.5 CAR-PDI-FF21A-8.0-8.5
	PID (ppm) 0.0	dry to moist dry to saturated	USCS ASPHALT FILL NR FILL NR	Graphic	Project Manager: Scott Mikaelian Surface Elevation: 9 Surface Elevation: 9 Surface Cover and Thickness: ASPHALT and gravel sub-base. fine to medium SAND, little coal fragments, trace ash and wood, (7.5YR 3/2) dark brown, medium dense, dry to moist, no odor, no staining. NO RECOVERY fine to medium Gravel, (5Y 5/1) gray, medium dense, dry, no odor, no staining. fine silty SAND, some fine to medium gravel, (5YR 4/3) reddish brown, medium dense, wet to saturated, slight petroleum odor, product staining, water at 6.0 feet bgs. NO RECOVERY fine silty SAND, some fine gravel, (5YR 4/3) reddish brown,	2.8 ft NAVD88 Sample ID CAR-PDI-FF21A-0.7-1.2 CAR-PDI-FF21A-2.0-2.5 CAR-PDI-FF21A-6.0-6.5 CAR-PDI-FF21A-8.0-8.5
Depth Range ft bgs) Recovery (ft/ft) (property ft bgs) Recovery (prope	PID (ppm) 0.0	dry to moist dry to saturated	USCS ASPHALT FILL NR FILL NR		Surface Cover and Thickness: ASPHALT and gravel sub-base. fine to medium SAND, little coal fragments, trace ash and wood, (7.5YR 3/2) dark brown, medium dense, dry to moist, no odor, no staining. NO RECOVERY fine to medium Gravel, (5Y 5/1) gray, medium dense, dry, no odor, no staining. fine silty SAND, some fine to medium gravel, (5YR 4/3) reddish brown, medium dense, wet to saturated, slight petroleum odor, product staining, water at 6.0 feet bgs. NO RECOVERY fine silty SAND, some fine gravel, (5YR 4/3) reddish brown,	Sample ID CAR-PDI-FF21A-0.7-1.2 CAR-PDI-FF21A-2.0-2.5 CAR-PDI-FF21A-4.0-4.5 CAR-PDI-FF21A-6.0-6.5
Range (ft/ft) (ft bgs) (ft/ft) (ft bgs) (ft/ft) (ft ft bgs) (ft/ft) (ft ft ft bgs) (ft/ft) (ft ft f	(ppm) 0.0	dry to moist dry to saturated	ASPHALT FILL NR FILL NR		ASPHALT and gravel sub-base. fine to medium SAND, little coal fragments, trace ash and wood, (7.5YR 3/2) dark brown, medium dense, dry to moist, no odor, no staining. NO RECOVERY fine to medium Gravel, (5Y 5/1) gray, medium dense, dry, no odor, no staining. fine silty SAND, some fine to medium gravel, (5YR 4/3) reddish brown, medium dense, wet to saturated, slight petroleum odor, product staining, water at 6.0 feet bgs. NO RECOVERY fine silty SAND, some fine gravel, (5YR 4/3) reddish brown,	CAR-PDI-FF21A-0.7-1.2 CAR-PDI-FF21A-2.0-2.5 CAR-PDI-FF21A-4.0-4.5 CAR-PDI-FF21A-6.0-6.5
-1	6.7	dry wet to saturated	NR FILL FILL		fine to medium SAND, little coal fragments, trace ash and wood, (7.5YR 3/2) dark brown, medium dense, dry to moist, no odor, no staining. NO RECOVERY fine to medium Gravel, (5Y 5/1) gray, medium dense, dry, no odor, no staining. fine silty SAND, some fine to medium gravel, (5YR 4/3) reddish brown, medium dense, wet to saturated, slight petroleum odor, product staining, water at 6.0 feet bgs. NO RECOVERY fine silty SAND, some fine gravel, (5YR 4/3) reddish brown,	CAR-PDI-FF21A-4.0-4.5 CAR-PDI-FF21A-6.0-6.5 CAR-PDI-FF21A-8.0-8.5
- 4.5 -3 - 4		dry wet to saturated	NR FILL FILL		wood, (7.5YR 3/2) dark brown, medium dense, dry to moist, no odor, no staining. NO RECOVERY fine to medium Gravel, (5Y 5/1) gray, medium dense, dry, no odor, no staining. fine silty SAND, some fine to medium gravel, (5YR 4/3) reddish brown, medium dense, wet to saturated, slight petroleum odor, product staining, water at 6.0 feet bgs. NO RECOVERY fine silty SAND, some fine gravel, (5YR 4/3) reddish brown,	CAR-PDI-FF21A-4.0-4.5 CAR-PDI-FF21A-6.0-6.5 CAR-PDI-FF21A-8.0-8.5
- 4.5 -3 - 4.5 -4		wet to saturated	FILL FILL NR		fine to medium Gravel, (5Y 5/1) gray, medium dense, dry, no odor, no staining. fine silty SAND, some fine to medium gravel, (5YR 4/3) reddish brown, medium dense, wet to saturated, slight petroleum odor, product staining, water at 6.0 feet bgs. NO RECOVERY fine silty SAND, some fine gravel, (5YR 4/3) reddish brown,	CAR-PDI-FF21A-4.0-4.5 CAR-PDI-FF21A-6.0-6.5 CAR-PDI-FF21A-8.0-8.5
-6		wet to saturated	FILL FILL NR		fine to medium Gravel, (5Y 5/1) gray, medium dense, dry, no odor, no staining. fine silty SAND, some fine to medium gravel, (5YR 4/3) reddish brown, medium dense, wet to saturated, slight petroleum odor, product staining, water at 6.0 feet bgs. NO RECOVERY fine silty SAND, some fine gravel, (5YR 4/3) reddish brown,	CAR-PDI-FF21A-8.0-8.5
-6		wet to saturated	FILL FILL NR		fine to medium Gravel, (5Y 5/1) gray, medium dense, dry, no odor, no staining. fine silty SAND, some fine to medium gravel, (5YR 4/3) reddish brown, medium dense, wet to saturated, slight petroleum odor, product staining, water at 6.0 feet bgs. NO RECOVERY fine silty SAND, some fine gravel, (5YR 4/3) reddish brown,	CAR-PDI-FF21A-8.0-8.5
-7 - 3.5 -8	0.0	to saturated	NR		reddish brown, medium dense, wet to saturated, slight petroleum odor, product staining, water at 6.0 feet bgs. NO RECOVERY fine silty SAND, some fine gravel, (5YR 4/3) reddish brown,	CAR-PDI-FF21A-8.0-8.5
-10 -11 -11 -12 -13 -14 -14 -15 -15	0.0	wet			fine silty SAND, some fine gravel, (5YR 4/3) reddish brown,	
-10 -11- -12- -13- -14- -15- -15-	0.0	wet	FILL			CAR-PDI-FF21A-10.0-10.5
-11	0.0	wet	TILL			
4 -13 -14 -15						
-14 -15 						CAR-PDI-FF21A-12.0-12.5
15						CAR-PDI-FF21A-13.0-13.5
15		dry	PT	<u> </u>	PEAT (degraded vegetated material), 80% organic fibers,	CAR-PDI-FF21A-13.5-14.0
			NR		20% organic silt, (5YR 4/3) reddish brown, medium stiff, dry, slight organic odor, no staining. Soils consistent with MM. NO RECOVERY	
7	0.0	dry	PT	71/ 71/ 71/ 71/ 71/ 71/	20% organic silt, (5YR 3/2) dark reddish brown, stiff, dry,	
3		moist	OL		Organic SILT, 80% organic SILT, 20% organic fibers, (7.5YR 4/2) brown, soft, moist, no odor, no staining. Soils consistent with UNDorg.	
18			NR		NO RECOVERY	
-19 -						
20						
otes: gs - below surface gra		COPR - chr GGM - gree		cessing re		ufactured gas plant omate chemical production w

Boring ID: CAR-PDI-GG21A

	Name: F					Drilling Company: SGS North America Drilling Method: direct push	Coordinates (N ISE	PNAD83) x: 611484.23
			6/7/2016 9:	15:00 ΔΜ		Rig Type:		NAD83) y: 682649.09
Date Si	niched Dr	illina:	6/7/2010 9.	0:15:00 AM		Core Size: 3.0 in	Boring Total Depth	
	IBy: ES	iiiiig.	0///2010	0.13.00 AW		Project Manager: Scott Mikaelian	Depth to Water: N	
		n: ^a+	ual CAD F	וחפ		Froject wanager: Scott Mikaelian		
riysica	ai FOCATIO	ıı. ACT	ual - CAR F	וט			Surface Elevation:	9.1 IL INAVDÖÖ
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphi Log	Surface Cover and Thio	ckness:	Sample ID
-1 -1 -2	4.5	0.0	dry to moist	FILL		fine to medium SAND, little ash, little to trace wood and ceramics, (7.5YR 3/3) dense, dry to moist, no odor, no stainir	dark brown, medium	CAR-PDI-GG21A-0.0-0.5
-3 -4								CAR-PDI-GG21A-4.0-4.5
_ 7				NR		NO RECOVERY		
-5 6 -7 	4	0.0	moist to wet	FILL		fine silty SAND, little fine gravel, trace brown, medium dense, moist to wet, no water at 6.0 feet bgs.	ash, (7.5YR 4/2) o odor, no staining,	CAR-PDI-GG21A-6.0-6.5
-8 -9 -				NR		NO RECOVERY		CAR-PDI-GG21A-8.0-8.5
10		0.0	wet	FILL		fine silty SAND, trace fine to medium or reddish brown, medium dense, wet, no		CAR-PDI-GG21A-10.0-10.5
-12	5							CAR-PDI-GG21A-12.0-12.5
-13						8		CAR-PDI-GG21A-13.0-13.5
-14 -14			dry	PT	\(\lambda \lambda \lambd	l slight organic odor no staining Soils o	sh brown, stiff, dry,	CAR-PDI-GG21A-13.5-14.0
1M - me	adow mat		GGM - greer	n grey mud		esidue UNDno - non-organic undisturbed native UNDorg - organic undisturbed native de	posits CCPW - ch	nufactured gas plant nromate chemical production wa

A E C O M

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: CAR-PDI-GG22A

	t Number: tarted Dril		6/9/2016 9:	00:00 AM		Drilling Method: direct push Rig Type:		IAD83) x: 611470.04 AD83) y: 682631.79
				9:30:00 AM		Core Size: 3.0 in	Boring Total Depth:	
ogge	d By: ES					Project Manager: Scott Mikaelian	Depth to Water: NA	
Physic	al Locatio	n: Act	ual - CAR F	PDI		,	Surface Elevation: 9	9.2 ft NAVD88
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickne	ess:	Sample ID
		0.0		ASPHALT		Asphalt and gravel sub-base.		
-1— -2— -3—	4		dry	FILL		fine to medium SAND, little fine gravel and ash, (5YR 4/3) reddish brown, medium de no staining	d concrete, trace ense, dry, no odor,	CAR-PDI-GG22A-1.0-1.5
_					\bowtie			O/11(1 D1 0022/1 0.0 0.0
_1			dry	FILL	\bowtie	ASH, (2.5Y 5/2) grayish brown, loose, dry	, no odor, no	
-				NR		staining. NO RECOVERY	/	
-5 - -6		0.0	dry	FILL		ASH, some fine to medium sand, little coablack, loose, dry, no odor, no staining.	al, (5YR 2.5/1)	CAR-PDI-GG22A-5.0-5.5
-7 -8	4.5		moist to wet	FILL		fine to medium silty SAND, some fine graves 4/1) dark gray, medium dense, moist to we staining, water at 7.0 feet.		CAR-PDI-GG22A-7.0-7.5
-9- - -				NR		NO RECOVERY		CAR-PDI-GG22A-9.0-9.5
-10		0.0	wet	FILL	XXXX	fine to medium silty SAND, some fine gra	rel (EVD 4/2)	
-11 -12 -13	3.5					reddish brown, medium dense, wet, no od		CAR-PDI-GG22A-11.0-11.9
_ _1 <i>4</i>				NR		NO RECOVERY		
- -								
-15 -16 -17		5.0	wet	FILL		fine to medium silty SAND, some fine grave black, medium dense, wet, slight MGP like staining.	vel, (5Y 2.5/1) e odor and black	CAR-PDI-GG22A-15.0-15.8
-17 - -18	5							CAR-PDI-GG22A-17.0-17.8
–19 –			saturated	FILL		fine to coarse Gravel, (5Y 2.5/1) black, loc moderate MGP-like odor, product soaked.		CAR-PDI-GG22A-19.0-19.
-20 -	. 1	5.0	saturated	FILL		fine to coarse Gravel, (5Y 2.5/1) black, loc moderate MGP-like odor, product soaked.		CAR-PDI-GG22A-20.0-20.5
–21 – –	-			NR		NO RECOVERY		
им - me	eadow mat		GGM - gree	n grey mud		esidue UNDno - non-organic undisturbed native de UNDorg - organic undisturbed native depos present in any interval of this boring.	eposits MGP - manu its CCPW - chr	factured gas plant omium chemical production w

Boring ID: CAR-PDI-GG22A

Page: 2

	t Name: _					Orilling Company: SGS North America		raye. 2
	t Number:					Drilling Method: direct push		NAD83) x: 611470.04
				:00:00 AM		Rig Type:		IAD83) y: 682631.79
	inished Dr d By : ES		6/9/2016	9:30:00 AM		Core Size: 3.0 in Project Manager: Scott Mikaelian	Boring Total Depth: Depth to Water: NA	Π CΣ
			ual - CAR	PDI	IF	Toject Manager. Scott Mikaelian	Deptil to water. INF	1
			dai Ortic					
Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickn	ess:	Sample ID
 23 -								
24 								
25 -								
Notes								
Notes: bgs - be MM - me	low surface	grade	COPR - chr	romite ore proc	essing re	sidue UNDno - non-organic undisturbed native du UNDorg - organic undisturbed native depor	eposits MGP - man	ufactured gas plant romate chemical production waste

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

MM - meadow mat GGM - green grey mud UNDorg - organic undisturbed native deposits CCPW - chromate chemical production waste

Boring ID: CAR-PDI-GG23A

	t Name: F t Number:					rilling Company: SGS North America rilling Method: direct push	Coordinates (N.ISP)	NAD83) x: 611448.17
				9:15:00 AM		ig Type:		IAD83) y: 682604.15
				10:15:00 AM		ore Size: 3.0 in	Boring Total Depth:	
	d By: HBE		0/14/2010	10.10.0074		roject Manager: Scott Mikaelian	Depth to Water: NA	
			ual - CAR F	PDI				
th	_	DID						
ge gs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thic	kness:	Sample ID
		0.0	moist	FILL		fine to medium SAND, little fine to med		CAR-PDI-GG23A-0.0-0.5
_			moist	FILL		4/3) brown, medium dense, moist, no of fine to medium SAND, trace fine gravel 4/2) brown, medium dense, moist, no of the first province of the first provi	and brick, (7.5YR	
_	4.5		moist	FILL		ASH, trace cinders and fill debris, (5Y 5 dense, moist, no odor, no staining.	5/1) gray, medium	CAR-PDI-GG23A-2.0-2.5
_			moist	FILL		SILT, little fine sand, (7.5YR 4/3) brown moist, no odor, no staining.	n, medium dense,	CAR-PDI-GG23A-4.0-4.5
		0.0	wot	NR FILL		NO RECOVERY		
_		0.0	wet	FILL		SILT, trace fine sand, (7.5YR 4/2) brown o staining, water at 6.0 feet.	ni, soit, wet, no odor,	
_	3.5							CAR-PDI-GG23A-6.0-6.5
	0.0							CAR-PDI-GG23A-8.0-8.5
_				NR	*****	NO RECOVERY		
_		0.0	saturated	FILL		fine sandy SILT, little fine gravel, (7.5YI	R 4/2) brown.	CAR-PDI-GG23A-10.0-10.5
_	3		dry	PT	77 77 7 77 77 7 77 77 7	medium dense, saturated, no odor, no s PEAT (degraded vegetated material), 9t 10% organic silt, (5YR 3/2) dark reddist moderate organic odor, no staining. Soi MM.	staining. 0% organic fibers, h brown, stiff, dry,	CAR-PDI-GG23A-10.5-11.0
_				NR		NO RECOVERY		
	low surface	grade	COPR - chro	omite ore proc	cessing res	idue UNDno - non-organic undisturbed native UNDorg - organic undisturbed native der	deposits MGP - manu	ufactured gas plant

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

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: CAR-PDI-X19A

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: 611268.1 Project Number: 60240739 Drilling Method: direct push Date Started Drilling: 6/15/2016 8:25:00 AM Rig Type: Coordinates (NJSPNAD83) y: 682823.83 Date Finished Drilling: 6/15/2016 9:30:00 AM Core Size: 3.0 in Boring Total Depth: 20 ft Logged By: ES Project Manager: Scott Mikaelian Depth to Water: NA Physical Location: Actual - HSN PDI Surface Elevation: 11.8 ft NAVD88 Depth PID Recovery Moisture Graphic Sample **USCS** Surface Cover and Thickness: Range Content ΙĎ (ft/ft) (ppm) Log (ft bgs) 0.0 **FILL** Asphalt and gravel sub-base. FILL GGM (100%), (5Y 5/1) gray, soft, moist, no odor, green moist staining. 5 FILL CINDERS, some ash, (5Y 2.5/1) black, dense, dry, no odor, drv no staining. **FILL** GGM (100%), (5Y 5/1) gray, soft, moist, no odor, green moist staining. FILL moist fine to coarse SAND, some medium gravel, trace coal, (5Y 5/1) gray, medium dense, moist, no odor, green staining. 0.0 wet FILL fine to medium gravel, little fine to medium sand, (2.5Y 4/1) dark gray, medium dense, wet, no odor, no staining, water at 5.0 feet FILL wet GGM (100%), (5Y 5/1) gray, soft, wet, no odor, green staining. 5 CAR-PDI-X19A-10 0-10 5 60.0 FILL wet fine to medium GRAVEL, trace wood, (5Y 2.5/1) black, medium dense, wet, strong MGP-like odor and staining. FILL SILT, little fine gravel, (5YR 4/4) reddish brown, soft, wet, wet 12 strong MGP-like odor, product soaked. CAR-PDI-X19A-12.0-12.5 4.5 13 CAR-PDI-X19A-14.0-14.5 NO RECOVERY NR 60.0 FILL SILT, little fine gravel, (7.5YR 4/3) brown, soft, wet, strong wet MGP-like odor, product soaked. 16 CAR-PDI-X19A-16.0-16.5 wet **FILL** fine silty SAND, little fine gravel, (5YR 4/4) reddish brown, medium dense, wet, moderate MGP-like odor, product staining.

2012-09 RA PPG LOGS

5

bgs - below surface grade MM - meadow mat

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

moist

PT

1/ 1/1/ V

11, 11, 1/ 1/1/ 1

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

PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (5YR 3/3) dark reddish brown, stiff, moist,

slight MGP-like odor, no staining. Soils consistent with MM.

MGP - manufactured gas plant CCPW - chromate chemical production waste

CAR-PDI-X19A-17.5-18.0

CAR-PDI-X19A-18.0-18.5

A.GDT - 10/14/16 10:

19

20

A E C O M

Boring ID: CAR-PDI-Y19A

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: 611302.26 Project Number: 60240739 Drilling Method: direct push Date Started Drilling: 6/15/2016 10:25:00 AM Rig Type: Coordinates (NJSPNAD83) y: 682817.9 Date Finished Drilling: 6/15/2016 11:30:00 AM Core Size: 3.0 in Boring Total Depth: 20 ft Depth to Water: NA Logged By: ES Project Manager: Scott Mikaelian Physical Location: Actual - CAR PDI Surface Elevation: 11.6 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 and gravel sub-base dry **FILL** fine to coarse SAND, little medium gravel, (2.5Y 5/2) gravish brown, medium dense, dry, no odor, green staining. 5 moist FILL GGM (100%), (5Y 5/1) gray, soft, moist, no odor, green staining. **FILL** moist fine to coarse SAND, some medium gravel, (2.5Y 5/2) gravish brown, medium dense, moist, no odor, green GGM (70%), some ash, trace fill debris, (5Y 5/1) gray, soft, 0.0 wet **FILL** wet, no odor, green staining, water at 5.0 feet. FILL ASH, little GGM (30%), (5Y 5/1) gray, loose, wet, no odor, wet green staining. 5 10 FILL fine silty SAND, little fine gravel, (5YR 4/4) reddish brown, medium dense, moist, MGP-like odor, no staining. 12 13 NR NO RECOVERY 30 FILL fine silty SAND, some fine gravel, (5YR 4/4) reddish brown, medium dense, wet, strong MGP-like odor, product staining 16 5 CAR-PDI-Y19A-17.5-18.0

Notes bgs -

A.GDT - 9/20/16

bgs - below surface grade MM - meadow mat GGM - green grey mud

dry

moist

PT

OL

1/ 1/1/ 1

UNDorg.

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

PEAT (degraded vegetated material), 80% organic fibers,

20% organic silt, (5YR 3/3) dark reddish brown, stiff, dry,

slight MGP like odor, no staining. Soils consistent with MM.

Organic SILT, 80% organic silt, 20% organic fibers, (5Y 5/1) gray, soft, moist, no odor, no staining. Soils consistent with

MGP - manufactured gas plant CCPW - chromate chemical production waste

CAR-PDI-Y19A-18.0-18.5

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

GINT STD US LAB.GDT - 11/3/11 14:35 - NUSPSWZVFP001/DATA_USPSWZVFP001/ENVIRONMENTPISCATAWAY/PROJECT/PPG-NJCPROGRAM/9-WORKFILES/PROJECT MANAGER-CATALDOBIGA RI-SOIL INVESTIGATION/FIELD WORKIBORING LOGS/GINT L

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Comments: No COPR/GGM identified at this location.

Boring ID: EF-17

Page: 1 Project Name: PPG Soil RIWP Drilling Company: SGS Project Number: 6015-4801 Coordinates (NJSPNAD83) x: 611494.743 Drilling Method: Airknife/Geoprobe Date Started Drilling: 4/19/2011 Rig Type: Airknife/Geoprobe Coordinates (NJSPNAD83) y: 682560.847 Boring Total Depth: 25 ft Date Finished Drilling: 4/20/2011 Core Size: 2 in Depth to Water: 4 ft
Surface Flevation: 9 7 ft NAVD88 Logged By: B. Daniels, M. Merdinger Project Manager: Robert Cataldo

Physical	Location:	Paci	fic and Ca	rteret			Surface Elevation: 9.7 ft NAVD88	
2							(Note bgs = below ground s	urface)
Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	GA Class	USCS	Graphic Log	Surface Cover and Thickness:	Sample Number
<u> </u>		0	dry	3	Fill		Dark Brown (7.5YR 3/2) fine to medium SAND and SILT, little	EF-B17_0.5
5 1	1						fine to medium angular Gravel, Organics, and Fill Material (glass, slag, brick), dry, loose. No odor.	
2]	0					(glass, slag, blick), dry, loose. No odor.	EF-B17_2.0
{ 3 -	1	0						EF-B17_2.5
됩_4 -	-	0						EF-B17 4.0
<u> </u>		0.3	wet	3	Fill		Brown (7.5YR 4/3) SILT, some fine Sand, little fine to medium	LI -BI7_4.0
5			wet	6	Fill		Gravel, trace Fill (slag), wet, medium stiff. No odor. Reddish Brown (5YR 4/3) to Black fine to medium SAND, some	
<u> 6 </u>	-	0.7					Cinders, Coal and Ash, trace Glass, medium dense, wet. No	EF-B17_6.0
7	2.4		moist	3	Fill		odor. Brown (7.5YR 4/2) SILT, little fine to medium Sand and Clay,	
<u>-</u> 8 -	2.1				Fill		\soft, moist. No odor.	
9							No Recovery	
<u> </u>								
10		0.1	moist	3	Fill		Same as above.	EF-B17_10.0
5 11 -		0	moist	3	FIII		Same as above.	
12 -	-	0						EF-B17_12.0
13	3.2							EF-B17_12.0X
			moist	7	PT	XXX XX XX	Dark Reddish Gray (2.5YR 3/1) PEAT, Organics, medium stiff,	
14	-				PT	1, 11, 11,	\moist. Sulfur odor. No Recovery	
15		124				[-\/ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	•	
₹ - 16		106	moist	7	ОН		Very Dark Gray (7.5YR 3/1) Organic SILTY CLAY, cohesive, stiff, moist. Sulfur odor.	
17							oun, moter canal cach.	EF-B17_17.0
77	2.1				ОН		No Recovery	-
18	1						,	
19	1							
<u>}</u> _ 20		49.2						
- 5 21	-	45.7	moist	7	ОН		Same as above.	
ĬL _		165						
22	5							EF-B17_22.5
23]	10.8						_
≤ _24		0.4	moist	8	SC		Gray (Gley1 3/0) fine to medium SAND, little Clay, trace Silt,	
5	1						semi-cohesive, medium dense, moist. No odor.	
25 26	-						End of boring at 25 ft.	
N N N N N N N N N N N N N N N N N N N	1							
27	+							
28								
29	1							
= - 2 -30	-							
								
31	1							
i 32	+							
32 -33 -34 -34	1							
34	1							
35	-							
5 T						1		

Boring ID: EF-49

Page: 1

Droine	t Name: F	DDC So	il DI\A/D			Drilling Company: SGS North America		rage.
	t Number:					Drilling Method: Geoprobe	Coordinates (N ISDN	NAD83) x: 611399.447
	tarted Dril					Rig Type:		AD83) y: 682675.465
	inished Dr			<u> </u>		Core Size: 12 in	Boring Total Depth:	
	d By : E. A					Project Manager: Robert Cataldo	Depth to Water: NA	
Physic	al Locatio	n: Nar	rula Proper	ty	l	1	Surface Elevation:	10.2 ft NAVD88
Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickne	ess:	Sample ID
			dry	ASPHALT		Black Asphalt		
1 1		0	dry	FILL		Black (10YR 2/1) fine to coarse SAND (40 some-little fine to medium Gravel, trace Fi cinders, glass, brick), loose. No odor.		EF-B49-0.5
	5	0			\bowtie	<u> </u>		
2			dry	FILL	\bowtie	Black TAR, sheet layer in boring.		1
 3		0	moist	FILL	\bowtie	Black (10YR 2/1) fine to coarse SAND (25		
4 		0	wet	FILL		fine to medium Gravel, little Fill Material (a brick), medium dense. No odor. Black (10YR 2/1) to Dark Gray (10YR 4/1 and Silt, trace fine Sand and Fill Material () ASH, CINDERS,	
—5— –		0	wet	FILL			/_	
—6— – –		0	moist	FILL		Black-stained fine to medium SAND and Coose. No odor. Black-stained SILT, little Clay, trace medium		
7 8	2		moist	VOID		 semi-cohesive, medium Stiff. No odor. No Recovery 		
9 10					*****			
 11 		0	wet	FILL		Black-stained CINDERS and SILT, interbe odor.	edded, loose. No	EF-B49-11.0
 12 	_	0	moist	FILL		Black-stained SILT , little Clay, trace organ	nice soft No odor	EF-B49-12.0
13 14 14	5	0	moist	FILL		Brown (7.5YR 4/3) very fine SAND, some coarse Sand and medium rounded Gravel odor.	-little Silt, trace	
 15				NII II I	\bowtie			
				NULL		End of boring at 15 ft.		
	low surface eadow mat		GGM - gree	omite ore procen grey mud	essing re	sidue UNDno - non-organic undisturbed native de UNDorg - organic undisturbed native depos		ufactured gas plant omate chemical production waste

PPG - 2012-09 RA PPG_LOGS_A.GDT - 10/14/16 10:27

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

Boring ID: EF-99

Page: 1

<u> </u>						I				Page: 1
	t Name: F					Drilling Company				
	t Number:					Drilling Method:	Soft Dig/Geoprobe	9		IAD83) x: 611413.128
				0:25:00 AM		Rig Type:				AD83) y: 682723.521
		illing:	9/4/2012	10:55:00 AM		Core Size: 2 in			Boring Total Depth:	
Logge						Project Manager:	Chris Martell		Depth to Water: NA	
Physic	al Locatio	n:		I		1			Surface Elevation:	10.8 ft NAVD88
Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graph Log	ic	Surface Cover an	nd Thickne	ess:	Sample ID
				ASPHALT		ASPHALT				
 -1-	. 3	0.0	dry	FILL		ASH, and cinc odor, Little sla	lers little coal, (7.5\ g.	YR 4/1) da	ark gray, dry, no	EF-B099-0.5-1.0
2 		0.0	moist	FILL		silty SAND, litt moist, no odor	tle fine to medium ç r, angular, Slag, brid	gravel and ick, coal, g	l fill material, plass.	EF-B099-2.5-3.0
Notes:										
bas - be	eadow mat	grade	COPR - chr GGM - gree	omite ore proc en grey mud	essing r	esidue UNDno - non UNDorg - org	-organic undisturbed ganic undisturbed nat	d native de ative deposi	posits MGP - manu ts CCPW - chr	ufactured gas plant omate chemical production waste

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

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

Boring ID: EF-100

Date Started Drilling: 9/4/2012 11:20:00 AM Rig Type: Coordinates (NJSPNAD83) y: 682687.466 Date Finished Drilling: 9/4/2012 11:20:00 AM Core Size: 2 in Boring Total Depth: 3 ft Logged By: Ben Daniels Project Manager: Chris Martell Depth to Water: NA		t Number:					rilling Company: SGS North America rilling Method: Soft Dig/Geoprobe	Coordinates (NJSP	NAD83) x: 611449.135
						Ri	g Type:		
Logged By: Ben Daniels Project Manager: Chris Martell Depth to Water: NA					11:20:00 AM				
Physical Location: Surface Elevation: 10.6 ft NAVD88				S		Pr	oject Manager: Chris Martell		
			11:					Surface Elevation:	10.6 IL NAVD66
Depth Range (ft bgs) Recovery (ft/ft) PID (ppm) Moisture Content USCS Graphic Log Surface Cover and Thickness: Sample ID	Range	/ft/ft\			USCS	Graphic Log	Surface Cover and Th	ckness:	Sample ID
ASPHALT ASPHALT			0.0			****			
fine to coarse SAND, some silt little fine to medium gravel, (10YR 4/3) brown, moist, no odor, angular, Trace glass. EF-B100-0.5-1.0	_	3	0.0	moist	FILL		fine to coarse SAND, some silt little fil (10YR 4/3) brown, moist, no odor, and	ne to medium gravel, gular, Trace glass.	EF-B100-0.5-1.0
0.0 moist FILL ASH, and cinders trace ceramics, moist, no odor, Trace coal and glass.	2	-	0.0	moist	FILL			st, no odor, Trace coal	
EF-B100-2.5-3.0									EF-B100-2.5-3.0
Notes:									
bgs - below surface grade MM - meadow mat COPR - chromite ore processing residue UNDno - non-organic undisturbed native deposits MGP - manufactured gas plant CCPW - chromate chemical production of Comments:	MM - mea	eadow mat	grade	GGM - gree	omite ore proc en grey mud	essing resi	UNDorg - non-organic undisturbed native d	re deposits MGP - man eposits CCPW - ch	romate chemical production waste

Boring ID: EF-129

Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Drilling Method: NA Project Number: 60240739 Coordinates (NISDNAD93) v. 611/92

Date Fini Logged E Physical	ished Dri By: B. D Location Recovery	illing: aniels	12/13/201	2 8:50:00 AM 12 9:00:00 AM	1 C	tig Type: Core Size: 6 in Project Manager: Chris Martell	Boring Total Depth: Depth to Water: NA	1 ft
Depth Range	By: B.D. Location Recovery	aniels n: Cor			F			
Depth Range	Location Recovery	n: Cor	ner of Carl	hanat Avia and		roject Manager: Chris Martell	Depth to Water: NA	1
Depth Range	Recovery		ner of Carl	Laura 4 A aural				
Range	Recovery (ft/ft)	DID		teret Ave and	Pacific A	ve	Surface Elevation:	8.9 ft NAVD88
		(ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickne	ess:	Sample ID
		0.0		ASPHALT		ASPHALT		1
	-	0.0	alan .		XXXXX	Dark brown (7.5YR 3/2) silty SAND, little f	Sin	-
I .	1	0.0	dry	FILL	\bowtie	angular Gravel, dry, no odor.	The to coarse	
- 1	.				\bowtie	angular Graver, dry, no odor.		EF-129-0.5-1.0
					\bowtie			
1					\bowtie			
.								
/M - meac	w surface of dow mat		COPR - chr GGM - gree	omite ore procen grey mud	essing re	idue UNDno - non-organic undisturbed native de UNDorg - organic undisturbed native depos	posits MGP - manu its CCPW - chr	ufactured gas plant romate chemical production wa

Boring ID: FF20A-PUB1

Page: 1 Project Name: PPG Garfield Ave **Drilling Company:** Project Number: 60580814 Coordinates (NJSPNAD83) x: 611457.79 Drilling Method: Hand Auger Date Started Drilling: 10/19/2018 Rig Type: Coordinates (NJSPNAD83) y: 682695.82 Date Finished Drilling: 10/19/2018 Core Size: 2 inches **Boring Total Depth:** 5 ft Depth to Water: NA Logged By: Tarique Islam Project Manager: Bill Spronz Surface Elevation: 13.4 ft NAVD88 **Physical Location:** Depth Recovery PID Moisture Graphic Sample USCS Range Surface Cover and Thickness: (ft/ft) (ppm) Content Log ID. (ft bgs) 0.0 FILL fine to coarse silty SAND, trace gravel, (7.5YR 4/2) 5 moist brown, moist, no odor, no staining FF20A-PUB1-3.3-3.8 FF20A-PUB1-4.3.4.8 NULL End of Boring bgs - below surface grade MM - meadow mat UNDno - non-organic undisturbed native deposits UNDorg - organic undisturbed native deposits MGP - manufactured gas plant CCPW - chromate chemical production waste COPR - chromite ore processing residue GGM - green grey mud

