

APPENDIX E

MARCH 15, 2018 WORK PLAN TABLE 1: RATIONALE FOR SAMPLING LOCATIONS

Table 1
Armed Forces Retirement Home (AFRH) - Main Campus - Buildings 46 and 76
Work Plan for Additional Phase II Environmental Site Assessment (ESA)
Rationale for Sampling Locations

Task *	Location ID	Sampling Location Type	Planned SB/Well/VMP Depth (ft BG)	Co-Located Sampling Location	Planned Sampling Location	Rationale for Planned Sampling Location	Sample Type	Rationale for Sample Collection Depth	Analyses								
									VOCs	PAHs	TPH-C7-C12	TPH-GRO	TPH-DRO	TPH-ORO	RCRA 8 Metals	PCBs	
2	SB-01	Geoprobe® DPT soil boring	50	NA	Adjacent to SV-35.	Investigate naphthalene and TPH detections in SV-35 and naphthalene detection in MACTEC soil boring G46-1.	Subsurface Soil	Highest PID or depth of 5 feet BG ⁽¹⁾ .	X	-	X	-	-	-	-	-	-
							Subsurface Soil	Depth of 3 feet BG to evaluate possible impact to soil from the tar base layer.	-	X	-	-	-	-	-	-	-
							Tar Base Layer	To evaluate the contents of the tar base layer.	-	X	-	-	-	-	-	-	-
2	SB-02	Geoprobe® DPT or Hand Auger soil boring	TBD	NA	Adjacent to SV-26.	Investigate PCE detection in SV-26 and along the path of waste water discharge from the former laundry and dry cleaning plant. (Note waste water discharge at this location was via piping that ran below the ceiling of the basement.)	Subsurface Soil	Highest PID or depth of 5 feet BG ⁽¹⁾ .	X	-	-	-	-	-	-	-	-
2	SB-03	Geoprobe® DPT soil boring	50	NA	Adjacent to SV-12.	Investigate PCE detection in SV-12 and near the manhole where waste water discharge from the former laundry and dry cleaning plant entered the sanitary sewer line. The base of the manhole located near SV-12 is at a depth of approximately 10 feet BG.	Subsurface Soil	Highest PID or depth of 10 feet BG ⁽¹⁾ .	X	-	-	-	-	-	-	-	-
2	SB-04	Geoprobe® DPT soil boring	50	NA	Adjacent to SV-29.	Investigate PCE detections in SV-28 and SV-29.	Subsurface Soil	Highest PID or depth of 5 feet BG ⁽¹⁾ .	X	-	-	-	-	-	-	-	-
2	SB-05	Geoprobe® DPT soil boring	50	NA	West of SB-06.	Investigate PCE detections in SV-28 and SV-29.	Subsurface Soil	Highest PID or depth of 5 feet BG ⁽¹⁾ .	X	-	-	-	-	-	-	-	-
2	SB-06	Geoprobe® DPT soil boring	50	NA	Between SV-28 and SV-29.	Investigate PCE detections in SV-28 and SV-29.	Subsurface Soil and Duplicate Sample	Highest PID or depth of 5 feet BG ⁽¹⁾ .	X	-	-	-	-	-	-	-	-
2	SB-07	Geoprobe® DPT soil boring	50	W46-2	Adjacent to SV-28.	Investigate PCE detections in SV-28 and SV-29.	Subsurface Soil	Highest PID or depth of 5 feet BG ⁽¹⁾ .	X	-	-	-	-	-	-	-	-
							Subsurface Soil	Depth of 3 feet BG to evaluate possible impact to soil from the tar base layer.	-	X	-	-	-	-	-	-	-
2/3	SB-11	Geoprobe® DPT soil boring	50	W46-3	Adjacent to SV-15.	Investigate TPH detection in SV-15 and along the path of the sanitary sewer line.	Subsurface Soil	See entry under Task 3	See entry under Task 3	-	See entry under Task 3	-	-	-	-	-	-
2	SB-12	Geoprobe® DPT soil boring	50	W71-1	Southwest of Building 71 and downgradient of Building 46A.	Investigate conditions downgradient of Building 46A and along the path of the sanitary sewer line.	Subsurface Soil	Highest PID, above groundwater, or bottom of boring.	X	-	-	-	-	-	-	-	-
2	SB-13	Geoprobe® DPT soil boring	50	W71-2	Southeast of Building 71.	Investigate conditions between Building 46A/monitoring well W46-1 and monitoring well W72-1.	Subsurface Soil	Highest PID, above groundwater, or bottom of boring.	X	-	-	-	-	-	-	-	-
2	SB-14	Geoprobe® DPT soil boring	50	NA	Adjacent to SV-06.	Investigate TPH detection in SV-06.	Subsurface Soil	Highest PID or depth of 5 feet BG ⁽¹⁾ .	X	-	X	-	-	-	-	-	-
2	W46-1	Existing Groundwater Monitoring Well	NA	NA	NA	NA	Groundwater	Sample to be collected from perched groundwater zone as per existing well construction.	X	-	-	-	-	-	-	-	-
2	W72-1	Existing Groundwater Monitoring Well	NA	NA	NA	NA	Groundwater	Sample to be collected from deeper groundwater zone as per existing well construction.	X	-	-	-	-	-	-	-	-
2	W46-2	Groundwater Monitoring Well	65	SB-07	Adjacent to SV-28.	Investigate perched groundwater conditions immediately southwest of Building 46A and in the vicinity of in SV-28 and SV-29.	Groundwater and Duplicate Sample	Sample to be collected from perched groundwater zone if encountered within 65 feet BG.	X	-	-	-	-	-	-	-	-

