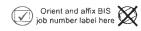






TR4: Technical Report Soil Investigation

Must be typewritten.



1		
	Location Information Required for all applications.	
	House No(s) 250 Street Name SOUTH STREET	
	Borough MANHATTAN Block 248 Lot 01	BIN 1003203 CB No. 103
	Work on Floor(s) ENTIRE	Apt/Condo No(s)
2	Applicant Information Required for all applications.	
	Last Name BOYER First Name RONAL) Middle Initial D
	Business Name Langan Eng, Env, Survey, and Landscape A	Arch, D.P.C. Business Telephone (201)794-6900
	Business Address 619 RIVER DRIVE, Ctr. 1, 4th Floor,	Business Fax (201)794-0366
	City Elmwood Pk. State NJ Zip 07407	Mobile Telephone
	E-Mail rboyer@Langan.com	License Number 085831
		⊠ P.E. □ R.A.
3	Required Borings / Test Pits Required for all applications.	
4	Plot Diagram Required for all applications. Draw in ink to indicate scale. Show building outline or extension and location	n of all havings and/or toot site by dimensions. Parings and/or toot
	shall be distributed according to the NYC Construction Codes. CHERRY B9 B5A B2A B6	SITE B11 B12

5 Test Report Required for all applica
--

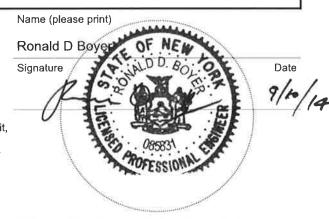
Date	Boring/ Test Pit #	Feet Below Curb	Soil Description	Class Number	Remarks
			See attached boring logs.		
-					

6 Statements and Signatures Required for all applications.

I hereby state that the above information is correct and complete to the best of my knowledge and that the above tests were performed in accordance with all Administrative Code Provisions and Departmental Rules, Regulations and Directives.

Falsification of any statement is a misdemeanor and is punishable by a fine or imprisonment, or both.

It is unlawful to give to a city employee, or for a city employee to accept, any benefit, monetary or otherwise, either as a gratuity for properly performing the job or in exchange for special consideration. Violation is punishable by imprisonment or fine or both.



P.E. / R.A. Seal (apply seal, then sign and date over seal)

Approvals - Internal Use Only										
Examined and Recommended for Approval		Approved								
Examiner Name		Borough Commissioner Signature								
Signature	Date									

	4	1//		1/V		Log		f Borin				B	1		_		Sheet	1	of	5
Project	Proposed 250 South Street Development					Ī	Project No. 009225510													
Location		•		oneer Development			I	Elevation and Datum Approx. el 11 MBPD												
Drilling C	ompa		York, NY				4	Date Sta	rted			App	rox. e	111			Finished			
		Craig	Test Boring									10/	16/07					10	/26/07	
Orilling E	quipn		75 Truck Moun	tod Drill Big			1	Completi	on D	epth	1		105 ft		R	Rock	Depth		95 ft	
ize and	Туре	of Bit	75 Truck-Moun				١,	Number	of Sa	mpl	es I	Distu				Un	disturbed		Core	
Casing D	iame	ter (in)	", 2-7/8", 1-7/8"	Tri-cone Roller Bits	Casing Dep	th (ft)	+	Water Le				First		2	1	Co	mpletion	-	2 <u>4 H</u> R.	2
Casing H	lamm	4" er.		Weight (lbs)	Drop (ir	93		Drilling F	•			∇		8	3	13		-	$ar{ar{\Lambda}}$	
Sampler			D 0 111 0	140) '' '	¹⁾ 30	-					nath	an Be	edso	le/P	aul	Mullins			
ampler	Hamr		D. Split Spoon Safety	Weight (lbs)	Drop (ir	1) 30		Inspectin	ıg En	gine		ndv	C70/L	Jima	nok	T	'rinathi			
4-		p a	Salety	140)		s/ ft	<u></u>	T			San	nple Da	ata	11151	iu i	ripathi		marks	
MATERIAL SYMBOL	Elev. (ft) +11.0	S jj		ample Description		PID Reading (ppm)	Casng blws/ ft.	E Dep	th le	Number	Type	Recov.	Penetr. resist BL/6in	N (B 10 2	-Valu lows 20 30	/ft)	(Dril Fluid L	ling Fluid	Depth of Cong Resistan	asing, ce, etc.)
4 4 4	+10.8			CK ASPHALT CK CONCRETE				ŧ °	=								Start Drille	ed drill d to 4"	ing at 9:2 with rolle	25 AM er bit
XXX								- 1	=								Hand	l auger	ed to 2'	
XXX								- 2	1											
XXX			Black f-c SAl	ND, some brick, trace	e f-c			Ē	=	_			25 39				SS 2			
			gravel, trace	silt, trace wood (dry)	[FILL]	1.3		3	4	S-1	SS	13	60			99		VOC = d to 4'	: 1.3ppm	
XX								- 4	1				21							
			Reddish brov	wn f-c SAND, some f-	-c gravel,			E	=	2	🛮		12 12				SS 4			
			trace brick, to	race glass (moist) [FI	LL]	1.3		5	=	S-2	SS	7	11	23	3				: 1.3ppm or detecte	
							<u> </u>	1		-	+	9	$ \cdot _{I}$							
XXX			trace brick (n	wn f-c SAND, some f- noist) [FILL]	-c gravel,	4.0		- 7	1	S-3	SS	19	6	11			SS 6		: 1.2ppm	
XXX	+3.8		Reddish brov	wn f-m SAND, some	 silt	1.2		E'	=	Ġ	s	_	5	11					or detecte	
	+3.0		(moist) [FILL			1		- 8	#		井	\dashv	4					SS 8'-10' PID: VOC = 1.4ppm		
XX				wn f-c SAND, some f- race wood, trace glas		1.4		- 9	=	S-4	SS	24	3	6						
XX			[FILL]	o (wei)	'		ŧ,	=	S	"	"	3				Orga	nic od	or detecte		
XXX		Class						- 10) 士		Ħ	\dashv	4				Drille	d to 10	ig to 10°	
XX		7	Reddish brov	wn Silty f-c SAND, so [FILL]	me f-c	1.2		11	Ħ	S-5	SS	9	3	7			PID:	0'-12' VOC =	: 1.2ppm	
			9.4401 (4401)	.·,				E	₫	נט			4 5				Orga	nic ode	or detecte	ed
								- 12 -	<u></u>		f	\dashv					Drille	d to 15 n wash	5'	
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XXX								- 14	1											
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\ggg			Reddish brov	wn f-m SAND, trace f	. gravel,			Ē	3	ွှ			13 9					5'-17'		
XXX			trace silt (we	t) [FILL]		1.1		<u> </u>	; =	S-6	SS	7	7	16					: 1.1ppm ig to 15'	
XX								17	, ‡		耳	\downarrow	6				Drille	d to 20 n wash)'	
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X	-9.0	n 1				-	_	 20) —							_	1			

B1 Log of Boring Sheet of 5 Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 11 MBPD Sample Data Building Code PID Reading (ppm) Remarks Elev (ft) N-Value (Blows/ft) Depth Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale Template TEMPLATE.GD1 10 20 30 40 20 SS SS 20'-22' Reddish brown f-m SAND, trace silt, trace 3 S-7 PID: VOC = 1.1ppm c. sand (wet) [FORMER RIVER BOTTOM 1.1 21 Drove casing to 25' DEPOSIT] 2 Drilled to 25 22 Brown wash Class 23 24 25 34 SS 25'-27' Brown f-m SAND, trace silt, trace c. sand, SS PID: VOC = 1.2ppm 1.2 26 9 trace f. gravel (wet) 9 Drove casing to 30' 6 Drilled to 30 8 27 Brown wash Class 5 28 4 BORINGS LOGS (B1-B4).GPJ 29 3 -19.0 30 5 SS 30'-32' SS Gray f-c GRAVEL (wet) 12 S-9 0.0 PID: VOC = 0.9ppm 31 0.9 10 Drilled to 35' 10 °. Q . 12 Brown wash -21.0 32 /\LANGAN.COM\DATA\EP\DATA\E\DATA\5\009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\009225510 9 33 10 34 9 35 12 SS 35'-37' Brown f-c SAND, trace silt (wet) S-10 6 PID: VOC = 0.5ppm 36 0.5 ω 10 Organic odor detected 13 Installed casing to 35' 8 37 Drilled to 40' 15 Brown wash 38 Difficult drilling from 38'-39' Class 3b 12 39 15 SS SS 40'-42' No Recovery 12 0 Installed casing to 40' 14 Drilled to 45' 17 Brown wash 42 43

B1 Log of Boring Sheet of 5 Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 11 MBPD Sample Data Building Code PID Reading (ppm) Remarks Elev (ft) N-Value (Blows/ft) Depth Recov. (in) Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale Template TEMPLATE.GD1 10 20 30 40 45 SS 10 SS 45'-47' Brown f-c SAND, trace silt (wet) S-12 13 PID: VOC = 0.8ppm 8.0 46 3 29 16 Organic odor detected Drilled to 50' 15 Brown wash 48 49 Class 50 10 SS 50'-52' PID: VOC = 0.8ppm Brown f-c SAND, trace mica flakes, trace 13 12 silt (wet) 16 Drilled to 55' 17 Brown wash 52 53 BORINGS LOGS (B1-B4).GPJ 54 55 10 SS 55'-57' Brown c-f SAND, trace f-c gravel, trace silt 15 Class 12 PID: VOC = 0.8ppm 56 8.0 37 22 Drilled to 60' 59 Brown wash -46.0 Difficult drilling from 57'-59'; ILANGAN.COMIDATA/EP/DATAS/009225510/ENGINEERING DATA/GEOTECHNICAL/GINTLOGS/009225510 . O. gravel inferred GRAVEL (inferred from drilling) Class 0.0 ٥. 58 °. Q . 59 60 10 SS 60'-62' Brown f-c SAND, trace f-c gravel, trace silt 15 13 PID: VOC = 0.6ppm (wet) 0.6 61 37 22 Drilled to 65' 17 Brown wash Class 62 63 64 SS 13 SS 65'-67' Brown f-c SAND, some f-c gravel, trace silt 14 4 PID: VOC = 0.8ppm 8.0 66 12 Stopped at 1:45 PM at 67' on 10/16/07. 14 67 Resumed work at 7:00 AM Class on 10/17/07. Redrilled from 55'-70' using 3-7/8" drill 68 collar. Brown wash 69 Rig chattering from 69'-70'

Log of Boring **B1** Sheet of 5 Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 11 MBPD Sample Data Building Code PID Readin (ppm) Remarks Elev (ft) N-Value (Blows/ft) Depth Recov. (in) Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale Template TEMPLATE.GD 10 20 30 40 70 SS 16 SS 70'-72' Brown f-c SAND, trace f-c gravel, trace silt S-17 13 PID: VOC = 0.8ppm 13 (wet) 8.0 15 Rods clogged due to insufficient pump pressure. 14 72 Resumed work on 10/18/07. Report: Log - LANGAN Advanced casing to 41'. 73 Redrilled from 40'-75'. Brown wash 74 SS 75'-77' Brown f-m SAND, trace c. gravel, trace silt 4/14/2014 3:41:20 PM 10 13 PID: VOC = 0.6ppm (wet) 11 Drilled to 80' 15 78 Brown wash Water loss BORINGS LOGS (B1-B4).GPJ Class 79 80 12 SS 80'-82' Brown f-m SAND, trace c. gravel, trace silt 14 3 PID: VOC = 0.5ppm 24 0.5 10 Mix revert into mud tub 12 Drilled to 85'-8" 82 Brown wash ILANGAN.COMIDATA/EP/DATAS/009225510/ENGINEERING DATA/GEOTECHNICAL/GINTLOGS/009225510 83 84 85 SS 86 0.5 SS 85'-8" to 87'-8" Brown f-m SAND, trace silt (wet) **S-20** 9 PID: VOC = 0.5ppm 16 Drilled to 90' 15 87 Brown wash 17 88 Chattering from 88'-89.5' GRAVEL (inferred from drilling) Gravel inferred from drilling Class 0 89 SS 90'-92' SS 20 PID: VOC = 0.5ppm Grayish brown Gravelly f. SAND and SILT 14 S-21 Hole collapsed 0.5 Installed casing to 65' 16 Casing broke 22 Stopped drilling at 12:30 PM 92 Class on 10/17/07. 93 Resume work at 7:15 AM on 10/23/07. Drilled to 95' and advanced casing to 92'. Rig

chattering from 92'-95'.

Brown wash

VILANGAN.COMIDATA\EP\DATAS\009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\009225510_BORINGS LOGS (B1-84).GP\

LANGAN Log of Boring **B1** Sheet of 5 Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 11 MBPD Sample Data Building Code PID Reading (ppm) MATERIAL SYMBOL Remarks N-Value (Blows/ft) Elev Depth Sample Description Recov. (in) (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) (ft) Scale 10 20 30 40 95 NX Core 95'-100' Start C-1 at 11:30 AM 3:48 Water loss - no return 96 =37% REC=57"/60" =95% 1:27 97 NX CORE **Gray MICA SCHIST** RQD=22"/60" 1:12 ပ် 98 1:30 99 2:25 Finish C-1 at 11:45 AM Class 100 NX Core 100'-105' Start C-2 at 12:00 PM. 1:30 Water loss - no return =42% REC=59"/60" =98% 1:39 102 Finish C-2 at 12:15 PM RQD=25"/60" **Gray MICA SCHIST** C-2 NX core barrel clogged with 1:45 sand, driller attempted to 103 flush. 1:51 End of work for day at 104 2:00 PM. 2:12 -94 (105 10/24/07 Boring completed at 105' on 10/26/07, Redrilled to 105' with roller 7:40 ĂM. bit. Attempted to core from 106 105' to 110'. NX core barrel clogged with 107 sand. Advanced casing to 93'. Rained at 8:10 AM. 108 End of work for day at 8:30 AM. 109 10/25/07 Rain - no work for the day 10/26/07 Driller backfilled 110 hole using drill cuttings and patched with cement. 111 112 Rock classified per NYC Bldg Code rock classification 113 modified based on RQD 114 115 116 117 118 119

LANGAN Log of Boring **B2** Sheet of 2 Proiect Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 9 MBPD Drilling Company Date Started Date Finished 10/18/07 10/19/07 Craig Test Boring Rock Depth **Drilling Equipment** Completion Depth CME 75 Truck-Mounted Drill Rig 27 ft Size and Type of Bit Disturbed Undisturbed Core Number of Samples 3-7/8", 2-7/8", 1-7/8" Tri-cone Roller Bits 9 Casing Diameter (in) Casing Depth (ft) 24 HR. Completion Water Level (ft.) V 4" 6.5 25 Casing Hammer Auto Weight (lbs) Drop (in) Drilling Foreman 30 140 Paul Mullins Sampler 2" & 3" O.D. Split Spoon Inspecting Engineer Sampler Hammer Weight (lbs) Drop (in) 140 30 Safety Sandy Sze Sample Data Building Code PID Reading MATERIAL SYMBOL Remarks Depth Penetr. resist BL/6in Recov. (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Sample Description (ft) Scale +9.0 10 20 30 40 +8.8 +8.7 2-INCH-THICK ASPHALT Drilled to 4" with roller bit SS 2-INCH-THICK CONCRETE 27 SS 4" to 2'-4" Dark brown f-c SAND, trace f-c gravel, trace 0.5 PID: VOC = 0.5ppm; CO = 24 <u>۲</u> 20 silt, trace concrete (dry) [FILL] 2ppm 55 Drilled to 2'-4" 2 11 16 SS 2'-4" to 4'-4" Brown f-m SAND, some silt, some f-c gravel, PID: VOC = 0.6ppm; CO = trace brick, trace steel (moist) [FILL] 0.6 3 SS 14 S-2 4 8 Drilled to 4'-4" -0GS (B1-B4).GP. 10 SS 11 SS 4'-4" to 6'-4" No recovery 0 11 S-3 0 8 6 8 ∇ 3 Brown f-c SAND, some f-c gravel, trace silt, SS 6'-4" to 8'-4" PID: VOC = 0.5ppm trace brick (moist) [FILL] 0.5 3 SS S-4 Drilled to 8'-4" Class 2 3 SS SS 8'-4" to 10'-4" Brown f-c SAND, trace brick, trace silt (moist) PID: VOC = 1.1ppm [FILL] 1.1 3 S-5 က Advanced casing to 10' Drilled to 10'-4" 10 SS 2 SS 10'-4" to 12'-4" Brown f-c SAND and BRICK FRAGMENT, PID: VOC = 0.6ppm some f. gravel (moist) [FILL] 0.6 2 S-6 Advanced casing to 15' 3 Drilled to 15'

12

13

14

16

17

18

19

16.4

SS

S-7

-6.0

Class

Black decomposed TIMBER, some peat, trace

c. gravel (wet)

5

3

6

9

Brown wash

Gray wash

SS 15'-17'

Drilled to 20'

fragments

Mix revert into mud tub

PID: VOC = 16.4ppm; CO =

6ppm; Oxygen = 18.8ppm Advanced casing to 20'

Gray wash with wood



B2 Log of Boring Sheet of 2 2 Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 9 MBPD PID Reading (ppm) Sample Data Building Code MATERIAL SYMBOL Remarks Elev (ft) N-Value (Blows/ft) Depth Recov. (in) Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 20 SS 20'-22' 15 No recovery with 2" split spoon, use 3" split spoon to Black decomposed TIMBER (wet) 10 S-8 SS 24 2.0 21 9 recover sample. PID: VOC = 2.0ppm; CO 6 22 =1ppm Advanced casing to 22', refusal on casing. 23 Drilled to 25' Class 7 Grayish black wash with wood fragments. 24 Water loss End work for day at 2:00 PM. 25 Resume work at 7:00 AM on 13 10/19/07. Black TIMBER (wet) SS 48 Advanced casing to 24' 4/14/2014 3:41:29 PM 252 26 ω SS 25'-27' 31 PID: VOC = 252ppm; CO = 14 -18.0 19ppm 27 Boring completed at 27' on 10/22/07, 1:20 PM. Organic odor detected 10/22/07 Driller backfilled hole using 28 drill cuttings and patched VILANGAN.COMIDATAIEPIDATA5/009225510/ENGINEERING DATA/GEOTECHNICAL/GINTLOGS/009225510_BORINGS LOGS (B1-B4).GPJ… with cement. 29 30 31 32 33 34 35 36 37 38 39 40 42 43

B₂A Log of Boring Sheet of 5 Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum Approx. el 9 MBPD New York, NY Drilling Company Date Started Date Finished 10/19/07 10/22/07 Craig Test Boring Drilling Equipment Completion Depth Rock Depth CME 75 Truck-Mounted Drill Rig 110 ft 95 ft Size and Type of Bit Disturbed Undisturbed Core Number of Samples 3-7/8", 2-7/8", 1-7/8" Tri-cone Roller Bits 18 3 Casing Diameter (in) Casing Depth (ft) 24 HR. Completion Water Level (ft.) 91 Casing Hammer Auto Weight (lbs) Drop (in) Drilling Foreman 30 140 Paul Mullins Sampler 2" O.D. Split Spoon Inspecting Engineer Weight (lbs) Sampler Hammer Drop (in) 140 30 Safety Sandy Sze Sample Data Building Code PID Reading (ppm) Coring (min MATERIAL Remarks Depth Recov. (in) Penetr. resist BL/6in (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Sample Description (ft) Scale +9.0 10 20 30 40 3-INCH-THICK ASPHALT Started drilling at 8:00 AM on +8.7 10/19/07. Refer to log of boring B2 for information on the first 12'. 2 Drilled to 12' 3 BORINGS LOGS (B1-B4).GP. 5 6 Class Advanced casing to 10' Drilled to 12' Brown wash consisting of c. gravel and sand 12 SS 12 SS 12'-14' Reddish brown m-f SAND, trace f. gravel, PID: VOC = 2.5ppm 10 trace silt (wet) [FILL] 2.5 13 Advanced casing to 15' Drilled to 15' Brown wash -6.0 SS Reddish brown f-c SAND, trace f. gravel, trace silt (wet) [FILL] SS 15'-17' 2 15 1.9 PID: VOC = 1.9ppm 2 Advanced casing to 20' 2 Drilled to 20' 17 Brown wash Class 18

LANGAN B₂A Log of Boring Sheet of 5 Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 9 MBPD Sample Data Building Code PID Readin (ppm) Remarks Elev (ft) N-Value (Blows/ft) Depth Sample Description Recov. (in) (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale Template TEMPLATE.GD1 10 20 30 40 20 SS SS 20'-22' Reddish brown f-c SAND, trace f-c gravel, 2 S-3 1.5 PID: VOC = 1.8ppm 1.8 21 trace silt (wet) [FILL] 2 [FORMER RIVER BOTTOM DEPOSIT] Advanced casing to 25' 2 Drilled to 25' 22 Brown wash Report: Log - LANGAN 23 24 Class 25 2 SS 25'-27' Brown f-c SAND, some f-c gravel, trace silt SS 19 PID: VOC = 1.4ppm 1.4 26 2 Advanced casing to 25' [FORMER RIVER BOTTOM DEPOSIT] Drilled to 25' 3 27 Brown wash 28 BORINGS LOGS (B1-B4).GPJ -20.0 29 Gray wash 29'-30' 30 4 Class SS SS 30'-32' Dark gray f-c SAND and SILT, some 5 S-5 PID: VOC = 1.4ppm 2 1.4 31 gravel (wet) 6 Advanced casing to 35' 5 Drilled to 35' -23.0 32 Gray wash 33 Grayish brown wash Rig chattering Water loss 34 35 SS SS 35'-37' Gray Sandy f-c GRAVEL, some silt (wet) 9 S-6 Class PID: VOC = 7.8ppm 7.8 36 α 9 Organic odor detected 17 Advanced casing to 40' 37 Drilled to 40' Grayish brown wash 38 Rig chattering Gravel - inferred from drilling Water loss 39 SS .ANGAN.COM\DATA\EP\DATA5\0092255 23 . () . SS 40'-42' Black and white c-f GRAVEL, trace f-c 29 0.0 S-7 PID: VOC = 1.0ppm 1.0 sand (wet) 16 Advanced casing to 45' °. Q °. Drilled to 45' 10 Class 42 . *o o* . *O* . 43 Grayish brown wash , o .c Rig chattering

Water loss

Ö.

Class

Template TEMPLATE.GD1

Report: Log - LANGAN

4/14/2014 3:41:34 PM

BORINGS LOGS (B1-B4).GPJ

-ANGAN.COM/DATA\EP\DATA5\009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\009225510_

. *o o*

LANGAN B₂A Log of Boring Sheet of 5 Project Project No. Proposed 250 South Street Development 009225510 Elevation and Datum Location New York, NY Approx. el 9 MBPD Sample Data Building Code PID Readin (ppm) Remarks Elev N-Value (Blows/ft) Depth Sample Description Recov. (in) (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) (ft) Scale 10 20 30 40 45 SS 45'-47' Brown c-f SAND, trace silt, trace mica SS 9 S-8 PID: VOC = 2.7ppm; CO = 2.7 46 4 flakes (wet) 6 299ppm, LEL = 2.2 Advanced casing to 50' 5 Drilled to 50' 48 Grayish brown wash Rig chattering 49 50 SS 14 SS 50'-52' Brown c-f SAND, trace f-c gravel, trace silt PID: VOC = 2.2ppm; CO = 2.2 (wet) 20ppm Advanced casing to 55' 8 52 Drilled to 55' Brown wash with gravel and 53 sand. Class Water loss 54 55 SS 55'-57' Brown Gravelly f-c SAND, some silt, trace 12 6.5 Advanced casing to 60' 56 26 0 mica flakes (wet) 14 Drilled to 60' 14 Brown gravelly wash Water loss Rig chattering 58'-60' 58 59 60 SS 60'-62' Brown c-f SAND, some gravel, trace mica S-11 9 Advanced casing to 65' flakes, trace silt (wet) 0 61 4 Drilled to 65' 11 -53 (62 Light brown to white wash 63 Brown wash, rig chattering with scraping noises 64 ۰0° SS 10 . O . O SS 65'-67' Gray f-c GRAVEL, trace c-f sand, trace silt 12 Class 0.1 66 PID: VOC = 0.1ppm (wet) - gravel stuck in spoon tip °. Q °. 10 Advanced casing to 70' 11 Drilled to 70' 67 Rig chattering ۰0° Light brown gravelly wash 0.0 68 °. Q °.

69

B₂A Log of Boring Sheet of 5 Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 9 MBPD Sample Data Building Code MATERIAL SYMBOL PID Readin (ppm) Remarks Elev Penetr. resist BL/6in N-Value (Blows/ft) Depth Recov. (in) Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) (ft) Scale 10 20 30 40 70 , 9 U SS 23 ٠. *Q* 。 SS 70'-72' Dark gray c. GRAVEL S-13 20 PID: VOC = 0.2ppm 0.2 2 39 19 Advanced casing to 75' Light brown gravelly wash 11 72 Rig chattering Class Report: Log - LANGAN . O. 73 0.0 74 °.0 ° ٥ -66.0 75 SS 30 SS 75'-77' Brown Gravelly f-c SAND, trace silt (wet) 15 9 Advanced casing to 80' 12 Drilled to 80' 12 Brown gravelly wash Class 78 COMIDATA\EP\DATA\$\009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\009225510_BORINGS LOGS (B1-B4).GPJ 79 80 19 SS 80'-82' Brown f. SAND, trace clay, trace silt, trace S-15 23 Resume drilling at 8:15 AM 0 81 f-c gravel (wet) 20 on 10/22/07. 16 Drilled to 85' 82 83 Gray wash Class 84 Rig chattering from 84'-85' 85 14 SS 85'-87' Brown f. SAND, some f-c gravel, some silt, S-16 18 12 PID: VOC = 0.5ppm trace m-c sand (wet) 0.5 86 36 18 Drilled to 90' 16 Gray wash -78.0 87 Rig chattering 87'-88' and 89'-90'), _ . (, 0 . () Water loss 88 SS 13 Hole collapsed °. Q « Grayish brown f-c GRAVEL, trace f-c S-17 16 SS 88'-90' 89 6 sand, trace silt (wet) 24 PID: VOC = 0.9ppm 56 Advanced casing to 91' . O. Class 90 Drilled to 95' 0.0 Rig chattering at 90'-9" 0.9 91 ∘. Q .; Difficult drilling at 91' and 93' 000 Gray wash with rock 92 cuttings. Bedrock at 93' inferred from drillings. 93 Weathered Rock inferred from drilling Class

B₂A Log of Boring Sheet of 5 Project Project No. Proposed 250 South Street Development 009225510 Elevation and Datum Location New York, NY Approx. el 9 MBPD Sample Data Building Code PID Readin (ppm) Remarks Elev (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 95 SS at 95' 0 50/0' 3:30 NX Core 95'-100' 96 Start C-1 @ 10:22 AM REC=55"/60" =92% 2:50 Beige wash 97 **Gray MICA SCHIST** RQD=53"/60" Water loss 3:15 98 2:40 99 3:29 100 Finish C-1 at 10:41 AM 2:37 NX Core 100'-105' REC=60"/60" =100% =95% Start C-2 at 10:50 AM 2:39 Beige wash, water loss 102 RQD=57"/60" **Gray MICA SCHIST** Class C-2 2:51 103 3:22 BORINGS LOGS (B1-B4).GP. 104 4:14 105 Finish C-2 at 11:08 AM 3:10 NX Core 105'-110' 106 Start C-3 at 11:20 AM REC=59"/60" =98% 3:41 RQD=59"/60" **Gray MICA SCHIST** د-3 VILANGAN.COM/DATA\EP\DATAS\009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\009225510_ 3:56 108 4:03 109 3:37 Finish C-3 at 11:50 AM. 110 Boring completed at 110' on 10/22/07, Driller backfilled hole with drill cuttings and patched 1:20 PM. with cement. 111 Note: 112 Rock classified per NYC Bldg Code rock classification modified based on RQD. 113 114 115 116 117 118 119

Log of Boring **B3** Sheet of 2 Proiect Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum Approx. el 7 MBPD New York, NY **Drilling Company** Date Started Date Finished Craig Test Boring 11/12/07 11/12/07 Rock Depth **Drilling Equipment** Completion Depth CME 75 Truck-Mounted Drill Rig 32 ft Disturbed Undisturbed Core Size and Type of Bit Number of Samples 2-15/16" & 3-7/8" Tri-cone Roller Bits 11 Casing Diameter (in) Casing Depth (ft) 24 HR. Completion Water Level (ft.) V 6.5 28 Casing Hammer Auto Weight (lbs) Drop (in) Drilling Foreman 140 Dave Cooke Sampler 2" O.D. Split Spoon Inspecting Engineer Sampler Hammer Weight (lbs) Drop (in) 140 30 Safety Sandy Sze/Chris McMahon Sample Data Building Code PID Readin MATERIAL SYMBOL Remarks Depth Penetr. resist BL/6in Sample Description Recov. (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) (ft) Scale +7. 10 20 30 40 8:15AM Set up Rig 6-INCH-THICK ASPHALT +6. Drilled through 6" asphalt SS 8 using drag bit. Dark brown f-c SAND, some red brick, trace f-c SS: 6" to 2'6" 15 S-1 15 gravel, trace silt (dry) [FILL] 0 36 40 32 3 SS: 2'6" to 4'6" Light gray f-c SAND, some f-c gravel, trace SS 15 S-2 brick, trace silt (dry) [FILL] 0 13 -0GS (B1-B4).GP. Advanced casing to 4'. 12 Drilled to 4'6". SS Class 2 5 SS: 4'6" to 6'6" Reddish brown f-m SAND, some brick, trace 3 S-3 6 silt, trace f-c gravel, trace wood (moist) [FILL] 1.7 5 10 ∇ 30 SS: 6'6" to 8'6" Grayish brown f-m SAND, some f-c gravel, 10 SS S-4 10 some silt, trace brick, trace c sand, trace wood, 0 3 Advanced casing to 8'. trace concrete, trace glass, trace clay (wet) Drilled to 8'6". SS Black Gravelly f-c SAND, some silt (wet) [FILL] 14 -2. SS: 8'6" to 10'6" 10 S-5 13 0 Black TIMBER (wet) [FILL] 5 Advanced casing to 10'. 10 5 Drilled to 10'6". SS: 10'6" to 12'6" Black to brown TIMBER (wet) [FILL] SS S-6 0 5 12 3 SS 3 13 SS: 12'6" to 14'6" Black TIMBER, some f-c sand, some brick, 2 some silt, trace f-c gravel (wet) [FILL] လှ 10 Advanced casing to 15'. 3 Drilled to 15'. Class Black wash. 16 Black to brown TIMBER, trace brick, trace f SS: 15' to 17' SS 4 sand (wet) [FILL] 2 3 Advanced casing to 17'. Drilled to 17'. 8 17 18 Grayish brown wash with wood fragments. Water loss at 18'-20'. 19 Advanced casing to 20'. Drilled to 20'.

Log of Boring **B3** Sheet 2 2 of Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 7 MBPD Sample Data PID Reading (ppm) Building Code Remarks Elev (ft) N-Value (Blows/ft) Depth Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 20 SS Black to brown TIMBER, some silt, trace f-c SS: 20' to 21'9" S-9 2 gravel (wet) [FILL] 21 0 Drilled to 25'. 100/3" 22 Class 23 No return/water loss. Rig chattering at 23.5'-25'. 24 25 Gray f-c SAND, trace silt, trace f-c gravel, 2 SS: 25' to 25'9" trace wood, trace shells (wet) [FILL] -18.8 100/3" 100/3" Class Boulder - inferred from drilling 26 Advanced casing to 25'. Drilled to 30' -20. 27 No return/water loss. Difficult drilling at 25'6" to 28 Boulder - inferred from drilling. -0GS (B1-B4).GP. 29 Class 2 Dark gray CLAY, some silt, trace f sand, trace SS: 30' to 32' wood, trace roots, trace f gravel (wet) 24 31 15 [FORMER RIVER BOTTOM DEPOSIT] 11 Advanced casing to 28'. Drilled to 30'. 32 Gray wash/clear wash. VILANGAN.COM/DATA\EP\DATAS\009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\009225510_ Abandoned B3 at 32' on 11/12/07 at 2:00pm. Chattering at 28.5'. Casing damaged after being 33 advanced through possible boulder. 5' casing lost in hole. 34 Driller backfilled hole with 35 drill cuttings and bentonite pellets (hole plug) and patched on top with hole 36 plug. 37 38 39 40 42 43

B3A Log of Boring Sheet 5 1 of Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 7 MBPD Drilling Company Date Started Date Finished 11/12/07 11/13/07 Craig Test Boring Drilling Equipment Completion Depth Rock Depth CME 75 Truck-Mounted Drill Rig 105.2 ft 95.2 ft Size and Type of Bit Disturbed Undisturbed Core Number of Samples 2-15/16" & 3-7/8" Tri-cone Roller Bits 16 Casing Diameter (in) Casing Depth (ft) 24 HR. Completion Water Level (ft.) 35 Casing Hammer Auto Weight (lbs) Drop (in) Drilling Foreman 30 140 Dave Cooke Sampler 2" O.D. Split Spoon Inspecting Engineer Report: Log - LANGAN Sampler Hammer Weight (lbs) Drop (in) 140 30 Safety Sandy Sze Sample Data Building Code MATERIAL Remarks Depth N-Value Recov. (in)
Penetr. resist Number (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Sample Description (ft) Scale +7.0 10 20 30 40 Moved hole 2' south of B3. Refer to B3 for information 4/14/2014 3:41:43 PM ... on the first 20'. Advanced casing to 20'. Drilled to 20'. 2 3 /ILANGAN.COMIDATA[EP/DATA5/009225510/ENGINEERING DATA/GEOTECHNICAL/GINTLOGS/009225510_BORINGS LOGS (B1-84).GPJ 5 6 9 Brown wash. 12 13 15 Gray wash. 16 17 18 19

Log of Boring B₃A Sheet of 5 Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 7 MBPD Sample Data Building Code Remarks N-Value (Blows/ft) Elev Depth Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) (ft) Scale 10 20 30 40 20 SS: 20' to 22' Grayish brown f-c SAND, some silt, some f-c 2 SS S-1 21 6 gravel, trace brick, trace wood, trace shells(wet) 2 Advanced casing to 25'. Drilled to 25'. 2 22 Class 23 Gray wash. 24 25 Dark gray f-m SAND, some silt, trace clay, trace -18 7 SS: 25' to 27' brick, trace wood (wet) [FILL] SS 10 Dark brown to black CLAY, some silt, trace f-c 2 Advanced casing to 30'. sand, trace f gravel, trace shells (wet) [FORMER Drilled to 30'. 1 RIVER BOTTOM DEPOSITI 27 28 Gray wash. 29 Class 30 SS: 30' to 32' Black to Gray CLAY, some silt, trace to some SS S-3 9 31 wood and organics, trace shells (wet) [FORMER 2 Advanced casing to 35'. RIVER BOTTOM DEPOSIT] 2 Drilled to 35'. 32 33 Black wash. Difficult drilling at 34.5' 34 Boulder - inferred from -27.5 DATA/GEOTECHNICAL/GINT drilling. BOULDER - inferred from drilling [FORMER RIVER BOTTOM DEPOSIT] 35 Black wash with rock 36 cuttings. 4:34 -30 37 SS: 37' to 39 '. qu = 0.6 tsfSS Black to Gray CLAY, some silt, trace f-c sand, trace wood, trace shells (wet) [FORMER RIVER 38 2 Drilled to 40'. 3 Class **BOTTOM DEPOSITI** 39 Black wash. -33.0 SS 2 Class Black to Gray Sandy CLAY, some silt, some f-c gravel, trace wood (wet) [FORMER RIVER SS: 40' to 42'. 8 9 3 Drilled to 45'. **BOTTOM DEPOSIT**] 3 Reddish Brown f-m SAND, trace silt (wet) 42 43 Class Black wash. Gray wash.