2012-09 RA PPG LOGS A.GDT - 9/17/20 15:19

Boring ID: HSD-PDI-BB19A

Project		0001	2200			Bullion Made at Disch D	A	A DOOL 04 40 TO
	Number:			05.00.414		Drilling Method: Direct Push	Coordinates (NJSPN	
				:35:00 AM		Rig Type:	Coordinates (NJSPN/	
			0/3/2016	1:50:00 AM		Core Size:	Boring Total Depth:	
	d By: HBI		nd Heb	DDI		Project Manager: Scott Mikaelian	Depth to Water: NA Surface Elevation: 1	IΩ 4 ft NΔ\/D88
	ai LUCATIO	ii. ACT	ual - HSD	רטו			Guilace Elevation.	10.7 IL NAV D00
Depth Range t bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphi Log	c Surface Cover and Thick	ness:	Sample ID
		0.0	moist	ASPHALT	XXXXX	Asphalt and gravel sub-base		HSD-PDI-BB19A-0.2-0.7
-1 - -2 -	4.5		moist ^k	FILL		ASH, some silt, trace fine gravel, coal 4/2) brown, medium dense, moist, no o		HSD-PDI-BB19A-2.0-2.5
-3			wet	FILL		fine SAND, trace silt, (5YR 4/3) reddisl	n brown, medium	
-4						dense, wet, no odor, no staining.		HSD-PDI-BB19A-4.0-4.5
-5-				NR		NO RECOVERY		
١		0.0	wet	FILL	\bowtie	fine SAND, trace silt, (5YR 4/3) reddis	n brown, medium	
-6-			wet to	FILL		dense, wet, no odor, no staining. SILT, little fine gravel, trace fine sand (5Y 5/1) gray, medium dense, wet to s		HSD-PDI-BB19A-6.0-6.5
\dashv			saturated, saturated	FILL		6.0 feet.		
-7-			wet	FILL		SILT, trace wood, (5Y 2.5/1) black, soft odor, no staining.	t, saturated, no	
-8-	4					fine SAND, little silt, (5YR 4/3) reddish dense, wet, no odor, no staining.	brown, medium	HSD-PDI-BB19A-8.0-8.5
\dashv			moist	FILL		Disturbed Organic SILT, 90% organic	silt 10% organic	
-9			moist	NR	XXXXX	fibers, (7.5YR 4/2) brown, medium der organic odor, no staining. NO RECOVERY	nse, moist, slight	
-10 -11 -12 -13	4.5	0.0	moist	FILL		fine SAND, trace silt, fine gravel and w reddish brown, medium dense, moist, staining.		HSD-PDI-BB19A-10.0-10.5 HSD-PDI-BB19A-12.0-12.5
]					<u> </u>	8		HSD-PDI-BB19A-13.5-14.0
-14			dry	PT	11/1/11		80% organic fibers,	HSD-PDI-BB19A-14.0-14.5
7				NR		20% organic silt, (5YR 3/3) dark reddis stiff, dry, moderate organic odor, no st		
-15 -16 -17	2.5	0.0	dry	PT		\tag{consistent with MM.} \text{NO RECOVERY} \text{PEAT (degraded vegetated material), in the consistent with MM.} \text{VO RECOVERY} \text{PEAT (degraded vegetated material), in the consistent with MM.} \text{VO RECOVERY} \text{PEAT (degraded vegetated material), in the consistent with MM.} \text{VO RECOVERY} \text{PEAT (degraded vegetated material), in the consistent with MM.} \text{VO RECOVERY} \text{PEAT (degraded vegetated material), in the consistent with MM.} \text{VO RECOVERY} \text{PEAT (degraded vegetated material), in the consistent with MM.} \text{VO RECOVERY} \text{PEAT (degraded vegetated material), in the consistent with MM.} \text{VO RECOVERY} \text{PEAT (degraded vegetated material), in the consistent with MM.} \text{VO RECOVERY} \text{PEAT (degraded vegetated material), in the consistent with MM.} \text{VO RECOVERY} \text{PEAT (degraded vegetated material), in the consistent with MM.} \text{VO RECOVERY} \text{PEAT (degraded vegetated material), in the consistent with MM.} \text{VO RECOVERY} \text{PEAT (degraded vegetated material), in the consistent with MM.} \text{VO RECOVERY} \text{PEAT (degraded vegetated material), in the consistent with MM.} \text{VO RECOVERY} \text{PEAT (degraded vegetated material), in the consistent with MM.} \text{VO RECOVERY} \text{PEAT (degraded vegetated material), in the consistent with MM.} \text{VO RECOVERY} \	80% organic fibers,	
-18	2.0			NR		NO RECOVERY		
-19 								
20								
	ow surface g		COPR - chro	mite ore proce	ssing res	sidue UNDno - non-organic undisturbed native de UNDorg - organic undisturbed native depos		factured gas plant mate chemical production wa

ENIOD		Client: PPG		BORII	NG ID:
ENSR	AECON	Site: PPG - Jersey City, NJ		M	W4A
Start Da	ite:	Project: Site Investigation		Page: 1 o	f 2
11/18/20	003	Coordinates: X-610811.29 Y-683249.	66		Boring: 18.00
End Dat	e:	Elevation: 12.8		Geologist	
11/18/20		Drill Subcontractor: ADI		Driller:	
Depth (ft)	Lithology	Description	PID	_{sample ID}	Sample Parameters
2—	F C C C C C C C C C C C C C C C C C C C	ILL: Black medium to fine SAND, some silt, little ravel, cinder, brick clinker, 30% COPR ILL: Black to dark reddish brown (5YR 2.5/2) medium fine SAND, some silt, cinder, clinker, shell, 20% OPR ILL: Dark yellowish brown (10YR 3/4) coarse to fine AND, some silt, trace gravel, clinker, brick, 50% OPR		MW-4A2.0	TAL Metals, Cr+6, TCLSVOCs, TCLVOCs, Cyanide, PCBs, Pesticides
6-		ILL: Reddish brown (2.5YR 4/3) coarse to fine SAND, ome gravel and silt, trace clay, brick, clinker, 30% OPR, cinder	0.0 ppm		
8-		ILL: Dark reddish brown (5YR 3/4) medium to fine AND, some silt, wood, brick, clinker, 10% COPR	0.0 ppm		
12		ILL: Reddish black (2.5YR 2.5-1) fine SAND, some lt, little clay and medium sand, wood, brick, cinder	0.0 ppm		

 $\underline{\textbf{NOTES:}} \hspace{0.2in} \textbf{Coordinates are provided in New Jersey State Plane NAD 1983 Feet.}$

ENCD A	CO 1 4	Client:	PPG				NG ID:		
ENSR AE	COM	Site: PPG - Jersey City, NJ					MW4A		
Start Date:		Project:	Site Investigation			Page: 2 of 2			
11/18/2003		Coordinates: X-610811.29 Y-683249.66			Depth of Boring: 18.00				
End Date:		Elevation: 12.8				Geologist	: D. Sherman		
11/18/2003		Drill Subcontractor: ADI				Driller:			
Depth (ft) Litholo	KO		Description	PID	58	mple ID	Sample Parameters		
	FIL cine		wn (7.5 YR 4/6) wood, root, clinker,	0.0 ppm	MV	W-4A12.0	TAL Metals, Cr+6, TCLSVOCs, TCLVOCs, Cyanide, PCBs, Pesticides		
	nat	ve	own (7.5 YR 4/6) SILT, some fine sand, dish brown (5YR 3/3) PEAT(meadow	0.0 ppm					
- 44	ma LL		distribution (STR 3/3) LAT (meadow	0.0 ppm					
16 +				1.8 ppm					
18	CL/ silt	AY: Dark gre	enish gray (GLEY2 4/1) CLAY, some						
10	NU	LL: End of Bo	oring at 18 ft.						

		Client: PPG		BORI	NG ID:			
TIVITERI	VATIONAL.	Site: PPG - Garfield, NJ		T N	IW4A			
Start Da	te:	Project: Site Investigation		Page: 1 d	of 2			
11/18/20	003	Coordinates: X-610811.3 Y-683249	.7	Depth of	Depth of Boring: 18.00			
End Dat	e:	Elevation: 14.52		Geologist: D. Sherman				
11/18/20		Drill Subcontractor: Advanced Drilling		Driller:				
Debth (ft)	Lithology	Description	Sample ID	Sample Parameters				
0								
The second secon		FILL: Black medium to fine SAND, some silt, little gravel, cinder, brick clinker, 30% COPR	TOTAL					
2+		FILL: Black to dark reddish brown (5YR 2.5/2) medium to fine SAND, some silt, cinder, clinker, shell, 20% COPR						
4		FILL: Dark yellowish brown (10YR 3/4) coarse to fine SAND, some silt, trace gravel, clinker, brick, 50% COPR						
6—		FILL: Reddish brown (2.5YR 4/3) coarse to fine SAND, some gravel and silt, trace clay, brick, clinker, 30% COPR, cinder	and the state of t					
8+		FILL: Dark reddish brown (5YR 3/4) medium to fine SAND, some silt, wood, brick, clinker, 10% COPR						
10 +		FILL: Reddish black (2.5YR 2.5-1) fine SAND, some silt, little clay and medium sand, wood, brick, cinder						
12		FILL: Strong brown (7.5 YR 4/6) wood, root, clinker, cinder						
14 —		SILT: Strong brown (7.5 YR 4/6) SILT, some fine sand, native						
16 —		PEAT: Dark reddish brown (5YR 3/3) PEAT(meadow mat)	Additional designation of the Commonweal Com					
18		CLAY: Dark greenish gray (GLEY2 4/1) CLAY, some silt						
	1	NULL: End of Boring	1					

ENCD	AFCON	Client: PPG			RING ID:		
ENSR	AECOM	Site: PPG - Jersey City, NJ			MW4B		
Start D	ate:	Project: Site Investigation		Page:	1 of 4		
12/3/20	003	Coordinates: X-610816.71 Y-683246.	.98 Depth of Boring: 40.00				
End Da	ate:	Elevation: 12.7		Geologist: D. Sherman			
12/3/20		Drill Subcontractor: ADI	5				
Depth (ft)	Lithology	Description	PID	Sample ID	Sample Parameters		
2—	FI DAD FI	LL: Black medium to fine SAND, some silt, little avel, cinder, brick clinker, 30% COPR LL: Black to dark reddish brown (5YR 2.5/2) medium fine SAND, some silt, cinder, clinker, shell, 20% OPR LL: Dark yellowish brown (10YR 3/4) coarse to fine AND, some silt, trace gravel, clinker, brick, 50% OPR	0.0 ppm	MW-4B2.0	TAL Metals, Cr+6, TCLSVOCs, TCLVOCs, Cyanide, PCBs, Pesticides		
6-	SC SC	LL: Reddish brown (2.5YR 4/3) coarse to fine SAND, ome gravel and silt, trace clay, brick, clinker, 30% OPR, cinder	0.0 ppm				
8+		LL: Dark reddish brown (5YR 3/4) medium to fine AND, some silt, wood, brick, clinker, 10% COPR	0.0 ppm				
10 —		LL: Reddish black (2.5YR 2.5-1) fine SAND, some t, little clay and medium sand, wood, brick, cinder	0.0 ppm				

ENSR AECOM	Client: PPG Site: PPG - Jersey City, NJ				NG ID:
Start Date:	Project: Site Investigation		Page: 2 of 4		
12/3/2003		_			
End Date:	Elevation: 12.7			Geologist	Boring: 40.00 : D. Sherman
12/3/2003	Drill Subcontractor: ADI			Driller:	
Depth (ft) Lithology	Description	PID	Sa	mpleID	Sample Parameters
12 FIL Cind	L: Strong brown (7.5 YR 4/6) Wood, root, clii	nker, 0.0 ppm		V-4B12.0	TAL Metals, Cr+6, TCLSVOCs, TCLVOCs, Cyanide, PCBs, Pesticides
nat	T: Strong brown (7.5 YR 4/6) SILT, some fin ve AT: Dark reddish brown (5YR 3/3) PEAT(me	0.0 ppm			
ma		0.0 ppm			
16 +		1.8 ppm			
CL _s ilt	AY: Dark greenish gray (GLEY2 4/1) CLAY,				
CL.	AY: Greenish gray (GLEY2 5/1) CLAY, some e fine sand at 19.5"" bgs	silt, 0.0 ppm			
	AY: Dark greenish gray (GLEY1 4/1) CLAY, anative soft	some 0.0 ppm			

SAND: Red (2.5YR 5/8) coarse to fine SAND, some

0.0 ppm

TEMS PRESENT		Client: PPG		BORIN	IG ID:
ENSR	AECOM	Site: PPG - Jersey City, NJ		M	W4B
Start Da	te:	Project: Site Investigation		Page: 3 of	4
12/3/200)3	Coordinates: X-610816.71 Y-683246.	98	_	Boring: 40.00
End Dat	e:	Elevation: 12.7		Geologist:	
12/3/200)3	Drill Subcontractor: ADI		Driller:	-
Depth (ft)	Lithology	Description	PID	imple ID	Sample Parameters
. 24					
	gra	avel	0.0 ppm		
26 —		ND: Red (2.5YR 4/6) coarse to fine SAND, little avel, till, fairly sorted			
_		ND: Red (2.5YR 4/8) coarse to fine SAND, trace avel 26'-27' bgs, trace fine sand, some silt 27'-28' s	0.0 ppm		
28 —		ND: Red (2.5YR 4/6) fine SAND, little medium sand, ft, well sorted	0.0 ppm		
30 +		ND: Red (2.5YR 4/6) fine SAND, little silt, soft, well ted	0.0 ppm M	W-4B30.0	TAL Metals, Cr+6, TCLSVOCs, TCLVOCs, Cyanide, PCBs, Pesticides
32 —		ND: Red (2.5YR 4/6) fine SAND, some silt, poorly aded, moderately well sorted	0.0 ppm		
34 +		ND: Red (2.5YR 4/6) fine SAND, some silt, fairly to orly graded, moderately well sorted	0.0 ppm		

ENSR AECOM	Client: PPG	BORING ID:
ENSK AECOM	Site: PPG - Jersey City, NJ	MW4B
Start Date:	Project: Site Investigation	Page: 4 of 4
12/3/2003	Coordinates: X-610816.71 Y-683246.98	Depth of Boring: 40.00
End Date:	Elevation: 12.7	Geologist: D. Sherman
12/3/2003	Drill Subcontractor: ADI	Driller:
Debty (41) Lithology	Description PID St	Driller: Sample ID Sample Parameters
	ND: Red (2.5YR 4/6) fine SAND and SILT, wet, ly graded, moderately sorted	
	T: Red (2.5YR 4/6) fine SILT, some fine sand	
	T: Reddish gray (5YR 5/2) SILT, some clay, trace sand	
-	LL: End of Boring at 40 ft.	

ENCD	AFCOM	Client: PPG Industries			BORIN		
ENSR	AECOM	Site: Site OSB			OSB	3/XOSB-10	
Start Dat	te:	Project: Site Investigation			Page: 1 of 3		
7/20/200	6	Coordinates: X-610903.4 Y-683195			Depth of Borir	ng: 26.00	
End Date		Elevation: OSB-10 = 12.5; XOSB-10 = 12.	4 ft NA	VD88		Abdelaziz	
9/14/200		Drill Subcontractor: ADI		<u> </u>	Driller:		
Depth (ft)	Lithology	Descultion	PID	Blows/6"	Sample ID	Sample Parameters	
0_	ASF	PHALT: Asphalt	N/A				
	××××××× CO	NCRETE: Concrete					
		L: Dark brown (7.5YR3/2) coarse to medium SAND, ne medium Gravel, trace Silt, dry. 80% COPR.	N/A		OSB-10A(1.0-1.5)	Cr+6, TAL Metals	
2-		NCRETE: Concrete stained with Cr6 water at 2.5 ft. No Sample			OSB-10 was a G14A on 7/20	advanced in Grid /2006 to 5.1'.	
4	× × som	L: Black (7.5RN2.5) coarse medium GRAVEL, ne Cinders, Glass and Wood chips, little Silt, wet. % COPR.	N/A	_	OSB-10B(3.1-3.6)	Cr+6, TAL Metals	
	NR:	No Sample	0.0 ppm	2 2			
_	× × very	L: Dark Brown (7.5YR 4/4) silty CLAY, some fine to y fine Sand, trace medium Gravel, wet. ~60% PR.	N/A	1 -	OSB-10C(4.6-5.1)	Cr+6, TAL Metals	
	NR	No Recovery		2			
6-		L: Very dark brown (10YR3/3) coarse to fine ND, some to little Silt, trace Clay, wet.		4		5.1' to 26' in Grid	
	× × NR:	: No Recovery		5	H14A as a step	o-out from OSB-10	
8-		L: Very dark brown (10YR3/3) coarse to fine ND, some to little Silt, trace Clay and fine Gravel,	0.0 ppm	2			

ENCD	A E C O M	Client: PPG Industries				NG ID:		
ENSR A	AECOM	Site: Site OSB			OSE	OSB/XOSB-10		
Start Date: Project: Site Investigation					Page: 2 of 3	Page: 2 of 3		
7/20/2006 Coordinates: X-610903.4 Y-683195					Depth of Borir	ng: 26.00		
End Date:		Elevation: OSB-10 = 12.5; XOSB-10 = 12	2.4 ft NA	VD8		Abdelaziz		
9/14/2006		Drill Subcontractor: ADI		T =-	Driller:			
Depth (ft) Lit	tology	Description	PID	Blows/6"	Sample ID	Sample Parameters		
	NR:	No Recovery	-	1				
				1				
10 — ×		L: Black (10YR2/1) coarse to fine SAND, little to e (+) fine Gravel and Silt, wet.	N/A	1	XOSB-10D(10.0-11.0)	MS/MSD, Cr+6, TAL Metals		
_ ×	$\times \times $			1				
×	$\times \times $			1				
12 — ×	×××		N/A	2	XOSB-10E(12.0-12.9)	Cr+6, TAL Metals		
×	××× FILI	L: Shells material		1	XOSB-10ED(12.0-12.9)	Cr+6, TAL Metals		
	NR:	No Recovery		5				
14 —			0.0	2	XOSB-10F(14.0-14.5)	Cr+6, TAL Metals		
		AT: PEAT, moist.	ppm	1				
-				2				
	 			2				
16 —	 		0.0 ppm	3				
_				2				
	<u> </u>		2.5 ppm	3	XOSB-10G(17.0-17.5)	Cr+6, TAL Metals		

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

XOSB location is offset from original OSB location due to presence of stormwater drain.

ENCD AFCOM	Client: PPG Industries				NG ID:
ENSR AECOM	Site: Site OSB			OSB/XOSB-10	
Start Date:	Project: Site Investigation			Page: 3 of 3	
7/20/2006	Coordinates: X-610903.4 Y-683195			Depth of Bori	ng: 26.00
End Date:	Elevation: OSB-10 = 12.5; XOSB-10 = 12.	4 ft NA	VD88	Geologist: M.	Abdelaziz
9/14/2006	Drill Subcontractor: ADI			Driller:	
Debty (41)	Description	PID	Blows/6"	Sample ID	Sample Parameters
	: No Recovery				
18 — SA	ND: Very dark greenish gray (Gley 1 3/1) medium ine SAND, little medium to fine Gravel, little to trace	N/A	7		
Silt	, wet.		7		
<u>⊘:7.⊘:7.</u>	AVEL AND SAND: Dark reddish brown (5YR3/2) arse to fine SAND and medium to fine GRAVEL, ne to little Silt and Clay, wet.		6		
20 + 20 20 20 20 20 20 20 20 20 20 20 20 20	·	0.4	10		
		0.1 ppm	10		
			14		
			15		
22 + 22 - 25 - 25 - 25	MANTE AND CAND Deductible (TVD2/2)	N/A	10		
COS	AVEL AND SAND: Dark reddish brown (5YR3/2) arse to fine SAND and fine GRAVEL, some to little , little to trace Clay, wet.		14		
			14		
			11		
24 -		N/A	11		
0:0:0:0 0:0:0:0 0::0::0			12		
			13		
			11		
1 26 1 NU	LL: End of boring at 26 feet.		1 1		1

ENICD	15001	Client: PPG Industries		BORIN	IG ID:	
ENSR	AECO	Site: Site 133		0	SB-22	
Start Da	te:	Project: Site Investigation	Page: 1 of	3		
7/18/200	06	Coordinates: X-611312.6 Y-682776	Depth of B	oring: 30.00		
End Dat		Elevation: 10.9 ft NAVD88			Geologist: M. Abdelaziz	
7/25/200		Drill Subcontractor:		Driller:	ADI	
Depth (ft)	Lithology	Description	PID	Sample ID	Sample Parameters	
0		ASPHALT: Asphalt	N/A			
	×××	CONCRETE: Concrete				
	XX	FILL: Dusky red (2.5YR3/2) medium to fine SAND, some medium to fine Gravel, trace Silt, dry. 25% COPR.		OSB-22A(1.05-1.55)	MS/MSD, Cr+6, TAL Metals	
2—	1	NR: Soft Dig - No Recovery				
4-	××	FILL: Light brownish gray (2.5Y6/2) fine SAND, some Slag and medium Gravel, little Clay and Silt, wet.	N/A	OSB-22B(4.0-4.5) OSB-22BD(4.0-4.5)	Cr+6, TAL Metals Cr+6, TAL Metals	
-		NR: Soft Dig - No Recovery				
6-		FILL: Gray (7.5YRN6) CINDERS, some Glass and coarse to medium Sand, little Silt, wet.				
_	1	NR: No Recovery				
8—		FILL: Very dark gray (7.5YRN3) CINDERS, some Glass and coarse to medium Sand, little Silt, wet.	N/A			
10 —		FILL: Dark brown (7.5YR3/2) fine to very fine SAND, PEAT and SILT, moist to wet.				

ENIOD LEGG	Client: PPG Industries		BORII	NG ID:	
ENSR AECC	Site: Site 133	Site: Site 133			
Start Date:	Project: Site Investigation	Page: 2 o	f 3		
7/18/2006 Coordinates: X-611312.6 Y-682776				Depth of Boring: 30.00	
End Date:	Elevation: 10.9 ft NAVD88			M. Abdelaziz	
7/25/2006	Drill Subcontractor:		Driller:	ADI	
Depth (ft) Lithology	Description	PID	Sample ID	ADI Sample Parameters	
*	NR: No Recovery		OSB-22C(11.0-12.0)	MS/MSD, Cr+6, TAL Metals	
12 -	FILL: Very dark gray (7.5YRN3) CINDERS, some Glass and coarse to medium Sand, little Silt, wet.	N/A			
14 —	FILL: Dark reddish brown (5YR3/2) fine to very fine SAND, some Silt, trace coarse Sand, wet.				
16 —	PEAT: PEAT.	N/A	OSB-22D(16.8-17.3)	Cr+6, TAL Metals	
18 — — — — — — — — — — — — — — — — — — —	FLAI. FLAI.				
20	PEAT: Black (5YR2.5/1) PEAT, some fine to very fine Sand and Silt, moist.	N/A			

NSR AECOM	Client: PPG Industries			NG ID:	
INSK AECON	Site: Site 133	OSB-22			
Start Date:	Project: Site Investigation		Page: 3 d	of 3	
7/18/2006	Coordinates: X-611312.6 Y-682776		Depth of	Depth of Boring: 30.00	
End Date:	Elevation: 10.9 ft NAVD88		Geologis	t: M. Abdelaziz	
7/25/2006	Drill Subcontractor:		Driller:	ADI	
pepth (ft) Lithology	Description	PID	Sample ID	ADI Sample Parameters	
S	AND: Gray (7.5RN5) fine to very fine SAND, some ilt, trace Clay, moist.				
24 - SA	R: No Recovery AND: Weak red (10R4/3) coarse to medium SAND, ome Silt and fine Sand, wet.	0.0			
26 —					
28 —		0.0			
30	ULL: End of boring at 30 feet.				

I	NOTES:	Coordinates are provided in New Jersey State Plane NAD 1983 Feet.	
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ENSR	AECOM	Client: PPG Industries			BORING ID:	
EINOR	AECUM	Site: Site OSB	OS	OSB/XOSB-9		
Start Da	te:	Project: Site Investigation		Page: 1 of 3		
7/21/2006 Coordinates: X-610809.6 Y-683242.5			Depth of Bori	ng: 26.00		
End Dat	e:	Elevation: OSB-9 = 12.9; XOSB-9 = 13.7 f	t NAVD88	Geologist: N	1. Abdelaziz	
9/20/200		Drill Subcontractor: ADI		Driller:		
Depth (ft)	Lithology	Description	PID	Sample ID	Sample Parameters	
0_			N/A			
	AS	PHALT: Asphalt	IN/A			
	××××× ×××××× ××××××	NCRETE: Concrete				
		L: Black (7.5YRN2) coarse to medium SAND, some dium to fine Gravel, trace to no Silt, dry.	N/A	OSB-9A(1.0-1.5)	Cr+6, TAL Metals, BNs, VOCs	
2—	NR	2: No Sample				
_	$\times \times \times$ SA	L: Dark reddish brown, (5YR3/2) coarse to medium ND, some medium to fine Gravel, little Silt, trace ay, dry. ~5% COPR.	N/A	OSB-9B(2.3-2.8)	Cr+6, TAL Metals, BNs, VOCs	
4	× × × × × × × × × × × × × × × × × × ×					
6—		L: Very dark grayish brown (10YR3/2) medium to e SAND, some Silt, trace fine Gravel, wet.	0.0 ppm	XOSB-9C(5.0-6.3) XOSB-9CD(5.0-6.3)	MS/MSD, Cr+6, TAL Metals, BNs, VOCs Cr+6, TAL Metals, BNs, VOCs	
	NR	2: No Recovery				
8—	$\times \times \times$ me	L: Very dark grayish brown (10YR3/2) fine to dium SAND, some Silt, trace fine Gravel, trace ay(-), wet.	0.0 ppm	XOSB-9D(8.0-10.1)	Cr+6, TAL Metals, BNs, VOCs	

ENSR A	AECOM	Client: PPG Industries			BORING ID:	
EINSK A	ALCOM	Site: Site OSB			OSB/XOSB-9	
Start Date:		Project: Site Investigation		Page: 2 of 3		
7/21/2006		Coordinates: X-610809.6 Y-683242.	5	Depth of Boria	ng: 26.00	
End Date:		Elevation: OSB-9 = 12.9; XOSB-9 = 13.7 ft	NAVD88	Geologist: M	I. Abdelaziz	
9/20/2006		Drill Subcontractor: ADI		Driller:		
Depth (ft) Lit	itology	Description	PID	Sample ID	Sample Parameters	
10 — ×		L: Black (10YR2/1) coarse to medium SAND, some Gravel, little to trace Silt, trace Wood, wet.				
-	NR:	No Recovery				
12 — ×	××× FILL × fine ×××	L: Black (10YR2/1) coarse to medium SAND, some Gravel, little to trace Silt, trace Wood, wet.	0.0 ppm			
14 —	NR:	No Recovery				
16 —	- 11- - 11- - 11- - 11- - 11-	AT: Peat, Some clay.	0.0 ppm	XOSB-9E(16.0-17.0)	Cr+6, TAL Metals, BNs, VOCs	

 $\underline{\hbox{\bf NOTES:}} \quad \hbox{Coordinates are provided in New Jersey State Plane NAD 1983 Feet}.$

ENSR AECOM	Client: PPG Industries			BORING ID:		
LINSK ALCOM	Site: Site OSB			SB/XOSB-9		
Start Date:	Project: Site Investigation		Page: 3 of 3	Page: 3 of 3		
7/21/2006	Coordinates: X-610809.6 Y-683242	Depth of Bori	ng: 26.00			
End Date:	Elevation: OSB-9 = 12.9; XOSB-9 = 13.7	t NAVD88	Geologist: N	1. Abdelaziz		
9/20/2006	Drill Subcontractor: ADI		Driller:			
Depth (ft) Lithology	Description	PID	Sample ID	Sample Parameters		
Silt	ND: Gray (10YR5/1) fine to very fine SAND, some r, trace Clay, wet.					
	ND: Gray (10YR5/1) fine to very fine SAND, some , trace Clay, wet.	N/A				
	T AND CLAY: Gray (5YR5/1) clayey SILT, trace e Sand, moist.					
24 — — — — — — — — — — — — — — — — — — —		N/A	XOSB-9G(24.0-26.0)	Cr+6, TAL Metals, BNs, VOCs		
26 SAI	ND: Yellowish red (5YR4/6) medium to fine SAND, me Silt, trace Clay, moist					
NU	LL: End of boring at 26 feet.					

ENCD	A F C O A	Client: PPG Industries			BORIN			
ENSR	AECOM	Site: Site 133			O;	SB/XOSB-13		
Start Date	e:	Project: Site Investigation			Page: 1 of 3			
7/20/2006	6	Coordinates: X-611056.3 Y-683090	.4		Depth of B	Boring: 28.00		
End Date		Elevation: OSB-13 = 12.6; XOSB-13 = 12.	88		M. Abdelaziz			
1	9/13/2006 Drill Subcontractor:				Driller:	ADI		
Depth (th)	Lithology	Description	PID	59	mpleID	Sample Parameters		
	AS	SPHALT: Asphalt	N/A					
	××× C	ONCRETE: Concrete						
	× × S	LL: Very dark brown (7.5 YR 3/3) coarse to medium AND, some coarse to fine Gravel, little Silt, dry. 50% OPR nodules.		OSB-	13A(1.0-1.5)	MS/MSD, Cr+6, TAL Metals		
2+	×××	R: Soft Dig - No Recovery		OSB-	13B(2.0-2.5)	Cr+6, TAL Metals		
		LL: Dusky red (7.5R3/4) some coarse Sand and fine ravel, little Silt, wet. 100% COPR nodules						
	NI	R: Soft Dig - No Recovery						
4-		LL: Very dark grayish brown (10YR3/2) SILTY AND, little Clay, wet.	0.0	XOSB	-13C(4.5-5.5)	MS/MSD, Cr+6, TAL Metals		
	× × NI	R: No Recovery						
6-		LL: Very dark grayish brown (2.5YR3/2) coarse to be SAND, trace Silt, moist.	0.0					
-	× × fir	LL: Very dark grayish brown (2.5YR3/2) coarse to be SAND and medium to fine GRAVEL, little to trace lt, moist.		XOSB-	-13D(7.0-8.0)	Cr+6, TAL Metals		
8-		LL: Olive (5Y 4/3) SILTY CLAY and coarse to fine AND, moist.	0.0	XOSB-	13DD(7.0-8.0)	Cr+6, TAL Metals		
		LL: Yellowish brown (10YR5/6) SILTY CLAY ecoming black (10YR2/1) SILTY SAND, moist.	0.0					
	× × FI	LL: Olive (5Y5/6) SILTY SAND, trace Gravel, moist.						
		LL: Olive gray (5Y4/2) medium to fine SAND and LAYEY SILT, moist.						

ENCD AFCOM	NSR AECOM Client: PPG Industries				BORING ID:		
ENSR AECOM	Site: Site 133			O;	SB/XOSB-13		
Start Date:	Project: Site Investigation			Page: 2 of 3			
7/20/2006	Coordinates: X-611056.3 Y-683090.			-	Boring: 28.00		
End Date:	1, 11				M. Abdelaziz		
9/13/2006	Drill Subcontractor:				ADI		
Debty (41) Titlology	Description	PID	58	mpleID	ADI Sample Parameters		
10 -		0.0	XOSB-1	3E(10.0-10.5)	Cr+6, TAL Metals		
	Lt: Dark gray (5Y4/1) Clayey SILT and coarse to fine ND, trace Gravel, moist.						
NF.	R: No Recovery						
12+		5.6					
			VOCD 1	3F(13.5-14.0)	Cr+6, TAL Metals		
	L: Olive gray (5Y4/2) SILTY SAND, little to trace ay, wet.	0.0		3G(14.0-14.5)	Cr+6, TAL Metals		
	AT: PEAT.	0.0	XOOD-1	30(14.0-14.3)	OTTO, TAL Metals		
16 +		0.0					
18 + + + + + + + + + + + + + + + + + + +		0.0					
			XOSB-1	3H(18.5-19.0)	Cr+6, TAL Metals		
NF	R: No Recovery						

ENCD	AFCON	Client: PPG Industries		BORING ID:
ENSR	AECON	Site: Site 133		OSB/XOSB-13
Start Dat	te:	Project: Site Investigation		Page: 3 of 3
7/20/200	06	Coordinates: X-611056.3 Y-68309	Depth of Boring: 28.00	
End Date		Elevation: OSB-13 = 12.6; XOSB-13 = 1	2.5 ft NAVD88	Geologist: M. Abdelaziz
9/13/200		Drill Subcontractor:		Driller: ADI
Depth (ft)	Lithology	Description	PID	Sample ID Sample Parameters
20 —	S	SILTY CLAY: Black (5Y 2.5/1) SILTY CLAY, trace Peat.	0.0	
24 —		GILTY CLAY: Black (2.5YR 2.5/1) SILTY CLAY and nedium to fine SAND. CLAYEY SAND: Black (2.5YR 2.5/1) CLAYEY SAND, race Organics. GILTY SAND: Very dark grayish brown (10YR 3/2) SILTY SAND, little to trace Clay. GAND: Dark reddish brown (5YR3/3) coarse to fine SAND, trace Silt and fine Gravel.	0.0	
l ₂₈ ⊥	\ N	JULL: End of boring at 28 feet.		

ENSR AI	ECOM	Client: PPG Industries					BORING ID:			
ENSK	ECOM	Site:	Site OSB				OSB/XOSB-17			
Start Date:		Project:	Site Investigation				Page: 1 of 3	Page: 1 of 3		
7/19/2006		Coordinates	3: X-611166.6 Y-68	32972			Depth of Boring: 28.00			
End Date:		Elevation: (OSB-17 = 12.1; XOSB-17	= 11.8 ft N	AVD8	38	Geologist: M.	Abdelaziz, R. Firely		
9/12/2006		Drill Subcor	ntractor: ADI				Driller:			
Depth (th)	91097		Description	PIL	Blows/6"		Sample ID	Sample Parameters		
	ASF	PHALT: Asphal	t	N/A						
× × × × × × × × × × × × × × × × × × ×	×××× COI	NCRETE: Con	crete			0	SB-17A(0.9-1.4)	MS/MSD, Cr+6, TAL Metals		
×	som		5YRN4) coarse medium SAND ne Gravel, little fine Sand and S							
2— ×	× × NR:	No Sample					SB-17 was a			
-	som		5YRN4) coarse to medium SAI ne Gravel and Silt, little fine Sa 0% COPR.			7	/19/2006 to 4	.7' in Grid S17A		
	NR:	No Sample								
4+	×			0.0			00.470/4.0.4.7			
×			5YRN4) WOOD CHIPS, some Silt, little medium Sand, wet.	ppn	7		SB-17B(4.2-4.7)	Cr+6, TAL Metals		
	NR:	No Sample			9			advanced on n 4.7' to 28' in		
6-					5	G		a step-out from		
× × × ×	× SAN		own (10YR2/2) medium to fine ome Coal ash, little medium to	fine 0.5		XC	OSB-17C(6.2-7.2)	MS/MSD, Cr+6, TAL Metals		
_ ×	× ×				100 /2"					
	NR:	No Recovery			NA					
8+ × × × × ×	× and		own (10YR2/2) coarse to fine S e GRAVEL, wet. MGP like odo			XC	DSB-17D(8.2-9.2) SB-17DD(8.2-9.2)	Cr+6, TAL Metals Cr+6, TAL Metals		
- × × ×	×××				42		(= -: -)	,		

ENCD	AECONA	Client: PPG Industries		BORING ID:			
ENSR	AECOM	Site: Site OSB	OSB	OSB/XOSB-17			
Start Date 7/19/200	06						
9/12/200		Drill Subcontractor: ADI			Driller:		
Depth (ft)	Lithology	Description	PID	Blows/6"	Sample ID	Sample Parameters	
10 —		L: Very dark grayish brown (10YR3/2) fine SAND I SILT, trace Clay, wet.	8.5 ppm	21 15 16	XOSB-17E(10.2-10.7)	Cr+6, TAL Metals	
12 —	× × trac	L: Reddish brown (5YR4/4) fine SAND and SILT, the Clay, wet. : No Recovery	1.5	10 10 12			
_	× × trac	L: Reddish brown (5YR4/4) fine SAND and SILT, te Clay, wet. : No Recovery	ppm	10 8 4	XOSB-17F(12.2-12.7)	Cr+6, TAL Metals	
14 —	× × FILI	L: Reddish brown (5YR4/4) fine SAND and SILT, te Clay, wet.	0.6 ppm	8 12 70	XOSB-17G(14.2-14.7)	Cr+6, TAL Metals	
16 —	NR:	AT: PEAT, moist. : No Recovery AT: PEAT, peat-like odor, moist.	10.0 ppm	5 3 4	XOSB-17H(16.0-16.5)	Cr+6, TAL Metals	
18 —			2.2 ppm	4 3 2 2			

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

XOSB location is offset from original OSB location due to presence of stormwater drain.