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Rationale for Sampling Locations

Task *	Location ID	Sampling Location Type	Planned SB/Well/VMP Depth (ft BG)	Co-Located Sampling Location	Planned Sampling Location	Rationale for Planned Sampling Location	Sample Type	Rationale for Sample Collection Depth	Analyses								
									VOCs	PAHs	TPH-C7-C12	TPH-GRO	TPH-DRO	TPH-ORO	RCRA 8 Metals	PCBs	
2	W46-3	Groundwater Monitoring Well	65	SB-11	Adjacent to SV-15.	Investigate perched groundwater conditions immediately south of Building 46A and along the path of the sanitary sewer line.	Groundwater	Sample to be collected from perched groundwater zone if encountered within 65 feet BG.	X	-	-	-	-	-	-	-	-
2	W71-1	Groundwater Monitoring Well	65	SB-12	Southwest of Building 71 and downgradient of Building 46A.	Investigate perched groundwater conditions downgradient of Building 46A and along the path of the sanitary sewer line.	Groundwater	Sample to be collected from perched groundwater zone if encountered within 65 feet BG.	X	-	-	-	-	-	-	-	-
2	W71-2	Groundwater Monitoring Well	65	SB-13	Southeast of Building 71.	Investigate perched groundwater conditions between Building 46A/monitoring well W46-1 and monitoring well W72-1.	Groundwater	Sample to be collected from perched groundwater zone if encountered within 65 feet BG.	X	-	-	-	-	-	-	-	-
2	VMP-01	Sub-Slab Vapor Monitoring Point	0.5	SB-02	Adjacent to SV-26.	Investigate PCE detection in SV-26 and along the path of waste water discharge from the former laundry and dry cleaning plant. (Note waste water discharge at this location was via piping that ran below the ceiling of the basement.)	Sub-Slab Vapor	NA	X	-	-	-	-	-	-	-	-
2	VMP-02	Soil Vapor Monitoring Point	3	SB-03	Adjacent to SV-12.	Investigate PCE detection in SV-12 and near the manhole where waste water discharge from the former laundry and dry cleaning plant entered the sanitary sewer line.	Soil Vapor	NA	X	-	-	-	-	-	-	-	-
2	VMP-03	Soil Vapor Monitoring Point	3	SB-06	Between SV-28 and SV-29.	Investigate PCE detections in SV-28 and SV-29.	Soil Vapor and Duplicate Sample	NA	X	-	-	-	-	-	-	-	-
2	VMP-04	Sub-Slab Vapor Monitoring Point	0.5	NA	Inside building opposite of VMP-02.	Investigate conditions inside basement of building opposite of VMP-02.	Sub-Slab Vapor	NA	X	-	-	-	-	-	-	-	-
2	VMP-05	Sub-Slab Vapor Monitoring Point	0.5	NA	Inside building opposite of VMP-03.	Investigate conditions inside basement of building opposite of VMP-03. (Note: VMP-03 is at street level, adjacent to second story of the building.)	Sub-Slab Vapor	NA	X	-	-	-	-	-	-	-	-
2	VMP-06	Sub-Slab Vapor Monitoring Point	0.5	NA	Inside building south of VMP-01.	Investigate conditions inside basement of building between VMP-01 and VMP-02.	Sub-Slab Vapor	NA	X	-	-	-	-	-	-	-	-
3	SB-08	Geoprobe® DPT soil boring	25	NA	West of USTs	Investigate conditions surrounding the USTs at Building 46A.	Subsurface Soil	Highest PID, depth of bottom of USTs (8 feet BG), or depth of refusal.	X	-	X	-	-	-	-	-	-
3	SB-09	Geoprobe® DPT soil boring	25	NA	North of USTs	Investigate conditions surrounding the USTs at Building 46A.	Subsurface Soil and Duplicate Sample	Highest PID, depth of bottom of USTs (8 feet BG), or depth of refusal.	X	-	X	-	-	-	-	-	-
3	SB-10	Geoprobe® DPT soil boring	25	NA	East of USTs	Investigate conditions surrounding the USTs at Building 46A.	Subsurface Soil	Highest PID, depth of bottom of USTs (8 feet BG), or depth of refusal.	X	-	X	-	-	-	-	-	-
2/3	SB-11	Geoprobe® DPT soil boring	50	W46-3	South of USTs	Investigate conditions surrounding the USTs at Building 46A.	Subsurface Soil	Highest PID, depth of bottom of USTs (8 feet BG), or depth of refusal.	X	-	X	-	-	-	-	-	-
4	SB-76-01	Geoprobe® DPT soil boring	25	NA	West of northern lift.	Investigate conditions surrounding the hydraulic lifts at Building 76 and TPH-DRO detection in MACTEC soil boring G76-2.	Surface Soil (immediately below concrete)	Possible location for surface soil evaluation	-	TBD	-	-	TBD	TBD	-	-	TBD
							Subsurface Soil	Above contamination or depth of 5 feet BG.	-	-	-	-	X	X	-	-	
							Subsurface Soil	Highest PID or depth of 10 feet BG.	-	-	-	-	X	X	X	-	
							Subsurface Soil	Below contamination or depth of 15 feet BG.	-	-	-	-	X	X	-	-	