B₃A Log of Boring Sheet of 5 Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 7 MBPD Sample Data Building Code Remarks Elev (ft) N-Value (Blows/ft) Depth Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale Template TEMPLATE.GD1 10 20 30 40 45 SS: 45' to 47' Reddish brown f-m SAND, trace c gravel, trace SS 6 S-6 46 No recovery - use 3" Split silt (wet) ∞ 6 Drilled to 50'. 7 48 Gray wash. 49 50 SS SS: 50' to 52' Reddish brown f-c SAND, trace f-c gravel, trace 4/14/2014 3:41:44 PM 6 13 silt (wet) 6 Drilled to 55'. 6 52 53 Gray wash. ALANGAN.COMIDATA[EP/DATA5/009225510/ENGINEERING DATA/GEOTECHNICAL/GINTLOGS/009225510_BORINGS LOGS (B1-B4).GPJ 54 55 SS: 55' to 57' Reddish brown f-m SAND, trace f-c gravel, trace 15 56 Drilled to 60'. 7 Class 58 Gray wash. 59 SS 10 SS: 60' to 62' Reddish brown f SAND, trace silt (wet) 14 S-9 15 61 16 Drilled to 65'. 15 62 63 Gray wash. 64 SS: 65' to 67' Reddish brown f SAND, trace f-c gravel, trace 11 16 silt (wet) 14 Drilled to 70'. 15 67 68 Gray wash. 69

B₃A Log of Boring Sheet of 5 Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 7 MBPD Sample Data Building Code Remarks Elev (ft) Recov. (in)
Penetr. resist
BL/6in N-Value (Blows/ft) Depth Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 70 SS SS: 70' to 72' Reddish brown f SAND, trace f-c gravel, trace S-11 13 15 25 silt (wet) 12 Drilled to 75'. 16 72 Class 73 Gray wash. Slight chattering of the rig at 74 ٠.*Q* 。 75 24 Class SS: 75' to 77' Gray c-f GRAVEL, trace f sand, trace silt (wet) 0.0 38 °. Q . 28 Drilled to 80'. ٥ 30 -70.0 78 Gray wash. ECHNICAL\GINTLOGS\009225510_BORINGS LOGS (B1-B4).GPJ. 79 80 11 SS: 80' to 82' Gray f SAND, trace silt (wet) 21 Class 16 81 21 Drilled to 85'. 25 82 83 Gray wash. 84 -78.0 85 11 SS: 85' to 87' Reddish brown CLAY, some silt, trace f-c sand, S-14 13 86 qu = 0.65 tsftrace f gravel (wet) 20 Drilled to 90' 15 Class 87 88 Gray wash. -82.0 89 Transition inferred from drilling.), 0 '0' 9 '8' Class SS 18 SS: 90' to 92' °.0 ° Brown Sandy f-c GRAVEL, trace silt (wet) 20 9 . ۵ ° o 23 Drilled to 95'. --25 Brown f-m SAND, some silt, trace f gravel (wet) Class 92 -85. 93 Brown wash. 0.0 Chattering of the rig at 92.5' Class 94 ٥

B3A Log of Boring Sheet of 5 Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 7 MBPD Sample Data Building Code MATERIAL SYMBOL Remarks Elev (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 95 Gray f-c GRAVEL (wet) SS: 95' to 95'2" -88. 100/2 Gray MICA SCHIST NX Core: 95'2" to 100'2" 3:23 96 Start C-1 at 11:36am. =21% REC=55"/60" =92% 3:45 97 RQD=34"/60" NX CORE Class <u>۲</u> 3:33 98 Grayish brown wash. 3:43 99 4:57 Finish C-1 at 12:04pm. 100 -93.2 Gray MICA SCHIST NX Core: 100'2" to 105'2" 2:55 Start C-2 at 12:28pm. REC=60"/60" =100% 3:24 102 RQD=57"/60" Class 4:08 103 Grayish brown wash. 4:17 VILANGAN.COMIDATA\EP\DATA\$/009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\009225510_BORINGS LOGS (B1-B4).GP\ 104 5:10 Finish C-2 at 1:00pm. 105 -98. Driller backfilled hole with B3A completed at 105'2" on 11/13/07 at 2:00pm. drill cuttings and bentonite 106 pellets (hole plug) and patched on top with asphalt. 107 108 109 110 Rock classified per NYC Bldg Code rock classification 111 modified based on RQD 112 113 114 115 116 117 118 119

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Siz Ca Sa Sa	MATERIAL SYMBOL	Elev. (ft)		Sa	ample Descript	tion		PID Reading (ppm)	Coring (min)	Depth Scale	Number	Туре	(in) Penetr.	3L/6in	I-Value Blows/ft 20 30	:)	(Drilli Fluid Lo	ng Fluid, I	narks Depth of Ca g Resistand	ising, ce, etc.)
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			Class 7	Red to brown trace silt (dry	n BRICK, some f v) [FILL]	f-m sand	d,			3 -	S-2	SS	2 8 5	5 20	•		2'-4' Obse 4'.	rved 3"	lowed by hole ope	ened to
		-2.0		Red to black silt (moist) [F	f-c SAND, some	e brick, t	trace ∑	1146		- 4 - - - - 5 -	S-3	SS	2	2 16					lowed by	
			Class 7	Black TIMBE	ER (wet) [FILL]					Ē]	l 🛮	14	5						
		-3.0			AVEL, some wo			804		- 6 - - 7 -	S-4	SS	2 2 6	7		50	6'-8' 3" hol Lowe	e open	lowed by	
			Class 7		ck Gravelly f-c S brick, trace silt (v			0		- 8 - - - - 9 -	₹		5 ω 3	4 7			SS: 8 8'-10'	'-10', fc	ollowed b	y 3" SS:
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\bigotimes				Black Grave	lly f-c SAND, trad	ce silt. tı	race	0		_ _ 15 -	<u>-</u>		2				SS: 1	5'-17'		
					brick, trace cond			0.1		- - 16 -	S-7	SS	رم 7	3 10				nced ca	asing to 2	20'
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Log of Boring **B4** Sheet of 5 Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 3 MBPD Sample Data Coring (min) PID Readin (ppm) Remarks Elev N-Value (Blows/ft) Depth Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) (ft) Scale TEMPLATE.GD1 10 20 30 40 20 0 SS: 20'-25' Brown Sandy f-c GRAVEL, some brick, SS 7 trace silt, trace shell (wet) [FILL] S-8 21 က Advanced casing to 25' 3 Drilled to 25' 4 22 23 Black to dark brown wash with red bricks 24 25 5 SS: 25'-27' Yellowish brown MORTAR and Red SS BRICK, some f-c sand, trace f-c gravel, 3 8-9 26 2 Advanced casing to 30' trace concrete, trace silt (wet) End work for the day at 4 11:04AM. 27 Class 11/15/10-10:00AM: Drilled to 30' 28 Black wash at 28' BORINGS LOGS (B1-B4).GPJ 29 Brown wash at 29' Black wash at 29.5' 30 2 SS: 30'-32' Black Clayey f-c SAND, trace shells, trace 2 f-c gravel, trace glass, trace brick, trace silt 6 31 Advanced casing to 35' (wet) [FILL] 6 Drilled to 35' 6 32 .ANGAN.COM/DATA\EP\DATA5\009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\009225510 33 Black wash 34 -31.5 35 SS 11 SS: 35'-37' 0.0 Black and white c-f GRAVEL, some f-c 12 S-11 sand (wet) 2 36 Advanced casing to 40' °. Q °. 14 Drilled to 40' . *o o* 17 37 Class . O. 38 Black to gray wash °. Q °. Rig chattering at 38.5'-40' 39 -02 SS 6 SS: 40'-42' Gray f-c GRAVEL, trace silt, trace f-c sand 10 (wet) Advanced casing to 45' 27 Drilled to 45' °. Q °. 7 42 . *o o* Class . *O* . 43 Black to gray wash Rig chattering at 44'-45' °.0 °



LANGAN Log of Boring **B4** Sheet of 5 3 Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 3 MBPD Sample Data Coring (min) MATERIAL SYMBOL PID Readin (ppm) Remarks Elev N-Value (Blows/ft) Depth Penetr. resist BL/6in Recov. (in) Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) (ft) Scale Template TEMPLATE.GD1 10 20 30 40 45 . 9 U SS SS: 45'-47' Reddish Brown f-c GRAVEL, some silt, ٠. *Q* 。 S-13 23 0.0 trace clay, trace f-c sand (wet) 2 46 Advanced casing to 50' 9 Drilled to 50' °. Q °. 8 Class 48 Gray wash with gravel 0.0 Chattering at 48'-50' 49 °.0 ° ٥ -47.0 50 SS SS: 50'-52' Grayish Brown f-c SAND, trace silt (wet) 5 13 Advanced casing to 55' 6 Drilled to 55' 12 52 Class 53 Mix revert BORINGS LOGS (B1-B4).GPJ Gray wash 54 Rig chattering at 54'-55' 55 Grayish Brown Gravelly f-c SAND, trace SS: 55'-57' 5 silt (wet) -53.0 13 56 Drilled to 60' Reddish Brown f SAND, trace silt (wet) 6 /\LANGAN.COM\DATA\EP\DATA5\009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\009225510 Class 58 Gray wash 59 -57.0 60 SS 12 SS: 60'-62' Gray c GRAVEL (wet) S-16 13 0.0 Class 3 61 Drilled to 65' 16 °. Q °. 23 -59 (62 63 Grayish brown wash 64 SS 9 SS: 65'-67' Brown f-m SAND, trace silt (wet) 10 Class 9 66 Drilled to 70' 10 12 67 68 Grayish brown wash 69

B4 Log of Boring Sheet of 5 Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 3 MBPD Sample Data Coring (min) PID Readin (ppm) Remarks Elev N-Value (Blows/ft) Depth Penetr. resist BL/6in Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale (ft) Template TEMPLATE.GD1 10 20 30 40 70 SS 12 SS: 70'-72' Brown f SAND, trace silt (wet) S-18 13 26 Drilled to 75' 13 14 72 73 Grayish brown wash 74 Class 17 SS: 75'-77' Grayish Brown f SAND, some silt, trace clay (wet) 10 Drilled to 80' 11 9 78 Grayish brown wash BORINGS LOGS (B1-B4).GPJ 79 80 22 SS: 80'-82' Brown f SAND, some silt (wet) S-20 81 Drilled to 85' 53 26 82 Class COM/DATA/EP/DATA5/009225510/ENGINEERING DATA/GEOTECHNICAL/GINTLOGS/009225510 83 Grayish brown wash 84 85 SS 79 SS: 85'-87' Brown Silty f-m SAND, some f-c gravel, 20 trace clay, trace c sand (wet) S-21 86 35 Drilled to 90' 15 17 87 Class Rig chattering at 87' Brown wash 88 89 Rig chattering at 89.5'-90' Class Gray to Brown c-f GRAVEL, some f sand, -87.2 100/2 S-22 SS 2 100/2" trace silt (wet) SS: 90'-90'2" 5:42 Drilled to 90'2" 91 Rig chattering at 90'2", 3:19 brown wash. =27% REC=54"/60" =90% 92 Gray MICA SCHIST with Quartz inclusions End work for the day at Class 5:40 2:15PM RQD=46"/60" 1b 7 11/16/07-7:10AM: 93 Drilled to 91' - difficult drilling 5:13 Brown wash NX Core: 91'-96' 6:05

Start C-1 at 7:55AM



4/14/2014 3:41:52 PM

B4 Log of Boring Sheet of 5 Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 3 MBPD Sample Data PID Reading (ppm) MATERIAL Remarks Elev N-Value (Blows/ft) Depth Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) (ft) Scale 10 20 30 40 95 Class ? 3:35 Water loss at 93.5'-96' 1b Finish C-1 at 8:21AM 96 NX Core: 96'-101' 4:42 Start C-2 at 8:32AM 97 REC=60"/60" =100% **Gray MICA SCHIST** 4:31 98 Water loss from 96'-101' NX CORE RQD=51"/60" C-2 Class 3:04 99 3:03 100 3:13 Finish C-2 at 8:50AM -98.0 Boring completed at 101' on 11/16/07 at Driller backfilled hole with bentonite pellets (hole plug) 10:05AM. and patched on top with hole 102 103 /ILANGAN.COMIDATA[EP/DATA5/009225510/ENGINEERING DATA/GEOTECHNICAL/GINTLOGS/009225510_BORINGS LOGS (B1-84).GPJ 104 105 Note: Rock classified per NYC Bldg Code rock classification 106 modified based on RQD 107 108 109 110 111 112 113 114 115 116 118 119

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Template TEMPLATE.GDT	ocation		•	osed 250 South York, NY	Street Development			009225510 Elevation and Datum Approx. el 9 (MBPD)											
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late				en George, Inc.				L				4/23/	13			4	1/24/13		
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	Size and	Туре	of Bit		_			T _{Ni}	umber of Sa	amn	les	Disturbed	l		Indisturbed		Core		
LANGAN	Casing D	iamet		" Tricone Roller	· Bit	Casing Depth	(ft)	+	/ater Level			First	1		ompletion	-	24 HR.	-	
. Log	Casing H	amme	er		Weight (lbs)	Drop (in)	-	\bot	rilling Foren	` ′		$\bar{\Delta}$			<u>¥</u>	-	Ā	-	
ਨ	Sampler			D. 0-14 0				Ł				m Wilso	า						
∷⊢	Sampler	Hamn		D. Split Spoon Safety	Weight (lbs)	Drop (in)	30	_ In:	specting Er	ngine		arinna D	io-z						
00: -				Salety	140			<u>L</u>			n.	Sample							
14/2014 3:43:00 PM	MATERIAL SYMBOL	Elev. (ft)	Building Code		Sample Description	1		PID Reading (ppm)	Depth Scale	Number	Type	Recov. (in) Penetr. resist	.i. N-' (Bk	Value ows/ft)	_ (D		marks , Depth of Cas ing Resistance	sing,	
4/201	Σ΄ σ	+9.0 +8.8		- 2-INCH-THI	CK ASPHALT		- 1	₫	₩ о Ӈ	ž	_	8 - 9 5	10 2	30 40)				
4. 7.		.0.0	Class	Grayish brov	wn f-c SAND, trace silt	, trace brick	· '	0.0		S-1	SS	ω 8 100/	5"		4/23	3/13	ing at 2:30		
₽. Z		+7.5.	7	fragments (n	noist) [FILL]				F 1 =			100/	<u> </u>	100/5		led thrοι halt.	ugh 2-inch	-thick	
1,22)				End of Dorin	og 1 5' ot 7.45 AM on 4	10.4.14.0			F 2 =						Sto	pped wo	ork at 3:00	PM on	
9,20,2				Elia di Bolili	ng 1.5' at 7:45 AM on 4	124/13.									Res	sumed w	vork at 7:0	0 AM	
316,1									3 =							4/24/13 2"-1'1"			
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AL F									5 =						1.5' Bor		inated and	t	
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NGA									11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 19 - 19 - 19 - 19 - 19 - 19										
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Log of Boring B-5A Sheet of 5 Project Project No. TEMPLATE.GD1 Proposed 250 South Street Development 009225510 Elevation and Datum Location Approx. el 9 (MBPD) New York, NY Drilling Company Date Started Date Finished 4/24/13 Warren George, Inc. 4/25/13 Drilling Equipment Completion Depth Rock Depth AD II Truck-Mounted Rig 97 ft 87 ft Size and Type of Bit Disturbed Undisturbed Core Number of Samples 2 7/8", 3 7/8", 4 7/8" Tricone Roller Bits 20 Casing Diameter (in) Casing Depth (ft) 24 HR. Completion Water Level (ft.) 3", 4" I.D. Steel Casing 87 7 Casing Hammer Donut Weight (lbs) Drop (in) Drilling Foreman 30 300 Jim Wilson Sampler 2" O.D. Split Spoon Inspecting Engineer Weight (lbs) Sampler Hammer Drop (in) 140 30 Safety Karinna Diaz Sample Data Building Code PID Readin Remarks MATERIAL Depth Recov. (in) Penetr. resist BL/6in Sample Description (Drilling Fluid, Depth of Casing, (ft) Scale Fluid Loss, Drilling Resistance, etc.) +9. 10 20 30 40 Started drilling at 8:00 AM on 4/24/13 Drilled to 2' Refer to log of boring B-5 for information on the first 2'. 2 SS SS 2'-4' 12 Advanced 4" casing to 5' **S-2** Drilled to 5' 3 ω 13 Brown f-c SAND, trace brick fragments (moist) 6 Brown wash [FILL] 11 5 SS 5'-7' 2 3 S-3 9 0.0 Brown f-c SAND, trace silt, trace brick 5 fragments (moist) [FILL] 7 ∇ SS 7'-9' Advanced 4" casing to 10' 6 SS Drilled to 10' 0.0 Grayish brown f-c SAND, trace clay, trace brick Brown wash 10 fragments (wet) [FILL] 8 9 Class 10 SS SS 10'-12' WOH WOH S-5 Brown f-c SAND, trace clay, trace brick 2 fragments (wet) [FILL] 2 12 SS 12'-14' SS 3 Advanced 4" casing to 15' Drilled to 15' 13 9 0.0 Brown f-c SAND, trace silt, trace brick Brown wash fragments (wet) [FILL] 3 15 SS 15'-17' SS 2 Advanced 4" casing to 20' 2 Drilled to 20' S-7 13 0.0 16 Brown f-c SAND, trace fine gravel (wet) 2 Brown wash 3 17 18 19

Log of Boring B-5A Sheet of 5 Project Project No. LANGAN ...Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 9 (MBPD) PID Reading (ppm) Sample Data Building Code Remarks Elev (ft) Penetr. resist BL/6in N-Value (Blows/ft) Depth Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 20 SS 20'-22' SS Drilled to 25' 3 S-8 Brown wash 21 0 No Recovery 3 Class wон 22 23 24 25 SS 25'-27' SS Drilled to 30' WOH Class Brown wash 4.6 26 6 Dark gray Sandy CLAY, trace wood (wet) 3 27 28 -19. 29 BORING LOGS (ALL 30 SS 30'-32' 5 Drilled to 35' 6 Brown wash 31 ω 0.0 Brown f-c SAND, trace fine gravel, trace silt 5 Class (wet) 32 LANGAN.COM/DATA\EP\DATA5\009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\009225510 33 34 35 SS SS 35'-37' Drilled to 40' 5 Brown wash 12 36 0.0 Brown f-c SAND, trace silt (wet) 5 37 Class 38 39 -31.0 SS SS 40'-42' Drilled to 45' Brown wash 10 0.0 Brown f-c SAND, trace silt (wet) 42 Class 43

B-5A Log of Boring Sheet 5 of Project Project No. Report: Log - LANGAN ...Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Elevation and Datum Location New York, NY Approx. el 9 (MBPD) PID Reading (ppm) Sample Data Building Code Remarks Elev (ft) Penetr. resist BL/6in N-Value (Blows/ft) Depth Recov. (in) Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 45 SS 45'-47 SS Drilled to 50' S-13 6 Brown wash 10 46 0.0 Brown f-c SAND, trace silt (wet) 5 4 Class 48 ₽ 4/14/2014 3:43:04 49 -41.0 50 SS 50'-52' SS Drilled to 53' 5 Water loss 0.0 2 EXCEPT B16, 19, 20, 21, 22). GPJ Brown f-c SAND, trace mica flakes (wet) Advanced 4" casing to 55' Drilled to 55' 5 52 Brown wash Class 53 54 (:0°. -46.0 55 SS 55'-57' 11 Advanced 4" casing to 60' 9 Drilled to 60' 56 က 0.0 Brown Sandy f-c GRAVEL, trace mica flakes Brown wash with gray and 9 (wet) reddish brown gravel 6 , , o . O. 58 59 Class 2b 60 SS SS 60'-62' 5 Drilled to 65' 8 Rig chattering from 62'-65' 61 Brown Sandy coarse GRAVEL, trace silt, trace 9 mica flakes (wet) 7 62 ٠٥٠, 63 0.0 64 .0. -56.0 SS SS 65'-67' 34 Drilled to 70' 25 Rig chattering at 68' 0.0 66 38 Tan Sandy fine GRAVEL, trace silt (wet) 13 Class , ° c 13 67 , O -59.0 68 Class 69

B-5A Log of Boring Sheet of 5 Project Project No. Report: Log - LANGAN ...Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Elevation and Datum Location New York, NY Approx. el 9 (MBPD) PID Reading (ppm) Sample Data Building Code Remarks Elev (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Sample Description Recov. (in) (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 70 SS Stopped work at 3:00 PM on S-18 15 4/24/13 4 0.0 Brown f-c SAND, trace fine gravel, trace silt Resumed work at 7:00 AM 16 (wet) on 4/25/13 13 Hole collapsed at 63' Advanced 4" casing to 70' 72 Class Drilled to 70' 73 Brown wash ₽ Drilled to 75' Brown wash 74 -66.0 75 SS 75'-77' 11 Drilled to 80' 14 Brown wash 4 0.0 GP. Brown f-c SAND, trace fine gravel, trace silt Rig chattering at 79' 12 EXCEPT B16, 19, 20, 21, 22). 11 78 79 Class 80 SS 80'-82' 15 LOGS (Drilled to 85' S-20 15 Brown wash 7 81 26 0.0 Brown f-c SAND, trace silt (wet) BORING 11 10 82 JGAN.COMIDATA/EP/DATAS/009225510/ENGINEERING DATA/GEOTECHNICAL/GINTLOGS/009225510 83 84 85 SS 85'-86'9" Drilled to 87 S-21 33 12 Class Bit refusal at 87' 86 0.0 Grayish brown f-c SAND, trace silt (wet) Installed 3" casing to 87' Redrilled to 87' 100/3 -78 87 Started NX Rock core run C-1 at 87' at 11:05 AM 88 **Gray MICA SCHIST** =85% Light gray wash REC=54"/60" =90% 89 RQD=51"/60" Class 90 91 Finished core run C-1 at 92' 92 at 11:40 AM =20% REC=59"/60" =98% Started NX Rock core run C-2 at 92' at 11:55 AM 93 **Gray MICA SCHIST** NX CORE RQD=42"/60" Class Light gray wash 1h

Log of Boring B-5A Sheet 5 of 5 Project Project No. Report: Log - LANGAN ... Template TEMPLATE. GDT Proposed 250 South Street Development 009225510 Location Elevation and Datum Approx. el 9 (MBPD) New York, NY PID Reading (ppm) Sample Data Building Code Remarks Elev. (ft) Depth Scale N-Value (Blows/ft) Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) 10 20 30 40 95 Finished core run C-2 at 12:25 PM at 97' Class 96 -88.0 97 Borehole backfilled with End of Boring at 97' at 3:00 PM on 4/25/13. cuttings and patched with 98 VLANGAN. COMIDATA/EPIDATA5/009225510/ENGINEERING DATA/GEOTECHNICAL/GINTLOGS/009225510_BORING LOGS (ALL EXCEPT B16, 19,20,21,22). GPJ ... 4/14/2014 3:43:05 PM ... cement upon completion. 99 100 101 102 103 104 105 106 107 108 109 110 - 111 112 113 114 115 116 117 118 119

Log of Boring **B-6** Sheet of 5 Project Project No. TEMPLATE.GD1 Proposed 250 South Street Development 009225510 Elevation and Datum Location Approx. el 10 (MBPD) New York, NY Drilling Company Date Started Date Finished Warren George, Inc. 4/16/13 4/18/13 Rock Depth Drilling Equipment Completion Depth DK525 Truck-Mounted Rig 104 ft 94 ft Size and Type of Bit Disturbed Undisturbed Core Number of Samples 2 7/8", 3 7/8", 4 7/8" Tricone Roller Bits Casing Depth (ft) 24 HR. Casing Diameter (in) Completion Water Level (ft.) 3", 4" I.D. Steel Casing V 92 12 Casing Hammer Donut Weight (lbs) Drop (in) Drilling Foreman 30 300 Eddie Cardona Sampler 2" O.D. Split Spoon Inspecting Engineer Weight (lbs) Sampler Hammer Drop (in) 140 30 Safety Karinna Diaz Sample Data Building Code PID Readin (ppm) Coring (min MATERIAL SYMBOL Remarks Elev Depth Penetr. resist BL/6in Recov. Sample Description (Drilling Fluid, Depth of Casing, (ft) Scale Fluid Loss, Drilling Resistance, etc.) +10.0 10 20 30 40 2-INCH-THICK ASPHALT +9. SS Started drilling at 1:30 PM on 30 4/16/13. 20 Drilled through 2-inch-thick S-4 35 2.6 Dark brown f-c SAND, trace silt, trace 15 asphalt. brick fragments (moist) [FILL] SS 2"-2'2" 11 2 SS 2'2"-4'2" 15 Drilled to 5' 32 3 S-2 Brown wash 12 0.5 Dark brown f-c SAND, trace silt, trace 27 brick fragments (moist) [FILL] 28 5 SS 5'-7' 5 SS 8 S-3 16 0.5 Dark brown f-c SAND, trace silt, trace 6 brick fragments (moist) [FILL] 3 SS 7'-9' 9 Class Advanced 4" casing to 10' SS Drilled to 10' 16 0.0 Reddish brown f-c SAND, trace silt (moist) Gray-brown wash 10 6 9 10 SS SS 10'-12' 5 9 S-5 7 0.3 Reddish brown f-c SAND, trace silt (moist) 11 7 ∇ 12 SS 12'-14' 9 Drilled to 15' SS 9 Gray-brown wash 20 13 0.3 Reddish brown f-c SAND, trace silt (wet) 12 9 -5.0 SS SS 15'-17' 2 Stopped work at 3:00 PM on 2 4/16/13 S-7 9 0.0 Reddish brown f-c SAND, trace silt (wet) 3 Resumed work at 7:00 AM [FORMER RIVER BOTTOM DEPOSIT] on 4/17/13 3 Drilled to 20' 17 Class Brown wash 18 19

B-6 Log of Boring Sheet 2 of 5 Project Project No. Report: Log - LANGAN ...Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 10 (MBPD) Sample Data Building Code PID Reading (ppm) Coring (min) Remarks Elev (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 20 SS Drilled to 25' 2 S-8 Brown wash 12 0.0 21 Brown f-c SAND, trace silt (wet) [FORMER RIVER BOTTOM DEPOSIT] 2 22 23 4/14/2014 3:43:13 PM 24 Class 25 SS 25'-27' 3 Drilled to 30' SS 2 Brown wash 10 0.0 26 EXCEPT B16, 19, 20, 21, 22). GPJ Brown f-c SAND, trace silt (wet) [FORMER 3 RIVER BOTTOM DEPOSIT 3 27 28 29 LOGS (ALL -20.0 30 SS 30'-32' Drilled to 35' 6 Gray-brown wash 9 13 31 0.0 BORING Brown and gray-brown f-c SAND, trace silt (wet) 7 32 /\LANGAN.COM\DATA\EP\DATA\E\DATA\5\009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\009225510 33 34 35 SS 35'-37' Drilled to 40' Brown wash 10 36 Brown f-c SAND, trace silt (wet) 10 7 37 Class 38 39 SS SS 40'-42' Drilled to 45' 5 Brown wash 0.0 Brown f-c SAND, trace silt (wet) 7 42 43

B-6 Log of Boring Sheet of 5 Project Project No. Report: Log - LANGAN ... Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 10 (MBPD) PID Reading (ppm) Sample Data Building Code Coring (min) Remarks Elev. (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 45 SS 45'-47' SS Drilled to 50' 6 Brown wash 46 ∞ 0.4 Brown f-c SAND, trace silt, trace f-c gravel 6 (wet) 8 48 4/14/2014 3:43:13 PM 49 50 SS 50'-52' 12 Drilled to 55' Brown wash 8.0 ω NLANGAN.COMIDATA\EPIDATA5\\009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\009225510_BORING LOGS (ALL EXCEPT B16, 19,20,21,22),GPJ. Brown f-c SAND, trace fine gravel (wet) 7 52 53 54 55 SS 55'-57' Drilled to 60' 10 Brown wash 0.3 Brown f-c SAND, trace fine gravel (wet) 11 13 Class 58 59 60 SS 60'-62' Drilled to 65' 8 Brown wash 4 61 0.2 Brown f-c SAND (wet) 10 10 62 63 64 SS SS 65'-67' Drilled to 70' 10 Brown wash 0.0 66 Brown f-c SAND (wet) 12 12 67 68 69

B-6 Log of Boring Sheet of 5 Project Project No. Report: Log - LANGAN ...Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Elevation and Datum Location New York, NY Approx. el 10 (MBPD) PID Reading (ppm) Sample Data Building Code Coring (min) Remarks Elev (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Sample Description Recov. (in) (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 70 SS Drilled to 75' S-18 9 Brown wash 10 0.0 Brown f-m SAND, some silt (wet) 12 13 72 Class 73 4/14/2014 3:43:13 PM -65.0 75 SS 75'-77' 11 Drilled to 80' 14 Brown wash 4 0.0 EXCEPT B16, 19, 20, 21, 22). GPJ Brown Silty f-m SAND (wet) 18 17 Class 78 79 -70.0 80 SS 80'-82' 8 LOGS (Rig chattering from 82'-85' S-20 9 Drilled to 85' 81 ω 0.3 Brown f-c SAND, trace silt (wet) Brown wash 23 38 82 Class VGAN.COM/DATA/EP/DATA5/009225510/ENGINEERING DATA/GEOTECHNICAL/GINTLOGS/009225510 83 84 85 SS SS 85'-87' Drilled to 90' 10 Brown wash S-21 86 9 0.2 Brown Silty f-m SAND, some clay, trace 14 fine gravel (wet) 14 87 Class 88 89 -80.0 90 SS 90'-91'11" 48 Advanced 3" casing to 92' 36 Drilled to 92' 0.2 Grayish brown Silty f-c SAND, trace f-c Gray wash 29 gravel (wet) Stopped work at 3:00 PM on 100/5" Class 92 4/17/13 Resumed work at 7:00 AM on 4/18/13 93 Drilled to 94' Started NX Rock core run Class C-1 at 94' at 8:00 AM

B-6 Log of Boring Sheet of 5 Project Project No. Report: Log - LANGAN ...Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 10 (MBPD) PID Reading (ppm) Sample Data Building Code Remarks Elev (ft) Penetr. resist BL/6in N-Value (Blows/ft) Depth Recov. (in) Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 95 Gray MICA SCHIST Light gray wash 4:12 REC=60"/60" =100% 96 4:40 RQD=44"/60" NX CORE Class 7 97 5:32 98 5:18 Finished core run C-1 at 99' -89.0 at 8:25 AM 99 Started NX Rock core run 4:04 C-2 at 99' at 8:50 AM 100 **Gray MICA SCHIST** REC=58"/60" =97% 4:12 Light gray wash 101 RQD=57"/60" Class 4:26 NLANGAN COMIDATAIEPIDATAS1009225510/ENGINEERING DATA/GEOTECHNICAL/GINTLOGS1009225510_BORING LOGS (ALL EXCEPT B16,19,20,21,22) 102 4:29 103 5:06 Finished core run C-2 at 104' -94.0 at 9:15 AM 104 Borehole backfilled with End of Boring at 104' at 10:30 AM on cuttings and patched with 105 4/18/13. cement upon completion. 106 107 108 109 110 111 112 113 114 115 116 118 119

Log of Boring **B-7** Sheet of 1 Project Project No. TEMPLATE.GD1 009225510 Proposed 250 South Street Development Elevation and Datum Location Approx. el 9 (MBPD) New York, NY Drilling Company Date Started Date Finished 4/15/13 Warren George, Inc. 4/15/13 Drilling Equipment Completion Depth Rock Depth DK525 Truck-Mounted Rig 14 ft Size and Type of Bit Disturbed Undisturbed Core Number of Samples 2 7/8", 3 7/8", 4 7/8" Tricone Roller Bits 6 Casing Depth (ft) 24 HR. Casing Diameter (in) Completion Water Level (ft.) 3", 4" I.D. Steel Casing V 10 10 Casing Hammer Donut Weight (lbs) Drop (in) Drilling Foreman 30 300 Jim Wilson Sampler 2" O.D. Split Spoon Inspecting Engineer Weight (lbs) Sampler Hammer Drop (in) 140 30 Safety Karinna Diaz Sample Data Building Code PID Reading MATERIAL SYMBOL Remarks Elev Depth Penetr. resist BL/6in Recov. Sample Description (Drilling Fluid, Depth of Casing, (ft) Scale Fluid Loss, Drilling Resistance, etc.) +9.0 10 20 30 40 2.5-INCH-THICK ASPHALT +8.8 Started drilling at 7:45 AM on SS S-1 26 9 4/15/13. 100/4" 100/4" Drilled through 2.5-inch-thick 2.5 Dark brown f-c SAND, trace silt, trace brick asphalt. fragments (moist) [FILL] SS 2.5"-1'0.5" 2 SS Drilled to 2' Brown wash 2 S-2 SS 2'-4' 3 0 3 Advanced 4" casing to 5' No Recovery Drilled to 5' 2 Brown wash 5 SS 5'-7' 2 Drilled to 7' SS 3 S-3 Brown wash 9 13 0.0 Brown f-c SAND, trace f-c gravel, trace silt, 10 trace brick fragments (moist) [FILL] 12 Class SS 7'-9' 17 /\LANGAN.COM\DATA\EP\DATA\5\009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\009225510 Advanced 4" casing to 10' 6 SS Drilled to 10' 10 15 Brown f-c SAND, trace f-c gravel, trace silt, Brown wash trace brick fragments (moist) [FILL] 4 9 ∇ SS 10 SS 10'-12' 4 Drilled to 12' 17 S-5 Brown wash Brown f-c SAND, trace silt, trace f-c gravel, 13 trace brick fragments (wet) [FILL] 10 SS 12'-12'8" S-6 SS 62 Drilled to 14' 0.6 50/2" Brown f-c SAND, trace silt, trace coarse gravel, 50/2 Difficult drilling from 13'-14' 13 trace brick fragments (wet) [FILL] Water loss Obstruction encountered at -5.0 14 Boring terminated and End of Boring at 14' at 10:30 AM on 4/15/13. relocated. 15 Borehole backfilled with cuttings and patched with cement upon completion. 16 17 18 19

Log of Boring B-7A Sheet of 5 Project Project No. TEMPLATE.GD1 Proposed 250 South Street Development 009225510 Elevation and Datum Location Approx. el 9 (MBPD) New York, NY Drilling Company Date Started Date Finished 4/15/13 4/16/13 Warren George, Inc Drilling Equipment Rock Depth Completion Depth DK525 Truck-Mounted Rig 100 ft 90 ft Size and Type of Bit Disturbed Undisturbed Core Number of Samples 2 7/8", 3 7/8", 4 7/8" Tricone Roller Bits 16 Casing Diameter (in) Casing Depth (ft) 24 HR. Completion Water Level (ft.) 3", 4" I.D. Steel Casing 90 Casing Hammer Donut Weight (lbs) Drop (in) Drilling Foreman 30 300 Jim Wilson Sampler 2" O.D. Split Spoon Inspecting Engineer Weight (lbs) Sampler Hammer Drop (in) 140 30 Safety Karinna Diaz Sample Data Building Code PID Reading (ppm) MATERIAL SYMBOL Remarks Depth Recov. (in) Penetr. resist BL/6in Number (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Sample Description (ft) Scale +9.0 10 20 30 40 3-INCH-THICK ASPHALT +8.8 Started drilling at 10:55 AM on 4/15/13 Refer to log of boring B-7 for information on the first 14'. 2 3 5 6 Class Drilled to 10' Brown wash 12 13 Advanced 4" casing to 15' Drilled to 15' Brown wash -6.0 SS 15'-17' SS Drilled to 17' 2 Gray wash 10.0 Dark gray and black decomposed WOOD, 5 some f-c sand, some peat (wet) [FILL] 6 SS 17'-19' 2 Class Advanced 4" casing to 20' IS | Drilled to 20' 4 0.0 18 Dark gray decomposed WOOD, some 3 Gray wash peat (wet) [FILL] 3