ENCD AECOM	Client: PPG Industries		BORING ID:				
ENSR AECOM	Site: Site OSB	OSB	OSB/XOSB-17				
Start Date:	Project: Site Investigation			Page: 3 of 3	Page: 3 of 3		
7/19/2006	Coordinates: X-611166.6 Y-682972	Coordinates: X-611166.6 Y-682972					
End Date:	Elevation: OSB-17 = 12.1; XOSB-17 = 11.	8 ft NA	VD88	Geologist: M. A	bdelaziz, R. Firely		
9/12/2006	Drill Subcontractor: ADI			Driller:			
Debty (41) Tithology	Describtion	PID	Blows/6"	Sample ID	Sample Parameters		
±:±: SIL wei	T AND CLAY: Dark gray (10YR4/1)SILT and CLAY,		4				
			6				
20 + NR	: No Recovery	0.7	3				
SIL	T AND CLAY: Dark gray (10YR4/1)SILT and CLAY,	ppm	_				
	l.		5				
			8				
=:=:			11				
22 + NR	: No Recovery	51.4	10				
-:: coa	ND AND GRAVEL: Dark reddish brown (5YR3/3) arse to fine SAND and medium to fine GRAVEL, e coarse Gravel, wet. MGP like odor and sheen.	ppm	8				
SA	ND AND SILT: Dark reddish brown (5YR3/3) fine		4				
SA	ND and SILT, wet. MGP like odor and sheen.		6				
24 + NR	: No Recovery	11.4	4				
	ND AND SILT: Dark reddish brown (5YR3/3) fine ND and SILT, wet. MGP like odor and sheen.	ppm	4				
-			4				
			4				
26 — — —		3.2 ppm	4	XOSB-17L(26.0-27.0)	Cr+6, TAL Metals		
		1- k,,	3 X	(OSB-17LD(26.0-27.0)	Cr+6, TAL Metals		
-			3 4				
28 — NU	LL: End of boring at 28 feet.			I			

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

XOSB location is offset from original OSB location due to presence of stormwater drain.

FNCD	A E COM	Client: PPG Industries			BORIN	
ENSR	AECOM	Site: Site OSB			OSB	/XOSB-19
Start Da	te:	Project: Site Investigation			Page: 1 of 3	
7/18/200)6	Coordinates: X-611217.1 Y-682922.	Depth of Borin	g: 28.00		
End Date		Elevation: OSB-19 = 11.7; XOSB-19 = 11.	9 ft NA	VD88	Geologist: M. A	Abdelaziz
9/11/200		Drill Subcontractor: ADI			Driller:	
Depth (ft)	Lithology	Description	PID	Blows/6"	Sample ID	Sample Parameters
0_	ASI	PHALT: Asphalt	N/A			
		NCRETE: Concrete				
	Sar	L: Weak red (2.5YR4/2) medium SAND, some fine and and fine Gravel, little Silt, trace Clay, dry. 40%	N/A		OSB-19A(0.9-1.4)	Cr+6, TAL Metals
2—	× × × FIL Sar	L: Dark red (7.5YR3/6) medium SAND, some fine and fine Gravel, little Silt, trace Clay, dry. 10% PR.				
	$^{\wedge} \times ^{\wedge} \times$ Sar	L: Dark red (7.5YR3/6) medium SAND, some fine and fine Gravel, little Silt, trace Clay, dry. 90% PR.				
4-	X X X X X X X X X X X X X X X X X X X		0.0 ppm	2 2		
		L: Pinkish gray (7.5YR7/2) fine to very fine SAND SILT, some very fine Gravel, moist.		2 2		
6+	$\begin{array}{ccc} \times & \times \\ \times & \times \\ \times & \times \end{array}$			2		
		L: Weak red (10R4/2) coarse to fine SAND, some , trace fine Gravel, moist.		3		
	$\times \times $			3 2		
8-	XXX	L Manufacture (0 FMDNO) - " - 1 G	19.6	4		
	\times^{\times} GR	L: Very dark gray (2.5YRN3) medium to fine AVEL, some coarse to medium Sand, trace Silt and e Sand, wet. Petroleum odor and sheen.	nnm			
-	$\begin{array}{ccc} \times & \times \\ \times & \times \\ \times & \times \end{array}$		19.6	3 _	OSB-19D(9.2-9.7)	Cr+6, TAL Metals
	XX		ppm	2		

ENCD	AFCOI	Client: PPG Industries				NG ID:
ENSR	AECO	Site: Site OSB			OSE	3/XOSB-19
Start Dat	te:	Project: Site Investigation			Page: 2 of 3	
7/18/200)6	Coordinates: X-611217.1 Y-682922	Depth of Borir	ng: 28.00		
End Date		Elevation: OSB-19 = 11.7; XOSB-19 = 11	.9 ft NA	VD8	8 Geologist: M.	Abdelaziz
9/11/200		Drill Subcontractor: ADI			Driller:	
Depth (ft)	Lithology	De ^{scription}	PID	Blows/6"	Sample ID	Sample Parameters
10 +	\ \ \ \ \	IR: No Recovery	50.4	4		
_	$ \hat{x} \times \hat{x} $ f	FILL: Very Dark Gray (2.5YR N3) silty CLAY, some ine Sand, trace medium Sand, wet. Petroleum odor and sheen.	50.4 ppm	5	OSB-19E(10.8-11.3)	MS/MSD, Cr+6, TAL Metals
	1	IR: No Recovery		9		
12 —			1.4- 2.3	9		
_		FILL: PEAT (Uplifted - fill), wet. Petroleum odor and heen.	ppm	10	OSB-19F(13.5-14.0)	Cr+6, TAL Metals
14 —	×××	ID No December	ppm 0.0	8	OSB-19FD(13.5-14.0)	Cr+6, TAL Metals
		IR: No Recovery	ppm	9		
-				11		
				12		
16—	$\begin{pmatrix} \times & \times \\ \times & \times \\ & & & \end{pmatrix}$	FILL: Very Dark Gray (2.5YR N3) silty CLAY, some ine to very fine Sand, trace fine Gravel, wet.	5.6 ppm	7		
		Petroleum odor and sheen.		7		
	× × × ×			8		
10	\times \times	FILL: Rotted WOOD. Petroleum odor and sheen.				
18 —	I	PEAT: PEAT, dry.	5.3 ppm	3	XOSB-19H(18.0-18.5) XOSB-19HD(18.0-18.5)	Cr+6, TAL Metals Cr+6, TAL Metals
		SAND: Gray (7.5YR5/1) fine to very fine SAND, some Silt, trace Clay, moist.		3	(3.2.13.6)	, , , ,

ENICD AECOM	Client: PPG Industries				NG ID:		
ENSR AECOM	Site: Site OSB			OSE	OSB/XOSB-19		
Start Date:	Project: Site Investigation			Page: 3 of 3			
7/18/2006	Coordinates: X-611217.1 Y-682922.	Depth of Bori	ng: 28.00				
End Date:	Elevation: OSB-19 = 11.7; XOSB-19 = 11.9	9 ft NA	VD88	Geologist: M.	Geologist: M. Abdelaziz		
9/11/2006	Drill Subcontractor: ADI			Driller:			
Debth (41) Lithology	Description	PID	Blows/6"	Sample ID	Sample Parameters		
			3				
	AYEY SAND: Gray (7.5YR5/1) clayey SILT, some e to very fine Sand, trace Peat, wet.	1.2 ppm	5				
	ND: Gray (7.5YR5/1) fine to very fine SAND, some , trace coarse Sand, moist.		10				
22	: No Recovery	2.2	11				
	ND: Gray (7.5YR5/1) fine to very fine SAND, some , trace coarse Sand and Clay, moist.	ppm	10				
	ND: Dark brown (7.5YR3/2) coarse SAND, some e Gravel, little Silt, moist to dry.		11				
	ND: Dark reddish brown (5YR3/4) coarse to dium SAND, little Silt and fine Sand, wet.	3.3 ppm	10				
			10				
			9				
	ND: Dark reddish brown (5YR3/4) fine to very fine	5.3 ppm	10				
- SA	ND, little Silt, trace coarse Sand, wet.		10				
			10				
28	LL: End of boring at 28 feet.		ı		1		

ENICD AFCO	Client: PPG Industries			BORIN	IG ID:
ENSR AECO	Site: Site 133			0	SB/XOSB-21
Start Date:	Project: Site Investigation			Page: 1 of	3
7/18/2006	Coordinates: X-611281 Y-682858.		Depth of B	oring: 30.00	
End Date:	Elevation: OSB-21 = 11.5; XOSB-21 = 11.	7 ft NAVD8	38		M. Abdelaziz
9/11/2006	Drill Subcontractor:			Driller:	ADI
Depth (th) Lithology	Description	PID	PID Sav		Sample Parameters
0	ASPHALT: Asphalt	N/A			
×^ × ^ × × ×	CONCRETE: Concrete				
××	FILL: Dusky red (2.5YR3/2) coarse to fine SAND, some medium to fine Gravel, trace Silt, dry. 35% COPR.	/	OSB-21	A(1.15-1.65)	Cr+6, TAL Metals
2+	NR: Soft Dig - No Recovery				
× × × × ×	FILL: Reddish gray (5YR5/2) medium to fine SAND, some medium Gravel and Slag, little Silt, trace(-) Clay, wet.	/	OSB-2	1B(2.7-3.2)	Cr+6, TAL Metals
1 4+	NR: Soft Dig - No Recovery				
	FILL: Black (5YR2.5/1) SILTY SAND, some Glass, Cinders and Tiles, wet.	0.1			
× × × × × × × × × × ×	FILL: Gray (5YR5/1) coarse to medium SAND, some Silt, wet.				
	NR: No Recovery				
6—	FILL: Black (5YR2.5/1) SILTY SAND, some Glass, Cinders and Tiles, wet.	0.1			
- × × × × × × × × × × × × × × × × × × ×	FILL: Gray (5YR5/1) coarse to medium SAND, some Silt, wet.				
	FILL: Brown (7.5YR4/2) medium SAND, some Silt, little fine Gravel, trace Clay, moist.	0.4			
×××	NR: No Recovery				
× × × × × ×	FILL: Dark grayish brown (10YR4/2) coarse to medium SAND, some Silt, little fine to very fine Gravel, trace Clay, wet.				
10 - × ×	FILL: Dark grayish brown (10YR4/2) medium to fine SAND, some Silt and Clay, trace coarse Sand, wet.	12.8			
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	NR: No Recovery	[

ENSR	AECO	Client:	PPG Industries				BORIN		
LINSK	ALCO	Site:	Site 133				O:	SB/XOSB-21	
Start Da	te:	Project:	Site Investigation	n			Page: 2 of 3		
	7/18/2006 Coordinates: X-611281 Y-682858.2						Depth of E	Boring: 30.00	
End Dat			n: OSB-21 = 11.5; X	OSB-21 = 11.	7 ft NAVD8	38		M. Abdelaziz	
9/11/200		Drill Sub	contractor:			1	Driller:	ADI	
Depth (ft)	Lithology		Description		PID	- S9/	mpleID	Sample Parameters	
	× × × × × × × ×		dish gray (10R3/1) SILTY dium Sand and olive yello						
12 —	××	NR: No Recove	ery						
	× × × × × × × ×		dish gray (10R3/1) SILTY dium Sand and olive yello		49.3				
14 —		FILL: Very darl SAND, some S Petroleum odo	s brown (7.5YR2.5/2) fine ilt, trace fine Gravel and rand sheen.	e to very fine Clay, wet.	49.3	OSB-2	1C(13.3-13.8)	Cr+6, TAL Metals	
		PEAT: PEAT, \	vet. Petroleum odor and	sheen.					
		NR: No Recov	ery						
		PEAT: PEAT, v	vet. Petroleum odor and	sheen.	39.5				
16—		NR: No Recov	ery						
		PEAT: PEAT, v	vet. Petroleum odor and	sheen.	78.8				
18—	# # # # # # # # #				7.3				
20 —	# # # # # # # # # # # # # # # # # # #				6.2	XOSB-2	21E(20.0-21.0)	MS/MSD, Cr+6, TAL Metals	

ENCD	1,500)	Client:	PPG Industries					NG ID:
ENSR	AECO) [V]	Site:	Site 133				0	SB/XOSB-21
Start Da	ite:		Project:	Site Investigation				Page: 3 c	of 3
7/18/200	06				′-682858.2				Boring: 30.00
End Dat				: OSB-21 = 11.5; XOSB	-21 = 11.7	ft NAVD88	3		:: M. Abdelaziz
9/11/200			Drill Subc					Driller:	ADI
Depth (ft)	Lithology			Description		PID	58	mple ID	ADI Sample Parameters
			TY CLAY: G ery fine San	ray (gley16/1) SILTY CLAY, s d, wet.	some fine				
22 —		NR:	No Recover	ГУ		7.3			
			TY CLAY: G ery fine San	ray (gley16/1) SILTY CLAY, s d, wet.	some fine	7.5			
			ND: Gray (glotrace fine S	ey16/1) coarse to medium SA and, wet.	ND, some				
		NR:	No Recover	ry					
24 —				dish brown (2.5YR3/3) coarse and and Silt, trace fine Grave		0.4			
		NR:	No Recover	гу					
26 —				dish brown (2.5YR3/3) coarse and and Silt, trace fine Grave		1.4			
		NR:	No Recover	ту					
28 —				dish brown (2.5YR3/3) coarse and and Silt, trace fine Grave		6.2			
		NR:	No Recover	ту					
1 30 ⊥		NUI	LL: End of bo	oring at 30 feet.					

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

AECOM

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: P4-A`14A

rz.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: 610701
Date Started Drilling: 3/10/2014 11:20:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 683297
Date Finished Drilling: 3/10/2014 11:50:00 AM	Core Size: 2 in	Boring Total Depth: 25 ft
Logged By: MI & FM	Project Manager: Chris Martell	Depth to Water: NA

Physical Location: A'14A- Carteret Ave. Surface Elevation: 11.3 ft NAVD88

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



Boring ID: P4-A`14A

30 Kı	nightsbridge F 732.564.32			08854						Page: 2
Project	t Name: F	PPG Ga	arfield Ave			Drilling Company:	SGS North America			•
Project	t Number:	60240	0739			Drilling Method:	Geoprobe	Coordinates (NJSP)	NAD83) x: 610701	
Date S	tarted Dril	ling: _:	3/10/2014	11:20:00 AM		Rig Type: Coordinates (NJSPN			AD83) y: 683297	
Date F	inished Dr	illing:	3/10/2014	4 11:50:00 AM	1	Core Size: 2 in Boring Total Depth: 25 ft			25 ft	
Logge	d By: MI	& FM				Project Manager:	Chris Martell	Depth to Water: NA	١	
Physic	al Locatio	n: A`1	4A- Carter	et Ave.				Surface Elevation:	11.3 ft NAVD88	
								(Not	e bgs = below ground surface)	
Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	С	Surface Cover and Thic	ckness:	Sample ID	
25										

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

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Boring ID: P4-A14A

Page: 1

Project Name:PPG Garfield AveDrilling Company:SGS North AmericaProject Number:60240739Drilling Method:GeoprobeCoordinates (NJSPNAD83) x:610726Date Started Drilling:3/10/2014 12:00:00 PMRig Type:Coordinates (NJSPNAD83) y:683283Date Finished Drilling:3/10/2014 1:40:00 PMCore Size:2 inBoring Total Depth:25 ft

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

Physical Location: P14A- Carteret Ave. Surface Elevation: 11.9 ft NAVD88

Depth Range t bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
3-7				NR		Boring advanced directly to 5 ft bgs.	
-2-							
	0						
-3							
-							
4							
\dashv							
-5-		0.0	slightly	FILL		fine to medium SAND, some cinders, little fine gravel,	
			moist			(7.5YR 2.5/1) black, loose, slightly moist, no odor, no	
-6						staining.	P4-A14A-6.0-6.5
.7—							
	5	0.0	moist	FILL		fine to medium silty SAND, little fine gravel, trace brick	
-8-						fragments, cinders, (7.5YR 4/2) brown, dense, moist, no odor, no staining.	
						0.001, 1.00 0.001	P4-A14A-8.0-8.5
-9							
_							
-10		0.0	moist	FILL		SILT, some fine sand, trace roots, (7.5YR 3/4) dark brown,	P4-A14A-10.0-10.5
\dashv		0.0	moist	FILL		low plasticity, soft, moist, no odor, no staining.	1 4 7 (14,7 (10.0 10.0
-11			P4-A14A-11.0-11.5				
40		0.0	moist	OL		UNDorg SILT, 90% organic silt, 10% organic fibers, low	P4-A14A-11.5-12.0
-12	5					plasticity, soft to stiff, moist, slight organic odor, no staining. Soils consistent with UNDorg.	P4-A14A-12.0-12.5
-13						Soils consistent with ondorg.	
		0.0	moist	SM		UNDno fine SAND, and silt trace organics, (10YR 5/4) yellowish brown, dense to soft, moist, no odor, no staining.	
-14						Soils consistent with UNDno.	D4 4444 44 0 44 5
4							P4-A14A-14.0-14.5
15		0.0	moist	SM		UNDno fine to medium SAND, some silt, (5YR 5/8)	
-		0.0	moist	SIVI		yellowish red, loose to dense, moist, no odor, no staining.	
16-		0.0	moist	SP		Soils consistent with UNDno. UNDno fine to coarse SAND, with fine to coarse gravel, little	P4-A14A-16.0-16.5
			R	e-Review		silt, (2.5YR 4/8) red, loose to hard, moist, no odor, no	
-17	5			soil descri	ption	staining. Soils consistent with UNDno.	
18-	· ·		in	dicates tha	it the		
			U	SCS for thi	 \$		P4-A14A-18.0-18.5
19			in	terval is SF	P-SM		
4							
20		0.0	moiet	SP		LINDno fine to coarse SAND with fine to coarse gravel little	P4-A14A-20.0-20.5
4		0.0	moist	3P		UNDno fine to coarse SAND, with fine to coarse gravel, little silt, (2.5YR 4/8) red, loose to hard, moist, no odor, no	1 7-71147-20.0-20.0
21						staining. Soils consistent with UNDno.	
_ +							
22	5						
	5						
23							

30 Ki	LECO nightsbridge F	M Road, Piso	cataway, NJ 0	08854			В	oring ID: P4-A14A
	732.564.32	200 office	telephone					Page: 2
Project	t Name: F	PPG Ga	arfield Ave			Drilling Company: SGS North America		
Project	t Number:	60240	0739			Drilling Method: Geoprobe	Coordinates (NJSP)	NAD83) x: 610726
Date S	tarted Dril	ling: _	3/10/2014	12:00:00 PM		Rig Type:	Coordinates (NJSPN	AD83) y: 683283
Date F	inished Dr	illing:	3/10/2014	4 1:40:00 PM		Core Size: 2 in	Boring Total Depth:	25 ft
	d By: MI					Project Manager: Chris Martell	Depth to Water: NA	
Physic	al Locatio	n: P1	4A- Cartere	et Ave.			Surface Elevation:	
							(Not	e bgs = below ground surface)
Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphi Log	Surface Cover and Thick	ness:	Sample ID
 - 25						4		

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Boring ID: P4-B14A

Page: 1

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

Project Number:60240739Drilling Method:GeoprobeCoordinates (NJSPNAD83) x:610753Date Started Drilling:3/11/2014 9:16:00 AMRig Type:Coordinates (NJSPNAD83) y:683270

 Date Finished Drilling:
 3/11/2014 10:00:00 AM
 Core Size:
 2.0 in
 Boring Total Depth:
 25 ft

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

			A - Cartere				(Note bgs = below ground surface)
epth inge bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
				NR		Boring advanced directly to 5 ft bgs.	
1-							
2-	0						
3—							
4—							
_							
5		0.0	dry	FILL		fine to medium silty SAND, little coal, trace glass (7.5YR 3/2) dark brown, medium dense, dry, no	s fragments, odor, no
6		0.0	slightly moist	FILL		staining. fine to medium SAND, little coarse gravel, trace	glass P4-B14A-6.0-6.5
7—	5		moist			fragments, (5YR 4/3) reddish brown, medium de moist, no odor, no staining.	ense, slightly
8—							P4-B14A-8.0-8.5
9—							
0		0.0	moist	FILL		fine silty SAND, trace glass fragments, trace cer	ramics, P4-B14A-10.0-10.9
1—			to wet			(10YR 4/3) brown, soft to medium dense, moist odor, no staining.	to wet, no
2	5						P4-B14A-12.0-12.5
3—							P4-B14A-12.5-13.0
4—		0.0	moist	OL		80% organic silt, 20% organic fibers fine SILT, (very dark brown, medium plasticity, medium den no odor, no staining. Soils consistent with UNDo	se, moist,
5		0.0	moist	SM		fine to medium sandy SILT, (7.5YR 5/1) gray, m dense to dense, moist, no odor, no staining. Soil	edium P4-B14A-14.0-14.
+		0.0	moist to	SM		with UNDno. fine SAND, little silt, (7.5YR 5/1) gray, medium of to wet, no odor, no staining. Soils consistent with	
6 -			wet			,	P4-B14A-16.0-16.9
7—	5	0.0	dry	SM		fine to medium SAND, some fine to course grav	el, (2.5YR
8		0.0	,			7/3) light reddish brown, dense to very dense, dr no staining. Soils consistent with UNDno.	y, no odor, P4-B14A-18.0-18.
9—		0.0	dry	SM		fine to coarse SAND, some fine to course grave 4/3) reddish brown, medium dense to very dense odor, no staining. Soils consistent with UNDno.	
.0		0.0	dry	SM		fine to coarse SAND, fine to course gravel, (2.5' reddish brown, medium dense to very dense, dry	(R 4/3) P4-B14A-20.0-20.5
21—						no staining. Soils consistent with UNDno.	
22—	5						
23—							



Boring ID: P4-B14A

Drilling Company: SGS North America	
Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 610753
Rig Type:	Coordinates (NJSPNAD83) y: 683270
Core Size: 2.0 in	Boring Total Depth: 25 ft
Project Manager: Chris Martell	Depth to Water: NA
	Surface Elevation: 12.4 ft NAVD88
	(Note bgs = below ground surface)
	Drilling Method: Geoprobe Rig Type: Core Size: 2.0 in

Logged	d By: MI	& FM			F	Project Manager:	Chris Martell	Depth to Water: NA	\
Physic	al Locatio	n: B14	4A - Carter	et Ave.				Surface Elevation:	12.4 ft NAVD88
	ı							(Not	e bgs = below ground surface)
Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log		Surface Cover and Thickn	ess:	Sample ID
25						4			
Comme	nts: 1) 3 atte	empts w	ere made to	obtain best re	covery 2)	MM/UND confirmed	to be 1 ft thick 3) No COPR or	GGM encountered in any	interval of this boring.



Boring ID: P4-BB20A

Project Name: PPG Garfield Ave Drilling Company: SGS North America
Project Number: 60240739 Drilling Method: Direct Push Coordinates (NJSPNAD83) x: 611366.605

 Date Started Drilling:
 12/9/2014 9:30:00 AM
 Rig Type:
 Geoprobe
 Coordinates (NJSPNAD83) y:
 682752.926

 Date Finished Drilling:
 12/9/2014 11:00:00 AM
 Core Size:
 3.0 in
 Boring Total Depth:
 20 ft

	l By: SP al Location	n: Ca	rteret Aven	nue		Project Manager: Scott Mikaelian	Depth to Water: N/A Surface Elevation:	10.5 ft NAVD88
								e bgs = below ground surface)
epth ange bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Ti	hickness:	Sample ID
		0.0		ASPHALT		ASPHALT.		
-1-								
_ =		0.0	moist	FILL		fine to medium SAND,trace gravel,	(10YR 5/1)	P4-BB20A-1.5-2.0
-3	5	0.0	moist	FILL		gray,loose,moist,no odor,no stainir fine to medium SAND,some ash tra dark grayish brown,loose to mediu staining.	ace gravel,(10YR 4/2)	P4-BB20A-2.0-2.5
-4								P4-BB20A-4.0-4.5
5		0.0	saturated	FILL		fine to coarse well-graded SAND,tr glass,trace silt,(10YR 5/1) gray,me dense,saturated,no odor,no stainin	dium	
-7 -8	5						•	P4-BB20A-6.0-6.5
9								P4-BB20A-8.0-8.5
10 <u> </u>		0.0		NR		NO RECOVERY.		
12 <u> </u>	3	13.6	saturated	FILL		fine to medium silty SAND,trace as 3/1) very dark gray,low plasticity so dense,saturated,moderate petroleu	oft to medium	P4-BB20A-12.0-12.5
14—								P4-BB20A-14.0-14.5
15		0.0	moist	FILL		fine to medium silty SAND,trace fir	ne gravel,(10YR 2/2)	P4-BB20A-15.0-15.5
16— - 17—	5	0.0	slightly moist	PT		very dark brown, low plasticity, mois PEAT (degraded vegetated materia 40% organic fibers), (10YR 4/3) bromedium dense, slightly moist, mode staining. Soils consistent with MM.	al),(60% organic silt, own,low plasticity	P4-BB20A-15.5-16.0
18 — — 19 —		0.0	slightly moist	OL		UNDorg SILT, (90% organic silt, 10 fibers),(10YR 4/1) dark gray,low plates dense,slightly moist,moderate organic soils consistent with UNDorg.	asticity,medium	
20								
	-4 4\ T'	_#-		- 4 b		2) UND/MM confirmed to be 1 ft thick 3) No CO	20D 00M	

Boring ID: P4-C14A

Page: 1

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

Depth							(Note bgs = below ground surface)		
Range t bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID		
				NR		Boring advanced directly to 5 ft bgs.			
-1-									
' ₋									
2-									
\dashv	0								
3-									
\dashv									
4									
5		0.0	moist	FILL		fine to medium silty SAND, some fine to medium gravel, little			
-6-						fill material, (10YR 5/2) grayish brown, dense, moist, no odor, no staining.			
						odor, no otaliling.	P4-C14A-6.0-6.5		
-7-									
\dashv	4								
-8-						+	P4-C14A-8.0-8.5		
\dashv									
9				NR		NO RECOVERY			
10									
10		0.0	moist	FILL		fine silty SAND, trace ceramics, trace fill material, (7.5YR	P4-C14A-10.0-10.5		
11						4/2) brown, dense, moist, no odor, no staining.			
4									
12-							P4-C14A-12.0-12.5		
\dashv	5						1 4-0 14A-12.0-12.3		
13-									
,, =							P4-C14A-13.5-14.0		
14		0.0	moist	OL		UNDorg SILT, 70% organic silt, 30% organic fibers, (7.5YR	P4-C14A-14.0-14.5		
15						2.5/3) very dark brown, low plasticity, soft to stiff, moist, moderate organic odor. Soils consistent with UNDorg.			
		0.0	moist	OL		UNDorg SILT, 70% organic silt, 30% organic fibers, (7.5YR			
16		0.0	slightly moist	SM		2.5/3) very dark brown, low plasticity, soft to stiff, moist, moderate organic odor. Soils consistent with UNDorg.	P4-C14A-16.0-16.5		
4			1110101			UNDno fine SAND, little silt, (7.5YR 5/1) gray, dense,	P4-C14A-10.0-10.5		
17—	_					slightly moist, no odor, no staining. Soils consistent with UNDno.			
-	5								
18							P4-C14A-18.0-18.5		
10									
19—		0.0	moist	SM		UNDno fine to medium SAND, some fine to medium gravel,			
20						(5YR 5/2) reddish gray, loose, moist, no odor, no staining. Soils consistent with UNDno.			
- 4		0.0	moist	SM		UNDno fine to coarse SAND, with fine to medium gravel, (2.5YR 4/6) red, loose to hard, moist. Soils consistent with	P4-C14A-20.0-20.5		
21			II.	e-Review		UNDno.			
\dashv				e soil des	그런 하고하는 다				
22	F		II.	dicates the	그 남자 그리고 되는				
⊢	5			SCS for th SP	is interval				
23			IS	or .					



Boring ID: P4-C14A

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

riiysicai	Locatio	n: C12	1A- Cartere	et Ave.		Sui	rface Elevation:	e bgs = below ground surface)
Depth Range ft bgs)	decovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:		Sample ID
25								
omments	s: 1) 3 atte	empts we	ere made to	obtain best re	covery 2) MM/UNI	confirmed to be 1 ft thick 3) No COPR or GGM	/I encountered in any	interval of this boring.



Boring ID: P4-CC20A

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

		illing:	12/11/201	14 10:15:00 <i>F</i>		Core Size: 3.0 in	Boring Total Depth:	
	d By: SP	0	-t t A		j.	Project Manager: Scott Mikaelian	Depth to Water: N//	
nysic	al Location	n: Cai	teret Aver	iue			Surface Elevation:	10.1 ft NAVD88 te bgs = below ground surface)
							ION)	S MS - DEION GLOUING SULIDGE)
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thic	kness:	Sample ID
		0.0		ASPHALT		ASPHALT.		
-1 -1 -2		0.0	slightly moist	FILL		fine SAND,(10YR 5/8) yellowish brow dense,slightly moist,no odor,no stainii	n,loose to medium ng.	P4-CC20A-0.5-1.0 P4-CC20A-2.0-2.5
-3 -4	5	0.0	slightly moist	FILL		fine to coarse SAND,some ash,trace coal,(10YR 4/2) dark grayish brown,lo moist,no odor,no staining.	gravel,trace ose,slightly	P4-CC20A-4.0-4.5
_ -5								
_		0.0	slightly	FILL		fine to medium SAND,trace gravel,tra	ce ash,(2.5YR	
-6 -7	5	0.0	moist saturated	FILL		2.5/2) very dusky red,medium dense, odor,no staining. fine to medium SAND,some gravel,tra 2.5/2) very dusky red,loose,saturated, staining.	ice ash,(2.5YR	P4-CC20A-6.0-6.5
-8					\bowtie			
-9								P4-CC20A-8.0-8.5
						2) No COPR or GGM present in any interval of th		

LOGS.GDT

PPG

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Boring ID: P4-D14A

Page: 1

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

Surface Elevation: 12.6 ft NAVD88 Physical Location: D14A - Carteret Ave. e bas = below arou Depth PID Moisture Graphic Recovery Sample Range **USCS** Surface Cover and Thickness: (ft/ft) (ppm) Content Log ID (ft bgs) NR Boring advanced directly to 5 ft bgs. 0 0.0 dry **FILL** fine to medium SAND, trace gravel, (5YR 5/1) gray, loose to medium dense, dry, no odor, no staining. 0.0 P4-D14A-6.0-6.5 **FILL** fine to medium SAND, little silt, trace coarse gravel, (5YR dry 4/3) reddish brown, dense, dry, no odor, no staining. 5 0.0 P4-D14A-8.0-8.5 moist **FILL** fine to medium sandy SILT, some organic fibers, (7.5YR 2.5/3) very dark brown, soft, moist, no odor, no staining. 0.0 P4-D14A-10.0-10.5 **FILL** fine to medium SAND, with cinders and ash, (7.5R 2.5/1) reddish black, (7.5YR 2.5/3) very dark brown, medium dense, no odor, no staining. P4-D14A-12.0-12.5 5 0.0 FILL moist fine to medium SAND, trace silt, (5YR 4/3) reddish brown, -13 medium dense, moist, no odor, sheen. 14 P4-D14A-14.0-14.5 0.0 P4-D14A-14.5-15.0 **FILL** SILT, some fill material, (5YR 4/3) reddish brown, medium dry plasticity, medium dense, dry to moist, no odor, no staining. to P4-D14A-15.0-15.5 0.0 OL moist SILT 60% organic silt, 40% organic fibers, (7.5YR 6/1) gray, 0.0 PT medium plasticity, medium dense, dry to moist, no odor, dry -16 sheen. Soils consistent with UNDorg. 1/ 1/ P4-D14A-16.0-16.5 to (80% organic fibers, 20% organic silt) PEAT, (7.5YR 3/2) moist 11, 11, dark brown, medium plasticity, stiff, moist, strong organic moist 0.0 SM odor, no staining. Soils consistent with MM. moist 5 fine to medium silty SAND, (7.5YR 5/1) gray, medium dense -18 to stiff, moist, no odor, no staining. Soils consistent with P4-D14A-18.0-18.5 UNDno. 19 -20 0.0 P4-D14A-20.0-20.5 SM fine to medium silty SAND, (5YR 5/1) gray, medium dense, moist moist to wet, no odor, no staining. Soils consistent with - 4/15/14 UNDno. -21 wet 22 5 -23 fine to coarse SAND, with coarse gravel, (5YR 4/3) reddish

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



Boring ID: P4-D14A

	r ugo. Z
Drilling Company: SGS North America	_
Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 610807
Rig Type:	Coordinates (NJSPNAD83) y: 683242
Core Size: 2.0 in	Boring Total Depth: 25 ft
Project Manager: Chris Martell	Depth to Water: NA
	Surface Elevation: 12.6 ft NAVD88
	Drilling Company: SGS North America Drilling Method: Geoprobe Rig Type: Core Size: 2.0 in Project Manager: Chris Martell

Logged	iby. IVII c	X 1 1V1				oject Manager: Chris Martell	Depth to Water: NA	
Physic	al Location	n: D14	4A - Cartere	et Ave.			Surface Elevation:	12.6 ft NAVD88
							(Not	e bgs = below ground surface)
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and	Thickness:	Sample ID
						brown, hard, dry, no odor, sheen.	Soils consistent with	
						UNDno.		
25								
	ata. 1) 3 atto	mnts we	ere made to	obtain best re	covery 2) M	WUND confirmed to be 1 ft thick 3) No C	OPR or GGM encountered in any	interval of this boring

Boring ID: P4-E14A

Page: 1 Drilling Company: SGS North America

Project Name: PPG Garfield Ave Project Number: 60240739 Drilling Method: Geoprobe Coordinates (NJSPNAD83) x: 610834 Date Started Drilling: 3/13/2014 9:00:00 AM Rig Type: Coordinates (NJSPNAD83) y: 683228 Boring Total Depth: 25 ft Date Finished Drilling: 3/13/2014 9:40:00 AM Core Size: 2.0 in Depth to Water: NA Logged By: MI Project Manager: Chris Martell

1			A- Cartere			Surface Elevation: 1 (Note	bgs = below ground surface)
Depth Range It bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
				NR		Boring advanced directly to 5 ft bgs.	
-1-							
' _							
2-							
_	0						
3-							
4							
4							
-							
5-		0.0		FILL		fine to medium gravelly SAND, little silt, trace ash, (7.5YR	
\dashv		0.0	moist	FILL		4/3) brown, loose to hard, no odor, no staining.	
-6						fine to medium SAND, some fine to medium gravel, trace ash, cinders, brick, (7.5YR 4/3) brown, moist, no odor, no	P4-E14A-6.0-6.5
_						staining.	
- /	3.5						
-8-	0.0						
° _							P4-E14A-8.0-8.5
9				NR		NO RECOVERY	
_							
10		0.0				6	D4 E444 40 0 40 E
4		0.0	moist	FILL		fine to medium SAND, some fine to medium gravel, trace ash, cinders, brick, (7.5YR 4/3) brown, moist, no odor, no	P4-E14A-10.0-10.5
11						staining.	
4							
12-	_						P4-E14A-12.0-12.5
\dashv	5						
-13							
,, =							
14—							P4-E14A-14.0-14.5
15							P4-E14A-14.5-15.0
		0.0	moist	OL PT	<u>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</u>	UNDorg SILT, 90% organic silt, 10% organic fibers, (7.5YR	P4-E14A-15.0-15.5
16		0.0	slightly moist	PI	1, 11, 1	2.5/1) black, low plasticity, soft, moist, no odor, no staining. Soils consistent with UNDorg.	D4 E444 40 0 40 E
					11, 11,	PEAT (degraded vegetated material), 80% organic fibers,	P4-E14A-16.0-16.5
17					1, 11, 1	20% organic silt, (7.5YR 2.5/3) very dark brown, stiff, slightly moist, strong organic odor, no staining. Soils consistent with	
\dashv	5	0.0	moist	SM		MM. UNDno fine SAND, some silt, (7.5YR 6/1) gray, dense,	
18-	F	Re-revi	ew of the	soil descri	iptions	moist, no odor, no staining. Soils consistent with UNDno.	P4-E14A-18.0-18.5
_ +			I	CS for inte	*10-15-4-24		
19—	f	t bgs is	SP-SM				
20							
20		0.0	moist	SM		UNDno SILT, some fine sand, trace coarse gravel, (7.5YR	P4-E14A-20.0-20.5
21						6/1) gray, stiff, moist, no odor, no staining. Soils consistent with UNDno.	
		0.0	moist	SM		UNDno fine SAND, little silt, (7.5YR 7/1) light gray, dense,	
22		0.0		SP-SM		moist, no odor, no staining. Soils consistent with UNDno. UNDno fine to medium SAND, some fine to medium trace	
	5					silt, (5YR 5/2) reddish gray, loose to hard. Soils consistent with UNDno.	
					<u> </u>		