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									VOCs	PAHs	TPH-C7-C12	TPH-GRO	TPH-DRO	TPH-ORO	RCRA 8 Metals	PCBs
4	SB-76-02	Geoprobe® DPT soil boring	25	NA	East of northern lift.	Investigate conditions surrounding the hydraulic lifts at Building 76 and TPH-DRO detection in MACTEC soil boring G76-2.	Surface Soil (immediately below concrete)	Default location for surface soil evaluation	-	X	-	-	X	X	-	X
							Subsurface Soil	Above contamination or depth of 5 feet BG.	-	-	-	-	X	X	-	-
							Subsurface Soil	Highest PID or depth of 10 feet BG.	-	-	-	-	X	X	X	-
							Subsurface Soil	Below contamination or depth of 15 feet BG.	-	-	-	-	X	X	-	-
4	SB-76-03	Geoprobe® DPT soil boring	25	NA	South of northern lift.	Investigate conditions surrounding the hydraulic lifts at Building 76 and TPH-DRO detection in MACTEC soil boring G76-2.	Surface Soil (immediately below concrete)	Possible location for surface soil evaluation	-	TBD	-	-	TBD	TBD	-	TBD
							Subsurface Soil	Above contamination or depth of 5 feet BG.	-	-	-	-	X	X	-	-
							Subsurface Soil	Highest PID or depth of 10 feet BG.	-	-	-	-	X	X	X	-
							Subsurface Soil	Below contamination or depth of 15 feet BG.	-	-	-	-	X	X	-	-
4	SB-76-04	Geoprobe® DPT soil boring	25	NA	West of central lift.	Investigate conditions surrounding the hydraulic lifts at Building 76 and TPH-DRO detection in MACTEC soil boring G76-3.	Surface Soil (immediately below concrete)	Possible location for surface soil evaluation	-	TBD	-	-	TBD	TBD	-	TBD
							Subsurface Soil	Above contamination or depth of 5 feet BG.	-	-	-	-	X	X	-	-
							Subsurface Soil	Highest PID or depth of 10 feet BG.	-	-	-	-	X	X	X	-
							Subsurface Soil	Below contamination or depth of 15 feet BG.	-	-	-	-	X	X	-	-
4	SB-76-05	Geoprobe® DPT soil boring	25	NA	South of central lift.	Investigate conditions surrounding the hydraulic lifts at Building 76 and TPH-DRO detection in MACTEC soil boring G76-3.	Surface Soil (immediately below concrete)	Default location for surface soil evaluation	-	X	-	-	X	X	-	X
							Subsurface Soil	Above contamination or depth of 5 feet BG.	-	-	-	-	X	X	-	-
							Subsurface Soil	Highest PID or depth of 10 feet BG.	-	-	-	-	X	X	X	-
							Subsurface Soil	Below contamination or depth of 15 feet BG.	-	-	-	-	X	X	-	-
4	SB-76-06	Geoprobe® DPT soil boring	25	NA	Center of central lift.	Investigate conditions surrounding the hydraulic lifts at Building 76 and TPH-DRO detection in MACTEC soil boring G76-3.	Surface Soil (immediately below concrete)	Default location for surface soil evaluation	-	X	-	-	X	X	-	X
							Subsurface Soil	Above contamination or depth of 5 feet BG.	-	-	-	-	X	X	-	-
							Subsurface Soil	Highest PID or depth of 10 feet BG.	-	-	-	-	X	X	X	-
							Subsurface Soil	Below contamination or depth of 15 feet BG.	-	-	-	-	X	X	-	-