B-7A Log of Boring Sheet of 2 5 Project Project No. ...Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 9 (MBPD) Sample Data Building Code Coring (min) PID Reading (ppm) Remarks Elev (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Number Sample Description Recov. (in) (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 20 SS Advanced 4" casing to 25' 5 S-9 Drilled to 25' 10 0.0 21 Grayish brown f-c SAND, trace peat, trace 10 Brown wash wood (wet) [FILL] 7 22 Class 23 24 -16.0 25 SS 25'-27' WOH Advanced 4" casing to 30' WOH Drilled to 30' 12 0.0 LOGS (ALL EXCEPT B16, 19, 20, 21, 22). GPJ Dark gray Silty fine SAND, trace wood 3 Gray wash (wet) [FORMER RIVER BOTTOM 4 DEPOSIT] 27 Class 28 29 30 SS 30'-32' WOH Drilled to 35' Dark gray Silty f-m SAND, some clay (wet) WOH Brown wash -22.0 31 [FORMER RIVER BOTTOM DEPOSIT] 0.0 WOH BORING Dark brown f-c SAND, trace silt (wet) [FORMER RIVER BOTTOM DEPOSIT] 4 32 /\LANGAN.COM\DATA\EP\DATA\E\DATA\5\009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\009225510 Class 33 34 -26.0 35 SS SS 35'-37' Drilled to 40' 9 4 Brown wash 0.0 36 Brown f-c SAND, trace silt (wet) 11 12 37 38 39 Class SS SS 40'-42' 6 Drilled to 45' 6 Brown wash 7 1.8 12+ Reddish brown f-c SAND, trace silt (wet) 6 42 43

B-7A Log of Boring Sheet of 5 Project Project No. Report: Log - LANGAN ...Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 9 (MBPD) Sample Data Building Code PID Reading (ppm) Coring (min) Remarks Elev (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 45 SS 45'-47 SS Drilled to 50' S-14 5 Brown wash 46 0.1 ∞ Reddish brown f-c SAND, trace silt, trace 4 f-c gravel (wet) 6 Class 48 4/14/2014 3:43:24 PM 49 -41.0 50 SS 50'-52' Drilled to 55' Brown wash 0.9 ω BORING LOGS (ALL EXCEPT B16, 19, 20, 21, 22). GPJ Reddish brown f-c SAND, trace fine 6 gravel, trace silt (wet) 6 52 53 54 55 SS 55'-57' 4 Drilled to 60' 5 Brown wash 3.6 Brown f-c SAND, some fine gravel, trace 5 silt (wet) 5 ILANGAN.COMIDATA\EP\DATA5\009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\0099225510_ 58 59 Class 3b 60 SS 60'-62' Stopped work at 3:00 PM on 4/15/13 18 61 0.1 16 Brown fine SAND, trace silt (wet) Resumed work at 7:00 AM 9 on 4/16/13 8 Drilled to 65' 62 Brown wash 63 64 SS 65'-67' Drilled to 70' 5 Brown wash 0.5 66 Brown f-c SAND, trace silt, trace f-c gravel (wet) 6 67 68 69

B-7A Log of Boring Sheet of 5 Project Project No. Report: Log - LANGAN ...Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Elevation and Datum Location New York, NY Approx. el 9 (MBPD) PID Reading (ppm) Sample Data Building Code Coring (min) Remarks Elev (ft) N-Value (Blows/ft) Depth Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 70 SS Drilled to 75' Brown wash 4 0.6 Brown f-c SAND, trace silt (wet) 9 8 72 Class 73 4/14/2014 3:43:24 PM -66.0 0.4 SS 75'-77' 11 Drilled to 80' 18 Brown wash 4 BORING LOGS (ALL EXCEPT B16, 19, 20, 21, 22). GPJ Brown f-c SAND, trace silt (wet) 23 18 78 79 Class 80 SS 80'-82' 11 Drilled to 85' 15 S-21 Brown wash 81 0.2 Brown f-m SAND, trace silt (wet) 19 20 82 JGAN.COMIDATA/EP/DATAS/009225510/ENGINEERING DATA/GEOTECHNICAL/GINTLOGS/009225510 83 84 85 SS 85'-87' 16 Advanced 3" casing to 90' S-22 13 Rig chattering from 87'-90' 86 0.0 Brown f-c SAND, trace silt (wet) Drilled to 90' 10 87 Class 88 89 -81.0 90 Started NX Rock core run C-1 at 90' at 12:45 PM 7:28 91 REC=60"/60" =100% **Gray MICA SCHIST** RQD=54"/60" =90% Light gray wash 4:22 92 Class 7 4:37 1a 93 3:04 94 Finished core run C-1 at 95' 4:10 at 1:10 PM

B-7A Log of Boring Sheet of 5 5 Project Project No. Report: Log - LANGAN ...Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 9 (MBPD) PID Reading (ppm) Sample Data Building Code MATERIAL SYMBOL Remarks Elev (ft) (in) Penetr. resist BL/6in N-Value (Blows/ft) Depth Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 95 Started NX Rock core run C-2 at 95' at 1:26 PM 3:49 96 **Gray MICA SCHIST** REC=60"/60" =100% RQD=54"/60" =90% Light gray wash 3:23 97 Class 3:11 98 3:52 4/14/2014 3:43:25 99 3:36 Finished core run C-2 at 100' -91.0 100 at 1:46 PM Stopped work at 3:00 PM on 4/16/13 End of Boring at 100' at 3:00 PM on VLANGAN, COM/DATA/EP/DATA5/009225510/ENGINEERING DATA/GEOTECHNICAL/GINTLOGS/009225510_BORING LOGS (ALL EXCEPT B16,19,20,21,22),GPJ... 101 4/16/13. Borehole backfilled with cuttings and patched with cement upon completion. 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119

Log of Boring **B-8** Sheet of 5 Project Project No. TEMPLATE.GD1 Proposed 250 South Street Development 009225510 Elevation and Datum Location Approx. el 7 (MBPD) New York, NY Drilling Company Date Started Date Finished 4/18/13 4/23/13 Warren George, Inc. Drilling Equipment Completion Depth Rock Depth DK525 Truck-Mounted Rig 105 ft 85 ft Size and Type of Bit Disturbed Undisturbed Core Number of Samples 2 7/8", 3 7/8", 4 7/8" Tricone Roller Bits 4 Casing Diameter (in) Casing Depth (ft) 24 HR. Completion Water Level (ft.) 3", 4" I.D. Steel Casing 87 Casing Hammer Donut Weight (lbs) Drop (in) Drilling Foreman 30 300 Eddie Cardona Sampler 2" O.D. Split Spoon Inspecting Engineer Weight (lbs) Sampler Hammer Drop (in) 140 30 Safety Karinna Diaz Sample Data Building Code PID Readin (ppm) Coring (min MATERIAL SYMBOL Remarks Depth Penetr. resist BL/6in Recov. Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) (ft) Scale +7.0 10 20 30 40 4-INCH-THICK ASPHALT +6.7 Started drilling at 11:30 AM SS 15 on 4/18/13. Drilled through 4-inch-thick <u>۲</u> 10 0.0 asphalt. Tan f-c SAND, trace fine gravel (moist) 2 SS 4"-2'4" [FILL] 2 2 SS 2'4"-4'4" 9 Drilled to 5' 3 SS Brown wash 10 S-2 0.0 2 17 Rig chattering from 4'-5' Reddish brown f-m SAND, trace silt, trace brick fragments (moist) [FILL] 5 SS 5'-6'5" SS 7 Drilled to 7' S-3 7 0.0 6 Rig chattering from 6'-7' Reddish brown f-c SAND, trace fine 100/5' gravel, trace brick fragments, trace wood 100/5" (moist) [FILL] ∇ SS 7'-9' 13 Advanced 4" casing to 10' 8 SS Drilled to 10' 10 0.0 Reddish brown f-c SAND, trace fine Gray-brown wash 8 gravel, trace brick fragments (wet) [FILL] 5 9 Class SS SS 10'-12' 4 2 S-5 0.0 9 Brown f-c SAND, trace f-c gravel, trace 6 brick fragments (wet) [FILL] 6 12 SS 12'-14' 10 Advanced 4" casing to 15' SS 8 Drilled to 15' 24 13 0.3 Dark gray f-m SAND, trace fine gravel, Gray-brown wash 10 trace wood, trace brick fragments (wet) Rig chattering from 14'-15' 9 [FILL] SS SS 15'-17' 9 Drilled to 20' 6 Dark gray wash S-7 0.0 2 Brown f-c SAND, some fine gravel, trace 2 silt, trace wood (wet) [FILL] 3 17 18

Log of Boring **B-8** Sheet of 5 2 Project Project No. ...Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Elevation and Datum Location New York, NY Approx. el 7 (MBPD) Sample Data Building Code Coring (min) PID Readin (ppm) Remarks Elev (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 20 SS Advanced 4" casing to 25' 9 S-8 Drilled to 25' 2 0.0 21 Dark gray and dark brown f-c SAND, some 9 Gray wash f-c gravel (wet) [FILL] Stopped work at 3:00 PM on 7 4/18/13 22 Resumed work at 7:00 AM on 4/19/13 23 24 Class 25 SS 25'-27' Advanced casing to 30' SS 17 Drilled to 30' 4 0.0 26 Brown f-c SAND, some f-c gravel, trace silt Gray wash 19 (wet) [FILL] 23 27 28 29 /LANGAN.COM/DATA/EP/DATA5/009225510/ENGINEERING DATA/GEOTECHNICAL/GINTLOGS/009225510_BORING LOGS (ALL -23.0 30 SS 30'-32' 10 Drilled to 35' 3 Gray-brown wash 4 31 0.0 Dark gray and brown SILT and f-m SAND, 2 trace fine gravel (wet) [FORMER RIVER BOTTOM DEPOSIT] 3 32 Class 33 34 35 SS SS 35'-37' Drilled to 40' Gray-brown wash 12 36 Brown f-c SAND, trace silt (wet) Water loss 6 Rig chattering from 38'-40' 8 37 Class 38 39 -33.0 SS 40'-42' SS Drilled to 45' 38 Brown wash 0.0 Brown f-c SAND, some f-c gravel, trace silt 16 Rig chattering from 44'-45' (wet) 11 42 Class 43

B-8 Log of Boring Sheet of 5 Project Project No. Report: Log - LANGAN ... Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 7 (MBPD) PID Reading (ppm) Sample Data Building Code Coring (min) MATERIAL SYMBOL Remarks Elev (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Number Recov. (in) Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 45 SS 45'-47 SS 28 Drilled to 50' S-13 16 Brown wash 4 46 0.0 35 Brown Silty f-c SAND, trace f-c gravel 19 (wet) 18 Class 48 4/14/2014 3:43:33 PM 49 -43.0 50 SS 50'-52' 10 Drilled to 55' 13 Brown wash 10 0.0 EXCEPT B16, 19, 20, 21, 22). GPJ Brown Silty f-m SAND (wet) 11 10 52 Class 53 54 -48.0 55 SS 55'-57' 10 LOGS (Drilled to 60' 15 Brown wash 10 56 0.0 29 Brown f-m SAND, some silt (wet) 14 16 Class 58 59 60 SS 60'-62' Drilled to 65' 11 Brown wash 4 61 0.0 Brown Silty fine SAND (wet) 13 14 62 Class 63 64 -58.0 0.0 SS SS 65'-67' 16 Drilled to 70' 18 Brown wash 12 0.0 66 Brown f-c SAND, trace silt, trace f-c gravel 12 (wet) 14 67 Class 68 69

Log of Boring **B-8** Sheet of 5 Project Project No. Report: Log - LANGAN ...Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 7 (MBPD) Sample Data Coring (min) Building Code PID Readin (ppm) Remarks Elev (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Sample Description Recov. (in) (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 70 SS 16 Drilled to 75' S-18 14 Brown wash 10 0.0 34 Brown f-c SAND, trace f-c gravel, trace silt 20 (wet) 14 72 73 ₽ 4/14/2014 3:43:33 74 75 SS 75'-77' 20 Drilled to 80' 15 Brown wash 12 0.0 EXCEPT B16, 19, 20, 21, 22). GPJ Brown f-c SAND, trace fine gravel, trace 16 17 Class 78 79 LOGS (ALL 80 SS 80'-82' 15 Drilled to 85' 25 S-20 Brown wash 8 81 0.3 Brown f-c SAND, trace f-c gravel, trace silt Borehole collapsed at 82' BORING 39 (wet) Redrilled to 85' 70 Brown wash 82 Stopped work at 3:00 PM on COMIDATA/EP/DATA5/009225510/ENGINEERING DATA/GEOTECHNICAL/GINTLOGS/009225510 4/19/13 83 Resumed work at 7:00 AM on 4/22/13 Borehole collapsed at 70' Advanced 3" casing to 80' 84 Drilled to 85' -78.0 SS refusal at 85' 85 50/0' _S-21 SS 0 50/0" Advanced 3" casing to 87' Drilled to 87' 86 Started NX Rock core run C-1 at 87' at 12:40 PM 87 3:45 Light gray wash RQD=31% REC=92% 88 REC=33"/36" =92% NX CORE Gray Weathered MICA SCHIST RQD=11"/36" =31% 5:09 89 6:19 Finished core run C-1 at 90' Class at 1:00 PM 90 Sand clogged in casing 5:22 Stopped work at 3:00 PM on 4/22/13 Gray Weathered MICA SCHIST REC=58"/60" =97% Resumed work at 7:00 AM 5:33 on 4/23/13 92 NX CORE RQD=13"/60" Started NX Rock core run C-2 5:54 C-2 at 90' at 10:05 AM 93 Light gray wash 6:48 94 Finished core run C-2 at 95'

6:27

at 10:45 AM

B-8 Log of Boring Sheet of 5 Project Project No. Report: Log - LANGAN ...Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 7 (MBPD) Sample Data Building Code PID Reading (ppm) Remarks Elev (ft) N-Value (Blows/ft) Depth Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 95 Started NX Rock core run 4:18 C-3 at 95' at 11:00 AM 96 **Gray MICA SCHIST** %28= REC=58"/60" =97% Light gray wash 5:15 97 RQD=52"/60" Class 7:02 98 6:44 99 6:31 Finished core run C-3 at 100' -93.0 100 at 11:50 AM Sand clogged in casing Started NX Rock core run C-4 at 100' at 1:40 PM 5:47 101 **Gray MICA SCHIST** =65% REC=40"/60" =67% 6:32 Light gray wash 102 RQD=39"/60" Class C-4 6:55 103 7:13 104 5:17 Finished core run C-4 at 105' ILANGAN.COMIDATA\EPIDATA\$\009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\009225510_BORING LOGS (ALL -98.0 at 2:25 PM 105 Borehole backfilled with End of Boring at 105' at 3:00 PM on cuttings and patched with 106 cement upon completion. 107 108 109 110 111 112 113 114 115 116 118 119

Log of Boring **B-9** Sheet of 5 Project Project No. TEMPLATE.GD1 Proposed 250 South Street Development 009225510 Elevation and Datum Location Approx. el 10 (MBPD) New York, NY Drilling Company Date Started Date Finished Warren George, Inc. 4/17/13 4/19/13 **Drilling Equipment** Rock Depth Completion Depth AD II Truck-Mounted Rig 96 ft 87 ft Size and Type of Bit Disturbed Undisturbed Core Number of Samples 2 7/8", 3 7/8", 4 7/8" Tricone Roller Bits Casing Depth (ft) 24 HR. Casing Diameter (in) Completion Water Level (ft.) 3", 4" I.D. Steel Casing V 87 10 Casing Hammer Donut Weight (lbs) Drop (in) Drilling Foreman 30 300 Jim Wilson Sampler 2" O.D. Split Spoon Inspecting Engineer Weight (lbs) Sampler Hammer Drop (in) 140 30 Safety Karinna Diaz Sample Data Building Code (min) MATERIAL SYMBOL Remarks Depth Penetr. resist BL/6in Coring (Recov. Sample Description (Drilling Fluid, Depth of Casing, (ft) Scale 믑 Fluid Loss, Drilling Resistance, etc.) +10.0 10 20 30 40 3-INCH-THICK ASPHALT +9.8 Started drilling at 8:00 AM on SS 13 4/17/13. 13 Drilled through 3-inch-thick S-1 0.0 Brown f-c SAND, trace f-c gravel, trace asphalt. brick fragments, trace silt (moist) [FILL] SS 3"-2'3" 5 SS 2'3"-4'3" 5 Advanced 4" casing to 5' SS 3 5 Drilled to 5' S-2 ω 0.0 Brown f-c SAND, trace silt, trace fine Brown wash 14 gravel, trace brick fragments (moist) [FILL] 14 Class 5 SS 5'-7' WOH WOH SS S-3 0.0 Brown f-m SAND, trace f-c gravel, trace WOH brick fragments (moist) [FILL] 2 SS 7'-9' 2 ANGAN.COMIDATA/EP/DATA5/009225510/ENGINEERING DATA/GEOTECHNICAL/GINTLOGS/009225510 Drilled to 10' 3 SS Brown wash 12 8 0.1 Brown f-m SAND, trace silt, trace brick 3 fragments (moist) [FILL] 4 9 0.0 SS 10'-12' SS 2 3 S-5 7 0.2 Brown f-m SAND, trace silt (wet) WOH [FORMER RIVER BOTTOM DEPOSIT] WOH 12 SS 12'-14' 2 Drilled to 15' SS 3 Brown wash 12 13 0.1 Brown f-c SAND, trace fine gravel (wet) 3 [FORMER RIVER BOTTOM DEPOSIT] 3 Class SS SS 15'-17' WOH Drilled to 20' WOH Brown wash S-7 9 0.3 Brown f-c SAND, trace silt, trace fine 2 gravel (wet) [FORMER RIVER BOTTOM wон **DEPOSITI** 17 18

B-9 Log of Boring Sheet of 5 2 Project Project No. Report: Log - LANGAN ...Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 10 (MBPD) Sample Data Building Code Coring (min) PID Reading (ppm) Remarks Elev (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 20 SS Drilled to 25' 2 S-8 Brown wash 0.2 21 6 Brown f-c SAND, trace silt, trace fine 2 gravel (wet) [FORMER RIVER BOTTOM 3 ĎEPOŠIT] 22 23 4/14/2014 3:43:41 PM 24 Class 25 SS 25'-27' 2 Drilled to 30' 2 Brown wash 4 0.4 26 EXCEPT B16, 19,20,21,22).GPJ Brown f-c SAND, trace silt, trace fine 2 gravel (wet) [FORMER RIVER BOTTOM WOH **DEPOSIT** 27 28 29 -20.0 30 SS 30'-32' 4 LOGS (Drilled to 35' Brown wash 10 31 0.6 Brown f-c SAND, trace silt (wet) BORING 6 8 32 Class ILANGAN.COMIDATA/EP/DATAS/009225510/ENGINEERING DATA/GEOTECHNICAL/GINTLOGS/009225510 33 34 35 SS 35'-37' 60 Drilled to 40' 17 10 Brown wash 36 36 Brown f-c SAND, some f-c gravel, trace silt 19 9 37 Class 38 39 -30.0 SS SS 40'-42' 6 Drilled to 45' 6 Brown wash 8.0 Brown f-c SAND, trace f-c gravel, trace silt (wet) 8 42 Class 43

B-9 Log of Boring Sheet of 5 Project Project No. Report: Log - LANGAN ...Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 10 (MBPD) PID Reading (ppm) Sample Data Building Code Coring (min) Remarks Elev (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Number Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 45 SS 45'-47 SS Drilled to 50' S-13 5 Brown wash 46 9 Brown f-c SAND, some f-c gravel, trace silt Borehole collapsed at 43' 6 (wet) Redrilled to 50' 4 Brown wash Class 48 ₽ 49 -40.0 50 SS 50'-52' 14 Drilled to 55' Brown wash 4 0.3 VANGAN COM/DATA\EP\DATAS\009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\009225510_BORING LOGS (ALL EXCEPT B16,19,20,21,22),GPJ Brown Silty f-m SAND, trace fine gravel 8 52 Class 53 54 -45.0 55 SS 55'-57' 42 Drilled to 60' 39 Brown wash 56 ω 0.4 Brown Silty f-m SAND, some f-c gravel, 13 trace clay (wet) 10 58 59 Class SS 60'-60'2" No Recovery 100/2" S-16 SS 0 100/2' Drilled to 65' Brown wash 61 62 63 64 -55.0 SS SS 65'-67' 14 Stopped work at 3:00 PM on 12 4/17/13 4 0.0 66 Brown f-c SAND, trace silt, trace fine Resumed work at 7:00 AM 11 gravel (wet) on 4/18/13 13 Drilled to 70' 67 Class Brown wash 68 69

Log of Boring **B-9** Sheet of 5 Project Project No. Report: Log - LANGAN ...Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Elevation and Datum Location New York, NY Approx. el 10 (MBPD) Sample Data Coring (min) Building Code PID Readin (ppm) Remarks Elev (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Recov. (in) Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 70 SS 15 Drilled to 75' S-18 12 Brown wash 0.0 26 Brown f-c SAND, trace f-c gravel, trace silt 14 (wet) 10 72 73 ₽ 74 Class 75 SS 75'-77' Drilled to 80' 11 Brown wash 12 0.0 .GPJ Brown f-c SAND, trace silt (wet) 15 EXCEPT B16, 19, 20, 21, 22). 13 78 79 -70.0 80 SS 80'-82' 14 JOAN, COM/DATA/EP/DATAS/009225510/ENGINEERING DATA/GEOTECHNICAL/GINTLOGS/009225510 BORING LOGS Drilled to 85' S-20 22 Brown wash 16 81 0.0 Brown Silty fine SAND, some clay (wet) 31 Class 29 82 83 84 Class 3a 85 SS 85'-85'11" 18 ω Drilled to 87 0.0 Brown f-c SAND, trace silt, trace f-c gravel 100/5" Roller bit refusal at 87' 100/5" 86 (wet) Advanced casing to 87' -77 (87 Started NX Rock core run 5:55 C-1 at 87' at 1:35 PM REC=43"/48" =90% **%6**/= 88 **Gray MICA SCHIST** Light gray wash 5:05 NX CORE RQD=38"/48" Class 5 1b 5:31 90 8:01 Finished core run C-1 at 91' at 2:00 PM Rig pump broke at 2:30 PM 5:45 =85% REC=56"/60" =93% on 4/18/13 92 **Gray MICA SCHIST** Stopped work at 3:00 PM on 4:30 RQD=51"/60" Class Replaced pump at 7:00 AM 93 on 4/19/13 Resumed work at 8:30 AM on 4/19/13 Started NX Rock core run 4:46 C-2 at 91' at 9:11 AM

B-9 Log of Boring Sheet 5 of 5 Project Project No. NLANGAN. COMIDATA/EPIDATAS/009225510/ENGINERRING DATA/GEOTECHNICAL/GINTLOGS/009225510_BORING LOGS (ALL EXCEPT B16, 19,20,21,22). GPJ ... 4/14/2014 3:43:42 PM ... Report: Log - LANGAN ... Template TEMPLATE. GDT Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 10 (MBPD) PID Reading (ppm) Sample Data Building Code MATERIAL SYMBOL Remarks Elev. (ft) Depth N-Value (Blows/ft) Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 95 Light gray wash Class C-2 6:23 Finished core run C-2 at 1a -86.0 96 9:40 AM End of Boring at 96' at 10:30 AM on 97 Borehole backfilled with cuttings and patched with cement upon completion. 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 118 119

Log of Boring B-10 Sheet of 5 Project Project No. TEMPLATE.GD1 009225510 Proposed 250 South Street Development Elevation and Datum Location Approx. el 10 (MBPD) New York, NY Drilling Company Date Started Date Finished Warren George, Inc. 4/11/13 4/16/13 Rock Depth Drilling Equipment Completion Depth DK-525 Truck-Mounted Rig 98 ft 88 ft Size and Type of Bit Disturbed Undisturbed Core Number of Samples 2 7/8", 3 7/8", 4 7/8" Tricone Roller Bits Casing Diameter (in) Casing Depth (ft) 24 HR. Completion Water Level (ft.) 3", 4" I.D. Steel Casing 88 7 Casing Hammer Donut Weight (lbs) Drop (in) Drilling Foreman 30 300 Eddie Cardona Sampler 2" O.D. Split Spoon Inspecting Engineer Weight (lbs) Sampler Hammer Drop (in) 140 30 Safety Karinna Diaz Sample Data Building Code PID Readin (ppm) Coring (min MATERIAL SYMBOL Remarks Elev Depth Penetr. resist BL/6in Recov. Sample Description (Drilling Fluid, Depth of Casing, (ft) Scale Fluid Loss, Drilling Resistance, etc.) +10.0 10 20 30 40 2-INCH-THICK ASPHALT +9.8 SS Started drilling at 12:30 PM 16 on 4/11/13. 12 Drilled through 2-inch-thick S-1 7 0.0 Brown f-c SAND, trace silt, trace brick asphalt. fragments (moist) [FILL] SS 2"-2'2" 6 2 SS 2'2"-4'2" SS 4 Advanced 4" casing to 5' 5 3 S-2 Drilled to 5' 0.5 Brown f-c SAND, some brick fragments, 7 Brown wash trace fine gravel, trace silt (moist) [FILL] 19 SS 5'-5'9" S-3 SS 38 9 Drilled to 7' 0.1 100/3" Reddish brown and gray f-c SAND, trace 100/3 Brown wash 6 f-c gravel, trace brick fragments, trace silt (moist) [FILL] ∇ SS 7'-9' Advanced 4" casing to 10' 3 SS Drilled to 10' 0.3 Reddish brown f-m SAND, trace silt, trace Brown wash 5 brick fragments (wet) [FILL] 5 9 Class 10 SS 10'-12' SS 3 Drilled to 12' 4 S-5 16 Brown wash 0.2 Brown f-c SAND, trace silt, trace brick 5 fragments (wet) [FILL] 7 12 SS SS 12'-14' 21 Drilled to 15' 12 Brown wash 24 13 0.3 Brown f-c SAND, trace silt, trace brick 12 fragments (wet) [FILL] 13 SS SS 15'-17' 11 Drilled to 20' 12 Brown wash S-7 17 0.0 23 Brown f-c SAND, trace silt, trace fine 11 gravel (wet) [FILL] 10 17 18 19

B-10 Log of Boring Sheet of 5 2 Project Project No. LANGAN ...Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Elevation and Datum Location New York, NY Approx. el 10 (MBPD) PID Reading (ppm) Sample Data Building Code Coring (min) Remarks Elev (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Number Recov. (in) Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 20 SS 12 Drilled to 25' 12 S-8 Brown wash 10 0.0 21 Brown f-c SAND, trace silt (wet) [FILL] 10 11 22 Class 23 ₽ 24 -15.0 25 SS 25'-27' 5 Stopped work at 3:00 PM on SS 3 8-9 4/11/13 19 0.0 26 EXCEPT B16,19,20,21,22).GPJ Brown f-c SAND, trace fine gravel, trace 6 Resumed work at 7:00 AM silt (wet) [FORMER RIVER BOTTOM on 4/15/13 5 DEPOSIT] Drilled to 30' 27 Brown wash 28 29 LOGS (ALL Class 30 SS 30'-32' 5 Drilled to 35' Brown wash 16 31 0.0 Brown f-c SAND, trace fine gravel, trace BORING silt (wet) [FORMER RIVER BOTTOM DEPOSIT] 5 32 /\LANGAN.COM\DATA\EP\DATA5\009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\009225510_ 33 34 35 SS SS 35'-37' 10 Drilled to 40' 3 16 Brown wash 0.0 36 Dark gray Silty f-m SAND (wet) 14 37 Class 3b 38 39 -30.0 SS 40'-42' SS 13 Drilled to 45' 16 Brown wash 8 0.2 Light brown f-m SAND, trace silt (wet) 17 20 42 Class 43

Log of Boring B-10 Sheet of 5 Project Project No. Report: Log - LANGAN ... Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 10 (MBPD) PID Reading (ppm) Sample Data Building Code Coring (min) Remarks Elev (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Recov. (in) Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 45 SS 45'-47' SS Drilled to 50' 9 Brown wash 10 46 0.1 Light brown f-c SAND, trace silt (wet) 10 10 48 4/14/2014 3:44:28 PM 49 50 SS 50'-52' 10 Drilled to 55' 13 Brown wash 10 0.2 NLANGAN.COMIDATA\EPIDATA5\\009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\009225510_BORING LOGS (ALL EXCEPT B16, 19,20,21,22),GPJ. Reddish brown f-c SAND, trace silt (wet) 14 11 52 53 54 55 SS 55'-57' 10 Drilled to 60' 6 Brown wash 0.4 Brown f-c SAND, trace silt (wet) 9 8 Class 58 59 60 SS 60'-62' Drilled to 65' 6 Brown wash 61 ω 0.3 Brown f-c SAND, trace silt (wet) 9 62 63 64 SS 65'-67' Drilled to 70' Brown wash 9 0.3 66 Brown f-c SAND, trace silt (wet) 8 67 68

69

B-10 Log of Boring Sheet of 5 Project Project No. Report: Log - LANGAN ...Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Elevation and Datum Location New York, NY Approx. el 10 (MBPD) Sample Data Building Code PID Readin (ppm) Remarks Elev (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 70 SS 10 Drilled to 75' S-18 11 Brown wash 0.6 9 Brown f-c SAND, trace silt (wet) 13 15 72 73 ₽ Class 75 SS 75'-77' 10 Drilled to 80' 6 Brown wash 0 EXCEPT B16,19,20,21,22).GPJ No Recovery 8 9 78 79 -70.0 80 SS 80'-82' 19 Drilled to 85' S-20 12 Brown wash 9 24 81 0.2 Grayish brown Silty f-m SAND, some f-c 12 gravel (wet) 12 82 Class 83 84 -75.0 85 SS 85'-85'11" 17 6 Advanced 3" casing to 50' 0.0 Grayish brown Silty f-m SAND, some clay 100/5" Drilled to 86' 100/5" 86 (wet) Rig pump broke at 12:30 PM Class on 4/15/13 Stopped work at 1:00 PM at 87 86' on 4/15/13 Resumed work at 7:00 AM -78.0 88 on 4/16/13 Advanced 3" casing to 88' 3:09 Drilled to 88' 89 **Gray MICA SCHIST** Started NX Rock core run REC=58"/60" =97% RQD=45"/60" =75% 4:19 C-1 at 88' at 10:30 AM 90 NX CORE Light gray wash 7 4:32 91 Class 5:15 92 4:24 Finished core run C-1 at 93' at 10:52 AM 93 **Gray MICA SCHIST** Started NX Rock core run 2:52 NX CORE C-2 at 93' at 11:20 AM C-2 94 4:29 Light gray wash

B-10 Log of Boring Sheet 5 of 5 Project Project No. Report: Log - LANGAN ... Template TEMPLATE. GDT Proposed 250 South Street Development 009225510 Location Elevation and Datum Approx. el 10 (MBPD) New York, NY PID Reading (ppm) Sample Data Building Code Remarks Elev (ft) Depth N-Value (Blows/ft) Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 95 REC=60"/60" =100% 4:25 Finished core run C-2 at 98' 96 at 11:42 AM RQD=41"/60" NX CORE Class C-2 4:02 Borehole backfilled with cuttings and patched with 97 cement upon completion. 4:18 -88.0 98 NLANGAN.COMIDATA/EPIDATAS/009225510/ENGINEERING DATA/GEOTECHNICAL/GINTLOGS/009225510_BORING LOGS (ALL EXCEPT B16, 19,20,21,22).GPJ ... 4/14/2014 3:44:29 PM End of Boring at 98' at 12:30 PM on 99 4/16/13. 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 118 119

Log of Boring B-11 Sheet of 5 Project Project No. TEMPLATE.GD1 009225510 Proposed 250 South Street Development Elevation and Datum Location Approx. el 12 (MBPD) New York, NY Drilling Company Date Started Date Finished 4/24/13 Warren George, Inc. 4/26/13 Drilling Equipment Completion Depth Rock Depth D-50 and Acker Soil Max Truck-Mounted Rigs 106 ft 95 ft Size and Type of Bit Disturbed Undisturbed Core Number of Samples 2 7/8", 3 7/8", 4 7/8" Tricone Roller Bits Casing Diameter (in) 24 HR. Casing Depth (ft) Completion Water Level (ft.) 3", 4" I.D. Steel Casing 96 10 Casing Hammer Donut Weight (lbs) Drop (in) Drilling Foreman 30 300 Eddie Cardona Sampler 2" O.D. Split Spoon Inspecting Engineer Weight (lbs) Sampler Hammer Drop (in) 140 30 Safety Karinna Diaz Sample Data Building Code PID Readin MATERIAL SYMBOL Remarks Depth Penetr. resist BL/6in Recov. Sample Description (Drilling Fluid, Depth of Casing, (ft) Scale Fluid Loss, Drilling Resistance, etc.) +12.0 10 20 30 40 3-INCH-THICK ASPHALT Started drilling at 8:00 AM on SS 4/24/13. Drilled through 3-inch-thick S-1 0.0 Brown f-c SAND, trace f-c gravel, trace silt, asphalt. 3 trace brick fragments (moist) [FILL] SS 3"-2'3" 4 SS 2'3"-4'3" 5 Drilled to 5' SS 3 15 Brown wash 9 0.0 Light brown f-c GRAVEL, some f-c sand, trace 8 silt, trace brick fragments (moist) [FILL] 11 5 SS SS 5'-6'4" 12 Drilled to 7' S-3 0.0 2 Brown f-c GRAVEL, some f-c sand, trace brick 13 Rig chattering from 6'-7' fragments (moist) [FILL] 100/4 100/4" SS 7'-9' Advanced 4" casing to 10' 27 SS Drilled to 10' 0.0 Brown f-c SAND, trace f-c gravel, trace brick Rig chattering from 8'-10' 24 fragments (moist) [FILL] Reddish brown wash 14 9 ∇ Class 10 SS SS 10'-12' 3 3 S-5 4 Brown f-c SAND, trace fine gravel, trace brick 2 fragments (wet) [FILL] 3 12 SS SS 12'-14' 4 Advanced 4" casing to 15' 3 Drilled to 15' 13 ω 0.0 Brown f-c SAND, some fine gravel, trace Brown wash fragments (wet) [FILL] 2 15 SS 15'-17' SS 5 Drilled to 20' 4 Brown wash S-7 10 0.0 16 Brown f-c SAND, trace fine gravel (wet) 3 [FILL] 2 17 18 19