Boring ID: P4-E14A

		1 4901 2
Project Name: PPG Garfield Ave	Drilling Company: SGS North America	-
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 610834
Date Started Drilling: 3/13/2014 9:00:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 683228
Date Finished Drilling: 3/13/2014 9:40:00 AM	Core Size: 2.0 in	Boring Total Depth: 25 ft
Logged By: MI	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: E14A- Carteret Ave.		Surface Elevation: 12.5 ft NAVD88
		(Note bgs = below ground surface)

hvsica	By: MI	n: F14	A- Cartere	t Ave		oject Manager:		Depth to Water: N Surface Elevation:	12.5 ft NAVD88
пузісс	ai Locatio		rA- Odricio	i Avc.				(N	ote bgs = below ground surface)
Depth lange t bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log		Surface Cover and T	hickness:	Sample ID
25									
23									
	nts: 1) 3 atte								



Boring ID: P4-EE21A

Page: 1

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

Project Number: 60240739 Drilling Method: Direct Push Coordinates (NJSPNAD83) x: 611433.137

Date Started Drilling: 12/10/2014 10:10:00 AM Rig Type: Geoprobe Coordinates (NJSPNAD83) y: 682678.79

 Date Finished Drilling:
 12/10/2014 11:30:00 AM
 Core Size:
 3.0 in
 Boring Total Depth:
 20 ft

 Logged By:
 SS
 Project Manager:
 Scott Mikaelian
 Depth to Water:
 N/A

iiyolot	ui Loodtio		rteret Aver			Odridee Ele	vation: 10.4 ft NAVD88 (Note bgs = below ground surface)
epth ange bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
_		0.0		ASPHALT		ASPHALT.	
1—		0.0	dry	FILL		fine to medium SAND,little fine gravel,little ash,trace debris,(7.5YR 2.5/2) very dark brown,loose,dry,no	P4-EE21A-1.0-1.5
3	5					odor,no staining.	P4-EE21A-2.0-2.5
4							P4-EE21A-4.0-4.5
5		0.0	slightly moist	FILL		fine to medium SAND,little ash,trace brick,trace coal,(7.5YR 2.5/3) very dark brown,loose,slightly moi moist,no odor,no staining.	
7— —	5					moot, no odor, no otdining.	P4-EE21A-6.0-6.5
9		0.0	wet	FILL		fine silty SAND,little ash,little fine to medium gravel,(2.5/1) black,loose,wet to saturated,slight petroleum odor,sheen.	5YR P4-EE21A-8.0-8.5
0				NR	XXXXX	NO RECOVERY.	
1—		0.0	wet	FILL		medium GRAVEL, little fine sand, (7.5YR 2.5/1) black, loose, wet, strong petroleum odor, sheen.	P4-EE21A-11.0-11.5
2—3—	4						P4-EE21A-12.0-12.5
4—		0.0	dry	FILL		fine SAND,little fine gravel,(10YR 5/2) grayish brown,loose,dry to slightly moist,slight petroleum odd staining.	
•						otaling.	P4-EE21A-14.0-14.5 P4-EE21A-14.5-15.0
5 - 6 -		0.0	slightly moist	PT		PEAT (degraded vegetated material),(50% organic si 50% organic fibers),(7.5YR 4/3) brown,medium stiff,slightly moist,moderate organic odor,no staining. Soils consistent with MM.	
7— 8—	5	0.0	slightly moist	OL		UNDorg SILT,(70% organic silt, 30% organic fibers),(10YR 4/2) dark grayish brown,low plasticity soft,slightly moist,slight organic odor,no staining. Soi consistent with UNDorg.	ls
9—							
20							
nmen	nts: 1) Three	attemn	ts were mad	e to ohtain heet	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-F14A

Page: 1

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

Depth	Recovery	PID	Moisture	11000	Graphic	·	gs = below ground surface) Sample
ange bgs)	(ft/ft)	(ppm)	Content	USCS	Log	Surface Cover and Thickness:	ID
				NR		Boring advanced directly to 5 ft bgs.	
-1-							
. +							
2—	0						
3—							
-							
4-							
_							
5—		0.0	moist	FILL		fine to medium silty SAND, with fine to medium gravel, (7.5YR 4/3) brown, loose, moist, no odor, no staining.	
6		0.0	moist	FILL		fine silty SAND, trace coal, fine gravel, (7.5YR 2.5/1) black, dense, moist, no odor, no staining.	P4-F14A-6.0-6.5
7—	F	0.0	moist	FILL		fine to medium silty SAND, little fine gravel, trace brick	
	5		to			fragments, ash, (7.5YR 5/3) brown, moist to wet, no odor,	
8			wet			no staining.	P4-F14A-8.0-8.5
9—							
\dashv							
10		0.0	wet	FILL		fine silty SAND, trace fine gravel, (7.5YR 5/3) brown, loose	P4-F14A-10.0-10.5
11—			to saturated			to dense, wet to saturated, no odor, no staining.	
``							
12—	_					-	P4-F14A-12.0-12.5
	5	0.0	moist	FILL		SILT, little roots trace cinders, (7.5YR 2.5/2) very dark	
13—		0.0	wet	FILL		brown, non plastic, soft, moist, no odor, no staining. fine silty SAND, trace fine gravel, (7.5YR 5/3) brown, loose	
14		0.0	moist	FILL		to dense, wet, no odor, no staining. fine to medium SAND, little silt, little fine to medium gravel,	P4-F14A-14.0-14.5
-						(7.5YR 4/1) dark gray, loose, moist, no odor, no staining.	P4-F14A-14.5-15.0
15		0.0	moist	OL		UNDorg SILT, 90% organic silt, 10% organic fibers, (7.5YR	P4-F14A-15.0-15.5
16-		0.0	slightly	PT	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	2.5/2) very dark brown, low plasticity, soft, moist, moderate organic odor, no staining. Soils consistent with UNDorg.	
-		0.0	moist		1, 11, 1	PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (7.5YR 2.5/2) very dark brown, stiff, slightly	P4-F14A-16.0-16.5
17—	_	0.0	moist	SM		moist, strong organic odor. Soils consistent with MM.	
40	5					UNDno fine to medium SAND, some silt, (7.5YR 5/1) gray, dense, moist, no odor, no staining. Soils consistent with	
18—						UNDno.	P4-F14A-18.0-18.5
19-							
\dashv							
20		0.0	moist	SM		UNDno fine to medium SAND, some silt, (7.5YR 5/1) gray,	P4-F14A-20.0-20.5
21—						dense, moist, no odor, no staining. Soils consistent with UNDno.	
- '		0.0	slightly moist	SP		UNDno fine to medium SAND, with fine to medium gravel,	
22-	_		1110101			(2.5YR 4/8) red, loose to hard, slightly moist, no odor, no staining. Soils consistent with UNDno.	
_	5						
23—							
1							



Boring ID: P4-F14A

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

Date F	inisnea Dr	illing:	3/13/2014	10:30:00 Ar	VI C	core Size: 2.0 in	Boring Total Depth:	25 II
Logge	d By: MI	F1	10 0	4 4	F	Project Manager: Chris Martell	Depth to Water: NA	10.4 # NIAV/D00
Physic	al Locatio	n: F14	+A- Cartere	et Ave.			Surface Elevation:	12.4 ft NAVD88 e bgs = below ground surface)
							(NOI	e bgs = below ground surface)
Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickne	ess:	Sample ID
25								
?								
2								
5								
) -								
	nts: 1) 3 atte	empts w	ere made to	obtain best re	coverv 2)	MM/UND confirmed to be 1 ft thick 3) No COPR or	GGM encountered in any	interval of this boring.
:1	, , , ,	,			/ -			-



Boring ID: P4-FF22A

Page: 1

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

Project Number: 60240739 Drilling Method: Direct Push Coordinates (NJSPNAD83) x: 611444.244

Date Started Drilling: 12/10/2014 9:10:00 AM Rig Type: Geoprobe Coordinates (NJSPNAD83) y: 682640.07

Date Finished Drilling: 12/10/2014 10:00:00 AM Core Size: 3.0 in Boring Total Depth: 15 ft

Logged By: SP

Project Manager: Scott Mikaelian Depth to Water: N/A

		illing:	12/10/20	14 10:00:00 A		ore Size: 3.0 in	Boring Total Depth:	
	d By: SP				P	roject Manager: Scott Mikaelian	Depth to Water: N/	
Physic	al Locatio	n: <u>Ca</u>	rteret Aver	nue			Surface Elevation:	
Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickr		te bgs = below ground surface) Sample ID
		0.0		ASPHALT		ASPHALT.		
1_		0.0		CONCRETE	0 4 0 0	CONCRETE.		
		0.0	dry	FILL		ASH,trace gravel,trace ceramics,trace v	wood	P4-FF22A-1.5-2.0
 2	1 _		,			fragments,(10YR 3/1) very dark gray,loc	ose,dry,no	P4-FF22A-2.0-2.5
 3 4	5					odor,no staining.	·	P4-FF22A-4.0-4.5
—5— – – —6—	-	6.5	moist	FILL		ASH,trace gravel,trace glass,trace cera fragments,(10YR 2/1) black,loose to me dense,moist,slight petroleum odor.	mics,trace wood edium	P4-FF22A-6.0-6.5
 7	5							F 4-1 1 22A-0.0-0.3
		8.1	saturated	FILL		fine to medium silty SAND,trace gravel,	trace glass,trace	
8 9 	-					wood fragments,trace ceramics,(10YR plasticity soft to medium dense,saturate petroleum odor,sheen.	2/1) black,low ed,slight	P4-FF22A-8.0-8.5
10 11 	-	0.0	saturated	FILL		fine to medium silty SAND,trace gravel, metal scraps,(10YR 4/4) dark yellowish plasticity soft,saturated,no odor,no stair	brown,low	P4-FF22A-10.0-10.5
—12— —13— 	5							P4-FF22A-12.0-12.5
14								P4-FF22A-13.5-14.0
- 1 4 15		0.0	slightly moist	PT	7 77 7	PEAT (degraded vegetated material),(6 40% organic fibers),(10YR 4/3) brown,I plasticity,medium dense,slightly moist,r	ow	P4-FF22A-14.0-14.5
						odor,no staining. Soils consistent with N	VIIVI.	
Camma	nte: 1) Thro	attemn	te were mad	e to obtain best	t recovery 2	2) UND/MM confirmed to be 1 ft thick 3) No COPR of	or GGM present in any inte	erval of this horing

3 - 2012-09 RA PPG_LOGS_A.GDT - 8/11/15 15:59

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: P4-G14A

Page: 1

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

Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content		Graphic Log	Surface Cover and Thickness:	Sample ID
				NR		Boring advanced directly to 5 ft bgs.	
-1-							
. 4							
2—	0						
	0						
3							
.4—							
\dashv							
5		0.0	moist	FILL		fine to medium SAND, (7.5YR 2.5/3) very dark brown,	
						medium stiff, moist, no odor, no staining.	
-6-		0.0	dry	FILL		fine to medium silty SAND, (5YR 4/3) reddish brown, soft to	P4-G14A-6.0-6.5
-7—			to moist			medium dense, dry to moist, no odor, no staining.	
\dashv	5						
8-						_	P4-G14A-8.0-8.5
9—							
10		0.0				5 4 5 14 OAND 194	P4-G14A-10.0-10.5
\dashv		0.0	wet	FILL		fine to medium silty SAND, little wood fragments, (10YR 5/2) grayish brown, loose, wet, no odor, no staining.	P4-G14A-10.0-10.5
11—							
12—		0.0	wet	FILL		fine to medium silty SAND, with ash, little coarse gravel,	
12	5					(5YR 4/4) reddish brown, soft to medium dense, wet, no odor, no staining.	P4-G14A-12.0-12.5
13		0.0	moist	FILL		fine to medium silty SAND, trace coarse gravel, (10YR 5/2) grayish brown, medium dense, moist, no odor, no staining.	
-						grayish brown, medidin dense, moist, no odor, no staining.	
14							P4-G14A-14.0-14.5
15		0.0	dry	PT	<u> </u>	PEAT (degraded vegetated material), (7.5YR 3/2) dark	P4-G14A-14.5-15.0
15		0.0	dry	PT	<u> </u>	brown, dense, dry. Soils consistent with MM. PEAT (degraded vegetated material), (7.5YR 3/2) dark	
16					1, 11, 11, 11	brown, very dense, dry, no odor, no staining. Soils consistent with MM.	P4-G14A-16.0-16.5
\dashv					7 7 7 7	WILLI IVIIVI.	F4-G14A-10.0-10.3
17—	5				<u> </u>		
18-		0.0	moist	SM		fine to medium silty SAND, some gravel, (7.5YR 5/1) gray,	
			to wet			medium dense, moist to wet, no odor, no staining. Soils consistent with UNDno.	P4-G14A-18.0-18.5
19-							
\dashv							
20		0.0	moist	SM		fine to medium silty SAND, (5YR 5/1) gray, moist, no odor,	P4-G14A-20.0-20.5
21		0.0	moist	SW		no staining. Soils consistent with UNDno. fine to coarse SAND, with gravel, (5YR 4/3) reddish brown,	
- '			to wet			medium dense, moist to wet, no odor, no staining. Soils	
22						consistent with UNDno.	
\dashv	5						
23							
\neg							



Boring ID: P4-G14A

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

Logged	d By: MI &	k FM		et Ave.	Proj	Project Manager: Chris Martell Depti Surfa			Depth to Water: NA Surface Elevation:	epth to Water: NA urface Elevation: 12.4 ft NAVD88 (Note bgs = below ground surface)		
Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log		Surface Cover a	nd Thickn		Sample		
					• • • • • • • • • • • • • • • • • • • •							
-25												
omme	n ts: 1) 3 atte	mpts we	ere made to	obtain best re	covery 2) MM/	UND confirmed	to be 1 ft thick 3) No	COPR or	GGM encountered in any	interval of this boring.		

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

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: P4-HAL-Y20A

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

 Project Number:
 60240739
 Drilling Method:
 Geoprobe
 Coordinates (NJSPNAD83) x:
 611283.761

 Date Started Drilling:
 9/25/2014 9:10:00 AM
 Rig Type:
 Coordinates (NJSPNAD83) y:
 682791.299

 Date Finished Drilling:
 9/25/2014 9:55:00 AM
 Core Size:
 3.0 in
 Boring Total Depth:
 20 ft

 Logged By:
 SP
 Project Manager:
 Scott Mikaelian
 Depth to Water:
 NA

Surface Elevation: 11.3 ft NAVD88 Physical Location: Halliday ote bgs = below ground surface Depth Recovery PID Moisture Graphic Sample Range **USCS** Surface Cover and Thickness: (ft/ft) (ppm) Content Log ID (ft bgs) 0.0 **ASPHALT** ASPHALT, with concrete. 0.0 P4-HAL-Y20A-2.0-2.5 dry FILL fine to coarse SAND, trace gravel, trace ash, (10YR 5/2) 5 grayish brown, non plastic, loose, dry, no odor. 0.0 **FILL** dry CINDERS, trace gravel, trace wood fragments, trace coal, trace ceramics, (10YR 5/1) gray, non plastic, loose, dry, no odor. P4-HAL-Y20A-4.0-4.5 0.0 moist **FILL** CINDERS, trace ceramics, trace wood fragments, trace gravel, (10YR 5/1) gray, non plastic, loose, moist, no odor. P4-HAL-Y20A-6.0-6.5 5 P4-HAL-Y20A-8.0-8.5 27.1 moist **FILL** fine to medium silty SAND, trace gravel, (10YR 2/1) black, non plastic, soft, moist, moderate petroleum odor, P4-HAL-Y20A-10.0-10.5 0.5 saturated **FILL** fine to medium silty SAND, trace ceramics, trace wood fragments, trace gravel, (5YR 3/4) dark reddish brown, non plastic, saturated, no odor, sheen. P4-HAL-Y20A-12.0-12.5 5 -13 P4-HAL-Y20A-14.0-14.5 0.0 **FILL** fine to medium silty SAND, trace gravel, (5YR 3/4) dark wet reddish brown, non plastic, soft, wet, no odor. -16 P4-HAL-Y20A-16.0-16.5 P4-HAL-Y20A-17.0-17.5 5 P4-HAL-Y20A-17.5-18.0 0.0 moist PT PEAT (degraded vegetated material), 60% organic silt, 18 40% organic fibers, (10YR 3/3) dark brown, medium 1, 11, dense, moist, moderate organic odor. Soils consistent 11/ 11/ with MM. 19 1/ 1/1/ 1 20

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

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: P4-I14A

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	_
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 610940
Date Started Drilling: 3/14/2014 10:50:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 683174
Date Finished Drilling: 3/14/2014 11:25:00 AM	Core Size: 2 in	Boring Total Depth: 25 ft
Logged By: MI & FM	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: 114A- Carteret Ave.	-	Surface Elevation: 12.1 ft NAVD88

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



Boring ID: P4-I14A

		1 4901 2
Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 610940
Date Started Drilling: 3/14/2014 10:50:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 683174
Date Finished Drilling: 3/14/2014 11:25:00 AM	Core Size: 2 in	Boring Total Depth: 25 ft
Logged By: MI & FM	Project Manager: Chris Martell	Depth to Water: NA
Physical Location: 114A- Carteret Ave.		Surface Elevation: 12.1 ft NAVD88
		(Note bgs = below ground surface)
		, , , , , , , , , , , , , , , , , , ,

	By: MI 8		A 0========	A	Į.	Project Manager:	Cilis Martel	Ofar: 7	Water: NA	NIAN/DOO
hysica	al Location	n: 114	A- Carteret	Ave.				Surface	Elevation: 12.1 ft	NAVD88 ow ground surface)
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log		Surface Cover and	d Thickness:		Sample ID
25										
20										
ommer	nts: 1) 3 atte	mpts we	ere made to	obtain best re	ecovery 2)	MM/UND confirmed t	o be 1 ft thick.		I	

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Boring ID: P4-J14A

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

Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content		Graphic Log	Surface Cover and Thickness:	Sample ID
				NR		Boring advanced directly to 5 ft bgs.	
_						, ,	
-1							
-2							
	0						
-3							
_							
-4							
_							
-5-		0.0	moist	FILL		medium SAND, some coarse gravel, little ash, little cinders,	
-6						trace ceramics, (10YR 5/2) grayish brown, dense, moist, no odor, no staining.	
-		0.0	wet	FILL		GGM with sitty sand little coarse gravel little sinders (ECV	
-7	_	0.0	WEL	LILL		GGM, with silty sand, little coarse gravel, little cinders, (5GY 6/2) light grayish green, soft, wet, no odor, no staining.	
_	. 5						
-8							
-9							
_							
-10		0.0	wet	FILL		GGM, with silty sand, trace coarse gravel, (5Y 6/2) light olive	
_		0.0	WEL	I IILL		gray, soft, wet, no odor, no staining.	
-11							
-12							
_	5						
-13							
_							
-14		0.0	moist	FILL		CLAY, little silt, (7.5YR 2.5/1) black, low plasticity, soft,	
45		0.0	moist	FILL		moist, no odor, no staining. fine to medium silty SAND, little coarse gravel, trace wood	
-15 		0.0	dry	OL		\ fragments, (7.5YR 3/3) dark brown, medium dense, moist, \ \	
-16					[]	\no odor, no staining. UNDorg fine to medium silty SILT, trace 90% organic silt,	
_		0.0	maiat	PT		5% organic fibers, trace fine sands, (7.5YR 4/2) brown, low	
-17	_	0.0	moist	PI	<u></u>	plasticity, soft, dry, no odor, no staining. Soils consistent with UNDorg.	
_	. 5				<u>\\\\\\</u>	PEAT (degraded vegetated material), 80% organic fibers,	
-18					1, 11, 1	20% organic silt, (7.5YR 2.5/2) very dark brown, medium dense, moist, strong organic odor, no staining. Soils	P4-J14A-18.0-18.5
 -19					<u>\\\\\\\</u>	consistent with MM.	
_					1, 11, 1		
20-		0.0	moist	CM	N/ N/	LINDno modium SAND, traco occess graval (2 EV E/A) and	P4-J14A-20.0-20.5
_		0.0	moist to	SM Re-review of	of the	UNDno medium SAND, trace coarse gravel, (2.5Y 5/1) gray, dense, moist to wet, no odor, no staining. Soils consistent	1 7-0 17A-20.0-20.0
-21			wet	soil descrip	tions	with UNDno.	
-				indicates th	e USCS		
-22 -	5			for this inter	val is		
23		0.0		\$P.			
_		0.0	wet	SP		UNDno fine to medium SAND, little coarse gravel, (2.5YR 4/3) reddish brown, medium dense, wet, no odor, no	



Boring ID: P4-J14A

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

Date F	inished Dri	lling:	3/14/2014	10:20:00 AN	Л	Core Size: 2.0 in	Boring Total Depth:	25 ft
Logged	d By: SS					Project Manager: Chris Martell	Depth to Water: NA	\
Physic	al Location	n: J14	A- Cartere	t Ave.		-	Surface Elevation:	12.1 ft NAVD88
							(Not	e bgs = below ground surface)
Denth								
Depth Range (ft bgs)	Recovery	PID	Moisture	USCS	Graphi	Surface Cover and Thickr	1000.	Sample
(ft has)	(ft/ft)	(ppm)	Content	0303	Log	Surface Cover and Trilcki	1000.	ID.
(it bgs)								
						staining. Soils consistent with UNDno.		
⊢ −								
25								
1								
1								
1								
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1								
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1								
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1								
1								
3								
il .								
2]								
<u> </u>								
Comme	nts: 1) 3 atte	mpts we	ere made to	obtain best re	covery 2	MM/UND confirmed to be 1 ft thick.		

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Boring ID: P4-K14A

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

Depth Range t bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
-1 -2				NR		Boring advanced directly to 5 ft bgs.	
-2 -3 -4	0						
-5		0.0	dry	FILL		medium SAND, some coarse gravel, some ash, little cinders,	
-6 - -7	5	0.0	dry	FILL		(7.5YR 3/2) dark brown, medium dense, dry, no odor, no staining. GGM and silty sand, little coarse gravel, (5GY 5/4) light olive green, medium dense, dry, no odor, no staining.	
-8 -9 -10	3						
- 11 - 12 -	5	0.0	dry	FILL		GGM, with fine to medium sand, little coarse gravel, (5GY 5/4) light olive green, medium dense, dry, no odor, no staining.	
-13 -14 -15		0.0	moist to wet	FILL		CLAY, little silt, (7.5YR 2.5/1) black, low plasticity, soft, moist to wet, no odor, no staining.	
-		0.0	moist to	FILL		CLAY, little silt, (7.5YR 2.5/1) black, low plasticity, soft, moist to wet, no odor, no staining.	P4-K14A-15.5-16.0
-16 — - -17—	5	0.0	dry to moist	OL		UNDorg fine to medium silty SAND, (80% organic silt, 20% organic fibers), trace wood fragments, (7.5YR 3/2) dark brown, low plasticity, soft, dry to moist, no odor, no staining. Soils consistent with UNDorg.	P4-K14A-16.0-16.5
-18 -19 -		0.0	dry to moist	OL		UNDorg SILT, 90% organic silt, 5% organic fibers, trace wood fragments, (5YR 4/1) dark gray, low plasticity, soft to medium dense, dry to moist, no odor, no staining. Soils consistent with UNDorg.	P4-K14A-18.0-18.5
-20 -21 - -22	5	0.0	wet	SM		UNDno fine to medium SAND, (2.5Y 6/1) gray, low plasticity, medium dense, wet, no odor, no staining. Soils consistent with UNDno.	P4-K14A-20.0-20.5
-23 -	J	0.0	moist	SP		UNDno medium SAND, (2.5YR 3/6) dark red, dense, moist, no odor, no staining. Soils consistent with UNDno.	



Boring ID: P4-K14A

ate Started ate Finish ogged By: hysical Lo	nber: 60240 d Drilling: ed Drilling: SS pocation: K1 Decry PID (ppm)	3/14/2014 3/14/2014 4A- Cartere Moisture	et Ave.	M AM	Rig Type: Core Size: 2 Project Mana	ger: Chris Mar	cover and Thickr	Coordinate Boring Tota Depth to W Surface Ele	evation: 12.2	3) y : 683147 ft	
eate Finish ogged By: hysical Lo Depth eange t bgs)	SS K1	3/14/2014 4A- Cartere Moisture	et Ave.	AM Graphi	Core Size: 2 Project Mana	ger: Chris Mar		Boring Tota Depth to W Surface Ele	al Depth: 25 f later: NA evation: 12.2	ft NAVD88 below.ground.surface)	
ogged By: hysical Lo Depth ange t bgs)	SS cation: K1	4A- Cartere	et Ave.	Graphi	Project Mana	ger: Chris Mar		Depth to W Surface Ele	tater: NA evation: 12.2	ft NAVD88 below ground surface)	
Depth ange t bgs)	overy PID	Moisture	LISCS	Graphi				Surface Ele	evation: 12.2	below ground surface) Sample	
repth ange bgs)	overy PID	Moisture	Hece	Graphi Log	С	Surface C	Cover and Thickr			below ground surface) Sample	
ange (ft.	overy PID (ppm)			Graphi Log	С	Surface C	Cover and Thickr	ness:		Sample	3
-25					.]						
				1							

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Boring ID: P4-M14A

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

ysical Locat	OII. IVI I	Tr Ourter	0171101		Surface Elevation:	bgs = below ground surface)
pth nge ogs) Recover (ft/ft)	y PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
	0.0		FILL		DGA	
	0.0	slightly moist	FILL		COPR, little fine sand, trace cinders, (2.5YR 3/6) dark red, loose, slightly moist, no odor.	
_	0.0	moist	FILL		GGM, some fine to medium gravel, little cinders, (5GY 5/2) grayish green, stiff, moist, no odor, green staining.	
_	0.0	moist	FILL		GGM, some fine to medium gravel, little cinders, (5GY 5/2) grayish green, stiff, moist, no odor, green staining.	
5	0.0	moist	FILL		GGM, little fine sand, (10YR 7/6) yellow, soft, moist, no odor, green staining.	
-	0.0	wet	FILL		GGM, little fine gravel, (5GY 4/4) olive green, stiff, wet, no odor, no staining.	
	0.0	moist	FILL		SILT, some fine sand, trace roots, wood fragments, (5GY 4/4) olive green, low plasticity, soft, moist, no odor, no staining.	P4-M14A-11.7-12.2
5	0.0	slightly moist	PT		PEAT (degraded vegetated material), 80% organic fibers 20% organic silt, (7.5YR 2.5/3) very dark brown, stiff, slightly moist, strong organic odor, no staining. Soils consistent with MM.	P4-M14A-14.0-14.5
5	0.0	slightly moist	PT	1/2 \(\frac{1}{2}\)	PEAT (degraded vegetated material), 80% organic fibers 20% organic silt, (7.5YR 2.5/3) very dark brown, stiff, slightly moist, strong organic odor, no staining. Soils consistent with	
7— — 5				1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2	MM.	P4-M14A-16.0-16.5
- - -	0.0		014	<u> </u>		P4-M14A-18.0-18.5
	0.0	moist	SM		UNDno SILT, little roots, (10YR 4/2) dark grayish brown, low plasticity soft to stiff, moist, no odor, no staining. Soils consistent with UNDno.	
	0.0	moist	SM		UNDno SILT, little roots, little fine sand, (10YR 4/1) dark gray, low plasticity, soft to stiff, moist, no odor, no staining. Soils consistent with UNDno.	P4-M14A-20.0-20.5
	1	1				

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Boring ID: P4-M14A

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

	nished Dr				l.	Drainat Managary Chris Martall	Donth to Motor: NA	
Logged	By: MI	n: M1	4A - Carter	ot Avo	ļ!	Project Manager: Chris Martell	Depth to Water: NA Surface Elevation: 1	2.3 ft NIAV/D88
rnysica	ai LOCATIO		4A - Carter 	el Ave.			Surface Elevation: (Note	2.3 IT NAV D88 bgs = below ground surface)
Depth	Recovery	PID	Moisture		Graphic			Sample
Depth Range (ft bgs)	(ft/ft)	(ppm)	Content	USCS	Log	Surface Cover and	Thickness:	ID
		0.0	moist	SM		UNDno fine to medium SAND, with	o fine gravel (2 5VR 5/6)	
-25 -						red, loose to hard, moist, no odor, r consistent with UNDno.	no staining. Soils	
Commer	nts: 1) 3 atte	empts we	ere made to	obtain best re	ecovery 2)	MM/UND confirmed to be 1 ft thick.		

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Boring ID: P4-M15A

			rfield Ave			Drilling Company: SGS North America		
	Number:					Drilling Method: Geoprobe	Coordinates (NJSPN	
Date St	arted Drill	ling: [3	3/7/2014 8:	50:00 AM		Rig Type:	Coordinates (NJSPN	AD83) y: 683079
Date Fi	nished Dr	illing:	3/7/2014 9	9:15:00 AM		Core Size: 2 in	Boring Total Depth:	25 ft
	IBy: MI					Project Manager: Chris Martell	Depth to Water: NA	
Physica	al Location	n: M1	5A- Cartere	et Ave.			Surface Elevation:	
							(Note	bgs = below ground surface)
Depth Range It bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thick	ness:	Sample ID
				FILL		ASPHALT		
			slightly	FILL		medium SAND, little crushed concrete, o		
-1			moist			fine to medium gravel, (7.5YR 2.5/3) ver	y dark brown, loose,	
_			slightly	FILL		slightly moist, no odor, no staining. COPR, little fine sand, trace cinders, (2.9)	EVD 2/6) dark rad	
-2— - -3—	5		moisť			loose to hard, slightly moist, no odor, slig		
-4 -4								
-5-			slightly	FILL		COPR, little fine sand, trace cinders, (2.5)		
_			moist		+	loose to hard, slightly moist, no odor, slig	ht green staining.	
-6— - -7— -	5		moist	FILL		GGM, little fine to medium sand, (5GY 4 moist to wet, no odor, green staining.	/4) olive green, soft,	
-8 -9 -10								
-10 -11 -10			moist	FILL		GGM, little fine to medium sand, (5GY 4 moist to wet, no odor, green staining.	/4) olive green, soft,	
-12 -13 -14	5		moist	FILL		SILT, some fine to medium sand, little cl (7.5YR 2.5/1) black, low plasticity, soft, r staining.		P4-M15A-12.0-12.5
_								P4-M15A-14.0-14.5
15			slightly moist slightly	PT PT OL	<u> </u>	PEAT (degraded vegetated material), 80 20% organic silt, (7.5YR 3/2) dark brown strong organic odor, no staining. Soils co PEAT (degraded vegetated material), 80	n, stiff, slightly moist, /	P4-M15A-14.5-15.0
-16 -17	5		moist moist			20% organic silt, (7.5YR 3/2) dark brown strong organic odor, no staining. Soils country UNDorg SILT, 70% organic silt, 30% org 5/2) grayish brown, low plasticity, soft to moderate organic odor, no staining. Soils	n, stiff, slightly moist, onsistent with MM. panic fibers, (10YR stiff, moist,	P4-M15A-16.0-16.5
-18 — - -19 —						UNDorg.		P4-M15A-18.0-18.5
20 — 	_		moist	OL		UNDorg SILT, 70% organic silt, 30% org 5/2) grayish brown, low plasticity, soft to moderate organic odor, no staining. Soils UNDorg.	stiff, moist,	P4-M15A-20.0-20.5
\dashv	5							
-23 -			moist	SM		UNDno SILT, some fine to meduim sand gravel, (10YR 5/1) gray, low plasticity, st		



Boring ID: P4-M15A

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 611014
Date Started Drilling: 3/7/2014 8:50:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 683079
Date Finished Drilling: 3/7/2014 9:15:00 AM	Core Size: 2 in	Boring Total Depth: 25 ft
Logged By: MI	Project Manager: Chris Martell	Depth to Water: NA
Physical Leastion: M15A Cortaret Ave		Curfoce Elevation: 12.7 ft NAV/D00

Date St		ling: _3	3/7/2014 8:	:50:00 AM		Rig Type:	Coordinates (NJSPN	
		illing:	3/7/2014	9:15:00 AM		Core Size: 2 in	Boring Total Depth:	
Logged Physics	By: MI	n: M1	5A- Carter	οτ Δνο		Project Manager: Chris Martell	Depth to Water: NA Surface Elevation:	Λ 12.7 ft ΝΑ\/D88
riiysica	ai Localio	II. IVI I	DA- Carter	CLAVE.		1	(Not	e bgs = below ground surface)
Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphi Log	Surface Gover and Thicking		Sample ID
						no staining. Soils consistent with UNDno.		
-25								
Commer	nts: 1) 3 atte	empts we	ere made to	obtain best red	covery 2)	MM/UND confirmed to be 1 ft thick.		

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Boring ID: P4-N15A

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

Depth Range It bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
				NR		Boring advanced directly to 5 ft bgs.	
-1							
_							
-2	0						
J _							
-4							
_							
-5		0.0		- 111	XXXXX	CODD cores fine to readiline and little fine to readiline	
_		0.0		FILL		COPR, some fine to medium sand, little fine to medium gravel, (2.5YR 4/6) red, loose to hard.	
-6						, ,	
_							
-7	5	0.0	moist	FILL		ASH, with GGM, little cinders, fine gravel, loose, moist, no	
_						odor, green staining.	
_8		0.0	moist	FILL		GGM, some fine to medium sand, little ash, (5GY 6/4) pale	
-9						yellowish green, low plasticity, soft, moist, green staining.	
_							
-10							
_		0.0	moist	FILL		GGM, trace fine sand, trace cinders, (5GY 4/4) olive green, stiff, moist, no odor, green staining.	
-11						Stiff, filolost, filo odor, green stairing.	
_							
-12							
_	5						
-13							
		0.0	moist	FILL		SILT, little roots, (10YR 5/2) grayish brown, low plasticity,	
-14		0.0	moist	OL		soft to stiff, moist, no odor, no staining. UNDorg SILT, 90% organic silt, 10% organic fibers, low	
_ -15						plasticity, soft, moist, moderate organic odor, no staining.	
15					<u> </u>	Soils consistent with UNDorg.	
-16							
_					<u> </u>		P4-N15A-16.0-16.5
-17							
_	3.5				<u> </u>		
-18						-	P4-N15A-18.0-18.5
-				NR	 	NO RECOVERY	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
19				•			
-							
20 —		0.0	moist	SM		UNDno SILT, some fine sand, low plasticity, soft to stiff,	P4-N15A-20.0-20.5
 _21						moist, no odor, no staining. Soils consistent with UNDno.	
		0.0		SP-SM		UNDno fine to medium SAND, some silt, dense. Soils consistent with UNDno.	
-22						CONSISTENT WITH CINDING.	
	5						
23							
_							
	1				16 SERING		

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Boring ID: P4-N15A

Drilling Company: SGS North America	
Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 611064
Rig Type:	Coordinates (NJSPNAD83) y: 683080
Core Size: 2.0 in	Boring Total Depth: 25 ft
Project Manager: Chris Martell	Depth to Water: NA
	Surface Elevation: 12.5 ft NAVD88
	Drilling Method: Geoprobe Rig Type: Core Size: 2.0 in

Logged	By: MI 8	<u> </u>	-		F		Cumfage Flouretters	10 F # NIA\/D00
Physica	al Location	n: N15	5A- Cartere	et Ave.			Depth to Water: NA Surface Elevation:	12.5 ft NAVD88 pbgs = below ground surface)
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and T		Sample ID
25		0.0	moist	SP		UNDno fine to medium SAND, with loose to hard, moist, no odor, no stawith UNDno.	fine to medium gravel, aining. Soils consistent	
						MM/UND confirmed to be 1 ft thick.		