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									VOCs	PAHs	TPH-C7-C12	TPH-GRO	TPH-DRO	TPH-ORO	RCRA 8 Metals	PCBs
4	SB-76-07	Geoprobe® DPT soil boring	25	NA	West of central lift.	Investigate conditions surrounding the hydraulic lifts at Building 76 and TPH-DRO detection in MACTEC soil boring G76-3.	Surface Soil (immediately below concrete)	Possible location for surface soil evaluation	-	TBD	-	-	TBD	TBD	-	TBD
							Subsurface Soil	Above contamination or depth of 5 feet BG.	-	-	-	-	X	X	-	-
							Subsurface Soil	Highest PID or depth of 10 feet BG.	-	-	-	-	X	X	X	-
							Subsurface Soil	Below contamination or depth of 15 feet BG.	-	-	-	-	X	X	-	-
4	SB-76-08	Geoprobe® DPT soil boring	25	NA	East of southern lift.	Investigate conditions surrounding the hydraulic lifts at Building 76.	Surface Soil (immediately below concrete)	Default location for surface soil evaluation	-	X	-	-	X	X	-	X
							Subsurface Soil	Above contamination or depth of 5 feet BG.	-	-	-	-	X	X	-	-
							Subsurface Soil	Highest PID or depth of 10 feet BG.	-	-	-	-	X	X	X	-
							Subsurface Soil	Below contamination or depth of 15 feet BG.	-	-	-	-	X	X	-	-
4	SB-76-09	Geoprobe® DPT soil boring	25	NA	South of southern lift.	Investigate conditions surrounding the hydraulic lifts at Building 76.	Surface Soil (immediately below concrete)	Possible location for surface soil evaluation	-	TBD	-	-	TBD	TBD	-	TBD
							Subsurface Soil	Above contamination or depth of 5 feet BG.	-	-	-	-	X	X	-	-
							Subsurface Soil	Highest PID or depth of 10 feet BG.	-	-	-	-	X	X	X	-
							Subsurface Soil	Below contamination or depth of 15 feet BG.	-	-	-	-	X	X	-	-
4	SB-76-10	Geoprobe® DPT soil boring	25	NA	West of southern lift.	Investigate conditions surrounding the hydraulic lifts at Building 76.	Surface Soil (immediately below concrete)	Possible location for surface soil evaluation	-	TBD	-	-	TBD	TBD	-	TBD
							Subsurface Soil	Above contamination or depth of 5 feet BG.	-	-	-	-	X	X	-	-
							Subsurface Soil	Highest PID or depth of 10 feet BG.	-	-	-	-	X	X	X	-
							Subsurface Soil	Below contamination or depth of 15 feet BG.	-	-	-	-	X	X	-	-

*** Task Description**

Task 2 - Building 46 - Additional Sampling Based on Passive Subsurface Vapor Survey Results
Task 3 - Building 46 - Soil Sampling at Inactive Underground Storage Tanks (USTs)
Task 4 - Building 76 - Soil Sampling to Delineate the Extent of Petroleum Contamination at Hydraulic Lifts

Table Notes

BG - Below Grade
TBD - To Be Determined
DPT - Direct-Push Technology
NA - Not Applicable
⁽¹⁾ - Should no PID readings above background levels be detected in a boring, a soil sample will be collected from the specified depth consistent with the goal of evaluating potential source areas.