B-11 Log of Boring Sheet of 5 Project Project No. LANGAN ...Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 12 (MBPD) PID Reading (ppm) Sample Data Building Code Remarks Elev (ft) N-Value (Blows/ft) Depth Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 20 SS Drilled to 25' 4 S-8 Brown wash 21 ∞ Brownish gray f-c SAND, trace fine gravel (wet) 3 Class 3 22 23 24 25 SS 25'-27' Drilled to 30' SS Class Brown wash 20 0.0 26 Grayish brown Sandy CLAY, trace wood (wet) [FORMER RIVER BOTTOM DEPOSIT] 6 27 28 -16.5 29 ALANGAN.COMIDATA\EPIDATA\$\009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\009225510_BORING LOGS (ALL 30 SS 30'-32' Drilled to 35' 8 Brown wash 9 31 0.0 Brown f-m SAND, some f-c gravel (wet) 7 32 33 34 35 SS 35'-37' Drilled to 40' 6 Brown wash 12 36 13 Brown f-c SAND, trace silt (wet) Class 6 37 38 39 SS SS 40'-42' Drilled to 45' 8 Brown wash 24 0.0 Brown f-c SAND, some fine gravel (wet) 12 42 43

Log of Boring **B-11** Sheet of 5 Project Project No. Report: Log - LANGAN ... Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 12 (MBPD) PID Reading (ppm) Sample Data Building Code Remarks Elev. (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Recov. (in) Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 45 SS 45'-47' SS Drilled to 50' 8 Brown wash 12 46 0.0 Brown f-c SAND, trace silt (wet) 6 8 48 4/14/2014 3:44:37 PM 49 50 SS 50'-52' 14 Drilled to 55' 12 Brown wash 0.0 NLANGAN.COMIDATA\EPIDATA5\\009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\009225510_BORING LOGS (ALL EXCEPT B16, 19,20,21,22),GPJ. Brown f-c SAND, trace silt (wet) 13 10 52 53 54 55 SS 55'-57' Drilled to 60' 8 Brown wash 0.0 Brown f-c SAND, trace silt (wet) 11 10 Class 58 59 60 SS 60'-62' 17 Drilled to 65' 11 Brown wash 61 0.0 Brown f-m SAND (wet) 10 11 62 63 64 SS 65'-67' 13 Drilled to 70' 13 Brown wash 0.0 66 Brown f-c SAND, trace silt (wet) 13 13 67 68 69

B-11 Log of Boring Sheet of 5 Project Project No. Report: Log - LANGAN ...Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Elevation and Datum Location New York, NY Approx. el 12 (MBPD) PID Reading (ppm) Sample Data Building Code Remarks Elev (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Number Recov. (in) Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 70 SS 70'-72' 18 Stopped work at 3:00 PM on S-18 16 4/24/13 ∞ 30 Brown f-m SAND, trace coarse sand, trace silt Removed D-50 Rig from site 14 (wet) for service on 4/24/13 15 Returned to site with Acker 72 Soil Max Rig on 4/25/13 at 9:00 AM 73 Resumed work at 9:30 AM ₽ on 4/25/13 4/14/2014 3:44:37 Drilled to 75' Brown wash 75 SS 75'-77' Drilled to 80' 11 Brown wash 24 EXCEPT B16, 19, 20, 21, 22). GPJ Brown f-c SAND, trace silt (wet) 18 16 Class 78 79 LOGS (ALL 80 SS 80'-82' Drilled to 85' S-20 13 Brown wash 13 81 29 0.0 BORING Brown f-c SAND (wet) 16 17 82 /\LANGAN.COM\DATA\EP\DATA\E\DATA\5\009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\009225510 83 84 85 SS 85'-87' 44 Drilled to 90' 25 Brown wash S-21 20 86 0.0 Light brown f-c SAND, some f-c gravel, trace Water loss 24 silt (wet) 29 87 88 89 Class 90 SS 90'-92' SS 19 Drilled to 95' 31 Brown gray wash 4 0.0 91 Brown f-c SAND, trace silt (wet) 47 Water loss 55 92 93 94

B-11 Log of Boring Sheet of 5 Project Project No. ...Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 12 (MBPD) PID Reading (ppm) Sample Data Building Code Remarks Elev (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 95 SS 95'-95'5" 0.0 Gray ROCK FRAGMENTS, some fine sand 3 100/5' Class 100/5' Stopped work at 3:00 PM on (wet) 1d 4/25/13 96 Resumed work at 7:00 AM on 4/26/13 Advanced 3" casing to 96' 97 **Gray MICA SCHIST** REC=57"/60" =95% Drilled to 96' Started NX Rock core run 98 C-1 at 96' at 8:50 AM NX CORE RQD=36"/60" 5 Light gray wash 99 100 Finished core run C-1 at 101' Class at 9:25 AM Started NX Rock core run C-2 at 101' at 9:50 AM 102 REC=60"/60" =100% **Gray MICA SCHIST** =82% Light gray wash 103 NX CORE RQD=49"/60" C-2 104 105 Finished core run C-2 at 106' -94.0 at 10:30 AM 106 End of Boring at 106' at 11:30 AM on VILANGAN.COM/DATA\EP\DATAS1009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\009225510_BORING 4/26/2013 Borehole backfilled with 107 cuttings and patched with cement upon completion. 108 109 110 111 112 113 114 115 116 117 118 119

Log of Boring **B-12** Sheet of 5 Project Project No. TEMPLATE.GD1 Proposed 250 South Street Development 009225510 Elevation and Datum Location Approx. el 12 (MBPD) New York, NY Drilling Company Date Started Date Finished 4/26/13 Warren George, Inc. 5/1/13 Drilling Equipment Completion Depth Rock Depth Acker Soil Max Truck-Mounted Rig 106 ft 96 ft Size and Type of Bit Disturbed Undisturbed Core Number of Samples 2 7/8", 3 7/8", 4 7/8" Tricone Roller Bits 24 HR. Casing Diameter (in) Casing Depth (ft) Completion Water Level (ft.) 3", 4" I.D. Steel Casing 96 12 Casing Hammer Donut Weight (lbs) Drop (in) Drilling Foreman 30 300 Eddie Cardona Sampler 2" O.D. Split Spoon Inspecting Engineer Weight (lbs) Sampler Hammer Drop (in) 140 30 Safety Karinna Diaz Sample Data Building Code PID Reading MATERIAL SYMBOL Remarks Depth Penetr. resist BL/6in Recov. Sample Description (Drilling Fluid, Depth of Casing, (ft) Scale Fluid Loss, Drilling Resistance, etc.) +12.0 10 20 30 40 3-INCH-THICK-ASPHALT SS Started drilling at 12:00 PM 20 on 4/26/13. 12 0.0 Drilled through 3-inch-thick S-1 Grayish brown f-c SAND, trace fine gravel, asphalt. trace silt, trace brick fragments (moist) [FILL] SS 3"-2'3" 2 5 SS 2'3"-4'3" 17 Advanced 4" casing to 5' SS 0.0 3 14 Drilled to 5' Light brown f-m SAND, trace f-c gravel, trace S-2 13 Brown wash silt, trace brick fragments (moist) [FILL] 10 7 5 SS 5'-7' 3 S-3 4 0.0 Light brown f-m SAND, trace fine gravel, trace 2 coarse sand, trace brick fragments (moist) 3 [FILL] SS 7'-9' Advanced 4" casing to 10' 5 SS Drilled to 10' 0.0 Brown f-m SAND, some f-c gravel, trace brick Brown wash fragments (moist) [FILL] 3 Class 9 10 SS SS 10'-12' 5 5 S-5 13 0.0 Brown f-m SAND, trace coarse sand (moist) [FILL] 5 ∇ SS SS 12 SS 12'-14' 8 Advanced 4" casing to 15' 8 Drilled to 15' 13 20 0.0 Brown f-c SAND, trace fine gravel, trace silt Brown wash (wet) [FILL] 5 15 SS 15'-17' SS 3 Drilled to 20' 4 Brown wash S-7 0.0 16 Brown f-m SAND, trace coarse sand, trace silt Difficult drilling at 18' (wet) [FILL] 4 17 -6.0 18 Class 19

B-12 Log of Boring Sheet 2 of 5 Project Project No. LANGAN ...Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Elevation and Datum Location New York, NY Approx. el 12 (MBPD) PID Reading (ppm) Sample Data Building Code MATERIAL SYMBOL Remarks Elev (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Number Recov. (in) Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 20 SS 20'-22' SS 24 Drilled to 25' 28 Gray brown wash Easy drilling at 24' S-8 10 0.0 21 Dark brown WOOD (wet) 25 19 Class 22 23 -12.0 24 25 SS 25'-27' Advanced 4" casing to 30' 13 Stopped work at 3:00 PM on 12 0.0 26 BORING LOGS (ALL EXCEPT B16, 19,20,21,22).GPJ Grayish brown f-c SAND, trace fine gravel, 9 trace silt (wet) No work on 4/29/13 due to 7 27 rain Resumed work at 7:00 AM on 4/30/13 28 Drilled to 30' Brown wash 29 30 SS 30'-32' 13 Drilled to 35' Brown wash 12 31 16 0.1 Brown f-c SAND, trace silt (wet) 9 6 Class 32 /\LANGAN.COM\DATA\EP\DATA\E\DATA\5\009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\009225510 33 34 35 SS 35'-37' Drilled to 40' 5 Brown wash 10 36 0.2 Brown f-m SAND, trace silt (wet) 5 5 37 38 39 -28.0 SS SS 40'-42' 3 Drilled to 45' 3 Brown wash 0.9 Brown f-c SAND, trace silt (wet) 5 3 42 Class 43

B-12 Log of Boring Sheet of 5 Project Project No. Report: Log - LANGAN ... Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 12 (MBPD) PID Reading (ppm) Sample Data Building Code Remarks Elev. (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 45 SS 45'-47' Drilled to 50' Brown wash 46 0.3 4 Brown f-c SAND, trace fine gravel (wet) 6 13 48 4/14/2014 3:44:46 PM 49 50 SS 50'-52' Drilled to 55' 5 Brown wash 22 0.1 NLANGAN.COMIDATA\EPIDATA5\\009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\009225510_BORING LOGS (ALL EXCEPT B16, 19,20,21,22),GPJ. Brown f-c SAND, trace fine gravel (wet) 6 52 53 54 55 SS 55'-57' Drilled to 60' 9 Brown wash 9 23 0.0 Brown f-m SAND, trace fine gravel (wet) 14 9 Class 58 59 60 SS SS 60'-62' Drilled to 65' 9 Brown wash 22 61 0.0 Brown f-c SAND (wet) 11 10 62 63 64 SS SS 65'-67' 10 Drilled to 70' 12 Brown wash 16 0.3 66 Brown f-c SAND, trace silt (wet) 14 11 67 68 69

B-12 Log of Boring Sheet of 5 Project Project No. Report: Log - LANGAN ...Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Elevation and Datum Location New York, NY Approx. el 12 (MBPD) PID Reading (ppm) Sample Data Building Code Remarks Elev (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Recov. (in) Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 70 13 Drilled to 75' S-18 24 Brown wash 10 0.0 Brown f-c SAND, trace f-c gravel, trace silt 25 (wet) 34 72 73 ₽ SS 75'-77' 12 Drilled to 80' Brown wash 22 ANGAN COMIDATA (EPIDATAS 1009225510) ENGINE DATA (GEOTECHNICAL) GINTLOGS (009225510_BORING LOGS (ALL EXCEPT B16, 19, 20, 21, 22), GPJ Brown f-m SAND, trace silt (wet) 24 31 78 79 80 SS 80'-82' 11 Drilled to 85' S-20 16 Brown wash 81 0.0 Brown f-m SAND, trace silt, trace clay (wet) 15 14 82 Class 83 84 85 SS 85'-87' 19 Drilled to 90' 19 S-21 Brown wash 86 0.0 Brown f-c SAND, trace silt (wet) 20 18 87 88 89 90 SS 90'-91'9" 25 Drilled to 95' S-22 46 Brown gray wash Advanced 3" casing to 96' ω 0.0 91 Grayish brown f-m SAND, trace f-c gravel, 16 trace clay (wet) Drilled to 96' 50/3" 92 Roller bit refusal Stopped work at 3:00 PM on 4/30/13 93 Resumed work at 7:00 AM on 5/1/13 94

B-12 Log of Boring Sheet of 5 Project Project No. Report: Log - LANGAN ...Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 12 (MBPD) PID Reading (ppm) Sample Data Building Code Remarks Elev (ft) N-Value (Blows/ft) Depth Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 95 Class 3a 96 Started NX Rock core run C-1 at 96' at 8:00 AM 97 **Gray MICA SCHIST** =27% REC=52"/60" =87% Light gray wash 98 NX CORE RQD=46"/60" Class 1b 5 99 100 Finished core run C-1 at 101' -89.0 at 8:40 AM Started NX Rock core run C-2 at 101' at 9:00 AM 102 **Gray MICA SCHIST** REC=57"/60" =95% Light gray wash 103 RQD=57"/60" Class C-2 104 105 Finished core run C-2 at 106' -94.0 at 9:30 AM 106 VILANGAN.COM/DATA\EP\DATAS1009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\009225510_BORING Borehole backfilled with End of Boring at 106' at 10:00 AM on 5/1/13. 107 cuttings and patched with cement upon completion. 108 109 110 111 - 112 113 114 115 116 117 118 119

Log of Boring B-13 Sheet of 5 Project Project No. TEMPLATE.GD1 009225510 Proposed 250 South Street Development Elevation and Datum Location Approx. el 12 (MBPD) New York, NY Drilling Company Date Started Date Finished 4/26/13 4/30/13 Warren George, Inc. Drilling Equipment Completion Depth Rock Depth AD II Truck-Mounted Rig 105 ft 95 ft Size and Type of Bit Disturbed Undisturbed Core Number of Samples 2 7/8", 3 7/8", 4 7/8" Tricone Roller Bits 3 Casing Diameter (in) Casing Depth (ft) 24 HR. Completion Water Level (ft.) 3", 4" I.D. Steel Casing 95 10 Casing Hammer Donut Weight (lbs) Drop (in) Drilling Foreman 30 300 Jim Wilson Sampler 2" O.D. Split Spoon Inspecting Engineer Weight (lbs) Sampler Hammer Drop (in) 140 30 Safety Karinna Diaz Sample Data Building Code PID Readin MATERIAL SYMBOL Remarks Depth Penetr. resist BL/6in Recov. (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Sample Description (ft) Scale +12.0 10 20 30 40 5-INCH-THICK ASPHALT Started drilling at 8:00 AM Drilled through 5-inch-thick asphalt to 1'. SS 55 SS 1'-3' 31 Odor detected 16 S-1 25.6 Brown fine SAND, trace clay, trace silt, trace 25 fine gravel (moist) [FILL] 29 3 SS 3'-3'9" S-2 25 SS Advanced 4" casing to 5' 0.0 50/3" Dark brown f-m SAND, some f-c gravel, trace Drilled to 5' silt, trace brick fragments (moist) [FILL] Brown wash 5 SS 5'-7' 11 SS 13 S-3 2 0.0 Brown f-m SAND, trace f-c gravel, trace brick 9 fragments (moist) [FILL] 14 SS 7'-9' 6 Drilled to 10' 6 SS Brown wash 10 1.7 Brown f-c SAND, trace clay, trace brick 8 fragments (moist) [FILL] 7 9 ∇ 10 Class SS SS 10'-12' 6 4 S-5 ω Brown f-m SAND, trace fine gravel, trace brick fragments (wet) [FILL] 3 SS 12'-12'9" S-6 |s|Advanced 4" casing to 15' 0.2 50/3" Reddish brown f-m SAND and BRICK Drilled to 15' 13 FRAGMENTS (wet) [FILL] Brown wash 14 SS 15'-17' SS Advanced 4" casing to 20' 9 Drilled to 20' S-7 0.0 16 2 Grayish brown f-c SAND, trace fine gravel, Brown wash with wood 6 trace mica flakes, trace brick fragments (wet) fragments 4 [FILL] 17 18 19

B-13 Log of Boring Sheet of 5 Project Project No. ..Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 12 (MBPD) PID Reading (ppm) Sample Data Building Code Remarks Elev (ft) N-Value (Blows/ft) Depth Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 20 Advanced 4" casing to 25' 2 SS S-8 Drilled to 25' 0.0 21 4 Brown f-c SAND, trace silt, trace brick 17 Gray brown wash Class fragments, trace wood (wet) [FILL] 26 22 23 24 25 SS 25'-27' 10 Advanced 4" casing to 30' SS 5 Drilled to 30' Class 26 9 Gray Sandy CLAY, trace wood (wet) [FORMER 3 Water loss RIVER BOTTOM DEPOSIT] 8 27 28 -16.5 29 30 SS 30'-32' 4 Advanced 4" casing to 35' Stopped work at 3:00 PM on 31 0.0 Gray f-c SAND, some fine gravel, trace silt 4/26/13 (wet) [FORMER RIVER BOTTOM DEPOSIT] Class Resumed work at 7:00 AM 5 on 4/29/13 32 Drilled to 35' ILANGAN.COMIDATA/EP/DATAS/009225510/ENGINEERING DATA/GEOTECHNICAL/GINTLOGS/009225510 Gray brown wash 33 34 35 SS 35'-37' Advanced 4" casing to 40' 31 Drilled to 40' 36 Brown f-m SAND, trace coarse sand, trace fine 15 Brown wash gravel, trace silt (wet) 10 37 Class 38 39 -28.0 SS 40'-42' SS 9 Drilled to 45' Brown wash 9 0.0 Brown f-c SAND, trace fine gravel, trace silt 12 (wet) 13 42 Class 43

B-13 Log of Boring Sheet of 5 Project Project No. Report: Log - LANGAN ...Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 12 (MBPD) PID Reading (ppm) Sample Data Building Code Remarks Elev (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Recov. (in) Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 45 SS 45'-47' SS 17 Drilled to 50' S-13 13 Brown wash 46 0.1 3 Brown f-c SAND, trace f-c gravel (wet) 18 17 Class 48 ₽ 49 -38.0 50 SS 50'-52' 18 Drilled to 55' Brown wash 1.1 Brown Gravelly f-c SAND (wet) 12 7 52 Class 53 54 -43.0 55 SS 55'-57' 12 LOGS (Drilled to 60' 6 Brown wash 0.1 Brown f-c SAND, trace fine gravel, trace mica 6 flakes (wet) 7 /\LANGAN.COM\DATA\EP\DATA\E\DATA\5\009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\009225510 58 59 60 SS 60'-62' 13 Drilled to 65' 13 Brown wash 13 61 0.0 Brown f-c SAND (wet) 10 62 Class 63 64 SS SS 65'-67' 33 Drilled to 70' 15 Brown wash 7 0.0 66 25 Light brown f-c SAND, trace f-c gravel (wet) 10 8 67 68 69

B-13 Log of Boring Sheet of 5 Project Project No. Report: Log - LANGAN ...Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 12 (MBPD) PID Reading (ppm) Sample Data Building Code Remarks Elev (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Sample Description Recov. (in) (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 70 SS Drilled to 75' 11 Brown wash 12 0.0 Brown f-c SAND (wet) 10 10 72 73 ₽ 4/14/2014 3:44:56 75 SS 75'-77' Drilled to 80' 10 Class Brown wash 22 EXCEPT B16, 19, 20, 21, 22). GPJ Brown f-m SAND, trace silt (wet) 11 11 78 79 LOGS (ALL 80 SS 80'-82' 12 Drilled to 82' S-20 14 Bit refusal at 82' 81 28 0.0 Brown f-c SAND, trace silt (wet) BORING Brown wash 14 Advanced 3" casing to 82' 37 -70.0 82 Started NX Rock core run /\LANGAN.COM\DATA\EP\DATA\E\DATA\5\009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\009225510 C-1 at 82' at 8:30 AM REC=8"/12" =67% **Gray COBBLE** 83 RQD=N/A Brown wash Finished core run C-1 at 83' 84 at 8:35 AM Drilled to 85' 50/0" 50/0" _S-21 SS 0 SS refusal at 85' No Recovery Drilled to 90' Brown wash 86 87 88 Class 89 SS 90'-92' SS Advanced 3" casing to 95' 12 Drilled to 95' 16 0.0 91 Grayish brown f-m SAND, trace fine gravel, 48 Bit refusal at 95' trace clay (wet) 16 92 93 94

B-13 Log of Boring Sheet of 5 Project Project No. Report: Log - LANGAN ...Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 12 (MBPD) PID Reading (ppm) Sample Data Building Code Remarks Elev (ft) N-Value (Blows/ft) Depth Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 95 Started NX Rock core run C-2 at 95' at 10:40 AM 96 **Gray MICA SCHIST** RQD=33"/60" =55% Light gray wash REC=39"/60" =65% 97 98 99 Finished core run C-2 at 100' Class 100 at 11:15 AM Started NX Rock core run C-3 at 100' at 12:50 PM **Gray MICA SCHIST** =65% REC=53"/60" =88% Light gray wash 102 RQD=39"/60" 6-3 103 104 Finished core run C-3 at 105' ILANGAN.COMIDATA\EPIDATA\$\009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\009225510_BORING LOGS (ALL -93.0 at 1:30 PM 105 Borehole backfilled with End of Boring at 105' at 3:00 PM on 4/30/13 cuttings and patched with 106 cement upon completion. 107 108 109 110 111 112 113 114 115 116 117 118 119

Log of Boring **B-14** Sheet of 1 Project Project No. TEMPLATE.GDT Proposed 250 South Street Development 009225510 Elevation and Datum Location Approx. el 12 (MBPD) New York, NY Drilling Company Date Started Date Finished 5/1/13 Warren George, Inc 5/1/13 Drilling Equipment Rock Depth Completion Depth AD II Truck-Mounted Rig 6 ft Size and Type of Bit Disturbed Undisturbed Core Number of Samples 2 7/8", 3 7/8", 4 7/8" Tricone Roller Bits 24 HR. Casing Diameter (in) Casing Depth (ft) Completion Water Level (ft.) 3", 4" I.D. Steel Casing V 5 Casing Hammer Donut Weight (lbs) Drop (in) Drilling Foreman 30 300 Jim Wilson Sampler 2" O.D. Split Spoon Inspecting Engineer Weight (lbs) Sampler Hammer Drop (in) 140 30 Safety Karinna Diaz Sample Data PID Reading MATERIAL SYMBOL Remarks Elev Depth N-Value Recov. (in) Penetr. resist BL/6in (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Sample Description (ft) Scale +12.0 10 20 30 40 5-INCH-THICK ASPHALT Started drilling at 8:00 AM SS 18 Drilled through 5-inch-thick asphalt. 15 S-1 9 0.0 SS 5"-2'5" Brown f-m SAND, trace silt (moist) [FILL] 13 SS 2'5"-4'5" 10 Advanced 4" casing to 5' SS 21 Drilled to 5' Class 3 45 S-2 Brown wash 20 0.1 Dark brown f-m SAND, trace coarse gravel, 37 trace silt, trace brick fragments (moist) [FILL] 20 5 50/0 - S-3 SS 50/0" SS refusal at 5' No Recovery 0 Drilled to 6' Bit refusal at 6' +6.0 6 /LANGAN.COM/DATA/EP/DATA5/009225510/ENGINEERING DATA/GEOTECHNICAL/GINTLOGS/009225510_BORING End of Boring at 6' at 9:15 AM on 5/1/13. Obstruction encountered at Boring terminated and relocated. Borehole backfilled with 8 cuttings and patched with cement upon completion. 9 10 12 13 15 16 17 18 19

Log of Boring B-14A/OW-2 Sheet of 5 Project Project No. TEMPLATE.GDT Proposed 250 South Street Development 009225510 Elevation and Datum Location Approx. el 12 (MBPD) New York, NY Drilling Company Date Started Date Finished Warren George, Inc. 5/1/13 5/2/13 Drilling Equipment Completion Depth Rock Depth AD II Truck-Mounted Rig 115 ft 100 ft Size and Type of Bit Disturbed Undisturbed Core Number of Samples 2 7/8", 3 7/8", 4 7/8" Tricone Roller Bits 21 3 Casing Diameter (in) Casing Depth (ft) 24 HR. Completion Water Level (ft.) 3", 4" I.D. Steel Casing V 100 12 12 Casing Hammer Donut Weight (lbs) Drop (in) Drilling Foreman 30 300 Jim Wilson Sampler 2" O.D. Split Spoon Inspecting Engineer Weight (lbs) Sampler Hammer Drop (in) 140 30 Safety Karinna Diaz Sample Data Building Code PID Readin MATERIAL SYMBOL Remarks Elev Depth N-Value Recov. (in) Penetr. resist BL/6in Number (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Sample Description (ft) Scale +12.0 10 20 30 40 5-INCH-THICK ASPHALT Started drilling at 9:30 AM Refer to log of boring B-14 for information on the first 5'. 2 3 Advanced casing to 5' Drilled to 5' 5 SS 5'-7' 8 SS S-1 9 0.3 Brown f-m SAND, trace coarse sand, trace brick fragments (moist) [FILL] 5 SS 7'-9' 3 Drilled to 10' SS Brown wash 0.3 Tan brown f-m SAND, trace clay, trace brick 9 fragments (moist) [FILL] 6 9 10 Class SS SS 10'-12' 3 3 S-3 0.0 9 Brown f-m SAND, trace fine gravel, trace brick 2 fragments (moist) [FILL] 2 Ā 12 SS 12'-14' 4 Advanced 4" casing to 15' 9 Drilled to 15' 13 13 0.1 Brown f-c SAND, trace fine gravel (wet) [FILL] 10 Brown wash 5 15 SS SS 15'-17' Advanced 4" casing to 20' WOH Drilled to 20' 0.0 16 ω Brown f-c SAND, trace fine gravel, trace silt Brown wash 3 (wet) [FILL] 2 17 18 19

B-14A/OW-2 Log of Boring Sheet of 5 Project Project No. ...Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 12 (MBPD) PID Reading (ppm) Sample Data Building Code Remarks Elev (ft) N-Value (Blows/ft) Depth Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 20 Advanced 4" casing to 25' 3 SS S-6 Drilled to 25' 4 0.0 21 Brown f-c SAND, trace silt (wet) [FILL] Brown wash 3 3 22 23 24 25 SS 25'-27' Class Drilled to 30' SS 5 Brown wash 26 0 No Recovery 4 27 28 29 30 SS 30'-32' Grayish brown f-m SAND, trace fine gravel, 5 Drilled to 35' trace clay (wet) [FILL] Gray brown wash -19.0 31 0.0 3 Gray CLAY, trace fine sand (wet) [FORMER RIVER BOTTOM DEPOSIT] 2 32 Class 4c 33 34 35 SS 35'-37' 16 Drilled to 40' SS 20 S-9 Brown wash 36 ∞ Grayish brown Clayey SAND, some f-c gravel (wet) [FORMER RIVER BOTTOM DEPOSIT] 21 12 37 Class 38 39 -28.0 SS 40'-42' SS 13 Drilled to 45' 6 Brown wash 4 0.0 Brown f-c SAND, some f-c gravel, trace silt, 6 trace mica flakes (wet) 5 42 Class 43



Log of Boring B-14A/OW-2 Sheet of 5 Project Project No. Report: Log - LANGAN ... Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 12 (MBPD) PID Reading (ppm) Sample Data Building Code Remarks Elev. (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Number Recov. (in) Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 45 SS 45'-47 SS Drilled to 50' 12 Brown wash 46 0.0 27 Brown f-c SAND, some f-c gravel, trace silt 15 (wet) 11 48 4/14/2014 3:45:16 PM 49 50 SS 50'-52' 16 Drilled to 55' Brown wash 12 0.0 NLANGAN.COMIDATA\EPIDATA5\\009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\009225510_BORING LOGS (ALL EXCEPT B16, 19,20,21,22),GPJ. Brown f-c SAND, trace f-c gravel, trace silt, 12 trace mica flakes (wet) 10 52 53 54 55 SS 55'-57' 14 Drilled to 60' 12 Brown wash 56 20 0.0 Brown f-c SAND (wet) 8 8 Class 58 59 60 SS 60'-62' 13 Drilled to 65' 15 Brown wash 61 0.0 26 Brown f-m SAND, trace silt (wet) 11 10 62 63 64 SS 65'-67' 14 Drilled to 70' 14 Brown wash 0.0 66 Brown f-c SAND, trace silt (wet) 13 14 67 68 69

B-14A/OW-2 Log of Boring Sheet of 5 Project Project No. Report: Log - LANGAN ...Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 12 (MBPD) PID Reading (ppm) Sample Data Building Code Remarks Elev (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Recov. (in) Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 70 SS 12 Drilled to 75' 15 Brown wash 12 0.0 Brown f-c SAND, trace silt (wet) 15 17 72 Class 73 4/14/2014 3:45:16 PM 74 -63.0 75 SS 75'-77' 20 Drilled to 80' 25 Brown wash 18 0.0 BORING LOGS (ALL EXCEPT B16, 19, 20, 21, 22). GPJ Brown f-c SAND, trace silt (wet) Stopped work at 3:00 PM on 24 5/1/13 23 Resumed work at 7:00 AM on 5/2/13 78 79 80 SS 80'-82' 12 Drilled to 85' 16 Brown wash 81 0.0 Brown f-m SAND, trace coarse sand (wet) 18 18 82 LANGAN.COM/DATA\EP\DATA5\009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\009225510 83 84 Class 3a 85 SS 85'-87' 20 Drilled to 90' 20 Brown wash 12 86 0.0 Brown f-c SAND, some f-c gravel, trace silt 13 (wet) 10 87 88 89 SS SS 90'-92' 14 Drilled to 95' S-20 18 Brown wash 16 0.0 91 Brown f-m SAND (wet) 16 15 92 93 94

B-14A/OW-2 Log of Boring Sheet of 5 Project Project No. Report: Log - LANGAN ...Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Elevation and Datum Location New York, NY Approx. el 12 (MBPD) PID Reading (ppm) Sample Data Building Code Remarks Elev. (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 50/0 95 S-21 SS SS refusal at 95' 0 50/0" No Recovery Drilled to 100' Bit refusal at 100' 96 Advanced 3" casing to 100' 97 Class 98 ₽ 99 -88.0 100 Started NX Rock core run C-1 at 100' at 1:00PM =37% **Gray MICA SCHIST** REC=52"/60" =87% Light gray wash 102 RQD=22"/60" NX CORE Class ? 103 104 Finished core run C-1 at 105' -93.0 at 12:15 PM 105 Started NX Rock core run C-2 at 105' at 1:00PM. 106 **Gray MICA SCHIST** RQD=48"/60" =80% REC=58"/60" =97% Light gray wash C-2 /\LANGAN.COM\DATA\EP\DATA\5\009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\009225510 108 109 Finished core run C-2 at 110' Class 1b at 1:40 PM 110 Started NX Rock core C-3 at 110' at 2:15PM. 111 **Gray MICA SCHIST** RQD=35"/60" =58% REC=37"/60" =62% Light gray wash 112 6-3 113 114 Finished core run C-3 at 115' 103.0 at 2:55 PM 115 Upon completion of boring, End of Boring at 115' at 5:00 PM on 5/2/13 116 installed 2-inch-diameter temporary observation well to a depth of 30'. 117 The well was screened beween 10' and 20'. A flush mount cover was 118 installed. 119

B-15/OW-1 Log of Boring Sheet of 5 Project Project No. TEMPLATE.GD1 Proposed 250 South Street Development 009225510 Elevation and Datum Location Approx. el 6 (MBPD) New York, NY Drilling Company Date Started Date Finished 4/19/13 Warren George, Inc. 4/23/13 Drilling Equipment Completion Depth Rock Depth **DK575 Truck-Mounted Rig** 110 ft 100 ft Size and Type of Bit Disturbed Undisturbed Core Number of Samples 2 7/8", 3 7/8", 4 7/8" Tricone Roller Bits Casing Diameter (in) Casing Depth (ft) 24 HR. Completion Water Level (ft.) 3", 4" I.D. Steel Casing V 100 5 8 Casing Hammer Donut Weight (lbs) Drop (in) Drilling Foreman 30 300 Jim Wilson Sampler 2" O.D. Split Spoon Inspecting Engineer Weight (lbs) Sampler Hammer Drop (in) 140 30 Safety Karinna Diaz Sample Data Building Code MATERIAL SYMBOL Remarks Elev Depth Recov. (in) Penetr. resist BL/6in Coring (Sample Description (Drilling Fluid, Depth of Casing, (ft) Scale 믑 Fluid Loss, Drilling Resistance, etc.) +6. 10 20 30 40 5-INCH-THICK ASPHALT +5. Started drilling at 12:00 PM 23 on 4/19/13. Drilled through 5-inch-thick SS 43 S-1 16 0.0 asphalt. Brown f-c SAND, trace f-c gravel (moist) 27 SS 5"-2'5" [FILL] 2 21 SS 2'5"-3'7" SS 34 Advanced 4" casing to 5' S-2 4 3 Drilled to 5' 0.0 Brown wash 50/2' Brown f-c SAND, trace f-c gravel, trace 50/2 clay, trace brick fragments (moist) [FILL] 4 ∇ 5 SS 5'-7' 36 SS 27 S-3 0.0 Brown f-c SAND, trace brick fragments, 17 trace wood (wet) [FILL] 6 SS 7'-9' 11 Advanced 4" casing to 10' 16 SS Drilled to 10' 0.0 Brown f-m SAND, trace brick fragments, 10 Brown wash trace wood (wet) [FILL] 11 9 Class SS SS 10'-12' 4 4 S-5 0.0 9 Grayish brown f-c SAND, trace f-c gravel, 2 trace brick fragments, trace wood (wet) 3 [FILL] 12 SS SS 12'-14' 5 Drilled to 15' Gray wash 2 13 0.0 Grayish brown f-c SAND, trace f-c gravel, 5 trace brick fragments, trace wood (wet) 6 [FILL] SS SS 15'-17' 5 Stopped work at 3:00 PM on 4/19/13 S-7 0.2 9 Brown f-m SAND, some brick fragments, Resumed work at 7:00 AM trace fine gravel (wet) [FILL] on 4/22/13 3 Advanced 4" casing to 20' 17 Drilled to 20' Brown wash 18 19

B-15/OW-1 Log of Boring Sheet of 5 Project Project No. LANGAN ...Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 6 (MBPD) Sample Data Building Code Coring (min) PID Reading (ppm) Remarks Elev (ft) N-Value (Blows/ft) Depth Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 20 SS Advanced 4" casing to 25' 2 S-8 Drilled to 25' 0.5 21 ∞ Gray f-c SAND, trace fine gravel, trace 2 Brown wash brick fragments (wet) [FILL] 2 22 23 24 25 SS 25'-27' 3 Drilled to 30' SS 2 Gray wash 4 0.2 Dark gray f-c SAND, trace brick fragments 3 (wet) [FILL] 3 27 28 29 Class 30 SS 30'-32' Drilled to 35' 11 Dark gray wash 9 31 0.0 Dark gray f-m SAND, trace silt, trace brick 10 fragments (wet) [FILL] 7 32 33 34 35 SS SS 35'-37' Drilled to 40' 5 4 Gray wash 0.0 36 Grayish brown f-m SAND, trace clay, trace 6 silt (wet) [FILL] 5 37 38 -33.0 39 SS SS 40'-42' 3 Drilled to 45' 3 Class Gray brown wash 6.2 Grayish brown CLAY, some fine sand 5 (wet) [FORMER RIVER BOTTOM 5 DEPOSIT] 42 43 Inferred transition at 43' based on drilling Class observations.