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Boring ID: P4-O16A

Project	Name: F	PPG Ga	rfield Ave			Drilling Company: SGS North America		Page
Project	Number:	60240	739			Drilling Method: Geoprobe	Coordinates (NJSPN	AD83) x: 611056
Date Sta	arted Dril	ling: _3	3/10/2014 9	9:30:00 AM		Rig Type:	Coordinates (NJSPN/	AD83) y: 683025
Date Fir	nished Dr	illing:	3/10/2014	10:50:00 AN	Л	Core Size: 2 in	Boring Total Depth:	25 ft
	By: MI					Project Manager: Chris Martell	Depth to Water: NA	
Physica	al Locatio	n: 016	A- Cartere	et Ave.			Surface Elevation: 1	
							(Note	bgs = below ground surface)
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickr	ness:	Sample ID
		0.0		FILL	XXXX	ASPHALT		
-		0.0	moist	FILL	 	fine to medium SAND, some fine to medi	um gravel. (7.5YR	
-1-					\bowtie	3/2) dark brown, loose to hard, moist, no		
_		0.0	moist	FILL		GGM, little fine sand, little fine to medium olive green, low plasticity, soft, moist, gre		
-2-	5							
	5							
-3-								
\dashv								
-4		0.0	me:et	- FILL		CCM some sinders fire to readily	rol little fine seed	
4		0.0	moist	FILL		GGM, some cinders, fine to medium grav trace COPR, (5GY 5/2) gravish green, lo		
-5-		0.0				moist, no odor, green staining.	placticity, sort,	
		0.0	slightly	FILL		GGM, with cinders, some salt precipitate,		
-6-			moist			green, dense to hard, slightly moist, no or	dor, green staining.	
-6-								
_ 7		0.0	slightly	FILL		CINDERS, some fine to medium gravel, (
-7-	E		moist			dark gray, loose to hard, slightly moist, no	odor, slight green	
\dashv	5					staining.		
-8-						×		
4		0.0	slightly	FILL		CINDERS, some fine to medium gravel, I		
-9-		0.0	moist	FILL		sand, (7.5YR 3/1) very dark gray, loose to		
_			slightly moist			moist, no odor, green staining, slight gree GGM, little fine sand, trace cinders, COP		
-10			HIUISL			green, stiff, slightly moist, no odor, green		
10		0.0	slightly	FILL		GGM, little fine sand, trace cinders, COP		
			moist			green, stiff, slightly moist, no odor, green	staining.	
-11								
\dashv								
-12	_							
\dashv	5	0.0						
-13		0.0	slightly	FILL		fine SAND, some silt, trace cinders, coal,		
4		0.0	moist moist	OL		(7.5YR 5/1) gray, dense, slightly moist, no UNDorg SILT, 90% organic silt, 10% organ	o odor, no staining.	P4-O16A-13.3-13.8
-14			1110131		F	3/2) dark brown, low plasticity, stiff, moisi	t, moderate organic	P4-O16A-13.8-14.3
]					<u> </u>	odor, hydrocarbon staining. Soils consiste	ent with UNDorg.	0 10/1 10.0 14.0
_15					<u> </u>			
-15		0.0		PT	71/2 71/	TEAT (degraded vegetated material), 707		
,,					1, 11,	30% organic silt, (7.5YR 2.5/3) very dark		
-16		0.0	moist	OL	<u> </u>	organic odor, no staining. Soils consisten UNDorg SILT, 90% organic silt, 10% organic	t WITH MM.	P4-O16A-16.0-16.5
\dashv					<u> </u>	3/2) dark brown, low plasticity, stiff, moisi	t. moderate organic	
-17					H	odor, hydrocarbon staining. Soils consiste		
\dashv	5					1	-	
18-					<u> </u>	1		D4 O16A 10 0 10 F
4					<u> </u>	-		P4-O16A-18.0-18.5
-19					<u> </u>	1		
					[
_20					<u></u>			
20		0.0	moist	SM		UNDno SILT, trace organics, (10YR 4/2)		P4-O16A-20.0-20.5
_ 7			F	Re-review o	the so	brown, low plasticity, stiff, moist, no odor,	no staining. Soils	
-21			d	escriptions	Indicat	consistent with UNDno.		
\dashv				ne USCS fo	1, 14, 14 1, 1	1		
-22					, uno 11	RCI Val		
\dashv	5		is	ML.				
-23		0.0				100		
-		0.0	slightly moist	SM		UNDno fine SAND, some silt, (7.5YR 4/1		
			TOTAL	I	in alterate	slightly moist, no odor, no staining. Soils	CONSISTENT WITH	

Boring ID: P4-O16A

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

Logged	By: MI	0.10			ļP	roject Manager:	Chris iviarteli	Depth to Water: Surface Elevation	NA	0
Physica	al Location	n: 016	A- Cartere	t Ave.				Surface Elevation	n: 13.1 π NAVD8 (Note bgs = below ground)	
									prove bys = below ground s	our late)
Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log		Surface Cover and TI	hickness:	S	ample ID
		0.0	slightly moist	SP-SM		UNDno. UNDno fine to	medium SAND, little s	silt, (5YR 5/2) reddish		
25						gray, loose, slig	htly moist, no odor, n UNDno.	o staining. Soils		
:ommer	nts: 1) 3 atte	mpts we	ere made to	obtain best re	coverv 2) I	MM/UND confirmed to	he 1 ft thick			

AECOM

Boring ID: P4-P15A

	Name: F					Drilling Company: SGS North America		NA BOO) 04441=		
	Number:					Drilling Method: Geoprobe	· · · · · · · · · · · · · · · · · · ·	tes (NJSPNAD83) x: 611115		
			3/7/2014 10			Rig Type:	Coordinates (NJSPN			
		illing:	3/7/2014 1	11:20:00 AM		Core Size: 2.0 in	Boring Total Depth:			
	By: MI					Project Manager: Chris Martell	Depth to Water: N			
hysic	al Locatio	n: P1:	5A - Cartere	et Ave.			Surface Elevation:			
							(No	ote bgs = below ground surface)		
Depth Lange t bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thick	kness:	Sample ID		
		0.0		FILL		ASPHALT				
_		0.0]	FILL		fine to medium SAND, little fine to medi				
-1		0.0	moist	FILL	\longrightarrow	2.5/3) very dark brown, loose, no odor, r	no staining.	-		
-2 -3	5	0.0	moist	I ILL		COPR, little fine sand, trace fine to med 4/8) red, loose, moist, no odor, slight gre				
-4 -4 -5		0.0	moist	FILL		COPR, little fine sand, trace fine to med				
-6						4/8) red, loose, moist, no odor, slight gre				
-6		0.0	moist	FILL		CINDERS, some coal slag, oil-like mate	rial, little silt, trace			
-7 -8 -9	5					organic fibers, (7.5YR 2.5/1) black, loos napthalene odor, sheen.	e, moist, moderate			
-10 - -11		0.0	moist moist	FILL		SILT, some fine sand, little organic fiber material, (7.5YR 3/2) dark brown, moist odor, sheen.	, slight napthalene	_		
-12 -13 	5	0.0	moist	112		SILT, some fine to medium sand, (5YR stiff, moist, no odor, no staining.	4/3) reddish brown,			
_						×		P4-P15A-13.5-14.0		
-14 - -15		0.0	moist	OL		UNDorg SILT, 70% organic silt, 30% org 3/3) dark brown, soft to stiff, moist, moc no staining. Soils consistent with UNDo	lerate organic odor,	P4-P15A-14.0-14.5		
.5		0.0	moist	OL	H	UNDorg SILT, 70% organic silt, 30% org	ganic fibers, (7.5YR			
-16					<u> </u>	3/3) dark brown, soft to stiff, moist, mod no staining. Soils consistent with UNDor	lerate organic odor,	D. D. T		
					<u> </u>	10 Stairing. Cons consistent with ONDO	· 3 ·	P4-P15A-16.0-16.5		
17						1				
-17	5					1				
_						1				
-18					ļ	4		P4-P15A-18.0-18.5		
_					<u> </u>	1				
19						1				
_					ļ.,,,,,,,	1		_		
-20		0.0	moist	SM		UNDno SILT, little fine sand, (7.5YR 3/2				
-20 — — -21—		0.0	moist	SM		moist, no odor, no staining. Soils consis UNDno SILT, little fine sand, (7.5YR 3/2 moist, no odor, no staining. Soils consis	2) dark brown, soft, tent with UNDno.	P4-P15A-20.0-20.5		
- 22 -	. 5	0.0	moist	SP-SM		UNDno fine to medium SAND, little fine (10YR 5/1) gray, loose to hard, moist. S UNDno.				
-23 — —		0.0	slightly moist	SP-SM		UNDno fine to coarse SAND, some fine (2.5YR 4/8) red, loose to hard, slightly n		1		

30 Knightsbridge Roa 732.564.320	ad, Piscataway, NJ 0 0 office telephone	08854			В	oring ID: P4-P15A
Project Name: PF	PG Garfield Ave		Drillin	g Company: SGS North Amer	rica	Page: 2
Project Number:				g Method: Geoprobe	Coordinates (NJSP	NAD83) x: 611115
Date Started Drilli		0:30:00 AM	Rig Ty		Coordinates (NJSPI	
Date Finished Dril				Bize: 2.0 in	Boring Total Depth:	
ogged By: MI	iiiig. 0/1/2014	11.20.007401		t Manager: Chris Martell	Depth to Water: N	
Physical Location:	· P15Δ - Carter	ret Ave	Tojec	t manager. Onns waiten	Surface Elevation:	
nysical Location.	. 1 TOA - Oarter	CLAVC.				ote bgs = below ground surface)
	PID Moisture (ppm) Content		iphic og	Surface Cover and	d Thickness:	Sample ID
25			S	taining. Soils consistent with UN	IDno.	

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

AECOM

Boring ID: P4-P16A

			arfield Ave			Drilling Company: SGS North America		
roject	Number:	60240	739			Drilling Method: Geoprobe	NAD83) x: 611080.495	
				0:00:00 AM		Rig Type:	Coordinates (NJSPN	IAD83) y: 683010.017
			3/14/2014	10:40:00 A		Core Size: 2 in	Boring Total Depth:	
	By: MI					Project Manager: Chris Martell	Depth to Water: NA	
Physica	al Locatio	n : P16	6A- Cartere	et Ave.			Surface Elevation:	
							(Not	te bgs = below ground surface)
Depth Range it bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphi Log	Surface Cover and Thi	ckness:	Sample ID
				NR		Boring advanced directly to 5 ft bgs.		
_								
' _								
_2								
']	0							
3_								
J								
4-								
_								
5—		0.0	moist	FILL		GGM, little fine sand, trace cinders,		
۾ ٦					\bowtie	green, low plasticity, stiff, moist, no	odor, green staining.	
ъ-					\bowtie	8		
, \neg						8		
′ 🗆	2			NR		NO RECOVERY		
7	_							
8-								
\Box								
9-								
,,								
10-		0.0	moist	FILL		GGM, little fine sand, trace cinders,		
,, T						green, low plasticity, stiff, moist, no		
11—						8		
, ,		0.0	slightly	FILL		fine to coarse SAND, with fine to coa	arse gravel, trace	
12	5	0.0	moist	FILL		oil-like material, (7.5YR 4/2) brown,	loose, slightly moist, /	
,, T			slightly			\slight naphthalene odor.	onte trace reets	
13-		0.0	moist moist	FILL		fine silty GRAVEL, trace wood fragn (10YR 5/6) yellowish brown, slightly	moist, no odor	
, , T						SILT, some roots, fine to medium sa	ind, trace coarse	
14—					\bowtie	gravel, (10YR 3/3) dark brown, soft	o stiff, moist, no	
<u>,</u>						odor.		
15		0.0	moist	OL	<u> </u>	UNDorg SILT, 80% organic silt, 20%	6 organic fibers,	
, T					H	(10YR 4/2) dark gravish brown, stiff,	moist, moderate	
16—						organic odor. Soils consistent with L	NDorg.	P4-P16A-16.0-16.5
🖯					[
17—	5					-		
	5				 	 		
18 –					<u> </u>			P4-P16A-18.0-18.5
					[
19—					H	+		
_						. 		
20		0.0	moist	SM		UNDno SILT, some fine sand, trace	roots, (7.5YR 5/1)	P4-P16A-20.0-20.5
_, ⊢						gray, low plasticity, soft to stiff, mois	t, no odor, no	
-21					1414	staining. Soils consistent with UNDn	0.	
\Box						4		
22-	_					:		
\dashv	5					4		
23-		0.0	slightly	SP		UNDno fine to medium SAND, trace	wood fragments	
\dashv		3.5	moist	OI '		(7.5YR 7/1) light gray, loose, slightly	moist, no odor, no	
24-						staining. Soils consistent with UNDn	0	
\dashv		0.0	slightly	SP		UNDno fine to medium SAND, with	coarse gravel,	
25			moist		1 1 1 1 1 1 1 1	(2.5YR 4/6) red, loose to hard, slight staining. Soils consistent with UNDn	ly moist, no odor, no	
						Stairing. Sons consistent with UNDI	<u>o.</u>	

AECOM

Boring ID: P4-Q16A

	t Name: F t Number:					Drilling Company: SGS North America Drilling Method: Geoprobe	Coordinates (NJSPN	NAD83) x: 611138
				1:30:00 AM		Rig Type:	Coordinates (NJSPN	
				12:00:00 PM		Core Size: 2.0 in	Boring Total Depth:	
	d By: MI					Project Manager: Chris Martell	Depth to Water: NA	4
	al Location	n: Q1	6A - Carter	et Ave.			Surface Elevation:	11.9 ft NAVD88
							(Not	te bgs = below ground surface)
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thick	kness:	Sample ID
_	-	0.0		ASPHALT		ASPHALT		
-1 -2 -3	5	0.0	moist to wet moist to wet	FILL FILL		fine to medium silty SAND, and coarse (10YR 4/3) brown, medium dense, mois GGM, little COPR, (10YR 5/3) brown, n to wet.	of to wet.	
-4- -	_	0.0	moist to	FILL		GGM, (10YR 5/3) brown, (2.5Y 5/2) gradense, moist to saturated, sheen.	ayish brown, medium	
-5— -		0.0	saturated wet	FILL		GGM, some cinders, (2.5Y 5/2) grayish dense, wet.	brown, medium	
-6 - -7	5	0.0	wet	FILL		COPR, some GGM, (2.5YR 5/3) reddisidense, wet, sheen.	n brown, medium	
-8 -9		0.0	wet	FILL		SILT, little oil-like material, trace fine gradark grayish brown, low plasticity, soft, vertoleum odor, sheen, diesel odor.		
-10 - -11 -	-	0.0	wet	FILL		fine to medium silty SAND, little coarse dark yellowish brown, medium dense, w odor sheen, diesel odor.		
-12 -13 -14	5	0.0	moist to saturated	FILL		fine to medium silty SAND, little coarse trace ceramics, (10YR 4/4) dark yellowi dense, moist to saturated.		P4-Q16A-14.0-14.5
_		0.0			XXXX			· ·
-15 -16		0.0	moist moist to wet	PT PT	\(\frac{1}{2}\frac{1}{	20% roots, (10YR 3/3) dark brown, low slight sulfur odor. Soils consistent with I PEAT (degraded vegetated material), 80	plasticity, stiff, moist, MM. 0% organic fibers,	P4-Q16A-14.5-15.0
- -17	5		Wot			plasticity, medium soft, moist to wet. Śo MM.	sh brown, low ils consistent with	P4-Q16A-16.0-16.5
-18 - - -19 - -	-				\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	<u> </u>		P4-Q16A-18.0-18.5
-20 -21 -22	5	0.0	moist to wet moist to wet	PT SP-SM		PEAT (degraded vegetated material), (1 brown, low plasticity, medium soft, mois consistent with MM. fine to medium silty SAND, trace fine gray, medium dense, moist to wet. Soils UNDno.	t to wet. Soils avel, (10YR 6/1)	P4-Q16A-20.0-20.5
-23 -		0.0	moist	SP-SM		fine to medium silty SAND, some coarsi brown, medium dense, moist. Soils con-		



Boring ID: P4-Q16A

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

1 ~~~~						Core Size: 2.0 in		epth: 25 ft
Logget	d By: MI				F	Project Manager: Chris Mart	ell Depth to Water	: NA
Physic	al Location	n: Q16	6A - Carter	et Ave.			Surface Elevat	ion: 11.9 ft NAVD88
								(Note bgs = below ground surface)
Depth Range (ft bgs)	Recovery (ft/ft)	(ppm)	Moisture Content	USCS	Graphic Log		over and Thickness:	Sample ID
		0.0	moist	SP		fine to coarse SAND, som reddish brown, medium do UNDno.	e fine gravel, (5YR 3/3) dark ense, moist. Soils consistent with	
-25						ONDIIO.		
						MM/UND confirmed to be 1 ft thic		

AECOM

Boring ID: P4-R17A

30 Kr	732.564.32		telephone	18854					Page: 1
Project	t Name: F	PPG Ga	arfield Ave			Drilling Company: SGS North America			
Project	Number:	60240	0739			Drilling Method: Geoprobe	Coordinates (NJSPN	NAD83) x: 611121	
Date S	tarted Dril	ling: :	3/11/2014	11:15:00 AM		Rig Type:	Coordinates (NJSPN	AD83) y: 682958	
Date F	inished Dr	illing:	3/11/2014	4 11:45:00 AN	Λ	Core Size: 2 in	Boring Total Depth: 25 ft		
Logged	d By: MI					Project Manager: Chris Martell	Depth to Water: NA		
Physic	al Locatio	n : R1	7A- Carter	et Ave.		-	Surface Elevation:	12.3 ft NAVD88	
							(Not	e bgs = below ground surface)	
Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphi Log	c Surface Cover and Thickn	ess:	Sample ID	
		0.0	moist	FILL FILL		ASPHALT fine to medium SAND, little fine gravel, tra	ace cinders, (7.5YR		

Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
		0.0		FILL		ASPHALT	
		0.0	moist	FILL		fine to medium SAND, little fine gravel, trace cinders, (7.5YR	
-1		0.0	moist	FILL		2.5/2) very dark brown, loose, moist, no odor, no staining. GGM, some COPR, little salt precipitate, trace cinders, (5YR	
						5/2) reddish gray, low plasticity, soft, moist, no odor, green	
-2-						staining.	
_	5	0.0	- 11 - 1-41 -			ONDEDO EM- and ask EM- for arrayal (7.5)/D 0.5(4)	
-3-		0.0	slightly moist	FILL		CINDERS, little coal ash, little fine gravel, (7.5YR 2.5/1) black, slightly moist, no odor, slight green staining.	
			IIIOISt			black, slightly filoist, filo odor, slight green stairing.	
,							
-4							
-5-		0.0	slightly	FILL		CINDERS, little coal ash, little fine gravel, (7.5YR 2.5/1)	
-		0.0	moist	FILL		black, slightly moist, no odor, slight green staining.	
-6-		0.0	slightly	FILL		GGM, some cinders, little gravel, little salt precipitate, (5GY	
_			moist			5/4) light olive green, non plastic, soft, slightly moist, no	
_7						odor, green staining.	
']	5						
-8-		0.0	moist	FILL		GGM, some fine sand, trace salt precipitate, (5GY 4/4) olive	
-				_		green, low plasticity, soft to stiff, moist, no odor, green	
-9-						staining.	
-10							
. " _		0.0	moist	FILL		GGM, some fine sand, trace salt precipitate, (5GY 4/4) olive	
						green, low plasticity, soft to stiff, moist, no odor, green	
-11						staining.	
-12	_	0.0	moist	OL	<u> </u>	UNDorg SILT, 90% organic silt, 10% organic fibers, (7.5YR	P4-R17A-12.0-12.5
	5		1110101	OL.		3/2) dark brown, low plasticity, soft, moist, moderate organic	
-13						odor. Soils consistent with UNDorg.	
. 4							
-14							
							P4-R17A-14.0-14.5
45							
-15		0.0	moist	OL	===	UNDorg SILT, 95% organic silt, 5% organic fibers, (7.5YR	
					H	3/2) dark brown, low plasticity, soft, moist, moderate organic	
-16						odor. Soils consistent with UNDorg.	P4-R17A-16.0-16.5
-17		0.0	ali edeki	DT	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	DEAT (degreeded vergeteted methodel) 000/	
. 4	5	0.0	slightly moist	PT		PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (7.5YR 2.5/3) very dark brown, stiff, slightly	
-18			IIIOISL		\(\triangle \)	moist, strong organic odor, no staining. Soils consistent with	
					<u>//// ////</u>	MM.	P4-R17A-18.0-18.5
40					1/ 1/1/ 1		
- 19					11, 11,		
		0.0	dry	OL	===	UNDorg SILT, 80% organic silt, 20% organic fibers, (10YR	
-20		0.0	dry	OL	 ==	√ 4/2) dark grayish brown, stiff, dry, strong organic odor, no /// /// /// /// /// /// // //	P4-R17A-20.0-20.5
-			. ,		H	staining. Soils consistent with UNDorg.	
-21		0.0	moist	SM		UNDorg SILT, 80% organic silt, 20% organic fibers, (10YR 4/2) dark grayish brown, stiff, dry, strong organic odor, no	
. 4		0.0	IIIOISI	JIVI		staining. Soils consistent with UNDorg.	
-22						UNDno fine SAND, some silt, (7.5YR 5/1) gray, dense,	
	5					moist, no odor, no staining. Soils consistent with UNDno.	
-23							
25							
_	1						



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

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: P4-R17A

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

Date Fi	nished Dr	illing:	3/11/2014	11:45:00 AM	1	Core Size: 2 in		Boring Total Depth:	25 ft
Logged	By: MI					Project Manager:	Chris Martell	Depth to Water: NA	
Physic	al Locatio	n : R1	7A- Cartere	et Ave.				Surface Elevation:	12.3 ft NAVD88
								(Note	bgs = below ground surface)
Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphi Log	С	Surface Cover and Thickness	ess:	Sample ID
25						- 4			
Comme	nts: 1) 3 atte	empts we	ere made to	obtain best red	covery 2) MM/UND confirmed	to be 1 ft thick.		

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Boring ID: P4-S17A

Page: 1

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

Project Number: 60240739 Drilling Method: Geoprobe Coordinates (NJSPNAD83) x: 611145

Date Started Drilling: 3/13/2014 10:25:00 AM Rig Type: Coordinates (NJSPNAD83) y: 682943

Date Finished Drilling:3/13/2014 10:45:00 AMCore Size:2 inBoring Total Depth:25 ftLogged By:MI & FMProject Manager:Chris MartellDepth to Water:NA

						(NOIE	bgs = below ground surface)
epth ange bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
		0.0		CONCRETE	P & 4 P 0	CONCRETE	
1— 2— 3— 4—	5	0.0	dry	FILL		fine to medium SAND, (5YR 4/3) reddish brown, medium dense, dry, no odor, no staining.	
5		0.0	moist	FILL		medium to coarse gravelly SAND, some glass fragments,	
6—			to wet			little wood fragments, (7.5YR 4/1) dark gray, loose, moist to wet, no odor, no staining.	
7— 8—	5		we.				P4-S17A-6.0-6.5
9							P4-S17A-8.0-8.5
٦		0.0	moist	FILL		SILT, some roots, little fine sand, (7.5YR 5/1) gray, low	P4-S17A-10.0-10.5
11			to wet			plasticity, soft to stiff, moist to wet, no odor, no staining.	P4-S17A-12.0-12.5
-	5	0.0	wet	FILL		fine to medium silty SAND, little fine sand, (5YR 2.5/2) dark	1 4 0177 12.0 12.0
13 		0.0	WCt	I ILL		reddish brown, low plasticity, wet, no odor, no staining.	D. 0474 0
4		0.0	4	FILL		fire to mediate site OAND to a fire model (EVD 4/0)	P4-S17A-14.0-14.5
15		0.0	wet moist	FILL		fine to medium silty SAND, trace fine gravel, (5YR 4/3) reddish brown, low plasticity, loose, wet, no odor, no	
-		0.0	moist	LILL		\staining. /	
6						SILT, with fine to medum sand, trace roots, (10YR 5/2) grayish brown, low plasticity, soft, moist, no odor, no staining.	P4-S17A-16.0-16.5
17—	-						
	5						
18—							P4-S17A-18.0-18.5
9—							
_							P4-S17A-19.0-19.5
20-		0.0	moist	PT	71/ 71/	PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, medium dense, moist, moderate organic	P4-S17A-19.5-20.0
21		0.0	moist	PT	1, 11, 1	odor, no staining. Soils consistent with MM. PEAT (degraded vegetated material), 80% organic fibers,	
22—					<u>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</u>	20% organic silt, (5YR 2.5/2) dark reddish brown, medium dense, moist, moderate organic odor, no staining. Soils consistent with MM.	
4	5	0.0	,	014	<u> </u>	OUT (7.5VD 5(4) many law plantations in the	
23		0.0	wet	SM		SILT, (7.5YR 5/1) gray, low plasticity, medium dense, wet, no odor, no staining. Soils consistent with UNDno.	



Boring ID: P4-S17A

30 K	nightsbridge F 732.564.32	Road, Pise 200 office	cataway, NJ 0 telephone	08854							Page:	
Proiec	t Name:	PPG Ga	arfield Ave			Drilling Company	: SGS North Am	nerica			. ugo.	
	t Number:					Drilling Method:			Coordinates (NJS	PNAD83) x:	611145	
				10:25:00 AM		Rig Type:			Coordinates (NJS			
				4 10:45:00 Al		Core Size: 2 in			Boring Total Dept			
	d By: MI		2 0. 201		-	Project Manager:	Chris Martell		Depth to Water: NA			
Physic	al Locatio	n: S1	7A- Cartere	et Ave		i i ojoot managon			Surface Elevation: 12.2 ft NAVD88			
yo.			, Cartor		_				Ouridoo Elovation	Note bgs = below gr	ound surface)	
Depth												
Range (ft bgs)	(ft/ft)	PID (ppm)	Moisture Content	USCS	Graph Log	ic	Surface Cover a	and Thickn	ess:		Sample ID	

Boring ID: P4-T17A

	Name: F					Drilling Company: SGS North America				
	Number:					Drilling Method: Geoprobe	Coordinates (NJSPN			
			3/7/2014 9:			Rig Type:	Coordinates (NJSPN			
		illing:	3/7/2014	10:15:00 AM		Core Size: 2.0 in	Boring Total Depth:			
	By: MI					Project Manager: Chris Martell	Depth to Water: NA			
Physical Location: T17A - Carteret Ave.							Surface Elevation:			
							(Note	bgs = below ground surface)		
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphi Log	Surface Cover and Thick	ness:	Sample ID		
				ASPHALT		ASPHALT				
1				FILL		fine to medium silty SAND, some fine gr				
'			wet	FILL		(10YR 4/2) dark grayish brown, very der GGM, (10Y 5/2) grayish olive, medium o				
_			AACT	1 ILL	\bowtie	Goivi, (101 5/2) grayish diive, medium d	ICHOC, WCL.			
-2-	_				\bowtie					
\dashv	5				\bowtie	×				
_3					\bowtie					
~										
. 7					\bowtie					
-4					\bowtie	× ×				
4					\bowtie					
-5-										
·				FILL	\bowtie	fine to medium silty SAND, some GGM,	(5Y 4/3) olive.			
_ 7			moist	FILL		CINDERS, some fine to medium sand, li	ttle GGM, trace			
-6			to		\bowtie	oil-like material, (10YR 4/2) dark grayish				
4			wet		\bowtie	to wet.				
-7-										
.	5				\bowtie	3				
					\bowtie	X X				
-8-					\bowtie					
4										
-9					\bowtie	X X				
			moist	FILL	\bowtie	SILT, little fine sand, (10YR 2/1) black, r	medium plasticity			
7						soft, moist, slight naphthalene odor.	modum plasticity,			
-10		0.0	moist	FILL		fine to medium SAND, little silt, (10YR 4	/3) brown. non			
\dashv		44.0	wet	FILL		plastic, medium dense, moist, slight nap	hthalene odor.			
11—					\bowtie	fine to medium silty SAND, little fine grav	vel, little roots,			
					\bowtie	(10YR 5/3) brown, non plastic, loose, we				
7					\bowtie	naphthalene odor, sheen.				
12-										
\dashv	4				\bowtie					
13					\bowtie	× ×				
.					\bowtie					
. 7										
14								P4-T17A-14.0-14.5		
\dashv					\bowtie	3				
15		1.5			\bowtie					
		1.2	moist	FILL	\bowtie	fine to medium silty COBBLES, little fine				
,, 7			to			brown, non plastic, medium dense, mois	t to wet, slight			
16			wet			naphthalene odor, sheen.		P4-T17A-16.0-16.5		
\dashv					\bowtie	3				
17—					\bowtie	×		P4-T17A-16.7-17.2		
\exists	5	6.6	moist	PT	<u>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</u>	PEAT (degraded vegetated material), 80	% organic fibers,	P4-T17A-17.2-17.7		
18					1, 11,	20% organic silt, (10YR 3/3) dark brown	, low plasticity,			
10					<u> </u>	medium dense, moist, slight sulfur odor.	Soils consistent			
_						***************************************				
19—					1/ 1/1/	<u> </u>				
4		4.0		05.0	 	f	, ,,	P4-T17A-19.2-19.7		
20		4.2	moist	SP-SM		fine silty SAND, (10YR 5/2) grayish brov	vn, non plastic,			
		1.0	moist	SP-SM		medium dense, moist, slight sulfur odor. with UNDno.	Suis cursistent	P4-T17A-20.0-20.5		
ヿ			to to			fine to medium silty SAND, little gravel, I	ittle roots (10YR			
21—			wet		医斜胎	5/1) gray, non plastic, medium dense, m				
4						consistent with UNDno.	S.St to Hot. Oolid			
22						1				
	5				医制料					
7					1344	1				
23—		0.0	moist	SP		fine to medium SAND, little fine gravel, (5YR 4/4) reddish			
4		0.0	to	OI .		brown, non plastic, medium dense, mois				
						, Storm, mon piaono, montali acinac, mola				



Boring ID: P4-T17A

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

Lanna	IIIISIIEU DI	iiiiig.	3/1/2014	10.13.00 AW		businest Management Charic Mantall	Don'th to Water NA	23 10
Logge	d By: MI				P	Project Manager: Chris Martell	Depth to Water: NA	1
Physic	al Locatio	n: T17	7A - Cartere	et Ave.			Surface Elevation:	11.9 ft NAVD88
							(Not	e bgs = below ground surface)
Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickr	ness:	Sample ID
			wet		12.32.341.82	consistent with UNDno.		
L _			wet			Consistent with ONDito.		
م ا								
25								
1								
1								
2								
3								
3								
2								
Comme	nts: 1) 3 atte	empts w	ere made to	obtain best re	covery 2) I	MM/UND confirmed to be 1 ft thick.		

30 Knightsbridge Road, Piscataway, NJ 08854

Boring ID: P4-U19A

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: 611189 Date Started Drilling: 3/11/2014 1:00:00 PM Rig Type: Coordinates (NJSPNAD83) y: 682869 Boring Total Depth: 25 ft Date Finished Drilling: 3/11/2014 1:25:00 PM Core Size: 2 in Project Manager: Chris Martell Depth to Water: NA Logged By: MI Physical Location: U19A- Carteret Ave. Surface Elevation: 12.4 ft NAVD88 (Note bgs = below ground surface)

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



Project Number: 60240739

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Date Started Drilling: 3/11/2014 1:00:00 PM

Boring ID: P4-U19A

Page: 2

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

Drilling Method: Geoprobe Coordinates (NJSPNAD83) x: 611189 Rig Type: Coordinates (NJSPNAD83) y: 682869

Date F	inished Dr	illing:	3/11/2014	1:25:00 PM		Core Size: 2 in		Boring Total Depth:	25 ft
Logge	d By: MI					Project Manager:	Chris Martell	Depth to Water: NA	
Physic	al Location	n: 1.110	A- Cartere	et Ave		, .,		Surface Elevation:	12.4 ft NAVD88
,	<u>-</u>	010	o, Contole	,, wo.					e bgs = below ground surface)
Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graph Log	ic	Surface Cover and Thickne		Sample ID
		0.0	moist	SM		UNDno fine S/ 5/1) gray, dens	AND, some silt, (5YR 5/2) rose, moist, no odor, no stainin UNDno.	eddish gray (7.5YR ng. Soils	

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

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Boring ID: P4-V18A

	Name: F					Drilling Company: SGS North America		
	Number:					Drilling Method: Geoprobe	Coordinates (NJSPNA	
			3/13/2014 8			Rig Type:	Coordinates (NJSPNAD	
			3/13/2014	10:00:00 Al		Core Size: 2 in	Boring Total Depth: 2	5 ft
	IBy: MI8					Project Manager: Chris Martell	Depth to Water: NA	
Physica	al Location	n: V18	BA- Carteret	: Ave.			Surface Elevation: 11.	
							(note bg	s = below ground surface)
Depth Range ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thick	rness:	Sample ID
_ _1		0.0	moist	FILL		fine to medium silty SAND, with fill mate reddish brown, medium dense, moist, no		
-2 -3 -4	5							
-5-		0.0			\longrightarrow			
		0.0	moist	FILL	\otimes	fine to medium SAND, with fill material, 5/2) grayish brown, medium dense, moi		
-6 -7	5	0.0	moist	FILL		Staining. GGM, with fill material (cinders, ash, gla (5.5-6.5 chromium precipitate white), litt (10Y 4/4) olive, medium dense, moist, n staining.	ass), some COPR le course gravel,	
-8 -9		0.0	moist to wet	FILL		coarse sandy GRAVEL, with fill materal, material, (7.5YR 5/1) gray, medium den moderate chemical odor, hydrocarbon st	se, moist to wet,	
40		0.0	moist	FILL		medium to coarse gravelly SAND, with f		
-10 -		0.0	to wet wet	FILL		tar-like material, medium dense, moist to petroleum odor, hydrocarbon staining. SILT, (5YR 4/1) dark gray (10YR 5/2) gr	/	
-11 -		0.0	moist to wet	FILL		plastic, very loose, wet, moderate petrole gravelly SILT, with fill material, some tar 4/3) reddish brown, low plasticity, loose,	eum odor, sheen. -like material, (5YR	
-12	5	0.0	moist	FILL		moderate hydrocarbon odor, sheen.		
-13 -14 -14	· ·		to wet			sandy SILT, with fill material, some grav material, (5YR 4/3) reddish brown, low p to wet, strong hydrocarbon odor, hydrocarbon	plasticity, soft, moist	
-15 -16 -17	_	0.0	moist to wet	FILL		fine to medium SAND, some fill material coarse gravel, (5YR 4/3) reddish brown, moist to wet, no odor, sheen.		P4-V18A-17.0-17.5
-	5	0.0	ds.	PT	<u> </u>	PEAT (degraded vegetated material), 80	10/ organia fibera	P4-V18A-17.5-18.0
-18 - -19		0.0	dry to moist	FI	\(\frac{1}{2} \) \(\fra	20% organic silt, (7.5YR 2.5/3) very darl moist, strong organic odor, no staining. MM.	k brown, stiff, dry to	1 - - v 10 00- 17.3-10.0
4		0.0	de:	O!	<u> </u>		rania fibera (7.5\/D	
-20			dry	OL	-	UNDorg SILT, 70% organic silt, 30% org 5/1) gray (10YR 5/2) grayish brown, stift		
_ _21		0.0	dry	OL		odor, no staining. Soils consistent with L UNDorg SILT, 70% organic silt, 30% org 5/1) gray (10YR 5/2) grayish brown, stiff	JNDorg. ganic fibers, (7.5YR f, dry, slight organic	
-22 - -23	5	0.0	moist	SM		odor, no staining. Soils consistent with L UNDno SILT, with fine to medium sand, medium dense, moist, no odor, no staini with UNDno.	(7.5YR 5/1) gray,	
20								
		0.0	moist	SP-SM		UNDno fine to coarse SAND, with grave	(5YR 4/3) reddish	



Boring ID: P4-V18A

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

			3/13/2014	10:00:00 Al	VI Co	re Size: 2 in	Boring Total Depth:	_ <u>25 ft</u>
ogged	I By : MI 8	k FM			Pro	oject Manager: Chris Martell	Depth to Water: N	Α
ysic	al Location	n: V18	BA- Cartere	t Ave.			Surface Elevation:	11.8 ft NAVD88
							(No	ote bgs = below ground surface)
epth nge bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thi	ckness:	Sample ID
75						brown, medium dense, moist, no odor, consistent with UNDno.	no staining. Soils	
25								

Boring ID: P4-W18A

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

,	al Locatio	11.9 ft NAVD88 bgs = below ground surface)					
Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
		0.0		FILL		fine to coarse gravelly SAND, with 10% ash and cinders.	
-1	_						
_	-						
-2	_						
_	5						
-3- -							
-4	-						
_							
-5		13.0	wet	FILL		fine to coarse gravelly FILL MATERIAL, with fine to coarse	
-6						sand, wet, moderate hydrocarbon odor, sheen, hydrocarbon staining.	
_							
-7	5						
-8- -							
_	-						
-9-	1						
-	_						
–10— –		6.0	wet	FILL		GGM, some coarse gravel, (5GY 4/4) olive green, low	
-11	-	5.0	wet	FILL		plasticity, loose, wet, no odor, green staining. fine to medium sandy GRAVEL, with tar-like material, some	
_	_	0.0	wet	FILL		silt, (5YR 3/1) very dark gray (7.5YR 2.5/2) very dark brown,	
–12 	5	5.0	wet	FILL		 soft, wet, moderate hydrocarbon odor, hydrocarbon staining. fine to medium silty SAND, with fill material, some tar-like 	
-13			to moist			material, (5YR 4/2) dark reddish gray, loose, wet to moist, strong naphthalene odor, sheen.	
_	_	4.0	moist	FILL		fine to medium silty SAND, some fine to medium sand, little	
- 14	_		moist	1 122		fill material, trace oil-like material, (5YR 4/3) reddish brown,	
_ _15						low plasticity, soft, moist, slight naphthalene odor, no staining.	
-	-	0.0	dry	FILL		fine to medium SAND, some coarse gravel, (5YR 4/3) reddish brown, medium dense, dry, no odor, no staining.	
-16 	-	0.0	dry	PT		PEAT (degraded vegetated material), 80% organic fibers,	P4-W18A-16.0-16.5
- 17	-		,		<u> </u>	20% organic silt, (7.5YR 2.5/3) very dark brown, medium stiff, dry, moderate organic odor, no staining. Soils	P4-W18A-16.5-17.0
17 -	5				<u>\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ </u>	consistent with peat.	
-18 					<u> </u>		
_	_				<u> </u>		
-19 -]				71/ 71/ 2 (1/2 (1/2)		
		0.0			1/2/1/2/		
_		0.0	moist	OL		SILT, with sand, 80% organic silt, 20% organic fibers, (7.5YR 5/1) gray, moist, no odor, no staining. Soils	
-21	†	0.0	dry	SP		consistent with UNDorg. fine SAND, little silt, (7.5YR 5/1) gray, medium stiff, dry, no	
						odor, no staining. Soils consistent with UNDno.	
	5	0.0	dry	SP		fine SAND, (7.5YR 5/1) gray, very dense, dry, no odor, no staining. Soils consistent with UNDno.	
-23	_					otaling. Cond condition with ONDIO.	
_	1	0.0	dry	SP		fine to coarse SAND, with coarse gravel, (5YR 4/3) reddish	
omme	nts: 1) 3 atte	empts w	ere made to	obtain best r	ecovery 2) M	M/UND confirmed to be 1 ft thick.	