Analytical Methods

VOCs (Volatile Organic Compounds) - Soil and Groundwater: EPA Method 8260 and Vapor: EPA Method TO-15 Low Level.
PAHs (Polycyclic Aromatic Hydrocarbons) - EPA Method 8270.
TPH-C7-12 (Total Petroleum Hydrocarbons - Stoddard Solvent Range Organics) - EPA Method 8015M.
TPH-GRO (TPH - Gasoline Range Organics) - EPA Method 8015M.
TPH-DRO (Diesel Range Organics) - EPA Method 8015M.
TPH-ORO (Oil Range Organics) - EPA Method 8015M.
RCRA (Resource Conservation and Recovery Act) 8 Metals - EPA Method 6020.
PCBs (Polychlorinated Biphenyls) - EPA Method 8082.

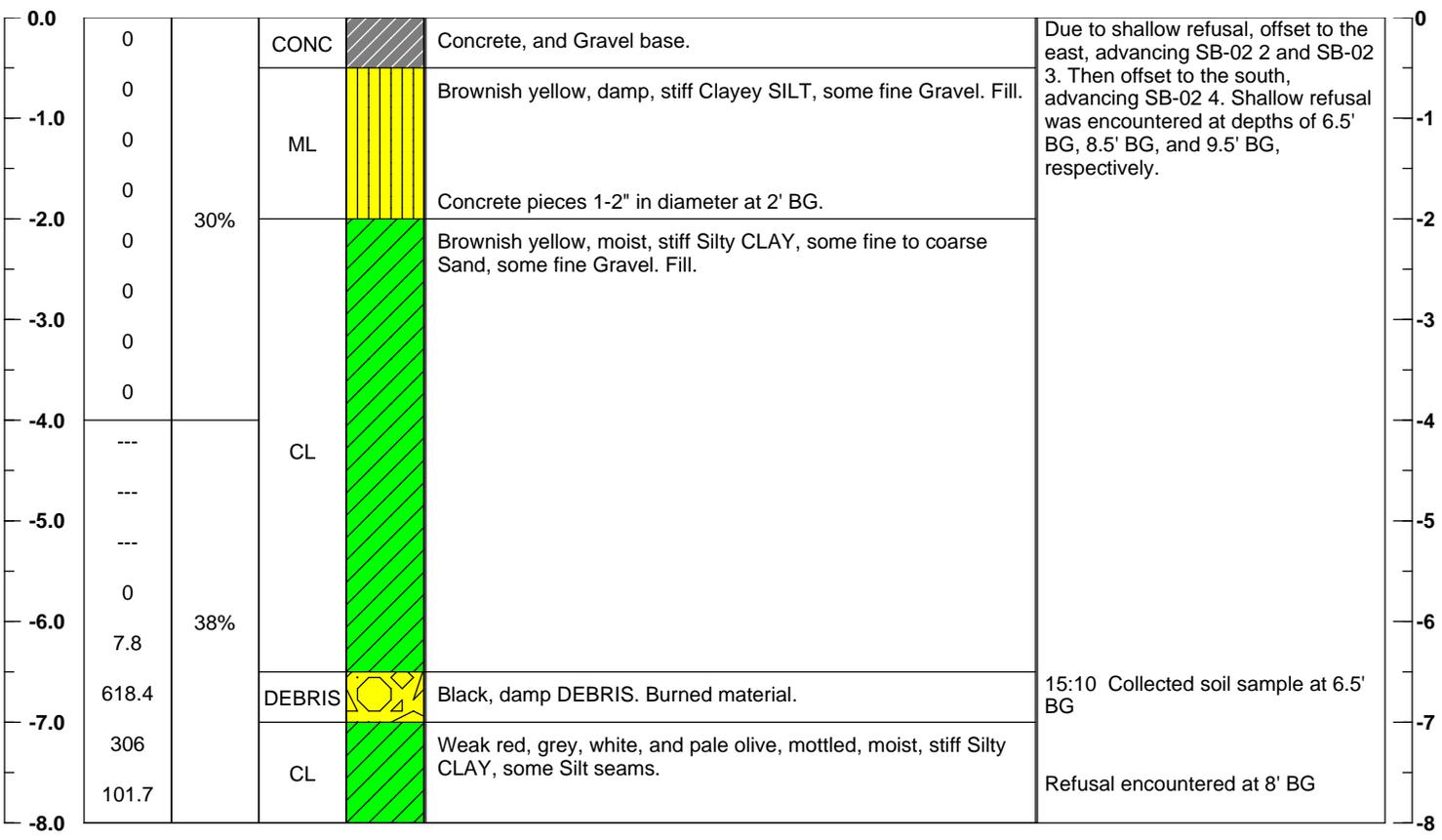
APPENDIX F

BUILDING 46 – SOIL BORING LOGS

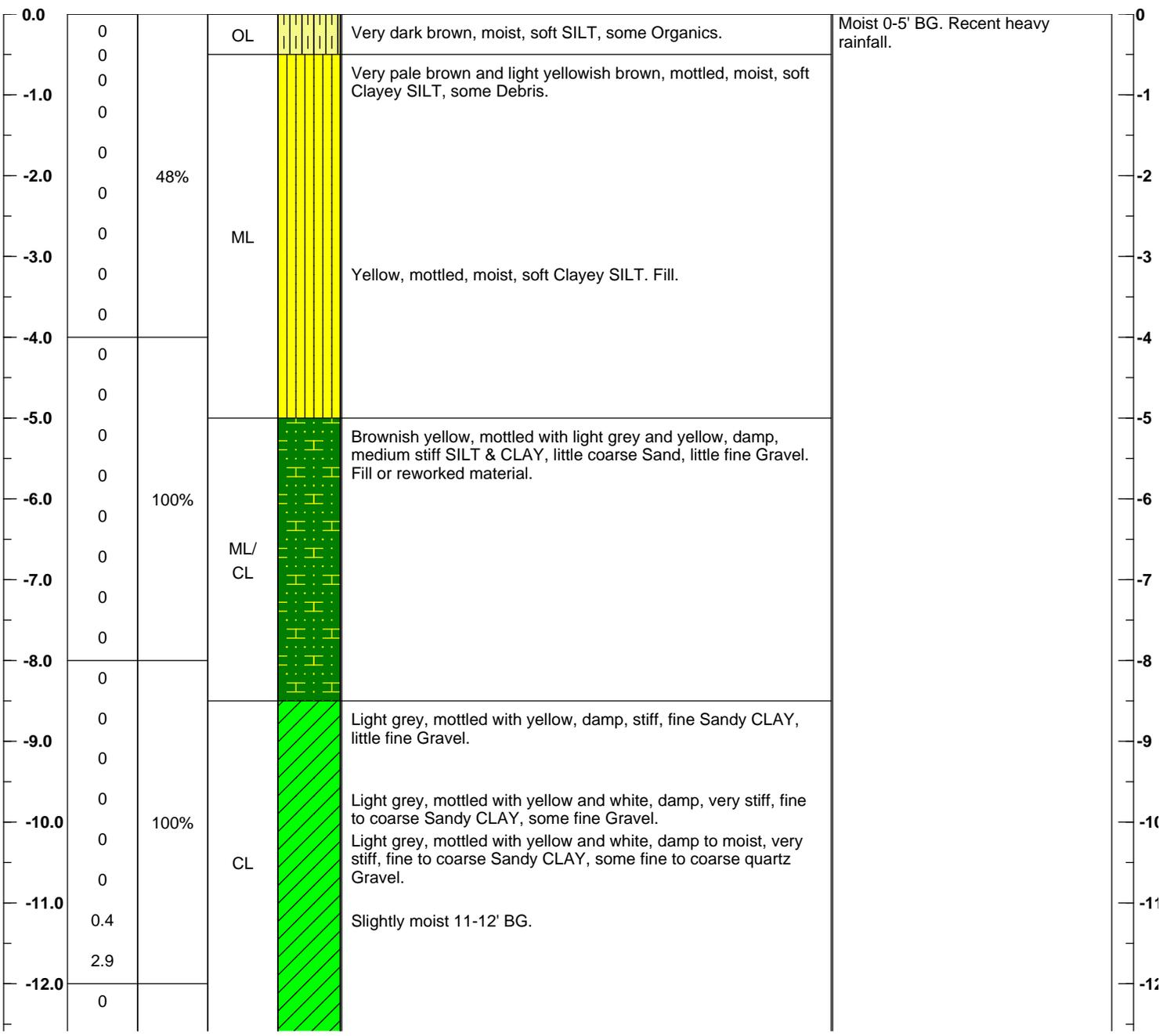
DEPTH (ft)	PID READING (ppm)	RECOVERY	SOIL CLASS	OVERBURDEN / ROCK DESCRIPTION	NOTES	
-13.0	0		GW	White and very pale brown, dry, hard, fine to coarse GRAVEL, some fine to coarse Sand, little Clayey fine Sand seams.		
-14.0	0	100%				
-15.0	0					
-16.0	0					
-17.0	0					
-18.0	0	100%	ML	Brownish yellow, mottled, damp, stiff Clayey SILT, little fine white quartz Gravel, trace Mica.		
-19.0	0		MH	Brownish yellow, mottled, damp, stiff Clayey SILT, some Mica, some fine Sand seams, little fine white quartz Gravel.		
-20.0	0					
-21.0	0		CL	Brownish yellow, mottled with weak red, damp, very stiff, plastic Silty CLAY. Clayey Silt lens (3" thick) at 21.5' BG.		
-22.0	0	100%				
-23.0	0					Light brownish yellow, mottled, damp, stiff, fine Sandy CLAY, little Mica. Weathered fine Gravel lens (2" thick) at 22.5' BG.
-24.0	---					
-25.0	0			Yellowish brown, mottled, damp, very stiff, fine Sandy CLAY, little Mica.		
-26.0	0.1	88%				
-27.0	0			Weathered fine Gravel lens (2" thick) at 27' BG.		
-28.0	0			Weak red, mottled, damp, stiff, plastic Silty CLAY.		
-28.0	0		SC	Brown, wet, loose Clayey fine SAND.	Perched groundwater encountered 28-29' BG.	