Log of Boring B-15/OW-1 Sheet of 5 Project Project No. Report: Log - LANGAN ... Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 6 (MBPD) PID Reading (ppm) Sample Data Building Code Coring (min) Remarks Elev (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 45 SS 45'-47 SS Drilled to 50' 6 Gray brown wash 4 46 0.0 Brown f-m SAND, trace silt (wet) 48 4/14/2014 3:45:25 PM 49 50 SS 50'-52' Drilled to 55' 13 Gray brown wash 10 0.0 NLANGAN.COMIDATA\EPIDATA5\\009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\009225510_BORING LOGS (ALL EXCEPT B16, 19,20,21,22),GPJ. Brown f-m SAND, trace coarse sand (wet) 14 15 52 53 54 Class 55 SS 55'-57' 8 Drilled to 60' 10 Gray brown wash 0.2 Brown f-c SAND (wet) 18 23 58 59 60 SS 60'-62' 16 Drilled to 65' 13 Gray brown wash 4 61 0.0 Brown f-c SAND, trace silt (wet) 14 14 62 63 64 -59.0 SS 65'-67' 12 Drilled to 70' 21 Gray brown wash 4 0.1 66 Brown f-c SAND, trace silt (wet) 19 14 67 Class 68 69

B-15/OW-1 Log of Boring Sheet of 5 Project Project No. Report: Log - LANGAN ...Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 6 (MBPD) PID Reading (ppm) Sample Data Building Code Coring (min) Remarks Elev (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Number Sample Description Recov. (in) (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 70 SS Drilled to 75' S-18 19 Brown wash 12 0.0 36 Brown f-m SAND, trace coarse sand (wet) 17 16 72 Class 73 ₽ -69.0 75 SS 75'-77' Drilled to 80' 11 Brown wash 12 0.0 EXCEPT B16,19,20,21,22).GPJ Brown f-m SAND, trace silt (wet) 15 14 78 79 LOGS (ALL Class 80 SS 80'-82' WOR Drilled to 85' S-20 10 Brown wash 7 81 27 0.0 Stopped work at 3:00 PM on Brown f-m SAND, trace silt (wet) BORING 17 4/22/13 16 82 Resumed work at 7:00 AM on 4/23/13 ANGAN.COM\DATA\EP\DATA5\009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\009225510_ 83 84 85 SS SS 85'-87' Drilled to 90' S-21 Brown wash 10 86 0.0 Brown Sandy SILT, trace clay (wet) 11 11 87 Class 88 89 SS 90'-92' SS 12 Drilled to 95' 10 Brown wash 16 0.0 Brown Silty fine SAND, trace f-c gravel 9 (wet) 10 92 Class 3b 93 94

B-15/OW-1 Log of Boring Sheet of 5 Project Project No. Report: Log - LANGAN ...Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 6 (MBPD) Sample Data Building Code MATERIAL SYMBOL PID Readin (ppm) Remarks Elev (ft) N-Value (Blows/ft) Depth Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 95 SS 95'-96'1 S-23 Drilled to 100' 9 0.0 Grayish brown Silty fine SAND, some f-c Brown wash 96 50/1' gravel (wet) 50/1 97 Class 98 99 -94.0 100 Roller bit refusal at 100' Advanced 3" casing to 100' 7:29 Drilled to 100' **Gray MICA SCHIST** %89= REC=57"/60" =95% Started NX Rock core run 6.47 C-1 at 100' at 10:40 AM 102 RQD=41"/60" Light gray wash 7 7:50 103 6:04 104 5:28 Finished core run C-1 at 105' Class at 11:30 AM 105 Started NX Rock core run 5:47 C-2 at 105' at 12:20 PM 106 **Gray MICA SCHIST** REC=52"/60" =87% Light gray wash 7:28 RQD=39"/60" C-5 VILANGAN.COM/DATA\EP\DATAS\009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\009225510_ 6:49 108 5:20 109 5:31 Finished core run C-2 at 110' at 1:00 PM 110 Upon completion of boring, End of Boring at 110' at 1:30 PM on installed 2-inch-diameter 111 temporary observation well to a depth of 30'. 112 The well was screened beween 10' and 20'. A flush mount cover was 113 installed. 114 115 116 117 118 119

Log of Boring B-16 Sheet of 5 Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum Approx. el 13 (MBPD) New York, NY Drilling Company Date Started Date Finished 5/30/13 Warren George, Inc. 6/11/13 **Drilling Equipment** Rock Depth Completion Depth DK-525 Track Mounted Drill Rig 110 ft 101 ft Size and Type of Bit 2 7/8", 3 7/8", 4 7/8" 5 7/8" Tricone Roller Disturbed Undisturbed Core Number of Samples Bits/ 4" Thin Wall Core Casing Diameter (in) Casing Depth (ft) 24 HR. Completion Water Level (ft.) V 3", 4", and 5" ID Steel Casing 15 92 Casing Hammer Donut Weight (lbs) Drop (in) Drilling Foreman 30 300 Gilbert Canelo Sampler 2" O.D. Split Spoon Inspecting Engineer Weight (lbs) Sampler Hammer Drop (in) 140 30 Donut Ransom Hennefer Sample Data Building Code Coring (min.) MATERIAL SYMBOL Remarks Depth Recov. (in) Penetr. resist BL/6in Number Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) (ft) Scale 믑 DATA\GEOTECHNICAL\GINTLOGS\009225510_BORING LOGS (B16,19,20,21,22).GPJ ... 4/14/2014 3:45:08 PM +13.0 10 20 30 40 e 4.7. k 4-INCH-THICK CONCRETE SLAB +12. Started day at 7:00 AM on 5/30/13 BASEMENT Set up rig at new location Drilled through first floor slab using 5 7/8" bit 2 Cored through basement slab using 4" thin wall core Drilled to 13.5' using 4 7/8" 3 Installed 5-Inch flange onto basement floor slab and connected it to the first floor level using 5" ID casing 5 6 2-INCH-THICK ASPHALT 12 2-INCH-THICK CONCRETE SLAB 13 50/0 S-1 SS 0 50/0' SS refusal at 13.5' No Recovery Drilled to 15' using 3 7/8" bit Brown wash ∇ SS 15'-17' SS 17 21 Class 0.1 Brown f-c SAND, trace brick fragments, 13 trace silt, trace fine gravel (wet) [FILL] 7 SS 17'-19' 30 28 ss S-3 20 0.0 18 Brown f-c SAND, some fine gravel, trace En Core samples taken from 33 18.5'-19' silt, trace brick fragments (wet) [FILL] 21 Advanced 4" ID casing to 19' Drilled to 20' using 3 7/8" bit Light brown wash

Log of Boring B-16 Sheet of 5 Project Project No. 009225510 Proposed 250 South Street Development Location Elevation and Datum New York, NY Approx. el 13 (MBPD) Sample Data Building Code MATERIAL SYMBOL PID Readin (ppm) Remarks N-Value (Blows/ft) Elev Depth Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) (ft) Scale 10 20 30 40 20 SS 20'-22' 2 SS S-4 0.0 21 က Brown f-c SAND, trace brick fragments 5 (wet) [FILL] 3 22 SS 22'-24' Drilled to 25' using 3 7/8" bit SS TITILITIE 8 S-5 Light brown wash 16 23 0.3 Grayish brown f-c SAND, trace fine gravel, Class trace pottery fragments (wet) [FILL] 8 24 25 SS 25'-27' 20 SS 18 0.0 26 Grayish brown f-m SAND, trace brick 11 fragments, trace silt (wet) [FILL] 8 27 WOOD, some clay (wet) [FORMER RIVER BOTTOM DEPOSIT] Class SS 27'-29' 2 Advanced 4" ID casing to 27' Ended day at 2:45 PM on 0.0 28 ω Gray CLAY, some silt, trace fine sand, 2 5/30/13. trace wood (wet) [FORMER RIVER Class Started day at 7:00 AM on 1 BOTTOM DEPÓSIT] 5/31/13. 29 Drilled to 30' using 3 7/8" bit Gray wash 30 SS 30'-32' 2 Drilled to 35' using 3 7/8" bit 2 SS S-8 Gray wash 0 31 0.0 No Recovery (Inferred Clay layer based on 3 drilling observations) [FORMER RIVER BOTTOM DEPOSIT] 2 32 Class 33 Attempted Shelby Tube 33'-35 No recovery 0.0 34 0 No Recovery (Inferred Clay layer based on Tip of Shelby Tube observed to be damaged Advanced 4" ID casing to 35' drilling observations) [FORMER RIVER -22.0 BOTTOM DEPOSIT 35 19 Drilled to 35' using 3 7/8" bit Gray wash SS 5 8-9 12 0.0 36 SS 35'-37' Gray CLAY, some silt, trace f-m sand 6 Drilled to 38' using 3 7/8" bit (wet) [FORMER RIVER BOTTOM 5 Gray wash DEPOSIT] 37 Class 38 Shelby Tube 38'-40' Large piece of wood ST-2 removed from tip of Shelby 9 39 SH tube WOOD (horizontal grain) [FORMER S-10 RIVER BOTTOM DEPOSIT SS 40'-40'9" 0.2 45 SS 9 Advanced 4" ID casing to 45' 100/3 Drilled to 45' using 3 7/8" bit 100/3" WOOD (horizontal grain), trace clay (wet) No water return [FORMER RIVER BOTTOM DEPOSIT] 42 Class 43

B-16 Log of Boring Sheet of 5 Project Project No. Proposed 250 South Street Development 009225510 Elevation and Datum Location New York, NY Approx. el 13 (MBPD) Sample Data Coring (min) Building Code MATERIAL SYMBOL PID Readin (ppm) Remarks Elev (ft) N-Value (Blows/ft) Depth Recov. (in)
Penetr. resist
BL/6in Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 WOOD (horizontal grain), trace clay (wet) [FORMER RIVER BOTTOM DEPOSIT] SS 45'-45'3" 3 100/3" 100/3" Advanced 4" I.D. casing to 46 Drilled to 50' using 3 7/8" bit No water return Class 48 49 50 SS 50'-52' Drilled to 55' using 3 7/8" bit 14 No water return 16 0.0 Reddish brown f-m SAND, trace silt (wet) 20 27 52 (B16,19,20,21,22).GPJ 53 54 55 SS 55'-57' 12 LOGS (Ended day at 3:00PM on 19 5/31/13. 7 56 0.0 BORING Light brown f-m SAND (wet) Started day at 7:30AM on 24 6/3/13. 30 Drilled to 60' using 3 7/8" bit No water return ILANGAN.COMIDATA/EP/DATA5/009225510/ENGINEERING DATA/GEOTECHNICAL/GINTLOGS/009225510 58 59 Class 3a 60 SS 60'-62' 23 Unable to advance 4" ID 38 casing beyond 50' 9 61 0.0 Light brown f-m SAND (wet) Drilled to 65' using 3 7/8" bit 41 46 62 63 64 SS 65'-67' 24 Drilled to 70' using 3 7/8" bit 32 Hole collapsed to 60' 8 0.0 66 Light brown f-m SAND (wet) Advanced 3" ID casing to 62' 43 Drilled to 70' using 2 7/8" bit 41 67 Brown wash 68 69

Template TEMPLATE.GD

4/14/2014 3:45:10 PM

(B16,19,20,21,22).GPJ

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BORING

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LANGAN **B-16** Log of Boring Sheet of 5 Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 13 (MBPD) Sample Data Building Code Coring (min) PID Reading (ppm) MATERIAL SYMBOL Remarks Elev (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Recov. (in) Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 70 SS 70'-72' SS 19 Ended day at 3:00 PM on S-16 27 6/3/13. 0.0 9 93 Light brown f-m SAND (wet) 66 Started day at 7:00 AM on 6/4/13. 51 Advanced 3" ID casing to 65' 72 Difficulty advancing casing. Drilled to 75' using 2 7/8" bit 73 Light brown wash 74 75 SS 75'-77' SS 27 Advanced 3" ID casing to 70' 30 Drilled to 80' using 2 7/8" bit 0.0 က Light brown f-c SAND, some fine gravel, Light brown wash 34 trace silt (wet) 71 78 79 80 SS 80'-82' 41 Advanced 3" ID casing to 80' 67 Difficulty advancing casing 81 133 0.0 Class Light brown f-c SAND, trace silt (wet) Ended day at 3:10 PM on 66 6/4/12. 81 82 Started day at 7:30 AM on 6/5/13. Advanced 3" ID casing to 85' 83 Drilled to 85' using 2 7/8" bit Light brown wash 84 85 S-19SS 0 100/3" SS 85'-85'3" No Recovery 100/3" Drilled to 90' using 2 7/8" bit Light brown wash 86 87 88 89 90 S-20SS 0 100/4" SS 90'-90'4" No Recovery 100/4" Advanced 3" ID casing to 95' Drilled to 95' using 2 7/8" bit 91 Light brown wash 92 -79.5 Inferred transition at 92.5' based on drilling 93

observations.

Log of Boring B-16 Sheet of 5 Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 13 (MBPD) Sample Data Building Code MATERIAL SYMBOL PID Readin (ppm) Remarks Template TEMPLATE. N-Value (Blows/ft) Elev Depth Penetr. resist BL/6in Number Sample Description Recov. (in) (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) (ft) Scale 10 20 30 40 95 , y U SS 95'-96'9" Light brown f-c GRAVEL, trace f-m sand, SS 27 Advanced 3" ID casing to 92' . O . (wet) S-21 61 Ended day at 3:00 PM on 0.0 96 171 0.0 110 Class Started day at 7:00 AM on 100/3" ۰.0، 6/613. 97 ٥. Drilled to 100' using 2 7/8" bit , o o. Light brown wash . O., 98 Mica flakes in wash -85. Inferred transition at 98.5' based on drilling 99 observations. Class 4/14/2014 3:45:10 PM 100 SS 100-100'9" Light brown f-c SAND, some fine gravel, 88 9 Drilled to 101 using 2 7/8" bit trace silt (wet) 0.0 100/3 100/3" Light brown wash -88.0 Mica flakes in wash 3.00 Rig chattering at 101' Roller bit refusal at 101' 102 REC=42"/60" =70% =53% Advanced 3" ID casing to 92' 3:30 Unable to advance casing (B16,19,20,21,22).GPJ 103 beyond 92' **Gray MICA SCHIST** RQD=32"/60" 5 Ended day at 3:00PM on 3:40 6/6/13. 104 Started day at 7:00PM on 3:35 6/7/13. Removed all 3" ID casing. 105 Drilled to 101' using 3 7/8" bit Class 7:00 Light brown wash Advanced 3" ID casing to 70' 106 Casing observed to have 3:55 =52% broken at 50' REC=46"/48" =96% 107 Ended day at 3:00 PM on NX CORE BARREI /\LANGAN.COM\DATA\EP\DATA\S\009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\009225510 4:10 6/7/13. RQD=25"/48" C-2 Started day at 7:00 AM on 108 **Gray MICA SCHIST** 6/10/13. 4:00 Removed broken casing Advanced 3" ID casing to 95' 109 Ended day at 3:00 PM on 12:00 6/10/13. -97.0 110 Started day at 7:00 AM on End of Boring at 110' at 11:15 AM on 6/11/13. 6/11/13 Advanced 3" ID casing to 111 Drilled to 101' using 2 3/8" bit Light brown wash 112 Started NX Rock core run C-1 at 101' at 9:55 AM 113 Light grayish brown wash Drill rods observed to rapidly advance 1/2" at 102.5' 114 Finished core run C-1 at 106' at 10:15 AM Started NX Rock core run 115 C-2 at 106' at 10:45 AM Light gray wash 116 Core barrel jammed at 110' Finished core run C-2 at 110' at 11:15 AM 117 Boring backfilled with drill cuttings and patched with cement upon completion 118 119

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Project		D	d 050 Cth	Charat Davidanasant			Pro	oject No.			000055	10								
Proposed 250 South Street Development Location									009225510 Elevation and Datum											
Drilling C		York, NY	Da	te Starte	4	Α	pprox. e			inished										
Drilling Company Warren George, Inc.									ı		5/7/1:		Date Finished 5/16/13							
Drilling E	ent	_	Co	Completion Depth						Rock Depth										
Size and	of Bit 2	0 Track-Mounte 7/8", 3 7/8", 4 7	- Ni.	Number of Samples			115 t Disturbed	t	Undisturbed			102 ft Core								
Casing D		I" Thin Wall Co	-				First 23		Cor	mpletion	-	24 HR.	3							
Casing Diameter (in) 3", 4", 5" I.D. Steel Casing Weight (lbs) 300 Casing Depth (ft) 105 Casing Hammer Donut Weight (lbs) 300								ater Level	` '		$\overline{\Sigma}$	13.5	Ţ		-	Ā	-			
Sampler				300	Бтор (ш)	30	- "	Drilling Foreman Gilbert Canelo												
Sampler			D. Split Spoon	Weight (lbs)	Drop (in)		Ins	Inspecting Engineer												
<u>-</u>	Donut 140 30								Ransom Hennefer Sample Data											
MATERIAL	Elev. (ft) +13.0	Sample Description					PID Reading (ppm)	Depth Scale	Number	Type	(in) Penetr. resist	N-Val (Blows	s/ft)	(Dril Fluid L	ling Fluid	marks I, Depth of Ca ling Resistan	asing, ce, etc.)			
	+12.7		4-INCH-THI	CK CONCRETE SLAB				_ 0 _								ed on 5/7/				
:			BASEMENT	-				_ 1 -						5/7/1	3	ling at 2:0				
0.(22)			271022.11													ugh the fi 5 7/8" bit	rst floor			
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2								_ 3 -							ed day	at 7:10 A	AM on			
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								- :						slab	to 13.5	ugh base 5' using 4	7/8" bit			
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			Brown f-c SA	AND, trace silt, trace fi	ne gravel.	-	0.6	14 -	S-1	SS	4 88 100/3	. ا	00/2"	Sligh		observed				
				ragments (wet) [FILL]	3			:			7	1 1	00/3"	Dark	gray v	5' using 3 vash	7/8" bit			
								_ 15 -		甫	47	1		SS 1	5'-17'	observed				
		Class	Light brown	f-m SAND, trace f-c gr	avel trace		1.2	_ 16 _	S-2	SS	58 65		123	_	0401	2001700	·			
		7	silt, trace co	arse sand, trace brick						SS	78									
			(wet) [FILL]					<u> </u>		Ħ	53				7'-18'9 t odor)" observed				
			Brown f-c SA	AND, trace fine gravel,	trace brick		0.7	_ 18 _	S-3	SS	55 64		119	Endo	ed day	at 3:15 P				
				race silt (wet) [FILL]				_ 10	1	耳	100/3				ed day	at 7:00 A	AM on			
								_ 19 -						Adva	nced 4	4" casing	to 17'			
·								_ 20 _	1					Drille	ed to 2	0' using 3	7/8" bit			

Log of Boring B-17 Sheet of 5 Project Project No. ..Template TEMPLATE.GD1 009225510 Proposed 250 South Street Development Elevation and Datum Location New York, NY Approx. el 13 (MBPD) Sample Data PID Reading (ppm) Building Code Remarks N-Value (Blows/ft) Elev Depth Penetr. resist BL/6in Sample Description Recov. (in) (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) (ft) Scale 10 20 30 40 20 Gray wash 80 SS 20'-22' 45 Slight odor observed S-4 SS 21 ∞ Brown f-c SAND, some silt, some fine gravel Hole collapsed 34 Class (wet) [FILL] Drilled to 22' using 3 7/8" bit 58 Gray wash SS 22'-24' 22 20 Brown f-m SAND, some fine gravel, trace silt 10 -10.0 12 23 0.0 q_u =0.9 tsf s_u =0.4 tsf Drilled to 25' using 3 7/8" 5 Gray CLAY, some silt, some wood (wet) [FORMER RIVER BOTTOM DEPOSIT] 3 Class Dark gray wash 24 -12.0 25 SS 25'-27' 25 SS 10 12 26 Light brown fine SAND, trace silt, trace clay 10 (wet) [FORMER RIVER BOTTOM DEPOSIT] 6 27 SS 27'-29' 5 Class Advanced 4" casing to 25' 12 Drilled to 30' using 3 7/8" bit S-7 28 9 EXCEPT B16, Brown fine SAND, trace silt, trace m-c sand, 16 Dark gray wash trace clay (wet) [FORMER RIVER BOTTOM 12 **DEPOSIT** 29 SS 30'-32' -17 (30 a..=0.75 tsf 2 Drilled to 35' using 3 7/8" bit Gray CLAY, some silt, some plant fibers (wet) 20 Dark gray wash 31 0.0 [FORMER RIVER BOTTOM DEPOSIT] 2 Gray CLAY, some silt, trace plant fiber, trace fine sand (wet) [FORMER RIVER BOTTOM 4 32 Class **DEPOSIT** 33 34 -22.0 35 SS 35'-37' WOH -q,,=0.3 tsf s,,=0.15 tsf SS WOH 8-9 9 36 Gray CLAY, some silt, trace plant fibers, trace WOH fine to coarse sand (wet) [FORMER RIVER WOH **BOTTOM DEPOSIT** 37 SS 37'-39' WOH Class Drilled to 40' using 3 7/8" bit WOH Dark gray wash 38 0.0 Gray CLAY, some silt, trace fine sand (wet) WOH [FORMER RIVER BOTTOM DEPOSIT] WOH 39 -27.0 SS SS 40'-42' 2 Drilled to 45' using 3 7/8" bit 2 Dark gray wash 0.0 က Gray CLAY, some silt, trace fine sand, trace plant fibers (wet) [FORMER RIVER BOTTOM 11 **DEPOSITI** 42 Class 43

B-17 Log of Boring Sheet of 5 Project Project No. Report: Log - LANGAN ...Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 13 (MBPD) PID Reading (ppm) Sample Data Building Code Remarks Elev (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Number Sample Description Recov. (in) (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 45 Drilled to 50' using 3 7/8" bit S-12 8 Dark gray wash 46 0.0 ∞ Brown f-m SAND, trace clay (wet) 10 11 48 4/14/2014 3:46:24 PM 49 50 SS 50'-52' Drilled to 55' using 3 7/8" bit 15 Dark gray wash 0.0 2 LOGS (ALL EXCEPT B16, 19, 20, 21, 22). GPJ Brown f-c SAND, some fine gravel, trace silt 13 14 52 53 54 Class 55 SS 55'-57' 27 Coarse gravel stuck in tip of 13 spoon; no additional 29 0.0 BORING Limited Recovery (Sand inferred from drilling recovery 16 observations) Drilled to 60' using 3 7/8" bit 15 Dark gray wash ILANGAN.COMIDATA/EP/DATA5/009225510/ENGINEERING DATA/GEOTECHNICAL/GINTLOGS/009225510 58 59 60 SS 60'-62' 15 Ended day at 3:05 PM on 11 5/9/13 61 0.0 Brown f-m SAND (wet) Started day at 7:15 AM on 15 5/10/13 17 Drilled to 65' using 3 7/8" bit 62 Gray wash 63 64 -52.0 SS SS 65'-67' 20 Drilled to 70' using 3 7/8" bit 20 Gray wash 0.0 66 Brown f-c SAND, trace fine gravel, trace silt 20 (wet) 20 67 Class 68 69

B-17 Log of Boring Sheet of 5 Project Project No. Report: Log - LANGAN ...Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Elevation and Datum Location New York, NY Approx. el 13 (MBPD) PID Reading (ppm) Sample Data Building Code Remarks Elev (ft) Penetr. resist BL/6in N-Value (Blows/ft) Depth Recov. (in) Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 70 20 Drilled to 75' using 3 7/8" bit 20 Grayish brown wash 46 Light brown f-c SAND, trace fine gravel, trace 26 silt (wet) 17 72 73 ₽ SS 75'-77' 27 Drilled to 80' using 3 7/8" bit 48 Grayish brown wash BORING LOGS (ALL EXCEPT B16, 19, 20, 21, 22). GPJ Grayish brown f-c SAND, some fine gravel, 30 trace silt (wet) 21 78 79 80 SS 80'-82' 31 Drilled to 85' using 3 7/8" bit 22 Grayish brown wash 81 0.0 Grayish brown f-c SAND, trace fine gravel, 21 trace silt (wet) 20 82 Class /\LANGAN.COM\DATA\EP\DATA5\009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\009225510_ 83 84 85 SS 85'-87' 33 Drilled to 90' using 3 7/8" bit S-20 43 Grayish brown wash 86 Light brown f-c SAND, some f-c gravel, trace 61 silt (wet) 95 87 88 89 90 SS 90'-91'3" SS 35 S-21 Ended day at 3:00 PM on 2 58 0.0 5/10/13 Light brown f-m SAND, trace mica flakes (wet) 91 100/3" 100/3" Started day at 8:30 AM on 5/13/13 92 Drilled to 95' using 3 7/8" bit Grayish brown wash 93

Log of Boring **B-17** Sheet of 5 Project Project No. ..Template TEMPLATE.GD1 Proposed 250 South Street Development 009225510 Elevation and Datum Location New York, NY Approx. el 13 (MBPD) Sample Data PID Reading (ppm) Building Code MATERIAL SYMBOL Remarks N-Value (Blows/ft) Elev Depth Penetr. resist BL/6in Sample Description Recov. (in) (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) (ft) Scale 10 20 30 40 95 S-22 SS Drilled to 100' using 3 7/8" bit 0.0 Light brown Gravelly f-c SAND, trace silt (wet) 100/6' Light brown wash 100/6" 96 97 98 SS 100'-100'6" ₽ Class Hole observed to be collapsing Advanced 3" casing to 80' 99 Ended day at 3:00 PM on 5/13/13 100 S-23SS 3 100/6' Started day at 6:45 AM on Light brown Gravelly f-c SAND, trace silt (wet) 100/6" 5/14/13 101 Drilled to 103' using 2 7/8" bit Light brown wash Rig chattering observed -89. 102 Weathered MICA SCHIST (inferred from 102'-103' Class 1d 103 Mica flakes observed in EXCEPT B16, wash at 102' %29= REC=45"/48" =94% Roller bit refusal at 103'. 104 Advanced 3" I.D. casing to **Gray MICA SCHIST** RQD=32"/48" Class Drilled to 103' using 2 7/8" bit 5 105 Light brownish gray wash Started NX Rock core run C-1 at 103' at 12:35PM 106 No water return Finished core run C-1 at 107' -94.0 at 1:05 PM Ended day at 3:00 PM on REC=100% 5/14/13 RQD=100% 108 NX CORE **Gray MICA SCHIST** Started day at 7:00 AM on C-2 Class 5/15/13 Advanced 3" casing to 105' Drilled to 107' using 2 7/8" bit Attempted NX Rock core run 109 at 107'. \\LANGAN.COM\DATA\EP\DATA5\009225510\ENGINEERING DATA\GEOTECHNICAL\ Core barrel jammed with sand; unable to remove inner barrel, drillers returned to **Gray MICA SCHIST** RQD=42"/60" =70% REC=57"/60" =95% shop for new barrel. Started NX Rock core run 112 6-3 C-2 at 107' at 2:20PM Class Gray wash 113 Finished core run C-2 at 110' at 2:40 PM REC=36"/36" =100% 114 RQD=36"/36" =100% Ended day at 3:00 PM on 102.0 5/15/13 115 Started day at 7:00 AM on 5/16/13 End of Boring at 115' at 8:15 AM on 5/16/13 Started NX Rock core run 116 C-3 at 110' at 7:50 AM Gray wash 117 Finished core run C-3 at 115' at 8:15 AM Boring backfilled with drill 118 cuttings; basement slab patched with cement and 1st floor slab patched with 119 plywood upon completion.

Log of Boring **B-18** Sheet of 6 Project Project No. **FEMPLATE.GD1** Proposed 250 South Street Development 009225510 Elevation and Datum Location Approx. el 13 (MBPD) New York, NY Drilling Company Date Started Date Finished 5/6/13 Warren George, Inc. 5/20/13 Rock Depth Drilling Equipment Completion Depth DK-525 Track-Mounted Rig 136 ft 113 ft Size and Type of Bit 2 7/8", 3 7/8", 4 7/8", 5 7/8" Tricone Roller Bits and 4" Thin Wall Core Disturbed Undisturbed Core Number of Samples 28 5 Casing Diameter (in) Casing Depth (ft) 24 HR. Completion Water Level (ft.) 3", 4", 5" I.D. Steel Casing V 14 122 Casing Hammer Donut Weight (lbs) Drop (in) Drilling Foreman 30 300 Chris Gibbs Sampler 2" O.D. Split Spoon Inspecting Engineer Weight (lbs) Sampler Hammer Drop (in) 30 Donut 140 Ransom Hennefer Sample Data 4/14/2014 3:46:42 Building Code PID Readin MATERIAL SYMBOL Remarks Depth Recov. (in) Penetr. resist BL/6in Number Sample Description (Drilling Fluid, Depth of Casing, (ft) Scale Fluid Loss, Drilling Resistance, etc.) +13.0 10 20 30 40 +12. 4-INCH-THICK CONCRETE SLAB Rig delivered on 5/3/13 Started day at 7:00 AM on DATA\GEOTECHNICAL\GINTLOGS\009225510 BORING LOGS (ALL EXCEPT B16,19,20,21,22).GPJ . 5/6/13 **BASEMENT** Drilled through first floor slab using 4 7/8" bit 2 Cored basement floor slab using 4" thin wall core Ended day at 3:45 PM on 3 5/6/13 Started day at 7:00 AM on 5/7/13 Drilled through first floor slab using 5 7/8" bit 5 Mounted 5" flange and sponge on basement slab, connected to first floor with 6 5" casing Flange observed to be leaking Sealant placed between flange and sponge, and 8 between slab and sponge Ended day at 3:15 PM on 5/7/13 9 Started day at 7:10 AM on 5/8/13 Sealant observed to be leaking Hydraulic cement placed under and around flange Drilled through basement 2-INCH-THICK ASPHALT slab to 14' using 4 7/8" bit +1.3 12 8-INCH-THICK CONCRETE SLAB +0.6 13 SS 14'-14'6" ss | z 73 50/0' 0.9 Brownish gray coarse GRAVEL, some fine to Slight odor observed 50/0" coarse sand, trace fine gravel, trace silt (wet) Drilled to 15' using 3 7/8" bit 15 Dark gray to black wash [FILL] 47 SS 15'-17' SS 54 S-2 Slight odor observed 16 20 Class 0.4 Gray f-c SAND, trace silt, trace brick 42 Drilled to 17' using 3 7/8" bit fragments, trace wood (wet) [FILL] Dark gray wash 99 17 SS 17'-18'1" 40 SS Slight odor observed 0.5 9 Brown to gray f-c SAND, trace silt, trace brick က် 65 Ended day at 3:15 PM on fragments, trace fine gravel (wet) [FILL] 18 100/1" 100/1" 5/8/13 Started day at 7:00 AM on 5/9/13 19 Advanced 4" casing to 19'

Drilled to 20'

Log of Boring B-18 Sheet of 6 Project Project No. ..Template TEMPLATE.GD1 009225510 Proposed 250 South Street Development Location Elevation and Datum New York, NY Approx. el 13 (MBPD) Sample Data PID Reading (ppm) Building Code Remarks Elev (ft) N-Value (Blows/ft) Depth Sample Description Recov. (in) (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 20 SS 20'-22' SS S-4 21 2 Dark gray f-c SAND, trace fine gravel, trace silt, trace wood, trace brick fragments (wet) [FILL] 5 22 SS 22'-24' 6 Drilled to 25' using 3 7/8" bit 7 S-5 Dark gray wash 23 α 0.0 Gray f-c SAND, some brick fragments, trace silt (wet) [FILL] 5 24 25 SS 25'-27' 2 SS 2 7 26 Dark gray to black f-c SAND, some silt, trace 2 brick fragments, trace glass fragments (wet) 4 [FILL] 27 SS 27'-29' 5 Class Drilled to 30' using 3 7/8" bit 7 S-7 Black wash 28 Light brown fine SAND, some f-c gravel, trace 5 silt, trace wood (wet) [FILL] 9 29 30 SS 30'-32' 3 S-8 0 31 No Recovery 32 SS 32'-34' Advanced 4" casing to 30' 5 SS Drilled to 35' using 3 7/8" bit 33 0.0 Gray Gravelly f-c SAND, trace silt, trace clay, Black wash 6 trace concrete and brick fragments (wet) [FILL] 6 34 -22.0 35 SS 35'-37' 5 Gray clay observed on spoon Class 36 0 No Recovery [FORMER RIVER BOTTOM DEPOSIT] (Inferred clay layer based on drillling 1 37 SS 37'-39' 4 q_u =0.8 tsf s_u =0.5 tsf Drilled to 40' using 3 7/8" bit 6 38 က 0.0 Gray CLAY, some silt, trace seashell Black wash 5 Class fragments, trace fine sand, trace plant fibers 9 (wet) [FORMER RIVER BOTTOM DEPOSIT] 39 -27.0. SS 40'-42' SS WOR 2 Class 0.0 ω Gray CLAY, some silt, trace fine sand, trace plant fibers (wet) [FORMER RIVER BOTTOM DEPOSIT] 42 SS 42'-44' 3 Advanced 4" casing to 40' SS S-13 10 Ended day at 3:05 PM on 43 4 Gray CLAY, some silt, trace fine sand, trace 4 Class plant fiber, trace wood (wet) [FORMER RIVER Started day at 7:15 AM on 4h 15 BOTTOM DEPOSIT 5/10/13 Drilled to 45' using 3 7/8" bit

Black wash

B-18 Log of Boring Sheet of 6 Project Project No. Report: Log - LANGAN ...Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 13 (MBPD) PID Reading (ppm) Sample Data Building Code Remarks Elev (ft) N-Value (Blows/ft) Depth Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 45 Drilled to 50' using 3 7/8" bit 8 Dark gray wash 46 9 Orangish brown f-m SAND, trace coarse sand, 9 trace silt (wet) 10 48 4/14/2014 3:46:44 PM 49 Class 50 SS 50'-52' 13 Drilled to 55' using 3 7/8" bit 14 Gray wash 0.0 EXCEPT B16,19,20,21,22).GPJ Grayish brown f-c SAND, trace fine gravel, 12 trace silt (wet) 21 52 53 54 -42.0 55 SS 55'-57' 18 LOGS (Drilled to 60' using 3 7/8" bit Light brown fine SAND, trace silt (wet) 33 Gray wash 56 0.0 BORING 27 Light brown fine SAND, trace medium sand 30 (wet) ILANGAN.COMIDATA/EP/DATA5/009225510/ENGINEERING DATA/GEOTECHNICAL/GINTLOGS/009225510 58 59 Class 3a 60 SS 60'-62' Light brown fine SAND, some silt (wet) 15 Drilled to 65' using 3 7/8" bit 33 Brownish gray wash 61 0.0 Light brown fine SAND (wet) 28 29 62 63 64 -52.0 SS SS 65'-67' 14 Drilled to 70' using 3 7/8" bit 11 Brownish gray wash 0.0 66 Light brown f-c SAND, trace silt (wet) 12 12 67 Class 68 69

B-18 Log of Boring Sheet of 6 Project Project No. Report: Log - LANGAN ...Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Elevation and Datum Location New York, NY Approx. el 13 (MBPD) PID Reading (ppm) Sample Data Building Code Remarks Elev (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Recov. (in) Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 70 17 Drilled to 75' using 3 7/8" bit 18 Brownish gray wash 34 Light brown f-c SAND, trace fine gravel (wet) 16 17 72 73 4/14/2014 3:46:44 PM SS 75'-77' 19 Hole observed to have S-20 16 collapsed /LANGAN.COM/DATA/EP/DATA5/009225510/ENGINEERING DATA/GEOTECHNICAL/GINTLOGS/009225510_BORING LOGS (ALL EXCEPT B16,19,20,21,22),GPJ Light brown f-c SAND, trace silt (wet) 16 Ended day at 3:00 PM on 5/10/13 26 Started day at 8:00 AM on 5/13/13 Drilled to 80' 78 Brown wash 79 80 SS 80'-82' 23 Drilled to 85' using 3 7/8" bit 27 S-21 Brown wash 81 0.0 Light brown f-c SAND, trace silt (wet) 28 32 82 Class 83 84 85 SS 85'-87' 22 Drilled to 90' using 3 7/8" bit 32 Light brown wash 86 0.0 Light brown f-m SAND, trace coarse sand, 35 trace silt (wet) 52 87 88 89 SS 90'-92' 25 Drilled to 95' using 3 7/8" bit S-23 31 Light brown wash 0.0 91 Light brown f-m SAND, trace silt (wet) 34 92 93 94