Boring ID: P4-W18A

				11:00:00 AM		Rig Type:	Coordinates (NJSPN	
			3/13/2014	1:20:00 PM		Core Size: 2 in	Boring Total Depth:	
Logged	By: MI	& FM			F	Project Manager: Chris Martell	Depth to Water: NA	\
Physica	al Locatio	n: W1	8A- Carter	et Ave.			Surface Elevation:	11.9 ft NAVD88
							(Not	e bgs = below ground surface)
Depth Range (ft bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and	d Thickness:	Sample ID
						brown, very stiff, dry, no odor, no with UNDno.	staining. Soils consistent	
25					1.251.65			
	-t 1\ 2 otto	mpto w	oro mada ta	obtoin boot ro	201/02/	MM/UND confirmed to be 1 ft thick.		I .

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

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

30 Knightsbridge Road, Piscataway, NJ 08854 732.564.3200 office telephone

Boring ID: P4-W19A

Page: 1 Project Name: PPG Garfield Ave Drilling Company: SGS North America Project Number: 60240739 Drilling Method: Geoprobe Coordinates (NJSPNAD83) x: 611232 Date Started Drilling: 3/5/2014 11:40:00 AM Rig Type: Coordinates (NJSPNAD83) y: 682835 Date Finished Drilling: 3/5/2014 12:10:00 PM Core Size: 2 in Boring Total Depth: 25 ft Logged By: A. Bogucki Project Manager: Chris Martell Depth to Water: NA Physical Location: W19A - Carteret Ave. Surface Elevation: 12.5 ft NAVD88

Depth Range t bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thickness:	Sample ID
_		0.0	slightly moist	FILL		fine to medium SAND, little fine gravel, trace GGM, cinders, (10YR 5/4) yellowish brown, loose to dense, slightly moist, no odor, green staining.	
-2-		0.0	moist	FILL		GGM, little salt precipitate, (5GY 4/4) olive green, low plasticity, soft, moist, no odor, green staining.	
-3 -4 -	5						
-5— -6— -7—	5	0.0	moist	FILL		GGM, little salt precipitate, (5GY 4/4) olive green, low plasticity, soft, moist, no odor, green staining.	
-8 -9 -10		0.0	moist	FILL		medium SAND, some fine to medium gravel, little cinders,	
- 11 - 12						trace GGM, (10YR 5/6) yellowish brown, low plasticity, hard, moist, no odor, green staining.	
13 — - 14 — - 15	5	0.0	moist	FILL		GGM, little salt precipitate, (5GY 4/4) olive green, low plasticity soft, moist, no odor, green staining.	
16 -		0.0	wet	FILL		sandy SILT, little GGM, (10YR 3/2) very dark grayish brown, non plastic, medium dense, wet.	
- - 17	5	0.0	moist	PT	\(\frac{\frac}\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\	PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (10YR 3/3) dark brown, low plasticity, medium stiff, moist, strong sulfur odor. Soils consistent with MM.	P4-W19A-16.2-16.7 P4-W19A-16.7-17.2
18 — — 19 —							P4-W19A-18.0-18.5
20		0.0	moist	PT	7 77 7	PEAT (degraded vegetated material), 80% organic fibers, 20% organic silt, (10YR 3/3) dark brown, low plasticity, medium stiff, moist, strong sulfur odor. Soils consistent with	P4-W19A-20.0-20.5
21— - 22— - 23—	5	0.0	wet	SP-SM		medium stiff, moist, strong sulfur odor. Soils consistent with MM. fine to medium silty SAND, some gravel little clay, (10YR 5/1) gray, non plastic, dense, wet. Soils consistent with UNDno.	



Boring ID: P4-W19A

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

Logged By: A Boxupck Not Starter Not S	Date F	inished Dr	illing:	3/5/2014	<u>12:10:00 PM</u>	Core	Size: 2 in			Boring Total Deptl	1: 25 ft	
Depth Range (ft/ft) PID (ppm) Moisture Content USCS Graphic Log Surface Cover and Thickness: Sample ID Sample Surface Cover and Thickness: Sample ID Sampl	.ogge	d By: A. B	Bogucki			Proj	ect Manager	r: Chris Martell	I	Depth to Water: 1	NA	
Recovery (ft/ft) PID (ppm) Moisture (ppm) PID	hysic	al Location	n: W1	9A - Carte	ret Ave.					Surface Elevation	: 12.5 ft NA	VD88
											Note bgs = below g	round surface)
28	epth ange bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log		Surface Cover	and Thicknes	ss:		Sample ID
	_											
	25											

Boring ID: P4-X19AR

Page: 1

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

Project Number: 60240739 Drilling Method: Geoprobe Coordinates (NJSPNAD83) x: 611270.755 Date Started Drilling: 12/12/2014 9:10:00 AM Rig Type: Coordinates (NJSPNAD83) y: 682827.642 Date Finished Drilling: 12/12/2014 Core Size: 3 0 in Boring Total Depth: 20.5 ft

		illing:	12/12/201	<u> 4 </u>		Core Size: 3.0 in	Boring Total Depth:	
	By: SS					Project Manager: Scott Mikaelian	Depth to Water: NA	11.0 (1)11/17.22
hysica	I Location	1: X19	A - Carter	et Ave.		1	Surface Elevation:	11.9 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		ASPHALT		ASPHALT		
-1 - -2	5	0.0	dry	FILL		fine to medium SAND, little fine to mediun (30%) COPR, (5YR 3/4) dark reddish broodor, no staining.	m gravel, little wn, loose, dry, no	P4-X19A-1.0-1.5 P4-X19A-2.0-2.5
-3 -4 -	J .	0.0	dry	FILL		ASH, some fine to medium sand, trace bi (10YR 4/2) dark grayish brown, loose, dry staining.		P4-X19A-4.0-4.5
-5-		0.0	moist to	FILL		ASH, little fine to medium sand and grave black, loose, moist to saturated, no odor,		
-6-			saturated			at 6.0 feet.		P4-X19A-6.0-6.5
-7— -8— -9—	5	0.0	wet	FILL		GGM (70%), little fine gravel, (5GY 5/2) g loose, wet, no odor, no staining.	grayish green,	
10 -		0.0	wet	FILL		GGM (100%), (2.5Y 3/3) dark olive brown petroleum odor, product staining.	n, soft, wet, slight	
-12		8.5	wet	FILL		fine to medium silty SAND, trace fine graduark brown, loose, wet, slight petroleum of		P4-X19A-11.5-12.0
-13 -14	5					staining.	noor, product	P4-X19A-12.0-12.5
-15		0.5	saturated	FILL		fine to medium silty SAND, (10YR 5/1) gr	av soft saturated	-
16-	2	0.0	moist	FILL		no odor, no staining. fine to medium SAND, trace fine gravel, (medium dense, moist, no odor, no stainin	7.5YR 4/2) brown,	
-17 		0.8	moist	FILL		fine to medium SAND, trace fine gravel, (gray, medium dense, moist, slight petrole	10YR 4/1) dark	
-18		0.0	moist	PT	7 77 77	\staining. PEAT (degraded vegetated material), (60	% organic silt, 40%	
19—	3.5				<u> </u>	moderate organic odor, no staining. Soils MM.		
20					<u> </u>			P4-X19A-20.0-20.5R
/IM - mea	adow mat		GGM - gree			sidue UNDno - non-organic undisturbed native d UNDorg - organic undisturbed native depo		ufactured gas plant romate chemical production w

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Boring ID: P4-X19A

	t Name: F t Number:					Orilling Company: SGS North America Orilling Method: Geoprobe	Coordinates (NJSPNA	.D83) x· 611253
				0:20:00 AM		Rig Type:	Coordinates (NJSPNA	
				10:20:00 AM		Core Size: 2 in	Boring Total Depth: 2	
	d By: A.Bo					Project Manager: Chris Martell	Depth to Water: NA	
	al Location		A - Carter	et Ave.	,-		Surface Elevation: 12	2.0 ft NAVD88
							(Note b	gs = below ground surface)
epth	Boos or :	חום	Moiotura		Cronhi-			Comple
ange bgs)	Recovery (ft/ft)	PID (ppm)	Moisture Content	USCS	Graphic Log	Surface Cover and Thick	ness:	Sample ID
		0.0	slightly	FILL		fine to medium SAND, some GGM, little		-
_]	0.0	moist	FILL		\ 3/4) dark brown, loose to dense, slightly	moist, no odor,	
1	1		slightly moist			\green staining. GGM, with ash, cinders, coal, little fine to	o medium gravel	
_	1					(5GY 3/2) very dark grayish green, stiff,		
2	_					odor, no staining.	•	
_	5							
3								
_								
4								
_								
5		0.0	-11 1 11	F		OOM	- man district	
_		0.0	slightly moist	FILL		GGM, with ash, cinders, coal, little fine to (5GY 3/2) very dark grayish green, stiff,		
6	1					odor, no staining.	ongritty moiot, no	
_	1	0.0	moist	FILL		GGM, little fine sand, trace COPR, (5GY		
7 —]					low plasticity, soft to stiff, moist, no odor	, green staining.	
_	5							
0]							
8	1							
	1							
9 —	1							
_								
0		0.0	moist	FILL		GGM, little fine sand, trace COPR, (5GY low plasticity, soft to stiff, moist, no odor,		
1		0.0	slightly moist	FILL		 fine silty SAND, little coarse gravel, trace 	oil-like material,	
_		0.0		FILL		stiff, slightly moist, slight naphthalene od	lor, no staining.	
2		0.0	p			SILT, trace roots, fibers, little fine to med 2.5/2) very dark brown, low plasticity, so		
_	4.5	0.0	slightly moist	FILL		\slight naphthalene odor, sheen.	/	
3	1		moist			fine to medium SAND, with silt, trace oil-		
_	1					(7.5YR 3/3) dark brown, dense, slightly r naphthalene odor.	noist, siignt	
4]					·		
T _]							P4-X19A-14.0-14.5
5				NR		NO RECOVERY		
5		0.0	wet	FILL		GGM, some sand, (10YR 4/3) brown, m	edium plasticity,	
_]					soft, wet.		
6	1							P4-X19A-16.0-16.5
	1							P4-X19A-16.5-17.0
7	5	00						P4-X19A-17.0-17.5
8	1		moist	PT	<u> </u>	PEAT (degraded vegetated material), 80	% organic fibers.	P4-X19A-18.0-18.5
_	†				1/ 1// 1	20% organic silt, (10YR 3/3) dark brown	, low plasticity,	
19	†				11, 11,	medium dense, moist, moderate sulfur o	dor. Soils consistent	
_	†				1, 11, 1	with MM.		
20		0.0	moist	PT		PEAT (degraded vegetated material), (10)YR 3/3) dark	P4-X19A-20.0-20.5
_		0.0	wet	SP-SM	医排	brown, low plasticity, medium dense, mo		
21				review of th	e soil	odor. Soils consistent with MM.	/	
_				criptions ind	NESTHAL	fine silty SAND, some clay, (10YR 5/1) of soft, wet. Soils consistent with UNDno.	gray, low plasticity,	
22-				CS for this i	PER CHILDRE	Sort, Wet. Colle Corleisterit With Orabilo.		
_	5			SC.				
23—		0.0					W	
_	_	0.0	moist	SP-SM		fine to medium silty SAND, some gravel reddish gray, low plasticity, dense, moist		



Boring ID: P4-X19A

		1 4901 2						
Project Name: PPG Garfield Ave	Drilling Company: SGS North America	-						
Project Number: 60240739	Drilling Method: Geoprobe	Coordinates (NJSPNAD83) x: 611253						
Date Started Drilling: 3/5/2014 10:20:00 AM	Rig Type:	Coordinates (NJSPNAD83) y: 682823						
Date Finished Drilling: 3/5/2014 10:20:00 AM	Core Size: 2 in	Boring Total Depth: 25 ft						
Logged By: A.Bogucki	Project Manager: Chris Martell	Depth to Water: NA						
Physical Location: X19A - Carteret Ave.	Surface Elevation: 12.0 ft NAVD88							
(Note bgs = below ground surface)								
		, , , , , , , , , , , , , , , , , , , ,						

te Fi	nished Dr	ming.	3/3/2014	10.20.00 AIVI	- 0	ore Size: 2 in		Boring Total De	ptiii. 20 it
gged	By: A.Bo	ogucki			Pr	oject Manager:	Chris Martell	Depth to Water	: NA
ysica	al Location	n: X19	9A - Cartere	et Ave.				Surface Elevat	ion: 12.0 ft NAVD88
									(Note bgs = below ground surface)
epth	Recovery	PID	Moisture		Graphic				Sample
epth inge bgs)	(ft/ft)	(ppm)	Content	USCS	Graphic Log		Surface Cover and	d Thickness:	Sample ID
-3-7					TO SOFTEN	consistent wi	th LINDno		
-						CONSISTENT WI	iii ONDiio.		
5									
			1		1				1



Boring ID: P4-Y19A

Page: 1

Project Name:PPG Garfield AveDrilling Company:SGS North AmericaProject Number:60240739Drilling Method:Direct PushCoordinates (NJSPNAD83) x:611303.112Date Started Drilling:12/8/2014 12:40:00 PMRig Type:GeoprobeCoordinates (NJSPNAD83) y:682811.3Date Finished Drilling:12/8/2014 1:30:00 PMCore Size:3.0 inBoring Total Depth:17 ftLogged By:SSProject Manager:Scott MikaelianDepth to Water:N/APhysical Location:Carteret AvenueSurface Elevation:11.8 ft NAVD88

Physical Location: Carteret Avenue					Surface Elevation: 11.8 ft NAVD88 (Note bgs = below ground surface)			
Recovery	PID	Moisture	Hece	Graphic	Surface Cover and Thickness: Samp			
(ft/ft)		Content		Log		ID		
	0.0		ASPHALT		ASPHALT.			
5	0.0	dry	FILL		fine to medium SAND,little medium gravel,little COPR(20%),(5YR 3/3) dark reddish brown,loose,dry,no odor,no staining.	P4-Y19A-1.0-1.5 P4-Y19A-2.0-2.5		
	0.0	moist	FILL		GGM,little ash,trace brick,(5GY 4/4) olive green,loose,moist,no odor,no staining.			
	0.0	moist	FILL		ASH,little GGM,little medium gravel,trace debris,(7.5YR 3/1) very dark grav loose moist no odor green staining.	P4-Y19A-5.0-5.5		
5						P4-Y19A-6.0-6.5		
						P4-Y19A-8.0-8.5		
	0.0	moist	FILL		ASH,little debris,little GGM,trace wood,(7.5YR 4/1) dark gray,loose,moist,no odor green staining.	P4-Y19A-10.0-10.5		
5	0.0	wet	FILL		fine to medium silty SAND,some oil-like material,little fine to medium gravel,trace roots,(7.5YR 2.5/1) black,soft,wet,moderate petroleum odor sheen.	P4-Y19A-12.0-12.5 P4-Y19A-14.0-14.5		
2	0.0	dry	FILL		fine to medium silty SAND, little oil-like material little organics, (7.5YR 2.5/3) very dark brown, soft, dry, slight petroleum odor, sheen.	P4-Y19A-16.0-16.5		
	(ft/ft) 5	(ft/ft) (ppm) 0.0 0.0 5 0.0 0.0 5 0.0 0.0	(ft/ft) (ppm) Content 0.0 0.0 dry 5 0.0 moist 5 0.0 moist 5 0.0 wet 0.0 dry	(ft/ft) (ppm) Content OSCS 0.0 ASPHALT 0.0 dry FILL 0.0 moist FILL 5 0.0 moist FILL 5 0.0 wet FILL 0.0 dry FILL	(ft/ft) (ppm) Content USGS Log 0.0 ASPHALT ASPHALT 0.0 dry FILL 5 0.0 moist FILL 5 0.0 moist FILL 5 0.0 wet FILL 2 0.0 dry FILL	Recovery (fi/ff) PID (content (Pipm) Moisture (Content (Pipm) Content (Pipm)		

AECOM Note: Ground surface elevation = 12.0 ft NAVD88

PSEG SC Former Halladay Street Gas Works Site **SCHOOR DEPALMA Supplemental Remedial Investigation** Page 1 of 6 **LOG OF SOIL BORING SB-28** PROJECT LOCATION GROUND ELEVATION (FT. MSL) PROJECT NUMBER Halladay Street, Jersey City, New Jersey 020667601 DRILLING CONTRACTOR FOREMAN DATE STARTED DATE COMPLETED Advanced Drilling, Inc. Jeremy Logel 04/11/05 COMPLETION DEPTH (FT BGS) DRILLING EQUIPMENT ROCK DEPTH (FT) Hollow Stem Auger Rig, 4.25" Augers not encountered N/A SIZE AND TYPE CORE BARREL NO. SAMPLES DIST. 27 JNDIST. N/A N/A 2.5' N/A N/A N/A WATER DEPTH COMPL N/A 24HR CASING FIRST CASING HAMMER WEIGHT N/A DROP N/A BORING LOCATION SAMPLER 2" diameter, 2' long split-spoon Southern side of Carteret Avenue, Road Shoulder SAMPLER HAMMER WEIGHT 140 lbs DROP 30" Eric Gaulin PID READINGS Samples **DESCRIPTION** REMARKS Depth Ambier Time Head Time Resis Time Sample (ft bgs) (ft) BL/6ii Air Space Date 0 0.0-0.5' Asphalt road surface 2.0 5 0845 0.0 0.0 0845 N/A N/A 0.5-0.6' Gravel sub-base 0.6-3.0' FILL: Dark greenish gray (GLEY1 2 0.0 4/1) fine to medium SAND, trace silt, tight 2 0.0 3 0.0 2 2 0850 N/A N/A 1.2 0.0 0.0 0850 4 3.0-3.2' FILL: Bright green / yellow sand, 0.0 2 suspected Chromate Ore Processing 3 Residue (COPR) 10 4 4.0-6.0' FILL: Dark gray (5YR4/1) fine to 3 2.0 0857 0.0 0.0 N/A N/A medium SAND, trace silt, wood fragments, gravel, glass fragments 5 0.0 5 0.0 0.0 6 2.0 0900 0.0 0.0 0900 N/A N/A 4 11 6.0-7.5' FILL: Dark gray to black fine to medium SAND, with 50% angular gravel 0.0 13 (1/4"), loose 7.5-8.0' FILL: Bright green, fine SILTY 10 0.0 SAND, COPR 12 0.0 8 8.0-9.0' FILL: Greyish green (GLEY1 5/2) 1.0 0913 0.0 0.0 0913 N/A N/A 5 3 tight fine SANDY SILT, little coal fragments 2 0.0 9

PSEG SC Former Halladay Street Gas Works Site SCHOOR DEPALMA Supplemental Remedial Investigation Page 2 of 6 **LOG OF SOIL BORING SB-28** PROJECT LOCATION GROUND ELEVATION (FT. MSL) PROJECT NUMBER Halladay Street, Jersey City, New Jersey 020667601 DRILLING CONTRACTOR FOREMAN DATE STARTED DATE COMPLETED Advanced Drilling, Inc. Jeremy Logel 04/11/05 COMPLETION DEPTH (FT BGS) DRILLING EQUIPMENT ROCK DEPTH (FT) Hollow Stem Auger Rig, 4.25" Augers not encountered N/A SIZE AND TYPE CORE BARREL NO. SAMPLES DIST. 27 UNDIST. N/A 2.5' N/A N/A N/A WATER DEPTH FIRST COMPL N/A 24HR CASING CASING HAMMER WEIGHT N/A DROP N/A BORING LOCATION SAMPLER 2" diameter, 2' long split-spoon Southern side of Carteret Avenue, Road Shoulder SAMPLER HAMMER WEIGHT 140 lbs DROP Eric Gaulin PID READINGS Samples **DESCRIPTION** REMARKS Depth Time Ambien Time Head Time Resist Sample (ft bgs) (ft) BL/6ii Air Space Date - 10 10.0-10.3' FILL: Greyish green (GLEY1 5/2) Slight naphthaline like 6 1.5 0922 0.0 0.0 0922 N/A N/A 3 tight fine SANDY SILT, little coal fragments, odors, some staining some fine gravel from 10.5-11.25 2 0.0 10.3-14.0' Bluish black (GLEY2 2.5/1) organic SILT and CLAY, with visible peat 0930 Sample SB-28(10.5-3 0.0 fibers (PT) 11.0) for TCL VOC, TCL SVOC, TAL Metals, CN 3 - 12 0928 N/A N/A 2.0 0.0 0.0 0928 No staining or odors 4 noted in this spoon 3 0.0 - 13 0.0 0.0 - 14 14.0-16.8' Reddish brown (2.5YR4/3) fine 8 0.5 0936 0.0 0.0 0936 N/A N/A SAND, wet, trace silty clay (SM) - 15 2 - 16 9 2.0 0941 0.0 0.0 0941 N/A 2 N/A 0943 Sample SB-28(16.0-16.5) for TCL VOC, TCL SVOC, TAL Metals, CN 2 0.0 16.8-18.5' Dark yellowish brown (10YR3/4) PEAT, very fibrous and firm 0.0 0.0 - 18 10 1.5 0947 0.0 0.0 0947 N/A N/A 2 18.5-23.0' Very dark bluish gray (GLEY2 3/1) 2 0.0 bands (1" to 1.5") of PEAT and organic CLAY (OH) - 19 0.0

AECOM Note: Ground surface elevation = 12.0 ft NAVD88

PSEG SC Former Halladay Street Gas Works Site SCHOOR DEPALMA Supplemental Remedial Investigation Page 3 of 6 **LOG OF SOIL BORING SB-28** PROJECT LOCATION GROUND ELEVATION (FT. MSL) PROJECT NUMBER Halladay Street, Jersey City, New Jersey 020667601 DRILLING CONTRACTOR FOREMAN DATE STARTED DATE COMPLETED Advanced Drilling, Inc. Jeremy Logel 04/11/05 COMPLETION DEPTH (FT BGS) ROCK DEPTH (FT) DRILLING EQUIPMENT Hollow Stem Auger Rig, 4.25" Augers not encountered SIZE AND TYPE CORE BARREL N/A TYPE BIT N/A NO. SAMPLES DIST. 27 UNDIST. N/A 2.5' N/A N/A N/A WATER DEPTH FIRST COMPL N/A 24HR CASING N/A CASING HAMMER WEIGHT N/A DROP BORING LOCATION SAMPLER 2" diameter, 2' long split-spoon Southern side of Carteret Avenue, Road Shoulder SAMPLER HAMMER WEIGHT 140 lbs DROP 30" Eric Gaulin PID READINGS Samples **DESCRIPTION** REMARKS Depth Time Ambien Time Head Time Sample (ft bgs) (ft) BL/6ii Air Space Date - 20 18.5-23.0' Very dark bluish gray (GLEY2 3/1) 0951 11 2.0 2 0.0 0.0 0951 N/A N/A bands (1" to 1.5") of PEAT and organic CLAY (OH) 0.0 - 21 2 0.0 0.0 22 12 0955 N/A N/A 2.0 13 0.0 0.0 0955 0.0 10 23 23.0-24.0' Dark gray (GLEY1 4/N) fine to 0.0 medium SILTY SAND, tight, 5% fine gravel, rounded (GM) 0.0 6 - 24 24.0-25.5' Very dark gray (GLEY1 3/N) fine 13 1.5 1030 0.0 0.0 1030 N/A N/A to medium SAND, trace silt (SW) 2 0.0 25 0.0 2 - 26 26.0-30.0' Dark reddish gray (2.5YR4/1) fine 14 2.0 1035 0.0 0.0 1035 N/A N/A to medium SILTY SAND, trace silt (SW) 2 0.0 3 - 27 2 0.0 2 0.0 - 28 15 2.0 3 1036 0.0 1036 N/A N/A 0.0 2 0.0 - 29 3 0.0 0.0

h	NOLE. GROUNG SUNA Halladay Street Gas Work					•								SCHOOR DEPALMA
Supplemental Rer	nedial Investigation			_	\F.O.		-	IN/A 1		•				Page 4 of 6
			LOG	C)FS(JIL E	SOR	ING S	5B-2	8				
PROJECT LOCATION								GPO! IV'') El EV/^?	TION (FT.	MSI \	PPO IFO	T NUMBE	:R
Halladay Street, Jersey	City, New Jersey							GHOUNL	LEVAI	HON (F1.	IVIOL)	PROJEC	I NUMBE	:н 020667601
DRILLING CONTRACTOR	,, 25.00j		FOREMAN	N				DATE ST	ARTED			DATE CO	OMPLETE	
Advanced Drilling, Inc.			Jeremy	Lo	gel				04/1	11/05				04/11/05
DRILLING EQUIPMENT								COMPLE	TION DE	PTH (FT E	BGS)	ROCK D	EPTH (FT)
Hollow Stem Auger Rig,	4.25" Augers								54'				not end	countered
TYPE BIT N/A			SIZE AND	ΤY	PE CORE	BARRE	EL	NO. SAM	IPLES	DIST.	27	UNDIST.	N/A	CORE N/A
CASING N/A	T			N/	/A			WATER I	DEPTH	FIRST	2.5'	COMPL.	N/A	24HR N/A
CASING HAMMER	WEIGHT N/A		DROP	N/	/Α			1	LOCATIO					
	eter, 2' long split-spoon									of Carte		enue, Ro	ad Sho	ulder
SAMPLER HAMMER	WEIGHT 140 lbs.	\dashv	DROP		30"			INSPECT	OR	Eric G				<u> </u>
		Interval		able		San	nples			PID	(BBM)	NGS		
DE	SCRIPTION	-	Depth	ater T	Number	Recov.	Penetr. Resist.	Timo	Sample	Ambiant	(PPM)	Head	Timo	REMARKS
<i>D</i> L		Sample	(ft bgs)	M	ramber	(ft)	BL/6in	Time	Sample	Ambient	inite	Space	Time	TILIWI II II II
		\top	- 30 -	П										
	ddish gray (2.5YR4/1) fine				16	2.0	2	1051	0.0	0.0	1051	N/A	N/A	
rounded gravel (S)	with trace silt, <1% fine W)													
graner (er	,						3		0.0					
			- 31 -											
							3		0.0					
			00				3		0.0					
			- 32 -		17	17	3	1053	0.0	0.0	1050	NI/A	NI/A	
					17	1.7	3	1000	0.0	0.0	1053	N/A	N/A	
							4		0.0					
32 9-33 // Reddish	brown (2.5YR4/4) fine		- 33 -						0.0					
SANDY SILT (SM)							4		0.0					
33.4-33.7' Dark red SANDY SILT (SM)	Idish gray (2.5YR3/1) fine						3		0.0					
OAND FOILT (ON)			- 34 -											0.1
	ldish brown (2.5YR3/4)				18	2.0	1	1119	10.4	0.0	1119	N/A	N/A	Oil material (OM) from 34.5 to 38.0,
fine SILTY SAND (OIVI)													naphthalene like odors;
			0.5				1		87.0					positive dye test at 36'
			- 35 -				3		72.0 118.0					
							3		116.0					
							4		74.0					
			- 36 -				ļ							
					19	2.0	3	1138	94.0	0.0	1138	N/A	N/A	1145 Sample SB-28(36.5
														37.0) for GC fingerprint, TCL VOC, TCL SVOC,
							3		58.0					TAL Metals, Total and
			- 37 -											Amenable CN
							2		284.0					
							1		62.0					
38.0-42.7' Dark red	ddish brown (2.5YR3/4)		- 38 -											Sheen and odors noted
fine SANDY SILT (20	2.0	1	1152	1.0	0.0	1152	N/A	N/A	from 38.0' to 42.7'
							2		1.0					
			- 39 -				4		1.0					
			55 -				2		1.0					
							-							
							1		1.0					
			- 40 -		 		ļ		ļ	ļ				

PSEG SC Former Halladay Street Gas Works Site **SCHOOR DEPALMA** Supplemental Remedial Investigation Page 5 of 6 **LOG OF SOIL BORING SB-28** PROJECT LOCATION GROUND ELEVATION (FT. MSL) PROJECT NUMBER Halladay Street, Jersey City, New Jersey 020667601 DRILLING CONTRACTOR FOREMAN DATE STARTED DATE COMPLETED Advanced Drilling, Inc. Jeremy Logel 04/11/05 COMPLETION DEPTH (FT BGS) DRILLING EQUIPMENT ROCK DEPTH (FT) Hollow Stem Auger Rig, 4.25" Augers not encountered TYPE BIT N/A SIZE AND TYPE CORE BARREL NO. SAMPLES DIST. 27 UNDIST. N/A N/A 2.5' N/A N/A N/A WATER DEPTH FIRST COMPL N/A 24HR CASING CASING HAMMER WEIGHT N/A DROP N/A BORING LOCATION SAMPLER 2" diameter, 2' long split-spoon Southern side of Carteret Avenue, Road Shoulder SAMPLER HAMMER WEIGHT 140 lbs DROP Eric Gaulin PID READINGS Samples **DESCRIPTION** REMARKS Depth Ambien Time Head Time Resist Time Sample (ft bgs) (ft) BL/6ir Air Space Date - 40 38.0-42.7' Dark reddish brown (2.5YR3/4) Sheen and odors noted 21 2.0 1209 14.2 0.0 1209 N/A N/A 3 fine SANDY SILT (SM) from 38.0' to 42.7' 14.7 - 41 44.3 8.7 - 42 42.7-48.25' Dark reddish brown (2.5YR3/4) 22 1211 N/A N/A 2.0 0.0 0.0 3 1211 fine SANDY SILT with occassional thin (1/2") bands of SILT 1.0 1217 Sample SB-28 - 43 (43.5-44.0) for TCL VOC, 6 0.0 TCL SVOC, TAL Metals, Total and Amenable CN 0.0 - 44 23 2.0 1337 0.0 0.0 1337 N/A N/A 5 0.0 - 45 6 0.0 0.0 24 2.0 1342 0.0 1342 N/A N/A 6 0.0 0.0 8 - 47 0.0 6 0.0 - 48 25 2.0 5 1410 0.0 N/A N/A 0.0 1410 48.25-51.8' Dark reddish brown (2.5YR3/4) loose fine SILTY SAND (SM) 7 0.0 - 49 8 0.0 Sheen and odors noted at 49.75' 0.0