Log of Boring **B-18** Sheet of 6 Project Project No. Report: Log - LANGAN ...Template TEMPLATE.GDT Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 13 (MBPD) PID Reading (ppm) Sample Data Building Code Remarks Elev (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Number Sample Description Recov. (in) (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 95 SS 95'-96'10" SS 16 Drilled to 100' S-24 19 2 0.0 96 57 Light brown f-m SAND, trace fine gravel (wet) 38 100/4" 97 98 Rig chattering at 98' ₽ 99 100 SS 100'-102' 59 Ended day at 3:00 PM on 35 5/13/13 101 က .GPJ Light brown f-c SAND, some f-c gravel, trace Started day at 6:45 AM on 30 5/14/13 EXCEPT B16, 19, 20, 21, 22). 37 Drilled to 105' using 3 7/8" bit 102 Light brown wash 103 Class 104 105 SS 105'-106'8" Light brown f-c SAND, some silt, some fine 75 LOGS (Drilled to 110' using 3 7/8" bit gravel (wet) S-26 115 4 Light brown wash 106 237 0.0 BORING 122 100/2 107 ANGAN. COM/DATA/EP/DATA5/009225510/ENGINEERING DATA/GEOTECHNICAL/GINTLOGS/009225510 108 109 110 SS 110'-110'9" S-27 90 SS Drilled to 115' using 3 7/8" bit 0.0 100/3" Light brown f-c SAND, some fine gravel, trace 100/3 Light brown wash silt (wet) 111 Rig chattering at 113' Mica flakes observed in 112 wash Roller bit refusal at 115' Advanced 3" casing to 80' 100.0 113 Ended day at 3:00 PM on 5/14/13 Weathered MICA SCHIST (inferred from Started day at 7:00 AM on Class 114 drilling) 5/15/13 Advanced 3" casing to 115' Drilled to 115' using 2 7/8" bit 115 100/0' Light brown wash Ended day at 3:00 PM on 116 5/15/13 REC=60"/60" =100% **Gray MICA SCHIST** =83% Started day at 7:00 AM on 5/16/13 NX CORE SS refusal at 115' RQD=50"/60" Class 7 Started NX Rock core run 1b C-1 at 115' at 9:20 AM 118 Gray wash 119 Finished core run C-1 at 120' at 10:10 AM

Log of Boring B-18 Sheet of 6 Project Project No. LANGAN ...Template TEMPLATE.GD1 009225510 Proposed 250 South Street Development Location Elevation and Datum New York, NY Approx. el 13 (MBPD) PID Reading (ppm) Sample Data Building Code MATERIAL SYMBOL Remarks N-Value (Blows/ft) Elev Depth Sample Description Recov. (in) (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) (ft) Scale 10 20 30 40 120 Started NX Rock core run C-2 at 120' at 11:00 AM Gray wash 121 Gray MICA SCHIST with pegmatite inclusions -45% Barrel jammed at 121.5' REC=54"/60" =90% (Orange staining observed on fractures and Core removed Resumed NX rock core C-2 122 NX CORE RQD=27"/60" Class at 121.5' at 12:15 PM C-2 Gray wash 123 Finished core run C-2 at 125' ₽ at 1:00 PM Advanced 3" casing to 117' 124 Ended day at 3:00 PM on 5/16/13 125 Started day at 7:15 AM on 5/17/13 94% 94% Class Drilled to 125' using 2 7/8" bit Started NX Rock core run **Gray MICA SCHIST** 126 C-3 at 125' at 9:30 AM Barrel jammed at 126.5' 127 REC=17"/18" =94% RQD=17"/18" =94% REC=54"/54" =100% **Gray MICA SCHIST** Finished core run C-3 at 128 126.5' at 10:10 AM NX CORE RQD=43"/54" Started NX rock core run C-4 129 at 126.5' at 10:45 AM No water return 130 131 Class Finished core run C-4 at 131' BORING at 12:40 PM Started NX Rock core run 132 REC=60"/60" =100% C-5 at 131' at 2:10 PM Gray MICA SCHIST with Pegmatite inclusions -63% /\LANGAN.COM\DATA\EP\DATA\S\009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\009225510 No water return 133 Barrel jammed at 131'8" NX CORE RQD=38"/60" C-5 Removed NX Rock core barrel 134 Advanced 3" casing to 120'. Ended day at 3:15 PM on 5/17/13 135 Started day at 7:00 AM on 5/20/13 123. Advanced 3" casing to 122'. 136 End of boring at 136' at 10:55AM on 5/20/13. Drilled to 131.5' using 2 7/8" 137 Resumed core run C-5 at 131'8" at 9:40 AM Gray wash 138 Finished core run C-5 at 136' at 10:55 AM Boring backfilled with drill 139 cuttings; basement floor slab patched with cement and 1st floor slab patched with 140 plywood upon completion. 141 142 143

Log of Boring **B-19** Sheet of 6 Project Project No. 009225510 Proposed 250 South Street Development Location Elevation and Datum Approx. el 13 (MBPD) New York, NY Drilling Company Date Started Date Finished 5/30/13 6/6/13 Warren George, Inc. **Drilling Equipment** Rock Depth Completion Depth DK-525 Track Mounted Drill Rig 121 ft 100 ft Size and Type of Bit 2 7/8", 3 7/8", 4 7/8" 5 7/8" Tricone Roller Bits/ 4" Thin Wall Core Disturbed Undisturbed Core Number of Samples 24 4 Casing Diameter (in) Casing Depth (ft) 24 HR. Completion Water Level (ft.) 3", 4", 5" I.D. Steel Casing V 105 14 Casing Hammer Donut Weight (lbs) Drop (in) Drilling Foreman 30 300 Chris Gibbs Sampler 2" O.D. Split Spoon Inspecting Engineer Weight (lbs) Sampler Hammer Drop (in) 140 30 Donut Ransom Hennefer Sample Data Building Code PID Readin (ppm) Coring (min.) MATERIAL SYMBOL Remarks Depth Recov. (in) Penetr. resist BL/6in Number (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Sample Description (ft) Scale DATA\GEOTECHNICAL\GINTLOGS\009225510_BORING LOGS (B16,19,20,21,22).GPJ ... 4/14/2014 3:45:59 PM +13.0 10 20 30 40 e 4.7. k +12. Started day at 7:00 AM on 4-INCH-THICK CONCRETE SLAB 5/30/13. Set up rig at boring location **BASEMENT** Drilled through first floor slab using 5 7/8" bit 2 Cored through basement slab using 4" thin wall core Drilled to 13' using 4 7/8" bit 3 5 6 2-INCH-THICK ASPHALT 12 2-INCH-THICK CONCRETE 13 50/0 S-1 SS 0 50/0' SS refusal at 13' Drilled to 14' using 3 7/8" bit ∇ SS 14'-16' 35 Slight odor observed SS Installed 5-inch flange onto 8 3.5 Dark brown f-c SAND, some f-c gravel, 63 basement floor slab and trace silt, trace brick fragments (wet) [FILL] connected it to the first floor 61 Class level using 5" ID casing En Core samples 15.5'-16' Advanced 4" ID casing to 14' Drilled to 17' using 3 7/8" bit 5 Brown wash IS E SS 17'-19' S-3 12 1.0 18 Light gray f-c SAND, some fine gravel, 6 trace silt, trace brick fragments (wet) [FILL] 10 SS SS 19'-21' 5

Log of Boring **B-19** Sheet of 6 Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 13 (MBPD) Sample Data Building Code PID Readin (ppm) Remarks N-Value (Blows/ft) Elev Depth Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) (ft) Scale 10 20 30 40 20 6.0 Light brown f-c SAND, trace pottery Ended day at 3:00 PM on SS S-4 5/30/13. fragments, trace silt, trace brick fragments 7 Started dat at 7:00 AM on (wet) [FILL] 21 5/31/13. Advanced 4" ID casing to 19' Drilled to 22' using 3 7/8" bit 22 5 Brown wash 3 SS 22'-24' S-5 0 23 No Recovery 3 24 SS 24'-26' Advanced 4" ID casing to 24' 59 PM S-6 SS Drilled to 27' using 3 7/8" bit 25 0.0 Dark gray f-c SAND, trace silt, trace brick 6 Brown wash fragments, trace wood (wet) [FILL] 5 26 27 SS 27'-29' SS 1 S-7 28 0 No Recovery WOH Class WOH 29 SS 29'-31' 2 Drilled to 32' using 3 7/8" bit 8-8 Brown wash SS 30 4 0.0 Light brown f-m SAND, some f-c gravel, 4 trace silt, trace brick fragments (wet) [FILL] 4 31 32 SS 32'-34' Drilled to 35' using 3 7/8" bit SS Brown wash 0.0 33 Light brown Sandy fine GRAVEL, some silt, trace brick fragments (wet) [FILL] 2 34 35 SS 35'-37' 0.0 36 Gray Sandy fine GRAVEL, some silt, trace clay (wet) [FILL] -24 37 SS 37'-39' 4 $q_{..}=0.75 \text{ tsf}$ 8 Drilled to 40' using 3 7/8" bit 38 9 0.0 Gray CLAY, some silt, trace f-m sand, Grayish brown wash 13 Class trace seashell fragments, trace plant fibers 11 (wet) [FORMER RIVER BOTTOM 39 DEPOSIT] -27.0 SS 40'-42' SS 3 Drilled to 45' using 3 7/8" bit 2 Gray wash 0.0 Gray CLAY, some silt, trace f-m sand 2 (wet) [FORMER RIVER BOTTOM 4 DEPOSITI 42 Class 43

Log of Boring B-19 Sheet of 6 Project Project No. Proposed 250 South Street Development 009225510 Elevation and Datum Location New York, NY Approx. el 13 (MBPD) Sample Data Coring (min) Building Code MATERIAL SYMBOL PID Readin (ppm) Remarks Elev (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Number Sample Description Recov. (in) (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 45 WOF $q_{\parallel} = 0.5 \text{ tsf } s_{\parallel} = 0.25 \text{ tsf}$ S-13 WOR Drilled to 50" using 3 7/8" bit 20 0.0 46 Gray CLAY, some silt, trace fine sand (wet) FORMER RIVER BOTTOM WOR Gray wash WOR DEPOSIT] Class 48 49 -37.0 50 SS 50'-52' Gray WOOD, some clay, trace silt (wet) [FORMER RIVER BOTTOM DEPOSIT] Drilled to 55' using 3 7/8" bit Class Gray wash 0.0 ω -38. Light brown f-m SAND, trace silt, trace 10 52 clay (wet) [FORMER RIVER BOTTOM DEPOSIT] (B16,19,20,21,22).GPJ 53 Class 6 54 -42.0 55 SS 55'-57' 49 LOGS (Drilled to 60' using 3 7/8" bit 48 Gray wash 56 0.0 Gray f-m SAND, some coarse gravel, BORING 36 trace coarse sand, trace silt, trace clay 28 (wet) ILANGAN.COMIDATA/EP/DATA5/009225510/ENGINEERING DATA/GEOTECHNICAL/GINTLOGS/009225510 58 59 60 SS 60'-62' 14 Ended day at 3:00 PM on 18 5/31/13. 4 0.0 61 Light brown f-m SAND (wet) Started day at 8:00 AM on 23 25 Drilled to 65' using 3 7/8" bit 62 Class Gray wash 63 64 SS SS 65'-67' 21 Drilled to 70' using 3 7/8" bit 37 Brownish gray wash 4 0.0 66 Light brown f-m SAND (wet) 42 33 67 68 69

Template TEMPLATE.GD

4/14/2014 3:46:00 PM

(B16,19,20,21,22).GPJ

LOGS (

BORING

FA/EP/DATA5/009225510/ENGINEERING DATA/GEOTECHNICAL/GINTLOGS/009225510

LANGAN **B-19** Log of Boring Sheet of 6 Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 13 (MBPD) Sample Data Building Code PID Reading (ppm) Coring (min) MATERIAL SYMBOL Remarks Elev. (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 70 Light brown f-m SAND (wet) SS 15 Drilled to 75' using 3 7/8" bit S-18 25 Brownish gray wash 12 0.0 28 37 72 73 SS 75'-77' Light brown f-m SAND (wet) 26 Drilled to 80' using 3 7/8" bit 30 Light brown wash 12 0.0 41 44 78 79 80 SS 80'-82' 11 Drilled to 85' using 3 7/8" bit S-20 20 Light brown wash 81 0.0 Light brown fine SAND, trace silt (wet) 18 17 82 Class 83 84 -72.0 85 SS 85'-87' 19 Drilled to 90' using 3 7/8" bit 25 Light brown wash S-21 86 ω 0.0 Light brown Silty fine SAND, trace mica 46 flakes, trace fine gravel (wet) 57 87 88 89 -77.0 SS SS 90'-92' 47 Ended day at 3:00 PM on 45 6/3/13. 0.0 Light brown Gravelly f-c SAND, trace silt 38 Started day at 7:00 AM on (wet) 6/4/13. 33 Drilled to 95' using 3 7/8" bit 92 Light brown wash 93

Log of Boring **B-19** Sheet of 6 Proiect Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 13 (MBPD) Sample Data Building Code MATERIAL SYMBOL PID Readin (ppm) Remarks Template TEMPLATE. N-Value (Blows/ft) Elev Depth Penetr. resist BL/6in Number Sample Description Recov. (in) (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Coring (ft) Scale 10 20 30 40 95 32 Drilled to 100' using 3 7/8" bit S-23 SS 37 Light brown wash 0.0 96 ∞ Light brown f-c SAND, trace silt, trace 29 mica flakes (wet) 40 97 Class 98 99 3:46:00 PM -87. 100 -24SS- 1 100/3" SS 100'-100'3" 100/3" Gray Decomposed GNEISS, some f-m Drilled to 100.5' using 3 7/8" 0.0 sand (wet) 101 Roller bit refusal at 100.5' Advanced 3" ID casing to Class 100' 102 Ended day at 3:10 PM on 6/4/13. 103 Started day at 7:30 AM on 6/5/12. Drilled to 105' using 2 7/8" bit 104 Slow drilling Light brownish gray wash Mica flakes in wash 105 Advanced 3" ID casing to 5:00 106 Drilled to 105' using 2 7/8" bit REC=25"/60" =42% =15% Roller bit refusal at 105' 4:50 Light gray-brown wash Class Mica flakes in wash Gray Fractured Schistic GNEISS with RQD=9"/60" 5 Started NX Rock core run Pegmatite inclusions 7:20 C-1 at 105' at 10:40 AM 108 Light brownish gray wash 8:25 Water lost from 108.5'-109' Light gray wash at 109' 109 Finished core run C-1 at 110' 8:15 at 11:14 AM 110 Started NX Rock core run REC=96% RQD=83% C-2 at 110' at 12:02 PM 3:10 NX CORE C-2 Light gray wash **Gray Schistic GNEISS** Core barrel jammed at 112' 8:35 Finished core run C-2 at 112' at 12:25PM 112 REC=23"/24" =96% 8:40 RQD=20"/24" =83% =63% REC=44"/48" =92% Class 113 Advanced 3" ID casing to **Gray Schistic GNEISS** 10:00 NX CORE RQD=30"/48" Drilled to 112' using 2 7/8" bit 6-3 114 Light gray wash 9:40 Ended day at 3:00 PM on 6/5/13. 115 Started day at 7:15 AM on 13:0 6/6/13. 116 Started NX Rock core run C-3 at 112' at 7:45 AM 4:45 =100% REC=60"/60" =100% Light gray wash Finished core run C-3 at 116' 4:50 at 9:05 AM RQD=60"/60" Class Started NX Rock core run 118 **Gray Schistic GNEISS** C-4 at 116' at 10:20 AM 5:35 Light gray wash Finished core run C-4 at 121' 119 at 11:00 AM

7:15



Log of Boring **B-19** Sheet 6 of 6 Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 13 (MBPD) NLANGAN. COMIDATA/EPIDATA5/009225510/ENGINEERING DATA/GEOTECHNICAL/GINTLOGS/0092225510 BORING LOGS (B16,19, 20,21,22), GPJ ... 4/14/2014 3;46:01 PM ... Report: Log - LANGAN ... Template TEMPLATE. GDT PID Reading (ppm) Sample Data Building Code MATERIAL SYMBOL Remarks Elev. (ft) Depth (in) Penetr. resist BL/6in N-Value (Blows/ft) Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 Boring backfilled with Class Q 4 8:05 cuttings and patched with cement upon completion. 1a -108.0 121 End of Boring at 121' at 11:00 AM on 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 142 143

		4			1/V			Log		oring			B-20	0			Sheet	1	of	6	
	Project	roject Proposed 250 South Street Development								Project No. 009225510											
l	Location	Location									Elevation and Datum										
5	New York, NY Drilling Company									Approx. el 13 (MBPD) Date Started Date Finished											
יי ע	Warren George, Inc. Drilling Equipment										5/16/13 Completion Depth						k Depth	5	/29/13		
	DK-50 Truck Mounted Drill Rig										121 ft 112 ft										
Diate	Size and Type of Bit 2 7/8", 3 7/8", 4 7/8" 5 7/8" Tricone Roller Bits/ 4" Thin Wall Core										Number of Samples Disturbed 23										
D	Casing Diameter (in) Casing Depth (ft) 3", 4", 5" I.D. Steel Casing 112									Water Level (ft.) First					12.5	Completion 24 HR.					
200		asing Hammer Donut Weight (lbs) 300 Drop (in) 30								Drilling Foreman											
- L	Sampler	Llomm		D. Split Spoon	Weight (lbs)		Dron (in)	١	Ins	Gilbert Canelo Inspecting Engineer											
JI. LOC		r Hammer Safety Weight (lbs) 140 Drop (in) 30								Ransom Hennefer Sample Data											
и repo	MATERIAL SYMBOL	Elev. (ft) +13.0	Sample Description				PID Readir (ppm)	Coring (min)	Debty Cin Debty Scale Cin Debty Scale Cin							/alue Remarks ws/ft) (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)					
5	888.K	+13.0		4-INCH-THICK CONCRETE SLAB							_		Ŧ		10 20	30 4	Start		ng up at 1:00 AM		
5				BASEMENT		1 -							5/16/	13.	igh first flo						
14/20						_ 2 _							using	5 7/8"	bit gh basen						
:																	slab	using 4	" thin wal 5' using	I core	
5/27										- 3 -							bit	n wash		, c	
, 20,7										- 4 -								ed day a	at 3:00 PI	M on	
0,13										- 5 -								ed day	at 7:15 A	M on	
250										_											
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2000										- 8 - 											
200										9 -											
201										_ _ 10 _											
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AIGE		+1.3 +1.1 +0.9		2-INCH-THIC	CK ASPHALT CK CONCRETE		$-\sqrt{2}$			12											
ב פ פ				Brown f-c SA	ND, some fine gr k fragments (wet		ice / <u>Y</u>	2.1		- - 13 -	S-1	SS	4 4	11 50/1"		50/		2'6"-13' lled 5-ir	'1" nch flange	e onto	
	>>>>			Siit, trace brit	ok iraginients (wei	() [I ILL]										50,	base	ment flo	oor slab " ID casir		
5										- 14 -		Ħ	4	14			Drille	ed to 14 n wash	using 3	7/8" bit	
0100				Light brown (Gravelly f-c SAND	D, trace s	silt	0.9		_ 15 _	S-2	SS	N 1	11	27			4'-16' inced 4	" ID casir	na to 15'	
100324	>>>>		Class	(wet) [FILL]	·					- - 16 -				44			Drille		using 3		
2			7								_		N 1	4			SS 1	6'-18'	using 3	7/8" bit	
					ND, some wood, ace silt (wet) [FIL		rick	0.2		- 17 -	S-3	SS	^N 1	5	19			n wash			
				nagments, ti	aoc ont (wet) [i il	· - J				18 -		早	+	17	'	\setminus					
2.5										- - - 19 -											
=	XXXXX									20							N.				

TEMPLATE.

4/14/2014 3:46:08 PM

LANGAN Log of Boring **B-20** Sheet 2 of 6 Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 13 (MBPD) Sample Data Coring (min) Building Code PID Readin (ppm) Remarks N-Value (Blows/ft) Elev Depth Sample Description Recov. (in) (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) (ft) Scale 10 20 30 40 20 SS 20'-21'9" SS Advanced 4" ID casing to 19' S-4 24 ထ Difficulty advancing casing 0.0 21 Brown Gravelly f-c SAND, trace silt, trace 35 beyond 17' brick fragments (wet) [FILL] 100/3" Drilled to 23' using 3 7/8" bit 22 No water return Difficulty drilling beyond 21.75' 100/0" 23 S-5 SS 0 100/0" No Recovery SS refusal at 23' Spoon bounced Ended day at 3:15 PM on 24 5/17/13. Started day at 7:00 AM on 25 5/20/13. 41 Drilled to 25' using 3 7/8" bit SS 87 No water return 0.0 108 Difficult drilling Gray Gravelly f-c SAND, trace clay, trace 21 SS 25'-27' brick fragments (wet) [FILL] 17 27 SS 27'-29' 15 Advanced 4" ID casing to 29' Drilled to 30' using 3 7/8" bit 37 S-7 0.0 28 Gray f-c SAND, trace fine gravel, trace 60 No water return clay, trace brick fragments (wet) [FILL] 27 29 30 SS 30'-32' 10 Drilled to 34' using 3 7/8" bit SS 10 S-8 Difficult drilling 31 0.0 Gray f-c SAND, trace clay, trace brick No water return 66 fragments, trace fine gravel, trace wood 44 (wet) [FILL] 32 Class 33 34 104 Advanced 4" ID casing to 35' 85 Drilled to 37' using 3 7/8" bit 8-9 SS 9 35 121 Gray f-c SAND, some f-c gravel, trace 36 No water return clay, trace brick fragments (wet) [FILL] 27 36 37 SS 37'-39' 9 Advanced 4" ID casing to 37' 16 Drilled to 40' using 3 7/8" bit 38 0.0 Gray f-c GRAVEL, some clay, some f-c 28 No water return sand, trace wood, trace brick fragments, 12 (wet) [FILL] 39 SS SS 40'-42' 10 Drilled to 45' 35 No water return 0.0 Gray Gravelly f-c SAND, trace clay, trace 68 brick fragments, (wet) [FILL] 110 42 43

B-20 Log of Boring Sheet of 6 Project Project No. Proposed 250 South Street Development 009225510 Elevation and Datum Location New York, NY Approx. el 13 (MBPD) Sample Data Building Code MATERIAL SYMBOL PID Readin (ppm) Remarks Elev (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Number Sample Description Recov. (in) (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 45 SS 45'-47' 10 $q_u = 3.1 \text{ tsf } s_u = 1.5 \text{ tsf}$ S-12 15 0.0 46 ∞ Gray CLAY, some silt, some plant fibers, trace fine sand (wet) [FORMER RIVER Drilled to 50' using 3 7/8" bit 19 No water return 22 BOTTOM DEPOSIT Class 48 49 -37.0 50 SS 50'-52' WOR •q_u=0.1 tsf s_u=0.0 tsf WOR 8 0.0 Ended day at 3:00 PM on Gray CLAY, some silt, some f-m sand, WOR 5/20/12. trace plant fibers (wet) [FORMER RIVER WOR Started day at 7:15 AM on BOTTOM DEPOSITI 52 5/21/13. Class Advanced 4" ID casing to 50' Drilled to 55' using 3 7/8" bit 53 Gray wash 54 -42 (55 SS 55'-57' 17 LOGS (Drilled to 60' using 3 7/8" bit 14 Brown wash 56 0.0 Brown f-c SAND, trace fine gravel, trace BORING 15 silt (wet) 15 Class ILANGAN.COMIDATA/EP/DATA5/009225510/ENGINEERING DATA/GEOTECHNICAL/GINTLOGS/009225510 58 59 60 SS 60'-62' 16 Drilled to 65' using 3 7/8" bit 25 Brown wash 0.0 61 Brown f-m SAND, trace silt (wet) 25 30 62 Class 63 64 -52.0 SS 10 Drilled to 70' using 3 7/8" bit 13 Brown wash 4 0.0 66 Brown f-m SAND (wet) 16 20 67 Class 68 69

Report: Log - LANGAN ... Template TEMPLATE.GD

4/14/2014 3:46:09 PM

LANGAN **B-20** Log of Boring Sheet of 6 Project Project No. Proposed 250 South Street Development 009225510 Elevation and Datum Location New York, NY Approx. el 13 (MBPD) Sample Data PID Reading (ppm) Building Code Coring (min) Remarks Elev. (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Sample Description Recov. (in) (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 70 SS SS 70'-72' 12 Drilled to 75' using 3 7/8" bit 17 Brown wash 0.0 ∞ Brown fine SAND (wet) 28 18 72 73 SS 75'-77' 22 Drilled to 80' using 3 7/8" bit 27 Brown wash 9 0.0 Brown fine SAND, trace silt (wet) 29 19 /\LANGAN.COM/DATA\EP\DATA5009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\009225510_BORING LOGS (B16.19,20,21,22).GPJ 78 79 80 SS 80'-82' 24 Drilled to 85' using 3 7/8" bit 18 Brown wash 36 0.0 Brown f-c SAND, some fine gravel, trace 18 silt (wet) 20 Class 83 84 85 SS 85'-87' 35 Ended day at 3:00 PM on S-20 31 5/21/13. 86 0.0 Brown f-m SAND, some f-c gravel, trace Started day at 7:30 AM on 27 coarse sand (wet) 5/22/13. 38 Drilled to 90' using 3 7/8" bit 87 Brown wash 88 89 SS SS 90'-92' 85 Drilled to 94' using 3 7/8" bit 61 S-21 Roller bit refusal at 94' 9 0.0 Light brown f-m SAND (wet) Advanced 3" ID casing to 94' 63 Drilled to 95' using 2 7/8" bit 62 92 Light brown wash 93

TEMPLATE.

4/14/2014 3:46:10 PM

GPJ

LOGS (

BORING

COMIDATA/EP/DATA5/009225510/ENGINEERING DATA/GEOTECHNICAL/GINTLOGS/009225510

Log of Boring **B-20** Sheet of 6 Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 13 (MBPD) Sample Data Building Code MATERIAL SYMBOL PID Readin (ppm) Remarks N-Value (Blows/ft) Elev Depth Sample Description Recov. (in) (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) (ft) Scale 10 20 30 40 95 S-22 SS SS 95'-96' Light brown f-m SAND (wet) ω 0.0 Ended day at 3:15' PM on 58 50/0" 5/22/13. 96 50/0" Started day at 7:00 AM on 5/23/13. 97 Drilled to 96' using 2 7/8" bit Roller bit refusal at 96' Drilled using NX Core Barrel 98 96'-97' Core barrel observed to be advancing rapidly 99 Drilled to 100' using 2 7/8" bit Light brown wash 100 SS 100'-100'9" Light brown f-m SAND (wet) 89 9 Advanced 3" ID casing to 0.0 100/3" 100/3" 100' 101 Ended day at 3:00 PM on 5/23/13. Started day at 6:00 AM on 102 Class 5/24/13. Drilled to 105' using 2 7/8" bit 103 Roller bit refusal. (B16,19,20,21,22). Light brown wash Could not advance core 104 barrel beyond 100'. Casing shoe damaged Removed all 3" ID casing 105 and replaced damaged casing shoe Advanced 3" ID casing to 80' 106 Ended day at 2:00 PM on 5/24/13. 107 Started day at 7:05 AM on 5/28/13. Advanced 3" ID casing to 108 Drilled to 112' using 2 7/8" bit 109 Light brown wash Rig chattering at 110' Mica flakes in wash -97.0 110 Roller bit refusal at 112' Advanced 3" ID casing to Class 111 Weathered MICA SCHIST (inferred from Drilled to 112' using 2 7/8" bit drilling) Light brown wash -99 112 Started NX Rock core run 2:46 C-1 at 112' at 1:45 PM ***99**= REC=41"/48" =85% Light brownish gray wash 113 Finished core run C-1 at 116' 2:50 at 2:30 PM on 5/28/13. RQD=27"/48" Ended day at 3:00 PM on 114 Gray Granitic MICA SCHIST 5/28/13. 2:55 Started day at 7:00 AM on 115 5/29/13. 3:00 Class Started NX Rock core run 3:05 C-2 at 116' at 7:45 AM **=**63% REC=58"/60" =97% Light gray wash Finished core run C-2 at 121' 4:30 at 8:20 AM. RQD=38"/60" 118 Gray Granitic MICA SCHIST 5:00 119

4:15



Log of Boring **B-20** Sheet of 6 Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum Approx. el 13 (MBPD) New York, NY NLANGAN. COMIDATA/EPIDATA5/009225510/ENGINEERING DATA/GEOTECHNICAL/GINTLOGS/0092225510 BORING LOGS (B16,19, 20, 21, 22), GPJ ... 4/14/2014 3;46:10 PM ... Report: Log - LANGAN ... Template TEMPLATE. GDT PID Reading (ppm) Sample Data Coring (min) Building Code MATERIAL SYMBOL Remarks Elev. (ft) Depth N-Value (Blows/ft) Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 120 Boring backfilled with drill Class C-2 5:50 cuttings and patched with 1b cement upon completion -108.0 121 End of Boring at 121' at 8:35 AM on 5/29/2013. 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 142 143

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L	_/	4	AVUAN							of Boring B-21						Sheet 1 of 5						
Pro	oject		Propo	osed 250 South	Project No. 009225510																	
Loc	cation			York, NY	Elevation and Datum Approx. el 13 (MBPD)																	
Dril	lling C	ompai	ny			Date Started Date Finished																
Dril	Warren George, Inc. Drilling Equipment											1	6/7/13	3	Rock	Depth	6/	/14/13				
Siz	DK-50 Track Mounted Drill Rig Size and Type of Bit 2 7/8", 3 7/8", 4 7/8" 5 7/8" Tricone Roller												114 f Disturbed	t	Un	ndisturbed		104 ft Core				
Template TEMPLATE.GDT	sing D	iamet	er (in)	4" Thin Wall Co		С	asing Dept	. ,		mber of S ater Level		F	irst	25	Completion		- ;	2 <u>4 H</u> R.	2			
-	sing H	lamme	3", 4" Donu ^{er} Donu	, 5" I.D. Steel C	Casing Weight (lbs)	300	Drop (in)	102) 30		Iling Fore			<u> </u>	13		<u></u>		Ā				
	mpler			D. Split Spoon		000			Ins	Chris Gibbs Inspecting Engineer												
Sar Sar	mpler	Hamm		Donut	Weight (lbs)	140	Drop (in)	30		Ransom Hennefer												
. Repor	SYMBOL	Elev. (ft)	Building Code	S	ample Descrip	ption		Reading (ppm)	Coring (min)	Depth Scale	Number Type		Recov. (in) (in) Penetr. resist BL/6in		alue vs/ft)	 t) (Drilling Fluid, Dep 		Depth of Ca	asing,			
L DW	્રું હ	+13.0	BO	4-INCH-THI	CK CONCRETE	SI AR		PID)	Cori	_ 0 _	N	T,	Per Per B.	10 20	30 40			ng Resistano at 7:00 A				
TAGEOTECHNICAL/GINTLOGS/009225510_BORING LOGS (B16.19,20,21,22), GPJ 4/14/2014 3:46:21 PM Report Log		+1.3 +1.1 +0.9			CK ASPHALT CK CONCRETE	= SLAB		0.1		- 1						Drilled using the Cored slab us Drilled bit	rig at through 5 7/8" through through 4 to 12	bit gh baser " thin wa .5' using	nent Il core			
LANGAN COMDATA.EPDATA.5009225510 ENGINEERING DATA (GEOTECHNICAL) GI			Class 7	Brown f-c SA fragments (v No Recovery	AND, trace silt, vet) [FILL]	trace bric		2.0		- 14 - - 15 - - 16 - - 17 - - 18 -	S-2	SS	0 25/0"	7	50/0"	basem conner level u Advan Drilled Gray v Rig ch 6/7/13 Starter 6/10/1 Drilled Gray v Rig ch SS 17' Advan	ed a 5 pent flocted it sing 5 ced 4' to 15' vash atterir usal a day a da	inch fland or slab to the first	rst floor ing ng to 14' 7/8" bit M on AM on 7/8" bit 5.5'			

Log of Boring B-21 Sheet of 5 Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, NY Approx. el 13 (MBPD) Sample Data Building Code Coring (min) PID Readin (ppm) Remarks TEMPLATE. N-Value (Blows/ft) Elev Depth Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) (ft) Scale 10 20 30 40 20 Gray wash 10 SS 20'-22' SS S-4 0.1 21 4 Brown f-c SAND, some brick fragments, 9 some f-c gravel, trace silt (wet) [FILL] 10 22 SS 22'-24' 6 Advanced 4" ID casing to 24' 8 S-5 Drilled to 25' using 3 7/8" bit ω 23 Gray f-c SAND, trace silt, trace f-c gravel, 10 Gray wash trace concrete, trace brick fragments (wet) 12 [FILL] 24 25 SS 25'-27' 11 SS 14 0.0 Brown f-c SAND, trace silt, trace fine 10 gravel, trace brick fragments (wet) [FILL] 27 SS 27'-29' 3 Advanced 4" ID casing to 29' 9 GP. SS Drilled to 30' using 3 7/8" bit S-7 0.0 28 2 Light gray f-c SAND, some concrete, some 8 Gray wash ,22) brick fragments, trace silt (wet) [FILL] 7 (B16,19,20,21 29 Class 30 SS 30'-32' 35 SS 11 S-8 9 31 0.0 Light gray f-c SAND, some concrete, some 11 brick fragments, trace silt (wet) [FILL] 9 32 SS 32'-34' 6 Advanced 4" ID casing to 34' 8 SS Drilled to 35' using 3 7/8" bit 0.0 33 Dark brown f-c SAND, some silt, some fine Gray wash 8 gravel, trace brick fragments (wet) [FILL] 9 34 35 SS 35'-37' 3 2 0.0 36 3 Gray f-c SAND, trace silt, trace clay, trace 2 brick fragments, trace fine gravel (wet) 3 [FILL] 37 SS 37'-39' 5 Ended day at 3:00 PM on 5 6/10/13 38 4 0.0 Brown f-c SAND, some silt, trace fine Started day at 7:00 AM on gravel, trace wood, trace brick fragments, 6/11/13. 5 trace concrete fragments, trace pottery Drilled to 40' using 3 7/8" bit 39 fragments (wet) [FILL] Dark gray wash -27.0 SS 40'-42' SS 61 Spoon bouncing at 40' 9 Class 0.0 WOOD, trace clay (wet) [FORMER RIVER 3 BOTTOM DEPOSIT 42 SS 42'-44' 8 Drilled to 45' using 3 7/8" bit SS S-13 8 Gray wash 0.0 43 9 Gray CLAY, some silt, trace wood (wet) 6 Class [FORMER RIVER BOTTOM DEPOSIT] 6

B-21 Log of Boring Sheet of 5 Project Project No. Proposed 250 South Street Development 009225510 Elevation and Datum Location New York, NY Approx. el 13 (MBPD) Sample Data Building Code Coring (min) MATERIAL SYMBOL PID Readin (ppm) Remarks Elev (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 45 Drilled to 50' using 3 7/8" bit q_u =0.2 tsf s_u =0.12 tsf 2 S-14 0.0 46 Gray CLAY, some silt, trace wood (wet) [FORMER RIVER BOTTOM DEPOSIT] 3 3 Class 4c 48 49 -37.0 50 SS 50'-52' WOR Drilled to 55' using 3 7/8" bit WOH Gray wash 20 0.0 Gray CLAY, some silt, trace fine sand 3 (wet) [FORMER RIVER BOTTOM Class 6 DEPOSIT] 52 53 (B16,19,20,21,22) -40.5 54 55 SS 55'-57' 10 LOGS (Drilled to 60' using 3 7/8" bit 17 Gray wash 56 ω 0.0 BORING Light brown f-m SAND, trace silt (wet) 14 Class 18 JANGAN.COM/DATA\EP\DATA5\009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\009225510 58 59 60 SS 60'-62' 13 Drilled to 65' using 3 7/8" bit 15 Gray wash 16 61 0.0 Light brown f-m SAND (wet) 13 14 62 Class 63 64 -52.0 SS 65'-67' 18 Drilled to 70' using 3 7/8" bit 28 Gray wash 9 0.0 66 Light brown f-m SAND (wet) 25 29 67 Class 68 69

B-21 Log of Boring Sheet of 5 Project Project No. Proposed 250 South Street Development 009225510 Elevation and Datum Location New York, NY Approx. el 13 (MBPD) Report: Log - LANGAN ... Template TEMPLATE.GD PID Reading (ppm) Sample Data Building Code Coring (min) MATERIAL SYMBOL Remarks Elev (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Recov. (in) Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 70 SS 23 Drilled to 75' using 3 7/8" bit 24 Gray wash 18 57 0.0 Light brown fine SAND (wet) 33 33 72 73 4/14/2014 3:46:24 PM SS 75'-77' 23 Ended day at 3:00 PM on 28 6/11/13. 4 0.0 Light brown f-m SAND (wet) Started day at 7:15 AM on 36 6/12/13. 34 Drilled to 80' using 3 7/8" bit Grayish brown wash //LANGAN.COM/DATA/EP/DATA5/009225510/ENGINEERING DATA/GEOTECHNICAL/GINTLOGS/009225510_BORING LOGS (B16,19,20,21,22),GPJ 78 79 80 SS 80'-82' 18 Drilled to 85' using 3 7/8" bit 25 S-21 Grayish brown wash 81 0.0 Light brown f-m SAND, trace silt (wet) 18 18 Class 83 84 85 SS 85'-87' 21 Drilled to 90' using 3 7/8" bit 23 Grayish brown wash 86 0.0 Light brown fine SAND, trace silt (wet) 23 37 87 88 89 SS 90'-92' 25 Drilled to 95' 33 Grayish brown wash 16 0.0 Light brown fine SAND, trace silt, trace 24 m-c sand (wet) 20 92 93

Log of Boring B-21 Sheet of 5 Project Project No. Proposed 250 South Street Development 009225510 Elevation and Datum Location New York, NY Approx. el 13 (MBPD) Sample Data Building Code MATERIAL SYMBOL PID Readin (ppm) Remarks Template TEMPLATE. Elev (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Number Sample Description Recov. (in) (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 95 SS 95'-97' 92 Drilled to 100' S-24 SS 26 0.0 96 ∞ Light brown f-c SAND, some silt, trace fine 33 gravel (wet) 35 97 98 Class 99 4/14/2014 3:46:25 PM 100 0.0 SS 100'-100'5" Light brown f-c SAND, some silt, some f-c S-25SS 4 100/5" 100/5" Ended day at 3:00 PM on gravel (wet) 6/12/13. 101 Started day at 7:00 AM on 6/13/13. Drilled to 103' using 3 7/8" bit 102 Grayish brown wash Roller bit refusal at 103' 103 Advanced 3" ID casing to WEATHERED GNEISS (inferred from Class drilling) Ended day at 3:00 PM on 104 6/13/13. 10:00 Started day at 7:00 AM on 6/14/13. 105 REC=59"/60" =98% Drilled to 104' using 2 7/8" bit 9:55 Light gray wash 106 Rig chattering from 103'-104' RQD=51"/60" NX CORE Light gray Granitic GNEISS Roller bit refusal at 104'. 11:40 Started NX Rock core run 107 C-1 at 104' at 9:35 AM VILANGAN. COM/DATA/EP/DATA5/009225510/ENGINEERING DATA/GEOTECHNICAL/GINTLOGS/009225510 12:00 Light gray wash Finished core run C-1 at 109' 108 at 10:40 AM 14:30 Class 109 Started NX Rock core run C-2 at 109' at 11:30 AM 11:00 Light gray wash 110 RQD=60"/60" =100% REC=60"/60" =100% Finished core run C-2 at 114' 10:00 at 12:30 PM Light gray GRANITE C-2 10:00 112 11:30 113 11:15 -101.0 114 Boring backfilled with drill End of Boring at 114' at 12:30 PM on cuttings and patched with 6/14/2013. cement upon completion. 115 116 117 118 119

Log of Boring **B-22** Sheet of 6 Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum Approx. el 13 (MBPD) New York, NY Drilling Company Date Started Date Finished Warren George, Inc. 5/21/13 5/29/13 Rock Depth Drilling Equipment Completion Depth DK-525 Track Mounted Drill Rig 122 ft 111.5 ft Size and Type of Bit 2 7/8", 3 7/8", 4 7/8" 5 7/8" Tricone Roller Bits/ 4" Thin Wall Core Disturbed Undisturbed Core Number of Samples 26 Casing Diameter (in) Casing Depth (ft) 24 HR. First Completion Water Level (ft.) 3", 4", 5" I.D. Steel Casing V 13 112 Casing Hammer Donut Weight (lbs) Drop (in) Drilling Foreman 30 300 Chris Gibbs Sampler 2" O.D. Split Spoon Inspecting Engineer Weight (lbs) Sampler Hammer Drop (in) 140 30 Safety Ransom Hennefer Sample Data Building Code) Readin (ppm) (min) Remarks MATERIAL Depth Recov. (in) Penetr. resist BL/6in Number Coring (Sample Description (Drilling Fluid, Depth of Casing, (ft) Scale 믑 Fluid Loss, Drilling Resistance, etc.) DATA/GEOTECHNICAL\GINTLOGS\009225510_BORING LOGS (B16,19,20,21,22).GPJ ... 4/14/2014 3:46:40 PM +13.0 10 20 30 40 e 4.7. k 4-INCH-THICK CONCRETE SLAB Started day at 7:15 AM on +12. 5/21/13. Drilled through fist floor slab **BASEMENT** using 5 7/8" bit Cored through basement slab using 4" thin walled core Drilled to 13' using 4 7/8" bit 2 3 5 6 9 2-INCH-THICK ASPHALT 12 +1.0 +0. 3-INCH-THICK CONCRETE SLAB SS 13'-13'8" 13 Brown Sandy f-c GRAVEL, trace silt, trace Mounted 5-inch flange and 1.3 ls⊟ S-61 sponge on basement slab brick fragments (wet) [FILL] 100/2 100/2' and connected to first floor 14 with 5" ID casing Advanced 4" ID casing to 14' Ended day at 3:00 PM on SS 95 5/21/13. 63 Started day at 7:30 AM on Class 0.5 101 5/22/13. Brown f-c SAND, trace silt, trace brick 38 Drilled to 15' fragments (wet) [FILL] 30 SS 15'-17' Brown f-c SAND, trace silt, trace brick 100/4" 0.1 Drilled to 17' using 3 7/8" bit 100/4" fragments (wet) [FILL] No water return SS 17'-17'4" 18 Spoon bouncing observed Advanced 4" ID casing to 19' 19 Drilled to 20' using 3 7/8" bit Dark gray wash

Log of Boring **B-22** Sheet of 6 Project Project No. 009225510 Proposed 250 South Street Development Location Elevation and Datum New York, NY Approx. el 13 (MBPD) Sample Data Building Code PID Readin (ppm) Remarks Elev (ft) N-Value (Blows/ft) Depth Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 20 SS 20'-22' SS 3 S-4 0.0 21 0 No Recovery 3 3 22 SS 22'-24' 3 En Core samples taken from S-5 bottom 6 inches of S-5 ω 23 0.0 Black f-c SAND, some clay, trace brick Drilled to 25' using 3 7/8" bit 9 fragments, trace wood (wet) [FILL] Dark gray wash 8 24 25 SS 25'-27' SS 5 0.0 26 9 Brown to black f-c SAND, some brick 5 fragments, trace silt, trace clay (wet) [FILL] 6 27 SS 27'-29' Drilled to 30' using 3 7/8" bit SS S-7 Dark gray wash 0.0 28 ω Dark brown f-c SAND, some silt, trace brick fragments, trace wood, trace porcelain fragments (wet) [FILL] 29 Class 30 SS 30'-32' 2 S-8 31 4 0.0 Brownish gray f-c SAND, some silt, trace 3 clay, trace brick fragments, trace wood, 5 trace plant fibers (wet) [FILL] 32 SS 32' to 34' Drilled to 35' using 3 7/8" bit SS Dark gray wash 0.0 33 Brown f-c SAND, some silt, trace clay, 9 trace brick fragments, trace porcelain 10 fragments, trace wood (wet) [FILL] 34 35 SS 35'-37' 13 12 0.0 36 Brown f-c SAND, some silt, trace clay, trace brick fragments (wet) [FILL] 9 37 SS 37'-39' 8 Drilled to 40' using 3 7/8" bit Dark gray wash 38 ω 0.0 Gray f-c SAND, some silt, trace fine 10 gravel, trace clay, trace brick fragments, 12 trace metal fragments, trace seashell 39 fragments (wet) [FILL] -27.0 SS 40'-42' SS 2 q_u=0.5 tsf 3 16 0.0 Drilled to 43' using 3 7/8" bit Gray CLAY, some silt, trace f-m sand, Class Dark gray wash trace wood (wet) [FORMER RIVER 6 BOTTOM DEPÓSIT] 42 -30.0 0.0 43 Shelby Tube 43'-45' $q_{11}=2.0$ tsf $s_{11}=0.8$ tsf ST-1 Class 9 SH

B-22 Log of Boring Sheet of 6 Project Project No. Proposed 250 South Street Development 009225510 Elevation and Datum Location New York, NY Approx. el 13 (MBPD) Sample Data Building Code Coring (min) MATERIAL SYMBOL PID Readin (ppm) Remarks Elev (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Sample Description Recov. (in) (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 45 SS q_=1.5 tsf s_=0.5 tsf S-13 11 10 0.0 46 Dark gray CLAY, some silt, some fine sand, trace wood (wet) [FORMER RIVER 12 10 BOTTOM DEPOSITI Ended day at 3:15 PM on Class Started day at 7:00 AM on 48 5/23/13. Drilled to 50' using 3 7/8" bit Gray wash 49 -37.0 50 SS 50'-52' -q_u=0.5 tsf s_u=0.2 tsf 2 10 0.0 Drilled to 55' using 3 7/8" bit Gray Sandy CLAY, some silt (wet) 2 Gray wash [FORMER RIVER BOTTOM DEPOSIT] 5 52 Class 53 54 -42 C 55 SS 55'-57' 11 LOGS (Drilled to 60' using 3 7/8" bit 16 Gray wash 56 0.0 Light brown f-m SAND, trace silt (wet) 13 10 ILANGAN.COMIDATA/EP/DATA5/009225510/ENGINEERING DATA/GEOTECHNICAL/GINTLOGS/009225510 58 59 60 SS 60'-62' Drilled to 65' using 3 7/8" bit 13 Brownish gray wash 0.0 61 Light brown f-m SAND, trace silt (wet) 14 14 62 Class 63 64 SS 65'-67' SS 12 Drilled to 70' using 3 7/8" bit 13 Grayish brown wash 0.0 66 Light brown f-c SAND, trace silt (wet) 14 16 67 68 69

B-22 Log of Boring Sheet of 6 Project Project No. Proposed 250 South Street Development 009225510 Elevation and Datum Location New York, NY Approx. el 13 (MBPD) Template TEMPLATE.GD PID Reading (ppm) Sample Data Building Code Coring (min) MATERIAL SYMBOL Remarks Elev (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Sample Description Recov. (in) (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 70 17 Drilled to 75' using 3 7/8" bit S-18 20 Grayish brown wash 0.0 9 38 Light brown f-m SAND, trace silt (wet) 18 20 72 Class 73 4/14/2014 3:46:42 PM -62.0 SS 75'-77' 13 Drilled to 80' using 3 7/8" bit 16 Grayish brown wash 16 0.0 Light brown fine SAND, trace silt (wet) 13 14 Class (B16,19,20,21,22).GPJ 78 79 -67.0 80 SS 80'-82' 14 LOGS (Drilled to 85' using 3 7/8" bit S-20 Grayish brown wash 9 81 0.0 BORING Light brown fine sand, trace silt (wet) 23 18 82 JANGAN.COM/DATA\EP\DATA5\009225510\ENGINEERING DATA\GEOTECHNICAL\GINTLOGS\009225510 83 84 Class 3a 85 SS 85'-87' 17 Ended day at 3:00 PM on 23 5/23/13. S-21 86 9 0.0 Light brown f-m SAND (wet) Satrted day at 6:00 AM on 26 5/24/13. 24 Drilled to 90' using 3 7/8" bit 87 Brown wash 88 89 SS 90'-92' 10 Drilled to 95' using 3 7/8" bit 13 Light brown wash 15 0.0 Light brown f-m SAND, trace silt (wet) 11 13 92 Class 93

Log of Boring **B-22** Sheet of 6 Project Project No. 009225510 Proposed 250 South Street Development Location Elevation and Datum New York, NY Approx. el 13 (MBPD) Sample Data Building Code MATERIAL SYMBOL PID Readin (ppm) Remarks Template TEMPLATE. Elev (ft) N-Value (Blows/ft) Depth Penetr. resist BL/6in Sample Description Recov. (in) (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 95 SS Drilled to 100' using 3 7/8" bit S-23 11 Light brown wash 0.0 96 က Light brown f-c SAND (wet) 11 20 97 98 99 Class 4/14/2014 3:46:43 PM 100 SS 100'-102' 15 Drilled to 105' using 3 7/8" bit 14 Light brown wash 0.0 9 Light brown fine SAND (wet) 11 12 102 GPJ 103 (B16,19,20,21,22). 104 -92 (105 SS 105'-106'9" SS 31 LOGS (Ended day at 2:00 PM on Light brown f-m SAND, some silt, some f-c 26 5/24/13. 106 gravel (wet) Started day at 7:05 AM on 85 5/28/13. -93.8 100/3" Drilled to 110' using 3 7/8" bit 107 Light brown wash 108 109 SS 110'-110'5" -S-26SS 3 100/5" Light brown Gravelly f-m SAND, trace silt, 100/5" Drilled to 112' using 3 7/8" bit trace coarse sand (wet) Light brown wash 111 Rig chattering at 111.5' -98. Class Mica flakes in wash Weathered MICA SCHIST (inferred from -99 N Roller bit refusal at 112' 112 Advanced 3" ID casing to 5:45 113 Drilled to 112' using 2 7/8" bit REC=56"/60" =93% Light brown wash 7:10 Ended day at 3:00 PM on 114 RQD=56"/60" Gray Granitic MICA SCHIST 5/28/13. 9:35 Started day at 7:00 AM on 5/29/13. 115 Started NX Rock core run 9:10 C-1 at 112' at 8:10 AM Class 116 Light gray wash Drill rods observed to rapidly 9:20 advance about 1" at 114' No water return beyond 114' =97% =97% 13:30 Finished core run C-1 at 117' at 8:55 AM 118 REC=58"/60" RQD=58"/60" Started NX Rock core run C-2 C-2 at 117' at 9:50 AM No water return 119 Gray Granitic MICA SCHIST Finished core run C-2 at 122' 20:00 at 11:45 AM



Log of Boring **B-22** Sheet of 6 Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum Approx. el 13 (MBPD) New York, NY Template TEMPLATE.GD1 PID Reading (ppm) Sample Data Building Code MATERIAL SYMBOL Remarks Elev. (ft) Depth N-Value (Blows/ft) Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 120 Boring backfilled with drill 20:00 cuttings and patched upon Class completion. 121 25:00 NLANGAN. COMIDATA!EPIDATA5/009225510/ENGINEERING DATA/GEOTECHNICAL/GINTLOGS/009225510_BORING LOGS (B16,19,20,21,22). GPJ ... 4/14/2014 3:46:43 PM ... Report: Log - LANGAN -109.0 122 End of Boring at 122' at 1:30 PM on 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143

B-23 Log of Boring Sheet 5 of Project No 009225510 Proposed 250 South Street Development Location Elevation and Datum New York, New York Approx. el 5 (MBPD) **Drilling Company** Date Started Date Finished 6/26/14 Warren George, Inc. 6/24/14 Rock Depth Drilling Equipment Completion Depth Acker Soil-Max Truck-Mounted Drill Rig 96 ft 111 ft Size and Type of Bit Disturbed Undisturbed Core Number of Samples 4-7/8", 3-7/8" Tricone Roller Bits 23 3 Casing Diameter (in) Completion 24 HR. Casing Depth (ft) First Water Level (ft.) ∇ Ÿ 4" I.D. Steel Casing 5 Casing Hammer Donut Weight (lbs) Drilling Foreman Drop (in) 300 30 Dave Osuch Sampler 2" O.D. Split Spoon & NX Core Barrel Inspecting Engineer Weight (lbs) Drop (in) Sampler Hammer Safety 140 30 Keith Herman Sample Data Building Code Coring (min) MATERIAI SYMBOL Remarks Depth N-Value (Blows/ft) Penetr resist BL/6in Sample Description Type (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) (ft) 3 Scale +5. 10 20 30 40 0 6-INCH-THICK ASPHALT Started drilling at 11:10 AM +4. on 6/24/14 SS 29 Drilled through approximately 40 6-inch-thick asphalt with Black ASPHALT AND CONCRETE, some f-c 4-7/8" roller bit 31 sand, trace brick, trace silt (dry) [FILL] 2 SS 6"-2' SS SS 2'-4' 26 Drilled to 5' with 3-7/8" roller S-2 15 3 67 Black f-c SAND, some concrete, some brick, trace fine gravel, trace silt, trace wood, trace Dark brown wash 55 styrofoam (moist) [FILL] ∇ 5 SS 5'-6'2" SS 19 5-3 Drilled to 7' with 3-7/8" roller Dark brown to black f-c SAND, some silt, trace 40 6 50/2" brick, trace concrete (wet) [FILL] 50/2" Dark grayish brown wash 7 SS 7'-9' NGAN COMIDATAIEPIDATASI009225510IENGINEERING DATAIGEOTECHNICALIGINTLOGSI009225510 Advanced 4" I.D. casing to 4' 3 (hammer) SS S-4 8 10 3 Black f-c SAND, trace fine gravel, trace brick, Drilled to 10' with 3-7/8" roller 7 trace concrete, trace silt (wet) [FILL] 5 9 Dark grayish brown wash 10 Class SS 10'-12' SS 3 2 Black f-c SAND, some brick, trace concrete, trace silt (wet) [FILL] 12 SS SS 12'-14' 4 Drilled to 15' with 3-7/8" roller 9 9-8 13 ω 18 Black f-c SAND, trace brick, trace concrete, 9 Dark brown wash trace silt (wet) [FILL] 10 15 SS 15'-17' SS Advanced 4" I.D. casing to 5 19' (push) S-7 9 16 Black f-m SAND, some brick, trace coarse sand, Drilled to 20' with 3-7/8" roller trace pottery fragments (wet) [FILL] 7 Dark gray wash 17 18 19

LANGAN **B-23** Log of Boring Sheet of 5 Project No. Proposed 250 South Street Development 009225510 Elevation and Datum Location Approx. el 5 (MBPD) New York, New York Sample Data Building Code Remarks Depth Scale N-Value (Blows/ft) Penetr, resist BL/6in (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Sample Description Coring ((ft) 10 20 30 40 20 SS 20'-22' 6 SS Advanced 4" I.D casing to ∞ 24' (hammer) 21 Dark gray to black f-m SAND, some brick, trace Drilled to 25' with 3-7/8" roller metal, trace concrete, trace coarse gravel, trace 5 silt (wet) [FILL] 22 Dark gray wash 23 24 25 SS 25'-27' Drilled to 30' with 3-7/8" roller 8-9 SS 26 22 Dark gray to black f-m SAND, trace brick, trace 13 Dark gray wash concrete, trace silt (wet) [FILL] 10 27 Class 28 29 30 SS 30'-32' 24 Advanced 4" I.D. casing to 29' (push) 15 31 19 Dark gray to black f-m SAND, trace brick, trace End of day's work at 3:00 PM pottery fragments, trace silt (wet) [FILL] on 6/24/14 12 32 Resumed drilling at 7:25 AM on 6/25/14 Drilled to 35' with 3-7/8" roller 33 Dark brown wash 34 35 SS 35'-37' WOH qu=0.25 tsf WOH Drilled to 37' with 3-7/8" roller SS | SS 36 Black Silty CLAY, trace fine sand, trace fine WOH gravel (wet) [FORMER RIVER BOTTOM Black wash DEPOSIT 37 Shelby Tube 37'-39' SH-1 19 38 동 39 SS 39'-41' WOH qu=0.25 tsf WOH Drilled to 45' with 3-7/8" roller Class SS 24 40 Black Silty CLAY, trace fine sand (wet) [FORMER RIVER BOTTOM DEPOSIT] WOH Dark gray wash WOH 41 42

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B-23 Log of Boring Sheet of 5 3 Project No. 009225510 Proposed 250 South Street Development Location Elevation and Datum Approx. el 5 (MBPD) New York, New York Sample Data Building Code Coring (min) Remarks Elev Depth (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Sample Description (ft) 45 SS SS 45'-47' Drilled to 50' with 3-7/8" roller 15 29 46 Brown fine SAND, trace medium sand, trace silt 18 Dark brown wash 15 48 Class 50 SS 50'-52' SS Drilled to 55' with 3-7/8" roller 24 20 51 Brown fine SAND, trace silt (wet) 12 Dark brown wash 15 52 53 55 SS THE 18 SS 55'-57' 12 Drilled to 60' with 3-7/8" roller 18 Brown f-m SAND, trace silt (wet) Brownish gray wash 28 36 57 58 59 60 SS 18 SS 60'-62' 12 Drilled to 65' with 3-7/8" roller S-16 17 53 Brown fine SAND, trace silt (wet) Brownish gray wash 34 62 Class 63 64 65 SS 65'-67' 19 Drilled to 70' with 3-7/8" roller 26 66 Grayish brown fine SAND, trace silt (wet) 30 Brownish gray wash 30 67 68 69

LANGAN Log of Boring **B-23** Sheet 5 4 of Project No. 009225510 Proposed 250 South Street Development Location Elevation and Datum Approx. el 5 (MBPD) New York, New York Sample Data Coring (min) Building Code Remarks Depth Elev (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Sample Description (ft) 10 20 30 40 70 SS SS 70'-72' 11 Drilled to 75' with 3-7/8" roller 15 Grayish brown fine SAND (wet) 21 Brownish gray wash 21 SS 75'-77' SS 14 Drilled to 80' with 3-7/8" roller 21 14 52 Grayish brown fine SAND, trace medium sand 31 Brownish gray wash (wet) 33 77 78 79 SS 16 SS 80'-82' 20 Drilled to 85' with 3-7/8" roller 20 54 81 Grayish brown fine SAND, some silt (wet) Brownish gray wash 33 82 Class 83 84 85 SS 85'-87' 26 Drilled to 90' with 3-7/8" roller 16 32 86 Grayish brown fine SAND, trace m-c sand, trace Brownish gray wash 16 fine gravel, trace silt (wet) 19 87 Difficult, slow drilling observed 87.5'-88' 88 End of day's work at 3:00 PM on 6/25/14 89 Resumed drilling at 7:15 AM on 6/26/14 90 SS 90'-92' SS 28 Drilled to 95' with 3-7/8" roller 28 16 63 Grayish brown fine SAND, trace m-c sand, trace Grayish brown wash 35 fine gravel, trace silt (wet) 32 92 Slow, difficult drilling observed 92'-92.5', 93'-93.5', and 94.5'-95' 93

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B-23 Sheet of 5 Log of Boring Project No 009225510 Proposed 250 South Street Development Elevation and Datum Location Approx. el 5 (MBPD) New York, New York Sample Data Building Code Coring (min) Remarks Depth N-Value Penetr resist BL/6in (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Sample Description Scale (ft) 10 20 30 40 95 S-23 SS SS 95'-95'10" 78 Class 9 Drilled to 96' with 3-7/8" roller 100/4" Grayish brown fine SAND, some fractured rock 100/4" 96 fragments, trace m-c sand, trace f-c gravel, trace Grayish brown wash silt (wet) Very hard, slow drilling observed 95'-96' 97 REC=33"/60" =55% Roller bit refusal at 96' 8:37 Started NX Rock core run 98 RQD=20"/60" C-1 at 96' at 10:48 AM NX CORE 7 Class 24:32 Gray wash Gray FRACTURED AND WEATHERED MICA 99 SCHIST 29:12 100 Finished core run C-1 at 101' 7:51 at 12:14 PM 101 Started NX Rock core run C-2 at 101' at 12:45 PM 14:04 Gray wash 102 Stopped coring C-2 at 12:58 PM for drill rig repair Resumed coring C-2 at RQD=52.5"/60" =88% Gray MICA SCHIST with quartz inclusions REC=60"/60" =100% 5:02 103 NX CORE 1:08 PM 9:01 104 8:27 105 Finished core run C-2 at 106' 7:47 at 1:40 PM 106 Started NX Rock core run Gray MICA SCHIST with quartz inclusions C-3 at 106' at 2:06 PM 14:39 Gray wash 107 REC=60"/60" =100% RQD=60"/60" =100% ILANGAN COMIDATAREPIDATASIO09225510/ENGINEERING DATAIGEOTECHNICALIGINTLOGSI009225510_ 6:23 108 -NX CORE 6:38 109 8:04 110 Finished core run C-3 at 111' 8:58 at 2:51 PM 106.0 Boring backfilled with drill End of boring at 111' at 3:15 PM on 6/26/14 cuttings upon completion 112 113 114 115 116 117 118 119

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Drilling	ا ر	mpar		en George, Inc.				Date Started Date Finished 6/30/14											
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Samp Samp	_	amm		Safety	Weight (IDS)	140	30	Keith Herman Sample Data											
Report: Log MATERIAL SYMBOL	E	lev. (ft)	Building Code		Sample Desc	ription		Coring (min)	Depth Scale	Number	Туре		Penetr. resist BL/6in	N-Va (Blow	s/ft)	(Dri Fluid I		marks , Depth of C ing Resista	Casing, nce, etc.)
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TA5/00922	\otimes			Dark gray f-r	n SAND, trace b	orick, trac	e concrete,		- 16 -	S-6	SS	7	2	-3		Drill	ed to 2	0' with 3	-7/8" roller
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Log of Boring **B-24** Sheet 2 of 5 Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, New York Approx. el 8.5 (MBPD) Sample Data Building Code Remarks Elev (ft) N-Value (Blows/ft) Depth Sample Description Coring ((Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 20 SS 20'-22' End of day's work at 3:00 PM 5 S-7 on 6/24/14 21 9 Dark gray f-m SAND, trace brick, trace silt (wet) Resumed drilling at 7:45 AM on 6/25/14 22 Drilled to 25' with 3 7/8" roller Dark brown wash 23 24 25 SS 25'-27' 5 Drilled to 30' with 3-7/8" roller 3 17 Black f-c GRAVEL, some brick, some f-c sand 8 Dark brown wash (wet) [FILL] 6 27 Class 28 29 30 SS 30'-32' Advanced 4" I.D. casing to 24' (hammer) Black Silty f-m SAND, some fine gravel, trace Drilled to 35' with 3-7/8" roller 5 brick (wet) [FILL] Dark brown wash 32 33 34 SS 35'-37' 3 Drilled to 40' with 3-7/8" roller S-10 3 48 36 Black Silty CLAY, some f-m sand, trace fine 3 Dark gray wash gravel (wet) [FORMER RIVER BOTTOM DEPOSIT 37 Class 38 39 40 SS SS 40'-42' 24 Drilled to 45' with 3-7/8" roller 39 65 Black to gray Silty f-m SAND, trace coarse Water loss observed 26 gravel, trace seashells (wet) [FORMER RIVER Moderate rig chatter observed 40'-43' 21 BOTTOM DEPOSIT 42 Class 3a 43

B-24 Sheet Log of Boring 3 of 5 Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, New York Approx. el 8.5 (MBPD) Sample Data Coring (min) Building Code Remarks Elev (ft) Depth Scale Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) 10 20 30 40 SS SS 45'-47' Advanced 4" I.D. casing to S-12 2 44' (hammer) 46 Black SILT, some fine sand, trace m-c sand 3 Drilled to 50' with 3-7/8" roller (wet) [FORMER RIVER BOTTOM DEPOSIT] 3 Dark gray wash Class 48 49 SS 50'-52' 11 Class Black Silty f-m SAND (wet) [FOMER RIVER Drilled to 55' with 3-7/8" roller 3b BOTTOM DEPOSIT] 4 10 Gray wash Grayish brown f-m SAND, trace silt (wet) 12 53 54 55 SS 55'-57' SS Class 3b Drilled to 60' with 3-7/8" roller 6 48 11 56 Grayish brown f-m SAND, trace coarse sand, 5 Gray wash trace fine gravel, trace silt (wet) 6 58 59 60 SS 60'-62' SS Drilled to 65' with 3-7/8" roller 12 61 Brown fine SAND, trace silt (wet) 5 Gray wash 6 62 Class 63 SS mmmmmmm 24 SS 65'-67' Drilled to 70' with 3-7/8" roller 6 12 66 Grayish brown f-m SAND (wet) Gray wash 6 67 Class 3b 68 69

B-24 Sheet Log of Boring of 5 Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, New York Approx. el 8.5 (MBPD) Sample Data Coring (min) Building Code Remarks Elev (ft) Depth N-Value (Blows/ft) Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 70 SS SS 70'-72' Drilled to 75' with 3-7/8" roller S-17 10 4 20 Grayish brown fine SAND (wet) 10 Gray wash 11 72 73 SS 75'-77' SS 10 Drilled to 80' with 3-7/8" roller S-18 11 4 24 Grayish brown fine SAND (wet) 13 Gray wash 16 Class 78 79 80 SS 80'-82' SS 10 Drilled to 85' with 3-7/8" roller 24 26 Grayish brown fine SAND, trace m-c sand, trace 15 Gray wash coarse gravel (wet) 17 PIDATASI009225510/ENGINEERING DATA/GEOTECHNICAL/GINTLOGS/009225510 83 84 85 SS 85'-87' SS WOH End of day's work at 3;00 PM Grayish brown f-m SAND, trace silt (wet) on 6/25/14 16 18 86 9 Resumed drilling at 7:30 AM Grayish brown SILT, trace f-m sand (wet) on 6/26/14 24 Drilled to 90' with 3-7/8" roller Gray wash Class 88 Light rig chatter observed at Difficult drilling observed 89 89'-90' 50/1" -S-21 SS 1 SS 90'-90'1" 50/1" Grayish brown fine SAND, trace m-c sand, trace SS observed to bounce coarse gravel, trace silt (wet) Advanced 3" I.D. casing to 91 84' (push/spin) Drilled to 94' with 2-15/16" Class roller bit 92 Slow, difficult drilling observed 91'-92' 93 Very slow, difficult drilling observed 93'-94' with mica flakes in wash Class Roller bit refusal at 94' 8:12

B-24 Log of Boring Sheet of 5 Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum Approx. el 8.5 (MBPD) New York, New York Sample Data Coring (min) Remarks Elev (ft) Depth Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale (Blows/ft) 10 20 30 40 95 Started NX Rock core run C-1 at 94' at 11:41 AM 5:40 =84% REC=50.5"/60" =84% Light gray wash 96 4:32 RQD=50.5"/60" Gray MICA SCHIST with quartz inclusions 5 97 4:50 98 Finished core run C-1 at 99' 2:55 at 12:08 PM 99 Borehole observed to Class 7:14 collapse at 85' when advancing core barrel 100 Advanced 3" I.D. casing to REC=48"/60" =80% 6:02 89' (hammer) Drilled to 99' with 2-15/16" 101 RQD=44"/60" roller bit 9:27 Gray MICA SCHIST Difficulty advancing core - 102 barrel to bottom of borehole End of day's work at 3:00 PM 5:20 on 6/26/14 103 Resumed drilling at 7:45 AM ILANGAN, COMIDATAIEPIDATASI009225510IENGINEERING DATAIGEOTECHNICALIGINTLOGSI009225510, BORING LOGS (B23 AND 24), GPJ 4:54 on 6/30/14 -95.5 Redrilled to 99' with 2-15/16" 104 End of boring at 104' at 10:00 AM on 6/30/2014 roller bit Started NX Rock core run 105 C-2 at 99' at 8:50 AM Gray wash Finished core run C-2 at 104' 106 at 9:22 AM Difficulty removing core barrel from borehole 107 Boring backfilled with drill cutting upon completion 108 109 110 112 - 113 -115 116 118

LANGAN **B-25** Log of Boring Sheet of 7 1 Project No. Project 009225510 Proposed 250 South Street Development Location Elevation and Datum Approx. el 4.5 (MBPD) New York, New York **Drilling Company** Date Started Date Finished 6/27/14 Warren George, Inc. 7/9/14 Rock Depth **Drilling Equipment** Completion Depth 138.5 ft (inferred) Acker AD-II Truck-Mounted Drill Rig 140 ft Disturbed Undisturbed Size and Type of Bit Core Number of Samples 2-15/16", 3-7/8", and 4-7/8" Tricone Roller Bits 31 0 Completion 24 HR Casing Diameter (in) Casing Depth (ft) First Water Level (ft.) \mathbf{V} 3", 4" I.D. Steel Casing 5 134 Casing Hammer Donut Weight (lbs) Drop (in) **Drilling Foreman** 300 30 Dave Osuch Sampler 2" O.D. Split Spoon and NX Core Barrel Inspecting Engineer Weight (lbs) Drop (in) Sampler Hammer 140 30 Safety Keith Herman Sample Data Building Code MATERIAL SYMBOL Remarks Elev. Depth N-Value Penetr. resist BL/6in Sample Description (Drilling Fluid, Depth of Casing, (ft) Fluid Loss, Drilling Resistance, etc.) +4.5 10 20 30 40 0 Started drilling at 8:40AM on 6-INCH-THICK CONCRETE SLAB 6/27/14 SS 27 Drilled through approx. 1 13 Brown fine SAND, trace m-c sand, trace fine 22 6-inch-thick concrete slab 40 a gravel, trace silt (dry) [FILL] with 4-7/8" roller bit 18 2 SS 6"-2" SS SS 2'-4' 33 12 0,0 3 79 Drilled to 5' with 4-7/8" roller Grayish brown fine SAND, trace m-c sand, 46 trace f-c gravel, trace brick, trace concrete, 32 Gray wash trace silt (moist) [FILL] 4 Difficult drilling observed 4.5'-5' ∇ 5 SS 5'-7' 11 SS 13 5-3 9 30 6 0.0 Grayish brown fine SAND, trace m-c sand, 17 trace f-c gravel, trace brick, trace concrete, 8 trace silt (moist) [FILL] 7 SS 7'-8'3" SS 20 22 8 0.0 75/3" Black f-c SAND, trace f-c gravel, trace silt, 75/3" Drilled to 10' with 4-7/8" roller trace wood (wet) [FILL] 9 Dark gray wash Very difficult drilling observed 8'-9' 10 Class SS 10'-12' 16 16 S-5 SS က 0.0 11 32 Gravish brown f-c SAND, trace fine gravel, 16 trace brick, trace pottery fragments, trace silt 12 (wet) [FILL] 12 SS 12'-14' 11 Advanced 4" I.D. casing to 9' 24 SS (Hammer) 13 0.0 Dark gray f-c SAND, trace fine gravel, trace Drilled to 15' with 3-7/8" roller 27 pottery fragments, trace silt (wet) [FILL] 14 Dark gray wash 14 SS 6 SS 15'-17' 14 Drilled to 20' with 3-7/8" roller 11 S-7 16 23 Black f-c SAND, trace f-c gravel, trace brick, 12 Dark gray wash trace silt, trace pottery fragments (wet) [FILL] 15 17 18