AECOM Note: Ground surface elevation = 12.0 ft NAVD88

PSEG SC Former	COM Note: Groun Halladay Street Gas Works			10		CVC	11101	<u> </u>	12.0	1011	17	<u> </u>			SCHOOR DEPALM
Supplemental He	medial Investigation		LOG	0	F SC	OIL E	BOR	ING S	SB-2	8					Page 6 of
PROJECT LOCATION Halladay Street, Jersey	City New Jersey							GROUNE	D ELEVAT	TION (FT.	MSL)	PROJEC	T NUMBE		20667601
DRILLING CONTRACTOR	Only, New Delacy		FOREMAI	V				DATE ST	ARTED			DATE CO	OMPLETE		20007001
Advanced Drilling, Inc.			Jeremy		ael					1/05					04/11/05
DRILLING EQUIPMENT			,		9 -			COMPLE		PTH (FT E	BGS)	ROCK D	EPTH (FT		
Hollow Stem Auger Rig	4.25" Augers								54'				not end	counter	ed
YPE BIT N/A		;	SIZE AND	TY	PE CORE	BARRE	L	NO. SAN	IPLES	DIST.	27	UNDIST.	N/A		core N/A
ASING N/A	1			N/	A			WATER	DEPTH	FIRST	2.5'	COMPL.	N/A		24HR N/A
ASING HAMMER	weight N/A	l	DROP	N/	A			BORING	LOCATIO	ON					
AMPLER 2" diam	eter, 2' long split-spoon	- 1								of Carte	eret Ave	enue, Ro	ad Sho	ulder	
SAMPLER HAMMER	WEIGHT 140 lbs.		DROP	П	30"			INSPECT	FOR	Eric Ga					
		erval		ple		San	nples	1		PID	READI				
5.7	CODIDTION	ple Int	Б.:	ter Ta			Penetr.			1.	(PPM)				DEMARKO
Di	ESCRIPTION	Sample	Depth	Wa	Number	Recov.	Resist.	Time	Sample		Time	Head	Time	ł	REMARKS
		+	(ft bgs)	Н		(ft)	BL/6in		<u> </u>	Air		Space	Date	<u> </u>	
	eddish brown (2.5YR3/4)		- 50 -		26	2.0	9	1452	0.0	0.0	1452	N/A	N/A	J	
loose fine SILTY S	SAND (SM)				20	2.0		1702	0.0	0.0	1+32	14/7	13//		
			-				10		0.0						
			- 51 -						0.0						Sample SB-28
51 8-52 0' Dark ro	ddish brown (2.5YR3/4)						12		0.0						5-51.0) for TCL VOC SVOC, TAL Metals,
	LTY and SILTY CLAY, wet														I and Amenable CN
	,						11		0.0						
52 0-52 5' Dark red	ddish brown (2.5YR3/4)		- 52 -												
	LTY and SILTY CLAY,				27	0.5	10	1455	0.0	0.0	1455	N/A	N/A	Run	ning sands jamming
wet, with layers of	fine SILTY SAND (1"													rods	3
hick)							11								
			- 53 -												
							12								
							13								
End of Boring at 5	A'		- 54 -												
End of Bonnig at 5	4														
			- 55 -												
			- 56 -						l					.	
			- 57 -												
			- 58 -												
			- 59 -												
						i	1	1		1		1	i		

PSEG SC Former Halladay Street Gas Works	Sit	e							VDC				SCHOOR DEPALMA
Supplemental Remedial Investigation		LOG	С	FSC	OIL E	BOR	ING S	SB-29	9				Page 1 of 9
PROJECT LOCATION Halladay Street, Jersey City, New Jersey							GROUNE	D ELEVAT	TION (FT.	MSL)	PROJEC	T NUMBE	PR 020667601
DRILLING CONTRACTOR		FOREMA	V				DATE ST	ARTED			DATE CO	OMPLETE	
Advanced Drilling, Inc.		Jeremy		nel			B/(12 0 1		2/05		B/112 00	,,,,, <u></u> ,	04/13/05
DRILLING EQUIPMENT		ociciny		901			COMPLE		PTH (FT E	3GS)	BOCK DE	EPTH (FT	
Hollow Stem Auger Rig, 4.25" Augers to 34'; mud rotary with	h 3 7/	/8" Rolle	er E	id to 84				84'	(,			countered
туре віт N/A		SIZE AND				L	NO. SAM		DIST.	25	UNDIST.	N/A	
CASING 4" steel casing to 34'	İ		N/	A			WATER	DEPTH	FIRST	3'	COMPL.	N/A	24HR N/A
CASING HAMMER WEIGHT 140 lbs.	[DROP	30				BORING	LOCATIO)N				'
SAMPLER 2" diameter, 2' long split-spoon							Southe	rn side	of Carte	eret Ave	nue, Ro	ad Sho	ulder
SAMPLER HAMMER WEIGHT 140 lbs.	[DROP		30"			INSPECT	TOR	Eric Ga	aulin			
•	/al		6		San	nples			PID	READI	NGS		
	Interval		Table			Penetr.				(PPM)			
DESCRIPTION	Sample	Depth	Water	Number	Recov.	Resist.	Time	Sample	Ambient	Time	Head	Time	REMARKS
	Š	(ft bgs)			(ft)	BL/6in			Air		Space	Date	
0.0.0.01 Applicable and a conference	Ш	- 0 -											
0.0-0.3' Asphalt road surface				1	1.7	3	0931	0.0	0.0	0931	N/A	N/A	
0.3-0.7' FILL: Dark brown fine to medium													
SAND, clinker, glass fragments						4		0.0					
0.7-1.7' FILL: Bright greenish gray fine		- 1 -											
SANDY SILT, Chromate Ore Processing						4		0.0					
Residue (COPR)													
						3		0.0					
O O A OFI FILL CONTRACTOR AT THE OWNER CAND	Ш	- 2 -											
2.0-4.25' FILL: Gray fine to medium SAND, silt, clinker, ash, brick pieces				2	1.5	5	0937	0.0	0.0	0937	N/A	N/A	
ont, omittor, dorr, briot proces													
						8		0.0					
		- 3 -	$\underline{\forall}$										
						9		0.0					
						11							
	Ш	- 4 -											
				3	1.25	5	0946	0.0	0.0	0946	N/A	N/A	
						5		0.0					
		- 5 -											
						7		0.0					
						4							
6.0-7.25' FILL: black fine to medium SAND,	Ш	- 6 -											
silt, wood fragments				4	1.5	6	0947	0.0	0.0	0947	N/A	N/A	Sweet, organic odors from 6.0' to 6.5'
													110111 0.0 10 0.5
						7		0.0					
		- 7 -											
						5		0.0					
						5							
8.0-9.75' FILL: black fine to medium SAND,	$ \cdot $	- 8 -											Nia adamatah
silt, wood fragments, clam shell fragment				5	2.0	10	0951	0.0	0.0	0951	N/A	N/A	No odors this spoon
						9		0.0					
		- 9 -											
						8		0.0					
					l								
9.75-10.0' Weak red (2.5YR4/2) medium dense fine SILTY SAND (SM)						8		0.0					

PSEG SC Former Halladay Street Gas Works Site **SCHOOR DEPALMA** Supplemental Remedial Investigation Page 2 of 9 **LOG OF SOIL BORING SB-29** PROJECT LOCATION GROUND ELEVATION (FT. MSL) PROJECT NUMBER Halladay Street, Jersey City, New Jersey 020667601 DRILLING CONTRACTOR FOREMAN DATE STARTED DATE COMPLETED Advanced Drilling, Inc. Jeremy Logel 04/13/05 COMPLETION DEPTH (FT BGS) DRILLING EQUIPMENT ROCK DEPTH (FT) Hollow Stem Auger Rig, 4.25" Augers to 34'; mud rotary with 3 7/8" Roller Bid to 84' not encountered SIZE AND TYPE CORE BARREL NO. SAMPLES DIST. 25 UNDIST. N/A 4" steel casing to 34' FIRST N/A N/A WATER DEPTH 3' COMPL N/A 24HR CASING CASING HAMMER WEIGHT 140 lbs. DROP 30" BORING LOCATION SAMPLER 2" diameter, 2' long split-spoon Southern side of Carteret Avenue, Road Shoulder SAMPLER HAMMER WEIGHT 140 lbs DROP 30" Eric Gaulin PID READINGS Samples **DESCRIPTION** REMARKS Depth Time Ambien Time Head Time Resis Sample (ft bgs) (ft) BL/6ii Air Space Date - 10 10.0-14.0' Weak red (2.5YR5/2) firm fine 6 0.5 1001 0.0 0.0 1001 N/A N/A SILTY SAND (SM) with occassional large Sweet, solvent odors (1") gravel, rounded, some roots, occassional thin band (1/2") band of silty clay - 11 6 5 12 1003 N/A N/A 2.0 0.0 0.0 1054 No water in 5 1003 hydropunch (10 to 14). Sample with bailer SB-29 5 0.0 W(10) for TCL VOC, TCL 13 SVOC, TAL Metals, level 0.0 of water observed in augers 0.0 - 14 15 15.0-15.3' Gravel 1" to 2" in diameter, 1.7 1153 8 6 0.0 0.0 000 N/A N/A Swampy odors this subangular to subrounded noogs 15.3-15.5' Very dark gray (10YR3/1) fine 0.0 SILTY SAND (SM) 16 0.0 9 15.5-17.2' Dark brown (10YR3/3) PEAT, very fibrous and firm 10 0.0 - 17 9 0.5 10 1157 0.0 0.0 1157 N/A N/A 17.2-17.5' Dark reddish gray (2.5YR4/1) organic CLAY, with a single piece of gravel (coarse grained metamorphic, peppery 12 colored) 18 11 10 - 19

AECOM Note: Ground surface elevation = 11.7 ft NAVD88

PSEG SC Former Halladay Street Gas Works Site **SCHOOR DEPALMA Supplemental Remedial Investigation** Page 3 of 9 **LOG OF SOIL BORING SB-29** PROJECT LOCATION GROUND ELEVATION (FT. MSL) PROJECT NUMBER Halladay Street, Jersey City, New Jersey 020667601 DRILLING CONTRACTOR FOREMAN DATE STARTED DATE COMPLETED Advanced Drilling, Inc. 04/13/05 Jeremy Logel COMPLETION DEPTH (FT BGS) DRILLING EQUIPMENT ROCK DEPTH (FT) Hollow Stem Auger Rig, 4.25" Augers to 34'; mud rotary with 3 7/8" Roller Bid to 84' not encountered SIZE AND TYPE CORE BARREL NO. SAMPLES DIST. 25 JNDIST. N/A 4" steel casing to 34' N/A N/A WATER DEPTH 3' COMPL N/A 24HR CASING FIRST CASING HAMMER WEIGHT 140 lbs DROP 30" BORING LOCATION SAMPLER 2" diameter, 2' long split-spoon Southern side of Carteret Avenue, Road Shoulder SAMPLER HAMMER WEIGHT 140 lbs DROP 30" Eric Gaulin PID READINGS Samples **DESCRIPTION** REMARKS Depth Ambier Head Time Resis Time Sample Time (ft bgs) (ft) BL/6ii Air Space Date - 20 20.0-20.1' Dark reddish gray (5YR4/2) fine 10 0.3 1301 0.0 0.0 N/A N/A 11 1301 SILTY SAND (SM) 12 20.1-22.2' Dark reddish gray (5YR4/2) 21 angular to subangular fine gravel (1/8" to 1"), sand, silt 22 22.2-22.8' Dark blushish gray (GLEY2 4/1) 11 1308 N/A N/A 1.7 0.0 0.0 3 1308 fine SANDY SILT and SILT, firm 3 0.0 22.8-23.5' Dark blushish gray (GLEY2 4/1) 23 fine to medium SAND, trace silt, trace fine 0.0 gravel 23.5-24.1' Dark blushish gray (GLEY2 4/1) 0.0 fine to medium SAND, trace gravel 24 24.1-24.7' Dark reddish gray (2.5YR4/1) 12 1.2 1331 0.0 0.0 1331 N/A N/A coarse to fine very loose SAND, banding of coarse sand (SW) 0.0 24.7-24.9' Dark reddish gray (2.5YR4/1) fine 25 grained sedimentary rock gravel fragment 8 0.0 24.9-25.0' Reddish brown (2.5YR4/4) fine to medium SAND (SW) 25.0-27.0' Reddish brown (2.5YR4/4) fine 11 SILTY SAND (SM) 26 13 1341 0.0 1341 N/A N/A 1.3 9 0.0 5 0.0 27 27.0-27.3' Reddish brown (2.5YR4/4) fine 3 0.0 SAND, firm (SP) 4 28 28.0-28.7' Reddish brown (2.5YR4/4) coarse 1349 0.0 N/A N/A 14 1.6 4 0.0 1349 to fine SAND and gravel (GP) 0.0 5 29 28.3-30.2' Reddish brown (2.5YR4/4) fine 6 0.0 SAND (SP)

AECOM Note: Ground surface elevation = 11.7 ft NAVD88

PSEG SC Former Halladay Street Gas Works Site SCHOOR DEPALMA Supplemental Remedial Investigation Page 4 of 9 **LOG OF SOIL BORING SB-29** PROJECT LOCATION GROUND ELEVATION (FT. MSL) PROJECT NUMBER Halladay Street, Jersey City, New Jersey 020667601 DRILLING CONTRACTOR FOREMAN DATE STARTED DATE COMPLETED Advanced Drilling, Inc. Jeremy Logel 04/13/05 COMPLETION DEPTH (FT BGS) ROCK DEPTH (FT) DRILLING EQUIPMENT Hollow Stem Auger Rig, 4.25" Augers to 34'; mud rotary with 3 7/8" Roller Bid to 84' not encountered SIZE AND TYPE CORE BARREL NO. SAMPLES DIST. 25 UNDIST. 4" steel casing to 34' N/A N/A WATER DEPTH FIRST 3' COMPL N/A 24HR CASING CASING HAMMER WEIGHT 140 lbs. DROP 30" BORING LOCATION SAMPLER 2" diameter, 2' long split-spoon Southern side of Carteret Avenue, Road Shoulder SAMPLER HAMMER WEIGHT 140 lbs DROP Eric Gaulin PID READINGS Samples **DESCRIPTION** REMARKS Depth Ambien Time Time Head Time Resist Sample (ft bgs) (ft) BL/6ir Air Space Date - 30 28.3-30.2' Reddish brown (2.5YR4/4) fine 15 1.2 1412 0.0 0.0 N/A N/A 1412 SAND (SP) 30.2-31.2' Reddish brown (2.5YR4/4) coarse 0.0 to fine SAND and 1/4" angular to - 31 subrounded gravel (GP) 0.0 32 32.0-31.1' Reddish brown (2.5YR4/4) fine 1415 16 0.0 N/A N/A 0.1 0.0 Remnants of rock 5 1415 SAND (SP) and black angular rock couldn't be moved by fragments augers. Drove casing to 34' and switched to mud 33 rotary 34 34.0-34.5' Reddish brown (2.5YR4/4) coarse 17 0.7 1510 0.0 0.0 N/A N/A to fine SAND and 1/4" angular to subrounded gravel (GP) 9 34.5-37.0' Reddish brown (2.5YR4/4) fine 35 grained siltstone fragments (GW) 9 10 36 1515 Sample SB-29 18 1.5 1511 0.0 0.0 N/A N/A 6 1511 (36.5-37.0) for total and amenable CN, TCL 7 0.0 VOC, TCL SVOC, TAL Metals 37 37.0-40.2' Reddish brown (2.5YR4/4) fine 0.0 SILTY SAND (SM) 38 19 1.75 1515 0.0 0.0 1515 N/A N/A 8 0.0 9 39 0.0 0.0

	Halladay Street Gas Works	s Sif	te											SCHOOR DEPALM
Supplemental Rer	nedial Investigation		LO	G C	OF S	OIL E	3OR	ING S	SB-29	9				Page 5 of
PROJECT LOCATION								GROUNI	D ELEVAT	ΠΟΝ (FT.	MSL)	PROJEC	T NUMBE	
Halladay Street, Jersey	City, New Jersey	—												020667601
DRILLING CONTRACTOR			FOREN					DATE ST				DATE CO	OMPLETE	
Advanced Drilling, Inc.			Jeren	ıy Lo	gel					12/05				04/13/05
DRILLING EQUIPMENT	4 25" Augura to 24' - mud rotany with	h 2 7	7/0" Da	llor [Did to 0	4'		COMPLE	TION DE	PTH (FT E	BGS)	ROCK D	EPTH (FT	r) countered
TYPE BIT N/A	4.25" Augers to 34'; mud rotary with				PE COR		=1.	NO. SAM		DIST.	25	UNDIST.		
	casing to 34'		OILL /		/A			WATER I		FIRST	3'	COMPL.	N/A	
CASING HAMMER	WEIGHT 140 lbs.		DROP	30					LOCATIO					
	eter, 2' long split-spoon							1			eret Ave	enue, Ro	ad Sho	oulder
SAMPLER HAMMER	WEIGHT 140 lbs.		DROP		30"			INSPECT	TOR	Eric Ga	aulin			
	•	val		0		Sar	nples			PID	READI	NGS		
		Inter		r Table			Penetr.				(PPM)			
DE	SCRIPTION	Sample	Dept	Mate h	Numbe	r Recov.	Resist.	Time	Sample	Ambient	Time	Head	Time	REMARKS
		S	(ft bg	s)		(ft)	BL/6in	<u> </u>		Air		Space	Date	
37.0-40.2' Reddish SILTY SAND (SM)	n brown (2.5YR4/4) fine		- 40	-	20	0.6	11	1539	0.0	0.0	1539	N/A	N/A	
40.2-40.5' Coarse (GP)	SAND and fine GRAVEL		-	-			12							
40.5-42.2' Reddish SANDY SILT (SM)	brown (2.5YR4/4) fine		- 41	-			12							
			- 42				13							
SILTY SAND (SM)			_	_	21	0.7	4	1540	0.0	0.0	1540	N/A	N/A	
42.3-42.5' Reddish SANDY SILT (SM)	n brown (2.5YR4/4) fine)		- 43				4		0.0					
42.5-46.3' Reddish SILTY SAND (SM)	brown (2.5YR4/4) fine		-	-			5							
			- 44	-	22	1.25	5	1601	0.0	0.0	1601	N/A	N/A	Slight naphthalene like
			-	-			6		0.0					odors from 44' to 45.25'; no sheen, no staining; odors limited to this
			- 45	-			6		0.0					interval
			- 46	_			5							
	n brown (2.5YR4/4) fine		-	_	23	2.0	4	1605	0.0	0.0	1605	N/A	N/A	No odors
SANDY SILT (SM) 46.8-49.8' Reddish	h brown (2.5YR4/4) fine		- 47	_			4		0.0					
SILTY SAND (SM)			-	-			4		0.0					
			- 48	-			3		0.0					
			-	-	24	2.0	3	1615	0.0	0.0	1615	N/A	N/A	
			- 49	-			3		0.0					
49.8-50.0' Reddish SANDY SILT (SM)	n brown (2.5YR4/4) fine		-	-			3		0.0					Ended here on 4/12/05
C. IIID I OILI (OIVI)	,		- 50		[0.0]]	<u> </u>	L

PSEG SC Former Halladay Street Gas Works Site SCHOOR DEPALMA Supplemental Remedial Investigation Page 6 of 9 **LOG OF SOIL BORING SB-29** PROJECT LOCATION GROUND ELEVATION (FT. MSL) PROJECT NUMBER Halladay Street, Jersey City, New Jersey 020667601 DRILLING CONTRACTOR FOREMAN DATE STARTED DATE COMPLETED Advanced Drilling, Inc. Jeremy Logel 04/13/05 DRILLING EQUIPMENT COMPLETION DEPTH (FT BGS) ROCK DEPTH (FT) Hollow Stem Auger Rig, 4.25" Augers to 34'; mud rotary with 3 7/8" Roller Bid to 84' not encountered SIZE AND TYPE CORE BARREL NO. SAMPLES DIST. 25 UNDIST. WATER DEPTH FIRST 4" steel casing to 34' N/A N/A 3' COMPL N/A 24HR CASING 140 lbs. 30" CASING HAMMER WEIGHT DROP BORING LOCATION SAMPLER 2" diameter, 2' long split-spoon Southern side of Carteret Avenue, Road Shoulder SAMPLER HAMMER WEIGHT 140 lbs DROP Eric Gaulin PID READINGS Samples **DESCRIPTION** REMARKS Depth Ambien Time Sample Time Head Time Resist (ft bgs) (ft) BL/6ir Air Space Date - 50 50.0-54.0' No Sample Collected -Started here on 4/13/05 Hydropunch Driven 0931 Sample SB-29-W(50-54) collected for - 51 TCL VOC, TCL SVOC, TAL Metals; sample turbid, no odors or sheen 52 53 54 54.0-57.6' Reddish brown (2.5YR4/4) fine 25 1008 0.0 0.0 N/A N/A SANDY SILT (SM), firm 10 0.0 55 8 0.0 10 56 26 2.0 1011 0.0 0.0 1011 N/A N/A 10 1021 Sample SB-29(56.5-57.0) for TCL VOC, TCL SVOC, TAL Metals, CN 0.0 10 57 0.0 57.6-61.75' Reddish brown (5YR5/3) thinly 6 0.0 interlaminated CLAY and SILTY CLAY 58 27 2.0 5 1032 0.0 0.0 1032 N/A N/A 0.0 6 59 0.0 0.0

AECOM Note: Ground surface elevation = 11.7 ft NAVD88

	Halladay Street Gas Work				0 01	010	10.				.,			SCHOOR DEPALM
Supplemental Rer	medial Investigation			_						_				Page 7 of
			LOG	O	F SC	OIL E	BOR	ING S	SB-2	9				
DD0 1507 1 00 1710 1								onounir	. =: =:	TION /FT		DD0 150		
PROJECT LOCATION Halladay Street, Jersey	City New Jersey							GROUNL) ELEVA	TION (FT.	MSL)	PROJEC	T NUMBE	-R 020667601
DRILLING CONTRACTOR	0.1,110.11 00.00,		FOREMAN	J				DATE ST	ARTED			DATE CO	OMPLETE	
Advanced Drilling, Inc.			Jeremy	Lo	gel					12/05				04/13/05
DRILLING EQUIPMENT								COMPLE	TION DE	PTH (FT E	BGS)	ROCK D	EPTH (FT)
Hollow Stem Auger Rig,	4.25" Augers to 34'; mud rotary wi	ith 3 7	7/8" Rolle	r B	Bid to 84	1'			84'				not end	countered
TYPE BIT N/A			SIZE AND	ΤY	PE CORE	BARRE	L	NO. SAM	IPLES	DIST.	25	UNDIST.	N/A	CORE N/A
CASING 4" steel	casing to 34'			N/	Α			WATER I	DEPTH	FIRST	3'	COMPL.	N/A	24HR N/A
CASING HAMMER	WEIGHT 140 lbs.		DROP	30)"			BORING						
	eter, 2' long split-spoon									of Carte		enue, Ro	ad Sho	ulder
SAMPLER HAMMER	WEIGHT 140 lbs.		DROP	1	30"			INSPECT	TOR	Eric G				<u> </u>
		Interval		aple		San	nples	\Box	ł	PID	READI			
DE	ESCRIPTION	Sample In	Depth	-	Number	Recov.	Penetr. Resist.	Time	Sample	Ambient	(PPM)	Head	Time	REMARKS
DL		San	(ft bgs)	≥	. sambel	(ft)	BL/6in		Sample	Ambient	111110	Space	Date	. 12.17.7.11.11.0
		\sqcap	- 60 -											
	sh brown (5YR5/3) thinly AY and SILTY CLAY				28	1.75	6	1037	0.0	0.0	1037	N/A	N/A	
interiariiriateu GL/	AT AND SILTT CLAT													
							6		0.0					
			- 61 -											
							10		0.0					
							40							
			- 62 -				12		0.0					
62.0-70.0' No Sar	nple Collected		02											
			- 63 -											
			- 64 -											
			ee.											
			- 65 -											
			- 66 -											
			- 67 -											
			66											
			- 68 -							1		1		
			- 69 -											
			- 70 -		 					ļ				1

PSEG SC Former	Halladay Street Gas Works	s Si	te											SCHOOR DEPALMA
Supplemental Rei	medial Investigation		LO	G (OF S	OIL I	BOR	ING S	SB-2	9				Page 8 of 9
PROJECT LOCATION Halladay Street, Jersey	City. New Jersey							GROUNI	D ELEVA	TION (FT.	MSL)	PROJEC	T NUMBE	ER 020667601
DRILLING CONTRACTOR			FORE	IAN				DATE ST	TARTED			DATE CO	OMPLETE	ED .
Advanced Drilling, Inc.			Jeren	ny Lo	ogel				04/	12/05				04/13/05
DRILLING EQUIPMENT								COMPLE	ETION DE	PTH (FT I	BGS)	ROCK D	EPTH (FT)
Hollow Stem Auger Rig,	4.25" Augers to 34'; mud rotary wit	th 3 7	7/8" Ro	ller	Bid to 8	4'			84'				not end	countered
TYPE BIT N/A			SIZE A	ND T	YPE COR	E BARR	EL	NO. SAN	/IPLES	DIST.	25	UNDIST.	. N/A	CORE N/A
CASING 4" steel	casing to 34'			N	l/A			WATER	DEPTH	FIRST	3'	COMPL.	N/A	24HR N/A
CASING HAMMER	WEIGHT 140 lbs.		DROP	3	0"			BORING	LOCATION	NC				
	eter, 2' long split-spoon		1					Southe	ern side			enue, Ro	oad Sho	ulder
SAMPLER HAMMER	WEIGHT 140 lbs.	1	DROP		30"			INSPEC	TOR	Eric G				1
		nterval		aple	-	Sar	nples	I	ł	PID	READI			
DI	CODIDTION		_	e. T			Penetr.			I	(PPM)			DEMARKS
DE	ESCRIPTION	Sample	Dep	- 1-	Numbe		Resist. BL/6in	Time	Sample		Time	Head	Time	REMARKS
		+	(ft bg		1	(ft)	DL/BIN	<u> </u>		Air	<u> </u>	Space	Date	
	eddish brown (5YR5/3)				29	2.0	8	1107	0.0	0.0	1107	N/A	N/A	
thinly interlaminat tight	ed CLAY and SILTY CLAY,		-	-										
tigrit							7		0.0					
			- 71	-										
	h brown (5YR5/3) very soft CLAY, with 10% angular						6		0.0					
1/4" gravel	OLAT, With 10 % angular		-	-										
3							5		0.0					
72 0 74 0' Dark ro	eddish brown (2.5YR3/4)		- 72	-										
	ed CLAY and SILTY CLAY,				30	2.0	5	1111	0.0	0.0	1111	N/A	N/A	
tight (CL)	,		-	-										
							8		0.0					
			- 73	-										
							7		0.0					
			-	-										
			74				3		0.0					
74.0-78.0' No San	nple Collected		- 74				1			1				
			_											
			- 75	-										
			-	-										
			- 76	-										
														Drillers noted change to
			-	-										coarse till at 77.5' based on screening mud
														on sorcening maa
			- 77	-										
			-	-										
			- 78											
78.0-82.0' Hydrop	ounch driven		''		1									
			_	_										
			- 79	-										
			-	-										
			- 80	-	[.	ļ			ļ		ļ		

PSEG SC Former Halladay Street Gas Work	s S	ite											SCHOOR DEPALMA
Supplemental Remedial Investigation													Page 9 of 9
		LOG	i C	OF SO	OIL I	BOR	ING S	SB-2	9				-
PROJECT LOCATION							GROUNI	D ELEVA	TION (FT.	MSL)	PROJEC	T NUMBE	=R
Halladay Street, Jersey City, New Jersey													020667601
DRILLING CONTRACTOR		FOREMA	λN				DATE ST	TARTED			DATE C	OMPLETE	ED
Advanced Drilling, Inc.		Jeremy	/ Lo	ogel				04/	12/05				04/13/05
DRILLING EQUIPMENT		, , ,					COMPLE		PTH (FT I	BGS)	BOCK D	EPTH (FT	
Hollow Stem Auger Rig, 4.25" Augers to 34'; mud rotary with	h 3 '	7/8" Roll	er F	Rid to 84	4'		00.00	84'		500)	1.00112		countered
TYPE BIT N/A				PE CORI		EL	NO. SAM		DIST.	25	UNDIST		
CASING 4" steel casing to 34'			N.				WATER		FIRST	3'	COMPL.		
CASING HAMMER WEIGHT 140 lbs.		DROP	30					LOCATION	٠		00.00.		
SAMPLER 2" diameter, 2' long split-spoon		DITO					1			arat Ava	nua Ro	oad Sho	ulder
SAMPLER HAMMER WEIGHT 140 lbs.		DROP		30"			INSPEC		Eric G		silue, i te	Jau Ono	didei
SAMPLER HAMMER WEIGHT 140 IDS.	T_		Τ	30	C = -	malaa	INSPEC	ION		READ	NCC		
	Sample Interval		Fable	-	Sai	mples		ł	PID				
DESCRIPTION	ple In		<u>ار</u>	1		Penetr.			1	(PPM)		I _	REMARKS
DESCRIPTION	Sam	Depth	_	Number			Time	Sample		Time	Head	Time	NEWANNO
	+	(ft bgs	_		(ft)	BL/6in			Air		Space	Date	
78.0-82.0' Hydropunch driven		- 80	-			1			1		1		
			1										
		- 81	-										
			-										
82.0-84.0 No Sample Collected		- 82	-										4040.0 1.00.00.14
62.0-64.0 No Sample Collected													1242 Sample SB-29-W (78-82) for TCL VOC
			-										only due to lack of
													sample
		- 83	-										
		- 84				<u>.</u>			<u> </u>		<u></u>		.
End of boring at 84.0'		04											
		0.5											
		- 85	-										
			-										
		- 86	-										
			-										
		- 87	-										
		- 88	-			ļ			ļ		ļ		
				1									
			1	1									
		- 89	_	1									
		- 09											
		00	1	1									
1		- 90	-1	1	+	1	1	F	1	r	1	1	

PSEG SC Former Halladay Street Gas Works Interim Data Submittal No.4		1.00		\F C/		B O D	INC	CD E	0					SCHOOR DEPALMA Page 1 of 6
		LOC	л C)F 5(JIL I	BOR	ING S	5B-5	2					
PROJECT LOCATION							GROUNI	D ELEVA	TION (FT.	MSL)	PROJEC	T NUMBE	R	
Halladay Street , Jersey City, NJ								12	2.22				0:	20667601
DRILLING CONTRACTOR		FOREM	AN				DATE ST	TARTED			DATE CO	OMPLETE	D	
Advanced Drilling, Inc.		Roger	Log	el				11/2	22/06			11	/27/06	
DRILLING EQUIPMENT							COMPLE	ETION DE	EPTH (FT I	BGS)	ROCK D	EPTH (FT)	
GEFCO SS 5 Drill Rig turning 4.25-inch hollow-stem augers								56				not en	counter	red
TYPE BIT Hollow-stem auger		SIZE AN	ID TY	PE CORI	E BARR	EL	NO. SAN	MPLES	DIST.	26	UNDIST.	. N/A		core N/A
casing N/A			N.	/A			WATER	DEPTH	FIRST	NA	COMPL.	N/A		24HR N/A
CASING HAMMER WEIGHT N/A		DROP		N/A			BORING	LOCATIO	ON: West	ern shou	lder of Ca	arteret A	venue, 8	88 ft SE from the
SAMPLER 2" diameter, 2' long split-spoon							1				Street / C	arteret A	venue i	ntersection.
SAMPLER HAMMER WEIGHT 140 lbs.	Т	DROP	Т	30"			INSPEC	TOR	Eric G				1	
	terval		able		Sar	nples		1	PID	READI	NGS			
DECORIDATION	Sample Interval		Vater Ta			Penetr.			1	(PPM)			1	DEMARKS
DESCRIPTION	Sam	Depth (# bac	>	Number		Resist.	Time	Sample		Time	Head	Time	-	REMARKS
	╁	(ft bgs)		(ft)	BL/6in			Air		Space	Date		
Cleared via hand digging to 4'; ash material		- 0												
(AM), gravel, clinker material (CM)														
		-	-											
		- 1												
		- 1												
		_	_											
		- 2	-											
		_	_											
		- 3	-											
		-	-											
	l	- 4	-										ļ	
4.0-6.9 FILL: CM, trace ash, gravel				1	1.0	4	1311	0.0	0.0	1311	N/A	N/A	No d	odors or other
		-	-											ence of
						5		0.0	0.0				cont	amination
		- 5	-											
						5								
		-	-											
						7								
		- 6	-											
				2	1.1	4	1313	0.0	0.0	1313	N/A	N/A		odors or other
		-	-											ence of amination
						4		0.0	0.0				COIN	ammation
6.9-8.0 Black fine SAND (SP) with silty clay,	1	- 7	-											
highly plastic						3		0.0	0.0					
		-	-											
						4								
8.0-8.8 Grayish brown SILTY CLAY (CL)		- 8	-						1				l	
with black mottling				3	1.0	4	1317	0.0	0.0	1317	N/A	N/A		odors or other ence of
Ĭ		-	-											amination
8.8-8.9 Reddish brown SILTY CLAY (CL)		_				2		0.0	0.0					
8.9-12.0 Disturbed PEAT (PT), with some		- 9	- [_								
reddish gray silty clay						2		0.0	0.0					
	1	-	-			2								
	1	1		l	1	-	1		1	1	1	1		

PSEG SC Former	Halladay Street Gas Works	s												SCHOOR DEPALMA
Interim Data Subn	nittal No.4		100		\F 04	\	205	INIC 1	SD 5	^				Page 2 of 6
			LOG	C)F 50	JIL E	SOR	ING :	5B-5	2				
PROJECT LOCATION								GROUNI) FI FVAT	TION (FT.	MSL)	PROJEC	T NUMBE	-R
Halladay Street , Jersey	City, NJ							GHOONE		2.22	WOL)	THOOLO	THOMBE	020667601
DRILLING CONTRACTOR			FOREMA	N				DATE ST	ARTED			DATE CO	OMPLETE	:D
Advanced Drilling, Inc.			Roger L	.og	el				11/2	22/06			11/	/27/06
DRILLING EQUIPMENT								COMPLE	TION DE	PTH (FT E	BGS)	ROCK DI	EPTH (FT)
GEFCO SS 5 Drill Rig to	urning 4.25-inch hollow-stem augers	:							56	1			not end	countered
TYPE BIT Hollow-s	stem auger		SIZE AND	TY	PE CORI	BARRE	EL	NO. SAN	IPLES	DIST.	26	UNDIST.	N/A	CORE N/A
CASING N/A	T			N/	/A			WATER	DEPTH	FIRST	4.8	COMPL.	N/A	24HR N/A
CASING HAMMER	WEIGHT N/A		DROP		N/A			BORING	LOCATIO	DN: Weste	ern shoul	lder of Ca	arteret A	venue, 88 ft SE from the
	eter, 2' long split-spoon											Street / C	arteret A	venue intersection.
SAMPLER HAMMER	WEIGHT 140 lbs.	П	DROP	Τ	30"			INSPECT	OR	Eric G				<u> </u>
		Interval		aple		San	nples	1		PID	READI	NGS		
DE	ESCRIPTION		Depth	Ė.	ļ., ,		Penetr.	_			(PPM)	I	_	REMARKS
DE	LOOKII TION	Sample	(ft bgs)	W	Number	Recov.	Resist. BL/6in	Time	Sample	Ambient	Time	Head Space	Time	HEIVIANNO
		\forall	- 10 -	H		(11)	DE/OII1					opace		
	PEAT (PT), with some				4	1.2	2	1329	0.0	0.0	1329	N/A	N/A	
reddish gray silty o	elay													
							1		0.0	0.0				
			- 11 -											
							2		0.0	0.0				
							2							
12.0-16.0 Reddish	brown SILT (ML) and silty		- 12 -											
clay, trace fine gra					5	1.5	2	1338	0.0	0.0	1338	N/A	N/A	
							2		0.0	0.0				
			- 13 -											
							2		0.0	0.0				
							2							
			- 14 -						l					
					6	0.9	2	1339	0.0	0.0	1339	N/A	N/A	
		$ \setminus $												
							3		0.0	0.0				
			- 15 -											
							3							
														Drilling ended here 11
							3							22-06
16.0-16.4 Very da	rk greenish gray (GLEY1		- 16 -											Dalling
3/1 10Y) PEAT (P					7	1.2	1	0900	0.0	0.0	0900	N/A	N/A	Drilling resumed here 11-27-06
16.4-18.4 Verv da	rk greenish gray (GLEY1						_		100					11-21-00
3/1 10Y) organic C	CLAY (OH), with 10% peat		. 17				2		10.3	0.0				
fragments			- 17 -				1		10.0	0.0				
							'		10.0	0.0				Anaerobic, swampy
							2							odors
			- 18 -				ļ		ļ		ļ		 	
					8	2.0	2	0905	26.3	0.0	0905	N/A	N/A	Anaerobic, swampy
	ganic CLAY (OH), with less													odors
than 5% peat fiber	'S						2		53.6	0.0				
			- 19 -											
							2		?	0.0				
							2		?	0.0				
			- 20 -	ı			 			4				

PSEG SC Former Halladay Street Gas Wor	ks				_							_	SCHOOR DEPALM
Interim Data Submittal No.4		100	_	NE 04	باد	200	INIO 1	SD 5	2				Page 3 of
		LOG	O)FSC	JIL E	BOK	ING S	3B-5	2				
PROJECT LOCATION							GROUNE) ELEVAT	TION (FT.	MSL)	PROJEC	T NUMBE	ER
Halladay Street , Jersey City, NJ									.22				020667601
DRILLING CONTRACTOR		FOREMAI	N				DATE ST	ARTED			DATE CO	OMPLETE	ED
Advanced Drilling, Inc.		Roger L	.og	el				11/2	22/06			11.	/27/06
DRILLING EQUIPMENT							COMPLE	TION DE	PTH (FT E	BGS)	ROCK D	EPTH (FT	T)
GEFCO SS 5 Drill Rig turning 4.25-inch hollow-stem auge	rs							56				not en	countered
TYPE BIT Hollow-stem auger		SIZE AND	TYI	PE CORE	BARRE	EL	NO. SAM	IPLES	DIST.	26	UNDIST.	. N/A	CORE N/A
CASING N/A			N/	Ά			WATER	DEPTH	FIRST	4.8	COMPL.	N/A	24HR N/A
CASING HAMMER WEIGHT N/A		DROP		N/A			BORING	LOCATIO	N: West	ern shou	lder of Ca	arteret A	venue, 88 ft SE from the
SAMPLER 2" diameter, 2' long split-spoon							souther	n corner	of the H	alladay S	Street / C	arteret A	Avenue intersection.
SAMPLER HAMMER WEIGHT 140 lbs.		DROP		30"			INSPECT	FOR	Eric G	aulin			
	aval		e e		San	nples	1		PID	READI	NGS		
	le Inte		er Tat			Penetr.			1	(PPM)	1		-
DESCRIPTION	Sample	Depth	Wate	Number		Resist.	Time	Sample	Ambient	Time	Head	Time	REMARKS
	- -	(ft bgs)	Н		(ft)	BL/6in			Air		Space	Date	
20.0-20.8 Brown PEAT (PT)		- 20 -									1		Unidontifichie
				9	1.8	2	0910	10.0	0.0	0910	N/A	N/A	Unidentifiable odors, strong, no staining visible
		-						_					onong, no staining visible
20.8-24.0 light gray, SILTY CLAY (CL)						2		5.2	0.0				Sample SB-52(21.0-
		- 21 -											21.5) collected at 0919
						3		98.8	0.0				for TCL SVOC, TCL
													VOC, TAL Metals, Total
		00				3							and Amenable CN
		- 22 -		10	4.0		0045	15		0915	1	N/A	
				10	1.3	3	0915	15	0.0	0915	N/A	IN/A	
						_							
		00				5		20	0.0				
		- 23 -						440					
						6		14.3	0.0				
		-				6							
		- 24 -				0							
24.0-24.9 Grayish red fine to coarse SAND		- 24 -		11	2.0	4	0928	0.0	0.0	0928	N/A	N/A	
(SW), trace silt				l ''	2.0	-	0320	0.0	0.0	0320	14/7	14//	
						5		0.0	0.0				
24.9-25.2 angular gravel/cobble fragments,		- 25 -						3.5	0.0				
1/4" in diameter						7		0.0	0.0				
25.2-26.0 Reddish brown (2.5YR4/4) fine to						<u> </u>		3.5	0.0				
medium SAND (SW), trace silt						7		0.0	0.0				
, , ,		- 26 -				ļ				ļ			.
26.0-28.0 Reddish brown (2.5YR4/4) fine to				12	1.2	6	0933	0.0	0.0	0933	N/A	N/A	
medium SAND (SW), trace silt, with some fine (1/8") gravel layers up to 1" thick													
ine (1/8) graver layers up to 1" thick						7		0.0	0.0				
		- 27 -											
						7		0.0	0.0				
						7							
28.0-29.4 Reddish brown (2.5YR4/4) fine to		- 28 -				ļ		ļ			ļ		
medium SAND (SW), trace silt, with some fine (1/8") gravel layers up to 1" thick, and				13	2.0	7	0942	0.0	0.0	0942	N/A	N/A	
with some coarse sand													
						6		0.0	0.0				
29.4-30.0 Reddish brown (2.5YR4/4) fine		- 29 -											
SILTY SAND (SM)						7		0.0	0.0				
						6		0.0	0.0				
		30	Н			l	1	l			1	1	1

	NOTE: Ground Surfa Halladay Street Gas Work		0101		40.01	•			47.10					SCHOOR DEPALMA
Interim Data Subn	nittal No.4			_						_				Page 4 of 6
			LOG	O	FSC	OIL E	3OR	ING S	SB-5	2				
				_										
PROJECT LOCATION	Otto N.I.							GROUNE		TION (FT.	MSL)	PROJEC	T NUMBE	
Halladay Street , Jersey	City, NJ		FOREMAN	_				DATE ST		2.22		DATE OF	OMPLETE	020667601
DRILLING CONTRACTOR					al			DATEST		22/06		DATE CO		:D /27/06
Advanced Drilling, Inc. DRILLING EQUIPMENT			Roger Lo)ge	31			COMBLE		22/06 PTH (FT E	200)	BOCK DI	EPTH (FT	
	ırning 4.25-inch hollow-stem auger	re						COMPLE	56	:FIH (FI 1	503)	NOCK DI	,	countered
	tem auger		SIZE AND	TYF	PE CORE	BARRE		NO. SAM		DIST.	26	UNDIST.	N/A	
CASING N/A				N/A	A			WATER I	DEPTH	FIRST	4.8	COMPL.	N/A	24HR N/A
CASING HAMMER	WEIGHT N/A		DROP		N/A			BORING	LOCATIO	DN: Weste	ern shoul	der of Ca	arteret A	venue, 88 ft SE from the
SAMPLER 2" diame	eter, 2' long split-spoon	•						souther	n corner	of the H	alladay S	Street / C	arteret A	venue intersection.
SAMPLER HAMMER	WEIGHT 140 lbs.		DROP		30"			INSPECT	ГOR	Eric Ga	aulin			
	•	val		0		San	nples			PID	READI	NGS		
		Interval		r Table			Penetr.				(PPM)			
DE	SCRIPTION	Sample	Depth	Wate	Number	Recov.	Resist.	Time	Sample	Ambient	Time	Head	Time	REMARKS
		S	(ft bgs)	╛		(ft)	BL/6in			Air		Space	Date	
30.0-34.0 Reddish	brown (2.5YR5/4) fine		- 30 -	١										
SANDY SILT (ML)	,	\setminus		١	14	8.0	5	1003	0.0	0.1	1003	N/A	N/A	No odors, no sheen
				١			6		0.0	0.0				
			- 31 -	١										
				١			6							
				١			_							
			- 32 -	١			7							
			- 32 -	١	15	1.1	5	1012	0.0	0.0	1012	N/A	N/A	No odors, no sheen
		\setminus		١	13	'		1012	0.0	0.0	1012	19/73	19/75	The eddie, no encon
				١			7		0.0	0.0				
			- 33 -	١			′		0.0	0.0				
			00	١			9		0.0	0.0				
				١										
				١			9							
			- 34 -	١										
	brown (2.5YR5/4) fine				16	1.1	4	1031	0.0	0.0	1031	N/A	N/A	Extremely faint
SILTY SAND (SM)													naphthalene-like odors,
							5		0.0	0.0				no sheen, no staining, no product
			- 35 -											product
				-			5		1.4	0.0				
				-										
				-			5							
			- 36 -											
		\setminus			17	0.8	4	1033	1.9	0.0	1033	N/A	N/A	Sample SB-52(36.3-36.8)
				-					_					collected at 1039 for TCL SVOC, TCL VOC, TAL
				-			4		5.6	0.0				Metals, Total and
			- 37 -				_							Amenable CN
							5							
			- 38 -				6							
			- 36 -	-	18	1.2	4	1043	3.3	0.0	1043	N/A	N/A	Extremely faint odors,
					10	1.2	4	1043	3.3	0.0	1043	IN/A	IN/A	unidentifiable, possibly
			-				4		2.5	0.0				naphthalene-like
			- 39 -						2.0	0.0				
				-			4		11.6	0.0				
				-			'							
							5							
			- 40 -	١					ļ					

PSEG SC Former Halladay Street Gas Works SCHOOR DEPALMA Interim Data Submittal No.4 Page 5 of 6 **LOG OF SOIL BORING SB-52** PROJECT LOCATION GROUND ELEVATION (FT. MSL) PROJECT NUMBER Halladay Street , Jersey City, NJ 12.22 020667601 DRILLING CONTRACTOR FOREMAN DATE STARTED DATE COMPLETED Advanced Drilling, Inc. Roger Logel 11/22/06 11/27/06 COMPLETION DEPTH (FT BGS) ROCK DEPTH (FT) DRILLING EQUIPMENT GEFCO SS 5 Drill Rig turning 4.25-inch hollow-stem augers not encountered SIZE AND TYPE CORE BARREL Hollow-stem auger NO. SAMPLES DIST. 26 JNDIST. N/A N/A N/A WATER DEPTH FIRST 4.8 COMPL N/A 24HR CASING CASING HAMMER WEIGHT N/A DROP BORING LOCATION: Western shoulder of Carteret Avenue, 88 ft SE from the SAMPLER 2" diameter, 2' long split-spoon southern corner of the Halladay Street / Carteret Avenue intersection. SAMPLER HAMMER WEIGHT 140 lbs DROP 30" Eric Gaulin PID READINGS Samples **DESCRIPTION** REMARKS Depth Ambien Time Sample Time Head Time Resist (ft bgs) (ft) BL/6ir Air Space Date - 40 34.0-44.0 Reddish brown (2.5YR5/4) fine 19 1.0 1056 9.5 0.0 1056 N/A N/A 3 Faint naphthalene-like SILTY SAND (SM) odors, no sheen, no staining, no product at 2 0.8 0.0 top of spoon; no odors - 41 noted from 40.5 down 2 2 42 Dark layer observed at 20 1100 11.5 N/A N/A 1.2 2 0.0 1100 42.9' in this spoon 3 1.0 0.0 Sample SB-52(42.9-43.2) 43 collected at 1100 for TCL 3 0.0 0.0 SVOC, TCL VOC, TAL Metals, Total and Amenable CN 44 44.0-48.8 Reddish brown (2.5YR5/4) fine No odors noted in this 21 1.2 1115 0.0 0.0 1115 N/A N/A SANDY SILT (ML) spoon 3 0.0 0.0 45 3 0.0 0.0 3 46 No odors noted in this 22 1.2 1117 0.0 0.0 N/A N/A 3 1117 spoon 4 0.0 0.0 47 3 0.0 0.0 5 48 No odors noted in this 23 1.0 1129 0.0 0.0 1129 N/A N/A 4 48.8-50.6 Reddish brown (2.5YR5/4) fine noogs SANDY SILT (ML), with silty clay 0.0 0.0 4 49 4

AECOM Note: Ground surface elevation = 11.1 ft NAVD88

PSEG SC Former Halladay Street Gas Works SCHOOR DEPALMA Interim Data Submittal No.4 Page 6 of 6 **LOG OF SOIL BORING SB-52** PROJECT LOCATION GROUND ELEVATION (FT. MSL) PROJECT NUMBER Halladay Street, Jersey City, NJ 12.22 020667601 DRILLING CONTRACTOR FOREMAN DATE STARTED DATE COMPLETED Advanced Drilling, Inc. Roger Logel 11/27/06 DRILLING EQUIPMENT COMPLETION DEPTH (FT BGS) ROCK DEPTH (FT) GEFCO SS 5 Drill Rig turning 4.25-inch hollow-stem augers not encountered SIZE AND TYPE CORE BARREL Hollow-stem auger NO. SAMPLES DIST. 26 JNDIST. N/A N/A WATER DEPTH FIRST 4.8 COMPL 24HR CASING BORING LOCATION: Western shoulder of Carteret Avenue, 88 ft SE from the CASING HAMMER WEIGHT N/A DROP SAMPLER 2" diameter, 2' long split-spoon southern corner of the Halladay Street / Carteret Avenue intersection. SAMPLER HAMMER WEIGHT 140 lbs DROP 30" Eric Gaulin PID READINGS Samples **DESCRIPTION** REMARKS Depth Ambien Time Sample Time Head Time Resist (ft bgs) (ft) BL/6ir Air Space Date - 50 48.8-50.6 Reddish brown (2.5YR5/4) fine 24 1.2 1139 0.0 0.0 1139 N/A N/A No odors noted in this SANDY SILT (ML), with silty clay spoon 0.0 0.0 50.6-52.0 Reddish brown (2.5YR5/4) fine SILTY SAND (SM) 51 52 52.0-55.2 dark reddish brown (2.5YR3/3) fine 25 1143 No odors noted in this 1.7 N/A N/A 0.0 0.0 1143 spoon to medium SAND (SW), trace silt 0.0 0.0 53 0.0 0.0 54 Sample SB-54(55.5-56.0) 26 1.2 1155 0.0 0.0 1155 N/A collected at 1157 for TCL VOC, TCL SVOC, TAL 0.0 0.0 Metals, Total and 55 Amenable CN 0.0 0.0 0.0 0.0 56 End of Boring at 56' 57 58 59

PSEG SC Former	Halladay Street Gas Works	S												SCHOOR DEPALMA
Interim Data Subn	nittal No.4				\F 0/	 .	200	INIO (2D E	4				Page 1 of 6
			LOG	7 C)F 50	JIL I	SUR	ING S	2B-2	4				
PROJECT LOCATION								GROUNE	D ELEVA	TION (FT.	MSL)	PROJEC	T NUMBE	ER
Halladay Street , Jersey	City, NJ							GI 100112		1.40				020667601
DRILLING CONTRACTOR	•		FOREM	٩N				DATE ST	ARTED			DATE CO	OMPLETE	D
Advanced Drilling, Inc.			Roger	Log	jel				11/2	27/06			11.	/28/06
DRILLING EQUIPMENT								COMPLE	TION DE	PTH (FT E	BGS)	ROCK D	EPTH (FT)
GEFCO SS 5 Drill Rig tu	rning 4.25-inch hollow-stem augers								56				not end	countered
TYPE BIT Hollow-s	tem auger		SIZE AN	D TY	PE COR	E BARRE	EL	NO. SAN	IPLES	DIST.	26	UNDIST.	N/A	CORE N/A
CASING N/A	T			N/	/A			WATER	DEPTH	FIRST	4.8	COMPL.	N/A	24HR N/A
CASING HAMMER	WEIGHT N/A		DROP		N/A			BORING	LOCATIO	ON: Easte	ern shoul	der of Ca	arteret A	venue, 95 ft SE from the
	eter, 2' long split-spoon											reet / Ca	rteret Av	enue intersection.
SAMPLER HAMMER	WEIGHT 140 lbs.	\blacksquare	DROP	Т	30"			INSPECT	TOR	Eric Ga				
		Interval		able		San	nples	1		PID	READI			
DE	SCRIPTION	nl əldi	Depth	1			Penetr.	_		Ī	(PPM)			REMARKS
DE	SONIFTION	Sample	(ft bgs	-	Number	Recov.	Resist. BL/6in	Time	Sample	Ambient	Time	Head Space	Time	HEWARKS
		$\dagger \dagger$	- 0 -			(11)	DE/OII1			- All		орасе	Date	
	digging to 4'; boring													
	ill consisted of brownish ine to medium sand			-										
yellow (101Ho/o) i	ine to medium sand													
			- 1 -											
				-										
			- 2 -											
				-										
			- 3 -	•										
				-										
		╻┃┃	- 4 -											
4.0-4.2 FILL: black	fill, silt, wood		7		1	0.8	1	1455	0.0	0.0	1455	N/A	N/A	No odors or other
	gray ash material (AM),			-	'			.50						evidence of
clinker	gray asii materiai (Aw),						1		0.0	0.0				contamination
		-\	- 5 -	Ē	1									
							1							
				-										
							1							
6 0-6 0 Black fine 9	SAND with silty clay, highly	М	- 6 -											
plastic (SP)	SAND WITH SITY Clay, HIGHLY	\setminus			2	1.1	1	1457	0.0	0.0	1457	N/A	N/A	No odors or other
	· · · · · · (DT)	$ \cdot $		-										evidence of contamination
6.9-8.4 Disturbed borganic matter	prownish peat (PT) and						1		0.0	0.0				Contamination
organic matter		\ 	- 7 -											
							1		0.0	0.0				
				-										
							1							
			- 8 -		3	0.7	1	1503	0.0	0.0	1503	N/A	N/A	No odors or other
8.4-10.0 Reddish g	rayish SILTY SANDY				3	0.7	'	1003	0.0	0.0	1503	IN/A	IN/A	evidence of
CLAY (CL)							1		0.0	0.0				contamination
		П	- 9 -				'		0.0	0.0				
							1		0.0	0.0				
				-										
							1							
			- 10	-1			ļ							

PSEG SC Former Interim Data Subr	Halladay Street Gas Work	s	LOG		OF SO	OIL F	BOR	ING S	SB-5	4					SCHOOR DEPALI Page 2 o	
												T				
PROJECT LOCATION										TION (FT.	MSL)	PROJEC	T NUMBE			
Halladay Street , Jersey	City, NJ									.40		020667601				
PRILLING CONTRACTOR			FOREMA					DATE ST				DATE CO	OMPLETE			
Advanced Drilling, Inc.			Roger	Log	jel					27/06				/28/06		
RILLING EQUIPMENT								COMPLE		PTH (FT E	BGS)	ROCK D	EPTH (FT			
	urning 4.25-inch hollow-stem augers			_					56		- 00	not encountered				
TYPE BIT Hollow-stem auger CASING N/A			SIZE ANI			E BARRE	EL .	NO. SAN		DIST.	26	UNDIST.			CORE N/A	
				N/				WATER		FIRST	4.8	COMPL.	N/A		24HR N/A	
ASING HAMMER	WEIGHT N/A		DROP		N/A			1							95 ft SE from the	
	eter, 2' long split-spoon											reet / Ca	rteret Av	enue in	tersection.	
SAMPLER HAMMER	WEIGHT 140 lbs.	\blacksquare	DROP	Т	30"			INSPEC	TOR	Eric Ga				ı		
		Interval		able		San	nples			PID	READI					
		le Int		1			Penetr.		<u> </u>	I	(PPM)	1	1	-		
DE	ESCRIPTION	Sample	Depth	1-	Number		Resist.	Time	Sample		Time	Head	Time	-	REMARKS	
		+	(ft bgs))	_	(ft)	BL/6in	1		Air		Space	Date	-		
10.0-14.0 Reddish grayish SILTY SANDY CLAY (CL), disturbed, trace wood, trace fine gravel			- 10 -	-	4	1.0	2	1512	0.0	0.0	1512	N/A	N/A		nple SB-54(10.0-	
							2		0.0	0.0				TCL	. VOC, TCL SVOC, . Metals, Total and	
	\ 	- 11 -	-			2							Ame	enable CN		
							3									
			- 12 -	-	5	0.7	2	1512	0.0	0.0	1512	N/A	N/A			
							3		0.0	0.0						
			- 13 -	-			2									
							3									
	ark greenish gray (GLEY1 CLAY (OH), less than 1%		- 14 -	-	6	2.0	1	1525	3.7	0.0	1525	N/A	N/A		erobic, swampy	
peat fibers	, ,,		- 15				1		3.0	0.0				odoi	rs	
			10				1		1.0							
			- 16 -				1		0.0					<u> </u>		
					7	2.0	1	1526	1.0	0.0	1526	N/A	N/A	Ana odoi	erobic, swampy 's	
			- 17 -	-			1		3.2	0.0						
							1		0.0	0.0						
			- 18 -	-			1		5.2	0.0				ļ		
					8	2.0	1	1533	8.1	0.0	1533	N/A	N/A	Ana odoi	erobic, swampy rs	
			- 19 -	-			1		9.7	0.0						
							1		4.2	0.0						
			- 20 -		[<u> </u>	1		1.0	0.0]		<u> </u>		

	Halladay Street Gas Works	s												SCHOOR DEPALMA									
Interim Data Subn	nittal No.4		LOG	_)F 9/	י ווכ	ROP	ING 9	SR-5	4				Page 3 of 6									
			LOG		<i>/</i> 3(JON	iiva .	3 D- 3	4													
PROJECT LOCATION								GROUNE	D ELEVAT	TION (FT.	MSL)	PROJEC	T NUMBE	ER									
Halladay Street , Jersey City, NJ									11	.40		020667601											
DRILLING CONTRACTOR			FOREMAN	V				DATE ST	ARTED			DATE COMPLETED											
Advanced Drilling, Inc.			Roger L	og	el				11/2	27/06			11/	/28/06									
DRILLING EQUIPMENT								COMPLE	TION DE	PTH (FT E	BGS)	ROCK DI	EPTH (FT)									
	urning 4.25-inch hollow-stem augers								56	ı				countered									
	*		SIZE AND			BARRE	EL	NO. SAN		DIST.	26	UNDIST.	N/A	<u> </u>									
ASING N/A				N/				WATER		FIRST	4.8	COMPL.	N/A										
CASING HAMMER	WEIGHT N/A		DROP		N/A			1						venue, 95 ft SE from the									
	eter, 2' long split-spoon	\neg	DDOD		30"							reet / Ca	rteret Av	enue intersection.									
SAMPLER HAMMER	WEIGHT 140 lbs.	T	DROP		30	San	nples	INSPECT	IOR	Eric G	READI	NGS											
		Interval		rable		San	Penetr.			FID	(PPM)	INGS											
DE	ESCRIPTION	Sample II	Depth	ater T	Number	Recov.	Resist.	Time	Sample	Ambient		Head	Time	REMARKS									
	Sar	(ft bgs)	>		(ft)	BL/6in			Air		Space	Date											
14.0.20.7 Vani dark arearish (OLE)		\top	- 20 -							ļ													
14.0-20.7 Very dark greenish gray (GLEY1 3/1 10Y), organic CLAY (OH), less than 1% peat fibers					9	1.7	1	1541	3.3	0.0	1541	N/A	N/A	Anaerobic, swampy									
														odors									
						3		n/a	0.0														
		- 21 -																					
00 7 04 0 Links area for a OH TV CAND, 400/							3		n/a	0.0													
20.7-24.8 Light gray fine SILTY SAND, 10% rounded gravel (SP)																							
rounded graver (C	roundoù giavor (or)						4		4.4	0.0													
		- 22 -																					
				10	1.6	4	1544	1.3	0.0	1544	N/A	N/A											
							_		4.0	0.0													
			- 23 -				5		4.0	0.0													
			20				5		0.0	0.0													
																		0.0	0.0				Drilling anded have 11
							5							Drilling ended here 11- 27-06									
			- 24 -																				
					11	1.2	2	0835	0.0	0.0	0835	N/A	N/A	Drilling resumed here									
24 8-26 0 Boddish	hrown (2 5VD4/4) fine to													11-28-06									
medium SAND (S)	i brown (2.5YR4/4) fine to W), trace silt						2		16.4	0.0													
	,,		- 25 -																				
							2		5.5	0.0													
							2																
26.0-27.2 Grevish	red fine to coarse SAND		- 26 -			1.		00.45	407		00.10	N/A	N1/A										
(SW), trace silt					12	1.9	2	0843	12.7	0.0	0843	N/A	N/A	Extremely faint naphthalene-like odors,									
							3		21.1	0.0				no sheen, no staining, no									
			- 27 -				٥		۱.۱ ک	0.0				product									
		_, -				2		8.6	0.0														
							-																
							2		11.4	0.0													
27 2-32 6 Dark roc	ddish aray (5VPA/2) fine to		- 28 -						ļ				 										
medium SAND (S	ddish gray (5YR4/2) fine to W), trace silt				13	1.6	2	0855	10.6	0.0	0855	N/A	N/A	Extremely faint									
5 5 (0	,,													naphthalene-like odors,									
							2		21.4	0.0				no sheen, no staining, no product									
			- 29 -											product									
							2		20.0	0.0													
							2																
		-1-1	- 30 -	ı	I		4	1		4		4											

	Halladay Street Gas Works	s												SCHOOR DEPALMA			
Interim Data Subn	nittal No.4		1.00		SE C	\!! '		INIC 1	D =	4				Page 4 of 6			
			LOG	C)F 50	JIL E	SOR	ING S	5B-5	4							
PROJECT LOCATION	GROUNI) FI FVAT	TION (FT.	MSL)	PROJEC	T NUMBE											
Halladay Street , Jersey City, NJ										.40				020667601			
DRILLING CONTRACTOR	•		FOREMA	N				DATE ST	ARTED			DATE COMPLETED					
Advanced Drilling, Inc.			Roger	_og	jel				11/2	27/06			11.	/28/06			
DRILLING EQUIPMENT								COMPLE	TION DE	PTH (FT E	BGS)	ROCK D	EPTH (FT)			
GEFCO SS 5 Drill Rig tu	rning 4.25-inch hollow-stem augers	;							56	1		not encountered					
TYPE BIT Hollow-s	PE BIT Hollow-stem auger) TY	PE CORI	BARRE	EL	NO. SAM	IPLES	DIST.	26	UNDIST.	N/A	CORE N/A			
ASING N/A		_		N/	/A			WATER I	DEPTH	FIRST	4.8	COMPL.	N/A	24HR N/A			
CASING HAMMER	WEIGHT N/A		DROP		N/A			BORING	LOCATIO	DN: Easte	ern shoul	der of Ca	arteret A	venue, 95 ft SE from the			
	eter, 2' long split-spoon	\neg										venue intersection.					
SAMPLER HAMMER	WEIGHT 140 lbs.	\dashv	DROP	1	30"			INSPECT	OR	Eric Ga				I			
		Interval		aple		San	nples			PID	READI	NGS					
DE	SCRIPTION		Depth	ater Ta	ļ., .	-	Penetr.	_			(PPM)	I	_	REMARKS			
DE	SONIF HON	Sample	(ft bgs)	Š	Number	Recov.	Resist. BL/6in	Time	Sample	Ambient	Time	Head Space	Time	NEWARKS			
		$\forall \exists$	- 30	t		(11)	DE/OIII					Opace					
27.2-32.6 Dark reddish gray (5YR4/2) fine to medium SAND (SW), trace silt		\setminus			14	1.0	2	0908	11.8	0.0	0908	N/A	N/A	Faint naphthalene-like			
														odors, no sheen, no staining, no product			
							1		20.3	0.0				Stanning, no product			
			- 31 -														
							2										
							2										
			- 32 -														
					15	1.6	2	0913	4.6	0.0	0913	N/A	N/A	Faint naphthalene-like			
														odors, no sheen, no staining, no product			
	32.6-32.7 Reddish brown (2.5YR5/4) fine SANDY SILT (ML) 32.7-36.0 Reddish brown (2.5YR5/4) fine SILTY SAND (SM)						3		7.9	0.0				Stairing, no product			
` '			brown (2 EVDE/4) fine	brown (2 5VD5/4) fine		- 33 -											
							2		8.3	0.0							
0.2 02 (0							2		0.0	0.0							
			- 34 -						0.0	0.0]					
			04		16	0.8	2	0922	3.2	0.0	0922	N/A	N/A	Faint naphthalene-like			
														odors, no sheen, no			
							2		7.0	0.0				staining, no product			
			- 35 -														
							2										
							2										
			- 36 -											Otro			
	brown (2.5YR5/4) fine				17	1.2	2	0924	10.6	0.0	0924	N/A	N/A	Stronger naphthalene-like odors, no sheen, no			
SAND (SP), trace	SIIL													staining, no product			
							2		21.5	0.0							
			- 37 -				,		0.0					Sample SB-54(36.5-37.0) collected at 0928 for TCL			
							2		8.3	0.0				SVOC, TCL VOC, TAL			
			-				2							Metals, Total and			
38.0-42.0 Reddish	brown (2.5YR5/4) fine		- 38 -						.					Amenable CN			
SANDY SILT (ML)	,		30		18	1.1	2	0933	10.2	0.0	0933	N/A	N/A	Naphthalene-like odors,			
							-							no sheen, no staining, no			
							1		15.3	0.0				product			
			- 39 -														
							2		33.2	0.0							
							2										
			- 40 -	1		ļ	ļ			1		1		.			

PSEG SC Former Halladay Street Gas Work nterim Data Submittal No.4		LOG	0	F SC	OIL E	BOR	ING S	SB-5	4					SCHOOR DEPALI Page 5 c	
ROJECT LOCATION	GROUNE	D ELEVAT	ΠΟΝ (FT.	MSL)	PROJECT NUMBER										
Halladay Street , Jersey City, NJ									.40	,	020667601				
RILLING CONTRACTOR		FOREMAN	ı				DATE ST	ARTED			DATE CO	OMPLETE	D		
dvanced Drilling, Inc.		Roger Lo	oge	el				11/2	27/06			11.	/28/06		
RILLING EQUIPMENT							COMPLE	TION DE	PTH (FT E	BGS)	ROCK DI	EPTH (FT)		
GEFCO SS 5 Drill Rig turning 4.25-inch hollow-stem auger	rs							56				not end	counter	red	
TYPE BIT Hollow-stem auger		SIZE AND	TYI	PE CORE	BARRE	ΞL	NO. SAM	IPLES	DIST.	26	UNDIST.	N/A		CORE N/A	
casing N/A			N/	A			WATER	DEPTH	FIRST	4.8	COMPL.	N/A		24HR N/A	
CASING HAMMER WEIGHT N/A				N/A			BORING	LOCATIO	N: Easte	rn shoul	der of Ca	arteret A	venue, 9	95 ft SE from the	
AMPLER 2" diameter, 2' long split-spoon							eastern	corner c	of the Hal	laday St	reet / Ca	rteret Av	enue in	tersection.	
SAMPLER HAMMER WEIGHT 140 lbs.				30"			INSPECT	TOR	Eric Ga	aulin					
·	val		m		San	nples			PID	READI	NGS				
	Interval		Table			Penetr.				(PPM)					
DESCRIPTION	Sample	Depth	Water	Number	Recov.	Resist.	Time	Sample	Ambient	Time	Head	Time	1	REMARKS	
	Š	(ft bgs)			(ft)	BL/6in			Air		Space	Date			
		- 40 -	1				<u>-</u>	ļ				ļ	ļ		
38.0-42.0 Reddish brown (2.5YR5/4) fine SANDY SILT (ML)				19	0.4	2	0955	0.3	0.0	0955	N/A	N/A	odoi	t naphthalene-like rs, no sheen, no ning, no product	
		- 41 -				2								G. ,	
		- 42 -				3									
42.0-42.6 Reddish brown (2.5YR5/4) fine SILTY SAND (SM)		- 42		20	1.4	2	1006	12.9	0.0	1006	N/A	N/A	odoi	t naphthalene-like rs, no sheen, no	
42.6-46.3 Reddish brown (2.5YR5/4) fine SANDY SILT (ML)		- 43 -				2		0.3	0.0				Sam	ning, no product	
						2		4.6	0.0				SVC Meta	ected at 1100 for TC DC, TCL VOC, TAL als, Total and enable CN	
		- 44 -		21	1.1	2	1036	0.0	0.0	1036	N/A	N/A	No	odors this spoon	
		- 45 -				2		0.0	0.0						
						2		0.0	0.0						
		- 46 -				3									
6.3-48.0 Reddish brown (2.5YR5/4) SILTY				22	0.8	2	1047	0.0	0.0	1047	N/A	N/A	No	odors this spoon	
CLAY (CL), trace fine sand		- 47 -				3		0.0	0.0						
						3		0.0	0.0						
		- 48 -				3									
8.0-52.0 Reddish brown (2.5YR5/4) fine AND (SP), trace silt				23	1.1	3	1100	0.0	0.0	1100	N/A	N/A	No	odors his spoon	
		- 49 -				3		0.0	0.0						
						3		0.0	0.0						
		- 50 -				3									

sittel No. 4													SCHOOR DEPAL		
nittal No.4		LOG	i C	F SC	OIL E	3OR	ING S	SB-5	4				Page 6 c		
										MSL)	PROJEC	PROJECT NUMBER			
Halladay Street , Jersey City, NJ								11	.40				020667601		
		FOREMA	AN				DATE ST	ARTED			DATE CO	MPLETE	ED		
		Roger	Log	el				11/2	27/06			11/	/28/06		
							COMPLE	TION DE	PTH (FT E	BGS)	ROCK DI	EPTH (FT)		
	S							56			not encountered				
CASING N/A CASING HAMMER WEIGHT N/A					BARRE	EL			 						
			N/						-						
<u>!</u>		DROP		N/A			1								
		DDOD		20"							reet / Ca	rteret Av	venue intersection.		
WEIGHT 140 IDS.	┰	DROP	Т	30"	Can	nnlaa	INSPEC	IOR			NCC				
	iterval		aple		San			l	PID		NG5				
SCRIPTION		Danth	ater T	Number	Ross		Time	Sample	Ambiant		Hood	Time	REMARKS		
OUT HON	Sam		1.	inumber			ите	Sample		ııme			ILIVIARIO		
	\top		+		(14)	SE/OIII									
48.0-52.0 Reddish brown (2.5YR5/4) fine SAND (SP), trace silt				24	0.9	3	1123	0.0	0.0	1123	N/A	N/A			
									-						
						3		0.0	0.0						
			_												
						2									
						3									
52.0-56.0 Reddish brown (2.5YR5/4) fine to medium SAND (SW)		- 52	-												
				25	2.0	2	1125	0.0	0.0	1125	N/A	N/A			
						3		0.0	0.0						
		- 53													
						3		0.0							
						3		0.0							
		- 54	-			ļ			ļ						
				26	2.0	3	1127	0.0	0.0	1127	N/A	N/A	Sample SB-54(55.5-56.0		
													collected at 1127 for TC		
						3		0.0	0.0				VOC, TCL SVOC, TAL Metals, Total and		
		- 55	-										Amenable CN		
						3		0.0	0.0						
						3		0.0	0.0						
		- 56	-												
End of Boring at 56'															
			-												
		- 57	-												
			-												
		- 58	-					}							
			-												
					1	1	1		I	l	1		i e		
		- 59	-												
		- 59	-												
		- 59	-												
	weight N/A ter, 2' long split-spoon weight 140 lbs. SCRIPTION brown (2.5YR5/4) fine silt brown (2.5YR5/4) fine to W)	WEIGHT N/A ster, 2' long split-spoon WEIGHT 140 lbs. ESCRIPTION In brown (2.5YR5/4) fine silt Ibrown (2.5YR5/4) fine to W)	City, NJ FOREM/Roger Irrning 4.25-inch hollow-stem augers Item auger SIZE AN WEIGHT N/A DROP BEGHT 140 lbs. Depth (ft bgs Depth (ft b	City, NJ FOREMAN Roger Log Irrning 4.25-inch hollow-stem augers Item auger SIZE AND TY N/ WEIGHT N/A DROP SSCRIPTION Depth (ft bgs) Drown (2.5YR5/4) fine silt - 51 - - 52 - Drown (2.5YR5/4) fine to W) - 53 - - 54 - - 55 - - 57 - - 57 - - 57 -	FOREMAN Roger Loge	FOREMAN Roger Logel	FOREMAN Roger Logel	City, NJ	City, NJ	The proper City, NJ FOREMAN Roger Loger Complete thousehold Complete the proper Complete the pro	City, NJ	City, NJ FOREMAN Roger Logel	City, NJ SPOUND ELEVATION (FT. MSL) PROJECT NUMBER 11.40 PROJECT NUMBER 11.40 PROJECT NUMBER 11.47/106 11.40 PROJECT NUMBER 11.47/106 11.40 PROJECT NUMBER 11.42 PROJECT NUMBER 11.40 PROJECT NUMBER PROJECT		