19

LANGAN **B-25** Sheet 7 Log of Boring of LOGS GP. Project No. Project Proposed 250 South Street Development 009225510 Location Elevation and Datum Approx. el 4.5 (MBPD) New York, New York Sample Data Building Code (ppm) Remarks Depth Elev. N-Value Penetr resist BL/6in (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Sample Description Type (ft) Scale 3 (Blows/ft) 吕 10 20 30 40 20 11 SS Drilled to 25' with 3-7/8" roller 12 9 24 0.0 21 Black f-c SAND, some brick, trace f-c gravel, 12 Dark gray wash trace pottery fragments, trace silt (wet) [FILL] 23 22 23 24 Water loss observed at 24.5' 25 SS 25'-27 12 Advanced 4" I.D. casing to SS 10 24' (Hammer). 26 23 0.0 Black f-c SAND, some brick, trace f-c gravel, Drilled to 30' with 3-7/8" roller 13 trace pottery fragments, trace silt (wet) [FILL] 11 27 Dark gray wash and intermittent water loss observed 28 29 Class 7 30 SS 30'-32' 9 Advanced 4" I.D. casing to SS T 29' (Push) 12 31 0.0 Black f-c SAND, some silt, trace f-c gravel, Drilled to 35' with 3-7/8" roller 8 trace brick (wet) [FILL] 5 Dark gray wash 32 33 35 SS 35'-37' Advanced 4" I.D. casing to SS 5 34' (Push) S-11 4 36 12 0.0 Black f-c SAND, some silt, trace f-c gravel, Drilled to 40' with 3-7/8" roller trace brick (wet) [FILL] 8 Dark gray wash 37 38 39 Dark gray fine SAND, trace m-c sand, trace SS 40'-42' SS fine gravel, trace silt, trace rubber (wet) [FILL] Drilled to 45' with 3-7/8" roller 17 0_0 41 Black Silty fine SAND, trace medium sand, 2 Dark gray wash trace wood (wet) [FORMER RIVER BOTTOM 4 **DEPOSITI** 42 Class 43

LANGAN B-25 Log of Boring Sheet 3 of 7 LOGS GP. Project Project No. 009225510 Proposed 250 South Street Development Elevation and Datum Location Approx. el 4.5 (MBPD) New York, New York plate WVU BASEBALL Sample Data C Reading (ppm) Building Code Remarks Depth Elev. resist BL/6in (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Sample Description (ft) Scale 10 20 30 40 , 13A SS 45 Black Silty CLAY, trace fine gravel, trace wood SS 45'-47' (wet) [FORMER RIVER BOTTOM DEPOSIT] qu=0.75 tsf Class 5 4b 46 15 0.0 10 9 Dark gray fine SAND, trace m-c sand, trace Drilled to 50' with 3-7/8" roller fine gravel, trace silt (wet) Dark gray wash End of day's work at 3:00PM 48 on 6/27/14 Resumed drilling at 8:00AM 49 on 6/30/14 Redrilled to 50' with 3-7/8" 50 roller bit SS 50'-52' Class 3b SS S-14 Drilled to 55' with 3-7/8" roller 20 51 15 0.0 Brown fine SAND, trace medium sand, trace 8 Dark gray wash silt (wet) 7 53 54 55 SS 55'-57' SS Brown fine SAND, trace silt (wet) 3 Class Drilled to 60' with 3-7/8" roller 3 -51 5 4 56 0.0 Light brown CLAY, some f-m sand, trace fine Dark brown wash 6 gravel, trace silt (wet) 7 57 Class 58 59 60 SS 60'-62' Drilled to 65' with 3-7/8" roller SS 10 24 61 21 0.0 Brown f-m SAND, trace silt (wet) Dark brown wash 11 13 62 63 64 Class 65 SS 65'-67' 3b Drilled to 70' with 3-7/8" roller SS 18 0_0 66 21 Grayish brown f-m SAND, trace coarse sand, 12 trace silt (wet) 11 67 68 69

LANGAN Log of Boring **B-25** 7 Sheet 4 of OGS GP Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum Approx. el 4.5 (MBPD) New York, New York Report: Log - LANGAN Template WVU BASEBALL Sample Data Building Code Remarks (mdd) Elev Depth Penetr resist BL/6in Number (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Sample Description Type (ft) Scale (Blows/ft) 딤 10 20 30 40 70 5 Drilled to 75' with 3-7/8" roller 6 16 0.0 Grayish brown f-c SAND, trace f-c gravel (wet) 5 Grayish brown wash Class 5 72 73 -69.0 Slow, difficult drilling observed 73.5'-74.5' 74 COBBLE (inferred based on drilling observations) 7/18/2014 8 44 32 75 SS 75'-76'2" 32 Drilled to 80' with 3-7/8" roller 0.0 4 Grayish brown f-m SAND, trace f-c gravel, ŝ 82 76 trace coarse sand, trace silt (wet) 50/2" 50/2" Grayish brown wash Slow, difficult drilling 77 observed at 77' ANGAN COMIDATAIEPIDATASIO09225510/ENGINEERING DATAIGEOTECHNICALIGINTLOGSI009225510_BORING LOGS (825,826. AND 827) GPJ 78 Class 79 80 SS 21 SS 80'-82' 14 Drilled to 83.5' with 3-7/8" 25 roller bit 81 54 0,0 Grayish brown f-c SAND, trace f-c gravel (wet) 29 Grayish brown wash Slow, difficult drilling 29 observed 82'-83.5' 82 End of day's work at 3:00PM on 6/30/14 83 Resumed drilling at 7:40AM BOULDER (Inferred based on drilling on 7/1/14 observations) Slow difficult drilling -79 84 observed 83.5-84' 85 0.0 SS 85'-85'2" Grayish brown f-c SAND, some fine gravel, 100/2" S-21 SS 2 100/2 trace silt (wet) 86 Drilled to 90' with 3-7/8" roller Grayish brown wash 87 Difficult drilling observed Class 85,5'-86' 88 Light rig chatter observed at 89 Slow, difficult drilling observed at 89.5' 90 SS 52 Grayish brown f-c SAND, some f-c gravel, 10 SS 90'-90'10" 0.0 trace silt (wet) 100/4 100/4" -86 91 Drilled to 95' with 3-7/8" roller bit Grayish brown wash 92 BOULDER (Inferred based on drilling Slow, difficult drilling observations) observed 91'-94' 93 94

Class

B-25 Log of Boring Sheet 5 of 7 plate WVU BASEBALL SOIL LOGS GP. Project Project No. 009225510 Proposed 250 South Street Development Location Elevation and Datum Approx. el 4.5 (MBPD) New York, New York Sample Data Reading Building Code MATERIAL SYMBOL Remarks (mdd) Depth Elev Penetr resist BL/6in Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) (ft) Scale (Blows/ft) 吕 10 20 30 40 95 S-23 SS 95'-95'9" 33 Grayish brown Gravelly f-c SAND, trace silt SSE 6 0.0 Drilled to 100' with 3-7/8" 100/3 100/3" roller bit 96 Grayish brown wash - LANGAN 97 Class 98 99 -95.5 · 0 100 SS 100'-102' 54 Grayish brown Sandy f-c GRAVEL (wet) Drilled to 105' with 3-7/8" 0.0 64 roller bit 101 131 0:0 Grayish brown wash 67 48 102 ٥. Class 00 ..G... 103 2.0.5 0.0 104 ·.0 : ANGAN COMIDATAIEPIDATASIO09225510IENGINEERING DATAIGEOTECHNICALIGINTLOGSI009225510_BORING LOGS (B25.B26, b D. 105 Borehole observed to S-25 48 75/2 8 collapse at 100' when 0.0 75/2" Grayish brown f-c SAND, trace f-c gravel, trace attempting to advance split 106 spoon to 105 End of day's work at 3:00PM on 7/1/14 107 Class Resumed drilling at 8:40AM on 7/2/14 108 Advanced 3" I.D. casing to 104' (Spin) Redrilled to 105' with 109 2-15/16" roller bit SS 105'-105'8" Drilled to 110' with 2-15/16" 110 SS 57 roller bit S-26 47 Grayish brown wash 12 96 0.0 -111Grayish brown Gravelly f-c SAND, trace silt SS 110'-111'10" 49 End of days work at 3:00PM 100/4 on 7/2/14 112 Resumed drilling at 7:45AM on 7/3/14 113 Advanced 3" I.D. casing to 109' (Spin) Drilled to 115' with 2-15/16" 114 roller bit Light gray wash Class Slow drilling observed at 113' 0_0 Light rig chatter observed at SS | | 95 50/1" Grayish brown Gravelly f-c SAND, trace silt 50/1" 114.5 (wet) 116 SS 115'-115'7" Drilled to 120' with 2-15/16" roller bit 117 Light brownish gray wash 118 119

LANGAN **B-25** 7 Log of Boring Sheet 6 of OGSGP Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, New York Approx. el 4.5 (MBPD) Report Log - LANGAN Template WVU BASEBALL Sample Data Reading (ppm) MATERIAL SYMBOL Building Code Remarks Elev. Depth N-Value Penetr resist BL/6in Sample Description (Drilling Fluid, Depth of Casing, (ft) Scale (E) (Blows/ft) 9 Fluid Loss, Drilling Resistance, etc.) 10 20 30 40 120 SS 120'-122' 70 Drilled to 125' with 2-15/16" 81 SS 23 168 roller bit 0.0 121 Grayish brown f-c SAND, some f-c gravel, Light brownish gray wash trace silt (wet) 79 122 Borehole observed to collapse at 120' when attempting to advance split 123 spoon. Driller did not have enough 3" I.D. casing to continue drilling. End of day's work at 1:15PM on 7/3/14 124 7/18/2014 B 44 33 AM 125 Resumed drilling at 8:00AM S-29**SS** 6 170/6 Grayish brown f-c SAND, some fine gravel on 7/7/14 170/6" Advanced 3" I.D. casing to 126 116' (Spin/Hammer) Casing refusal at 116' Removed all 3" I.D casing 127 from borehole and replaced DATAIGEOTECHNICALIGINTLOGS(009225510_BORING LOGS (B25,B26; AND B27), GPJ casing shoe 128 Advanced 3" I.D. casing to Class 116' (Spin) End of day's work at 3:00PM 129 Resumed drilling at 7:15AM on 7/8/14 130 S-30|SS- 3 | 120/3" Brownish gray f-c SAND, some f-c gravel, trace Redrilled to 120' with 120/3" silt (wet) 2-15/16" roller bit Advanced 3" I.D. casing to 131 119' (Spin/Hammer) Redrilled to 125' with 132 2-15/16" roller bit Advanced 3" I.D. casing to 124' (Spin/Hammer) 133 Redrilled to 125' with 2-15/16" roller bit SS 125'-125'6' 134 Drilled to 130' with 2-15/16" roller bit Slow, difficult drilling Gray f-c SAND, trace fine gravel, trace silt SS 102 ∞ observed 125'-126' 75/2" SS 130'-130'3" 0.0 136 Advanced 3" I.D. casing to 132.0 129' (Spin) Drilled to 135' with 2-15/16" 137 COBBLE (Inferred based on drilling roller bit observations) Brownish gray wash Class 138 Light rig chatter observed at BEDROCK (Inferred based on drilling End of day's work at 3:00PM 139 observations) on 7/8/14 VYL> Resumed drilling at 7:30AM > -135 5 140 on 7/9/14 End of boring at 140' at 3:00PM on 7/9/14 Redrilled to 135' with 2-15/16" roller bit 141 SS 135'-135'8" Advanced 3" I.D. casing to 142 134' (Spin/Hammer) Drilled to 140' with 2-15/16" roller bit 143 Brownish gray wash Very hard, slow drilling observed 136.5'-137.5' and 138-5'-140'

Roller bit refusal at 140'

Log of Boring B-25 Sheet 7 of 7 LOGS GPJ Project Project No. 009225510 Proposed 250 South Street Development Location Elevation and Datum New York, New York Approx. el 4.5 (MBPD) NLANGAN COMIDATAIEPIDATASD09225510ENGINEERING DATAIGEOTECHNICALIGINTLOGS/009225510_BORING LOGS (B25.B26, AND B27), GPJ. 7/18/2014 8-44;34 AM. Report Log.-LANGAN Template www BASEBALL PID Reading (ppm) Sample Data MATERIAL SYMBOL Building Code Remarks Elev. (ft) Depth Scale N-Value (Blows/ft) Penetr resist BL/6in (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Sample Description Туре Recov (in) 10 20 30 40 Borehole observed to collapse at 138' when attempting to advance core 146 barrel. Core barrel observed to jam when attempting to 147 advance to 140'. Removed all drill rods and core barrel. Core barrel bit 148 observed to have been lost in borehole. Abandoned boring. 149 Boring backfilled with drill cuttings upon completion. 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 - 165 - 166 167 168 169

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Project		D		Otes et Desseles				Pro	ject No.			00000	5540						
Location		Propo	sed 250 South	009225510 Elevation and Datum															
-			York, New York	Approx. el 4.5 (MBPD)															
Drilling C	ompai	-	en George, Inc.		Da	Date Started													
Drilling E	quipm		or George, mo.	Со	mpletion	Depth	1	0/00	77 17		Rock D	Depth		111117					
Size and	Type		AD-II Truck-M	-				10 Disturb	01 ft		Lind	listurbed		88 ft Core					
E	Size and Type of Bit 2-15/16", 3-7/8", and 4-7/8" Tricone Roller Bits													22			140		2
	Casing Diameter (in) 3", 4" I.D. Steel Casing Open (ft) 90											First		5	Con	npletion -	(*)	24 HR	:+:
Casing H	amme	Safety	У	Weight (lbs)	300	Drop (in	30	Dri	lling Fore	man	_	1.11.							
Sampler		2" O.I		and NX Core Ba	rrel			Eddie Cardona Inspecting Engineer											
Sampler 첫	Hamn	ner	Safety	Weight (lbs)	140	Drop (in	30	Keith Herman											
1 200	Elev. (ft) Sample Description						D Reading (ppm)	Conng (min)	Depth Scale	Number	Туре		BL/6in	N-Va (Blow		(Dril		emarks d, Depth of C lling Resistar	Casing,
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				f-c SAND, some race fine gravel,			0.0			S-1	SS	26	6		37	330	-2		
			[FILL]	(u) y)			2 -			24	28		1	SS 2	'-4'				
										ņ	S	8	32		0.4	hit	ed to 5	' with 4-7.	/8" roller
				f-c SAND, some ace silt (moist) [F		ace	0.0		3 -	S-2	SS	4 29	9		61		n was	h	
₹₩₩			concrete, tra	ce siit (moist) [i			4 -	_	E		31								
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									5 -			4		/	/	SS 5	'-7'		
			Dark brown t	f-c SAND, some	ailt trans	0 f 0	0,0		6 -	S-3	SS	4	4	14					
				brick (wet) [FILL		E 1-C	,,,,,			,		10	22	\	Ш				
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			5	OAND	•••		0,5 -		8 -	S-4	SSE	12	17	30)	(Pus	h)		ŭ
				c SAND, some s fine gravel (wet)			1.1			0,	SS) 13 12		7		Drille bit	ed to 1	0' with 3-7/8" rolle	
									9 -				12			Grayish brown wash			
		Class							10 -		Į.			/		CC 1	0'-12'		
O'ENGINEERING DATAGEOTECHNICAL		7										4	2	/	1	331	0-12		
			Dark gray to	black f-c SAND	, some s	ilt,	0,0		- 11 -	S-5	SS	ි 1	31	(11				
			trace fine gra	avel (wet) [FILL]					12 -	1_	LE		2			CC 1	2'-14'		
												3 & 5	2			Drille		5' with 3-	7/8" roller
			Dark gray to	black f-c SAND	, some s	ilt,	0.0		13 -	8-6	SS	σ 5	17	7		bit Blac	k was	n	
			trace fine gra	avel, trace brick	(wet) [FII	LL]			14 -		E		5						
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									15 -			5					5'-17'	011115	7.0" "
			=				0.0		16 -	S-7	SS		4	8		bit			7/8" roller
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COMIDATANEPIDATASNO									- 18 -										
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									E 20 -										

B-26 Log of Boring Sheet 2 of 5 Project Project No. 009225510 Proposed 250 South Street Development Location Elevation and Datum New York, New York Approx. el 4.5 (MBPD) Sample Data MATERIAL SYMBOL Building Code Coring (mir Remarks Elev. Depth (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Sample Description Recov (in) (ft) (Blows/ft) 10 20 30 40 20 SS 20'-22' End of day's work at 3:00PM SS on 6/30/14 0.0 Black f-c SAND, trace brick, trace pottery 3 Resumed drilling at 7:40AM fragments, trace silt (wet) [FILL] on 7/1/14 5 22 Advanced 4" I.D. casing to 19' (Push) Drilled to 25' with 3-7/8" roller 23 Dark gray wash 24 25 SS 25'-27' Drilled to 30' with 3-7/8" roller SS 26 18 0.0 Black Gravelly f-c SAND, some brick, 9 Dark gray wash trace silt, trace pottery fragments (wet) 4 (FILL) 27 28 29 30 SS 30'-32' Class Advanced 4" I.D.casing to SS 10 29' (Hammer) 7 16 31 0,0 Black f-c SAND, some fine gravel, trace Drilled to 35' with 3-7/8" roller 6 brick, trace silt (wet) [FILL] 8 Dark gray wash 32 33 34 35 Black f-c SAND, some f-c gravel, trace SS 35'-37' 10 Advanced 4" I.D. casing to brick, trace silt, trace pottery fragments SS ~ 39' (Hammer) (wet) [FILL] S-11 13 36 0.0 5 Drilled to 40' with 3-7/8" roller 9 Dark gray wash 37 38 39 SS 40'-42' Black f-c SAND, trace fine gravel, trace Drilled to 45' with 3-7/8" roller brick, trace pottery fragments, trace wood, trace silt (wet) [FILL] 0_0 10 Dark gray wash 6 42 Class Dark gray Silty fine SAND, trace m-c sand, 43 trace wood (wet) [FORMER RIVER BOTTOM DEPÓSITI

Log of Boring **B-26** Sheet of 5 Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, New York Approx. el 4.5 (MBPD) Sample Data Building Code Conng (min) MATERIAL Remarks Depth Elev N-Value (Blows/ft) Recov. Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) (ft) Scale 10 20 30 40 Class Dark gray to black Silty CLAY, trace f-m SS SS 45'-47' sand, trace wood (wet) [FORMER RIVER BOTTOM DEPOSIT] Drilled to 50' with 3-7/8" roller 13 9 46 23 0.0 10 Gray f-m SAND, trace coarse sand, trace Dark gray wash silt (wet) 9 48 49 50 SS 50'-52' SS Drilled to 55' with 3-7/8" roller 9 51 18 0.0 Brown fine SAND (wet) Dark gray wash 11 16 52 Class 53 54 55 SS 55'-57' Advanced 4" I.D. casing to 54' (Hammer) 20 56 22 Grayish brown f-c SAND (wet) Drilled to 60' with 3-7/8" roller 13 14 Dark gray wash 57 58 59 60 SS 60'-62' 17 Drilled to 65' with 3-7/8" roller 25 bit 61 24 56 0.0 Grayish brown f-c SAND, trace silt (wet) Gray wash 38 62 63 64 Class 65 SS 65'-67' 11 Advanced 4" I.D casing to 64' (Hammer) 24 31 66 0.0 Grayish brown f-m SAND, trace coarse End of day's work at 3:00PM 18 sand, trace f-c gravel (wet) on 7/1/14 19 67 Resumed drlling at 7:45AM on 7/2/14 68 69

B-26 Log of Boring Sheet of 5 Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum New York, New York Approx. el 4.5 (MBPD) Template TEMPLATE GDT Sample Data MATERIAL SYMBOL Coring (min) Remarks Depth N-Value Penetr resist BL/6in Recov (in) (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Sample Description Туре (ft) Scale (Blows/ft) 10 20 30 40 70 SS 70'-72 SS 23 23 Drilled to 75' with 3-7/8" roller 24 71 55 0.0 Grayish brown f-c SAND, trace fine gravel 32 Gray wash 32 72 Class 73 74 7/18/2014 4:05:57 75 SS SS 75'-77' 9 Drilled to 80' with 3-7/8" roller S-19 13 76 26 0.0 Grayish brown SILT, trace fine sand, trace 13 Gray wash fine gravel (wet) 14 77 Class AND 827) GPJ 78 79 825,826 80 SS 80'-82' SS 50 BORING LOGS Drilled to 85' with 3-7/8" roller 53 bit 17 0.0 81 85 Grayish brown f-c SAND, some f-c gravel, 32 Gray wash trace silt (wet) 29 82 83 Class 84 85 SS mmmm 22 SS 85'-87' 77 Drilled to 90' with 3-7/8" roller 54 S-21 86 116 0.0 Grayish brown f-c SAND, trace fine gravel, 62 Gray wash trace silt (wet) Light rig chatter observed 51 86'-87 87 88 Slow, difficult drilling WEATHERED ROCK (Inferred based on observed 88'-89.5' Class drilling observations) Very slow, difficult drilling 89 observed 89.5'-90' SS at 90' L 50/0" SS observed to bounce S-22 SS 0 50/0' No Recovery Advanced 3" I.D. casing to 88' (Push) 91 End of day's work at 2:30PM 10:21 Gray MICA SCHIST =100% Resumed drilling on 7/7/14 92 Class Advanced 3" casing to 90' 11:40 (Spin) NX CORE RQD=57"/60" REC=60"/60" <u>۲</u> Drilled to 91' with 2-15/16" 93 roller bit 5:42 Gray wash 94 Very slow, difficult drilling observed 90'-91' 5:37

LANGAN B-26 Log of Boring Sheet of 5 TOTAL SOIL LOGS GP. Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum Approx. el 4.5 (MBPD) New York, New York Sample Data Building Code Coring (min) MATERIAL SYMBOL Remarks Elev. (ft) Depth Number Penetr resist BL/6in Sample Description Recov (in) (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale (Blows/ft) 10 20 30 40 95 JL Roller bit refusal observed at 2 8:01 Started NX Rock core run 96 C-1 at 91' at 8:44AM 5:11 Light gray wash Driller increased drill rig 97 Gray MICA SCHIST with quartz inclusions **%**26= REC=58"/60" =97% revolution speed at 93' 5:38 Finished core run C-1 at 96' 98 NX CORE RQD=58"/60" at 9:26AM C-2 5:29 Started NX Rock core run VL> C-2 at 96' at 9:52AM 99 Light gray wash 9:27 IILANGAN COMIDATAIEPIDATAS10992255101ENGINEERING DATAIGEOTECHNICALIGINTLOGS1009225510_BORING LOGS (825,826,AND 827) GPJ ... 7/18/2014 8:51-43 AM Finished core run C-2 at 101' 100 at 10:34AM 1 L> Boring backfilled with drill 16:06 , > 7 cuttings upon completion. 101 End of boring at 101' at 11:00 AM on 102 103 104 105 106 107 108 109 110 111 112 - 113 -114 -115 116 -117 118 119

LAVEAN Log of Boring B-27 Sheet Project No.

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Project		Propo	osed 250 South Street Development		Pr	roject No.		C	0922551)							
Location	Ÿ.	A 1	SLAL N		Elevation and Datum Approx. el 4.5 (MBPD)												
Drilling C	ompa	ny ny	York, New York		Date Started Date Finished												
1000			en George, Inc.		7/8/14 7/11/14												
Drilling E	:quipm		AD-II Truck-Mounted Drill Rig	Co	Completion Depth Rock Depth 95 ft												
Size and	Туре	of Bit			T _N	umber of S	amp	les I	Disturbed	•	Undi	isturbed	Core				
Casing D	Diamet	er (in)	16", 3-7/8", and 4-7/8" Tricone Roller Bits Casing Dep	th (ft)	+				First	24	Com	pletion	24 HR.	2			
Casing H	łamm	3", 4"	I.D. Steel Casing Weight (lbs) Drop (iii	108	_	/ater Level			$\overline{\Delta}$	5	Y	(*)	Ā	(#)			
Casing F	Idillilli			^{''} 30	Drilling Foreman Eddie Cardona												
Sampler	Hamn		D. Split Spoon and NX Core Barrel Weight (lbs) Drop (iii	n) 00	Ins	Inspecting Engineer											
<u> </u>		_	Safety 140 Prop (iii	30	Keith Herman Sample Data Pomorko												
MATERIAL SYMBOL	Elev. (ft) +4.5	Building Code	Sample Description	PID Reading (ppm)	Conng (min)	Depth Scale	Number	Type	Recov (in) Penetr resist BL/6in	N-Vali (Blows	/ft)	Re (Drilling Fluid Fluid Loss, Dri	emarks d, Depth of Ca lling Resistand	asing, ce, etc.)			
						F 0 =			9	10 20 0	7.40	Started dri	lling at 8:5	5AM on			
			Brown f-c SAND, some silt, trace fine	0.0		-1-	S-1	SS	4 13	26 •		7/8/14 SS 0'-2'					
*****			gravel, trace brick, trace concrete (dry)				0,		13)							
			(FILL)			2 -			21			SS 2'-4'					
			Parisin for CANID, again all tages for	0.0		E 3 3	S-2	SS SS	رم 22 دم		51						
			Brown f-c SAND, some silt, trace f-c gravel, trace brick, trace glass (moist)				0,	目	29		1	Drilled to 5 bit	' with 4-7/8	8" roller			
			(FILL)			4		H	01			Dark browi Difficult dri		avod.			
			Z	2		5 -						4'-4.5'	illig obser	vea			
									6		11	SS 5'-7' Advanced	4" I D .cas	ing to Q'			
			Dark brown f-c SAND, some silt, trace f-c	0.0		6	S-3	SS	은 15 18	33	f	(Hammer)					
			gravel, trace brick (wet) [FILL]			E 7			11			Drilled to 1 bit					
								目	11			Dark grayis	sh brown v	wash			
			Dark gray f-m SAND, some silt, trace	0,0		8 =	S-4	SS SS	ත 13 21	34	<i>}</i>						
			wood, trace coarse sand (wet) [FILL]			E 9 3			23	1							
										/							
		Class 7				10 -		目	17			SS 10'-12'					
						1, 1	S-5	1 1	6								
			Dark gray WOOD, some f-c sand, some silt, trace fine gravel (wet) [FILL]	0,0		11 =	Ś	SS	7 4	104							
			om, mass mis graver (well, 122)			12 -		릠	6			SS 12'-14'					
\bowtie						1	9		6 ω 6 7 10			Drilled to 1	5' with 3-7	7/8" roller			
			Dark gray f-c SAND, trace brick, trace silt, trace fine gravel (wet) [FILL]	0,0		13	S-6	S	ω 7	13		Dark gray	wash				
			trace line graver (wet) [r izz]			14 -		H	10	1							
											-11						
						15 -		目	5			SS 15'-17' Drilled to 2		7/8" roller			
			Dark gray f-m SAND, trace silt, trace	0.0		16 -	S-7	SS	ω 10	21		bit		,o roller			
			coarse sand, trace brick (wet) [FILL]				,		11 8			Dark gray	wasn				
						17 -		F									
						18 -											
						E 3											
						19 -				1							

B-27 of Log of Boring Sheet 5 Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum Approx. el 4,5 (MBPD) New York, New York Sample Data Building Code Coring (min Remarks Elev Depth Penetr resist BL/6in Recov. Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) (ft) Scale 10 20 30 40 SS 20'-22' Advanced 4" I.D. casing to 5 24' (Hammer) 21 2 0.0 Dark gray to black f-m SAND, trace coarse 6 Drilled to 25' with 3-7/8" roller sand, trace silt, trace brick, trace glass 6 (wet) [FILL] 22 Dark gray wash 23 24 25 SS 25'-27' Drilled to 30' with 3-7/8" roller SS 0.0 9 Black f-m SAND, trace coarse sand, trace 3 Dark gray wash f-c gravel, trace silt, trace brick, trace 5 pottery fragments (wet) [FILL] 27 28 29 Class 30 SS 30'-32' SS Drilled to 35' with 3-7/8" roller 14 31 0.0 Black f-m SAND, trace coarse sand, trace 6 Dark gray wash f-c gravel, trace silt, trace brick, trace 8 pottery fragments (wet) [FILL] 32 33 34 35 SS 35'-37' Drilled to 40' with 3-7/8" roller SS 6 2 36 0.0 Black f-m SAND, some concrete, trace silt, 3 Dark gray wash trace brick (wet) [FILL] 6 37 38 39 SS 9 SS 40'-42' 8 End of day's work at 1:30PM 3 on 7/8/14 0.0 Dark gray SILT, some fine sand, trace 2 Resumed drilling at 7:45AM wood (wet) [FORMER RIVER BOTTOM on 7/9/14 **DEPOSIT** Advanced 4" I.D. casing to 42 39' (Hammer)
Drilled to 45' with 3-7/8" roller Class 43 Dark gray wash

LANGAN Log of Boring B-27 Sheet of 5 Project Project No. Proposed 250 South Street Development 009225510 Elevation and Datum Location Approx. el 4.5 (MBPD) New York, New York Sample Data Building Code Coring (min)) Reading (ppm) MATERIAL SYMBOL Remarks Elev (ft) N-Value (Blows/ft) Depth Penetr resist BL/6in Sample Description Recov (in) (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale 10 20 30 40 SS 45'-47' 6 Dark gray Silty CLAY, trace fine gravel, Class Drilled to 50' with 3-7/8" roller trace fine sand, trace wood (wet) **IFORMER RIVER BOTTOM DEPOSITI** 0.0 46 17 13 Dark gray wash Dark gray f-c SAND, some silt, some f-c 48 49 50 SS 50'-52' SS Drilled to 55' with 3-7/8" roller 5 0.0 51 Brown fine SAND (wet) 6 Dark gray wash 8 52 NLANGAN COMIDATAIEPIDATAS/009225510/ENGINEERING DATA/GEOTECHNICAL/GINTLOGS/009225510_BORING LOGS (B25.B26.AND B27) GPJ 53 54 ss 16 55 SS 55'-57' Drilled to 60' with 3-7/8" roller Class 3b 16 56 0.0 Brown f-m SAND, trace coarse sand, trace Dark gray wash fine gravel (wet) 10 57 58 59 60 SS 60'-62' 13 Drilled to 65' with 3-7/8" roller S-16 17 61 0.0 Grayish brown f-m SAND, trace coarse Brownish gray wash 10 sand (wet) 18 62 63 65 SS 14 SS 65'-67' 23 Drilled to 70' with 3-7/8" roller 16 66 32 0.0 Grayish brown f-m SAND (wet) Brownish gray wash 16 19 67 Class 68 69

B-27 Log of Boring Sheet of 5 -06S GP Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum Report Log - LANGAN Template WVU BASEBALL SOIL Approx. el 4.5 (MBPD) New York, New York Sample Data Building Code Coring (min) Remarks Elev (ft) Depth Penetr resist BL/6in Recov (in) Sample Description (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Scale (Blows/ft) 10 20 30 40 70 SS 15 SS 70'-72' 14 Drilled to 75' with 3-7/8" roller 13 27 0.0 Grayish brown f-c SAND, trace fine gravel, 14 Grayish brown wash trace silt (wet) 16 72 Class 73 74 Light chatter observed at 74' 7/18/2014 8 28 39 AM 75 SS 75'-77' SS 11 13 Drilled to 80' with 3-7/8" roller S-19 20 0.0 76 53 Grayish brown f-m SAND, trace coarse Grayish brown wash sand, trace silt (wet) 29 77 Class (B25, B26, AND B27), GPJ 78 79 80 SS 80'-82' 92 Drilled to 85' with 3-7/8" roller SS 52 4 107 0.0 81 Grayish brown Gravelly f-c SAND, trace 55 Grayish brown wash Class silt (wet) Slow drilling observed 80'-83' 74 82 83 Very slow, difficult drilling COBBLE (Inferred based on drilling observed 83'-83.5' observations) 84 Moderate rig chatter observed at 84' 85 SS 85'-87' 38 Class SS 10 35 S-21 75 86 0.0 Drilled to 90' with 3-7/8" roller Grayish brown Gravelly f-c SAND, trace 40 silt (wet) 37 Grayish brown wash 87 COBBLE (Inferred based on drilling Slow, difficult drilling 88 observed 87.5'-88.5' observations) Light to moderate rig chatter observed 88.5'-90' 89 SS 90'-90'1" Drilled to 95' with 3-7/8" roller 0.0 Brownish gray f-c SAND, some f-c gravel, 75/11 S-22 SS 1 75/1 Grayish brown wash trace silt (wet) 91 Class 92 93 Light rig chatter observed at 94

Log of Boring B-27 Sheet of 5 5 Project Project No. Proposed 250 South Street Development 009225510 Location Elevation and Datum Approx. el 4.5 (MBPD) New York, New York plate TEMPLATE GDT Sample Data MATERIAL SYMBOL Building Code Coning (min. Remarks Elev. Depth N-Value (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.) Sample Description (ft) 3 10 20 30 40 95 0.0 Dark gray DECOMPOSED MICA SCHIST SS 100/1 SS 95'-95'1" End of day's work at 3:00PM on 7/9/14 96 -92 0 Resumed drilling at 7:25AM WEATHERED ROCK (inferred based on on 7/10/14 97 drilling observations) Drilled to 100' with 3-7/8" -93 0 roller bit 98 Grayish brown wash Hard drilling with light rig WEATHERED ROCK (Inferred based on chatter observed 95'-96' 99 Very slow, difficult drilling observed 96.5'-97.5' and drilling observations) 98.5'-99' 100 No Recovery ss o Moderate rig chatter 75/2" observed 99'-100' 101 SS 100'-100'8" Class Drilled to 108' with 3-7/8" roller bit 102 Grayish brown wash AND 827) GPJ 103 Very slow, difficult drilling observed 103.5'-108' 104 105 106 107 108 Roller bit refusal at 108' **GRAY MICA SCHIST** L Advanced 3" I.D. casing to 12:00 103.5' (Spin) 109 End of day's work at 2:30PM 8:18 on 7/10/14 Resumed drilling at 7:30AM 110 NX CORE REC=56"/60" RQD=56"/60" L Class 5 on 7/11/14 7:32 Advanced 3" I.D. casing to 108' (Spln) Redrilled to 108' with 8:20 2-15/16" roller bit Started NX Rock core run 112 L L> 6:09 C-1 at 108' at 9:47AM Light brownish gray wash 113 JL Finished core run C-1 at 113' **GRAY MICA SCHIST** 6:44 at 10:49AM Started NX Rock core run RQD=42"/60" =70% C-2 at 113' at 10:49AM 5:42 Light brownish gray wash REC=49.5"/60" 115 NX CORE L 5 Class 5:04 -116 5:50 L 1 5:14 113.5 118 Finished core run C-2 at 118' End of Boring at 118' at 11:45 AM on at 11:17AM 119 Boring backfilled with drill cuttings upon completion