-29.0	0	100%	SC	Brown, wet, loose Clayey fine SAND.	
	0.2		CL	Weak red, mottled, damp, very stiff, plastic Silty CLAY, little Clayey SAND layers 29-30' BG.	
-30.0	0.5			Color change only 31-33.5' BG: Red, mottled.	
	0	100%	SC	Pale brown, mottled with very dark grey, damp, dense Clayey fine SAND.	
-31.0	0		CL	Pale brown, mottled with weak red and very dark grey, damp, very stiff Silty CLAY, little fine Sand seams.	
-32.0	0				
	0	50%	CL		Poor recovery 36-40 - liner got stuck in the Macrocore. Geoprobe Operator confirmed lithology change at 39' BG.
-33.0	0				
-34.0	0				
	0	50%	SP	Yellow, mottled with light grey, damp, hard, fine SAND, little Clay, trace Mica.	Bottom of boring 40' BG.
-35.0	0				
-36.0	0				
-37.0	---				
-38.0	0				
-39.0	0				
-40.0	0				

PROJECT CG-17-1111		SOIL BORING LOG SB-02 1		PAGE 1 OF 1		
PROJECT: Additional Phase II Environmental Site Assessment			DATE STARTED: 05/01/2018			
LOCATION: AFRH - 3700 N Capitol St NW, Washington, DC 20011			DATE/TIME COMPLETED: 05/01/2018 17:00			
DRILLING COMPANY: Tidewater, Inc.			LOGGED BY: Meg Staines			
DRILLING METHOD: Geoprobe			PROJECT MANAGER: Nancy Love			
SAMPLING METHOD: Macrocore			BORING DIAMETER: 2"		BORING DEPTH: 8'	
DEPTH TO GW (ft) FROM BG: NA			DATE: 05/01/2018		NOTES: Located inside Building 46 on the south side of the smokestack	
DEPTH (ft)	PID READINGS (ppm)	RECOVERY (%)	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES



PROJECT CG-17-1111		SOIL BORING LOG SB-03		PAGE 1 OF 4		
PROJECT: Additional Phase II Environmental Site Assessment			DATE STARTED: 04/25/2018			
LOCATION: AFRH - 3700 N Capitol St NW, Washington, DC 20011			DATE/TIME COMPLETED: 04/25/2018 18:00			
DRILLING COMPANY: Tidewater, Inc.			LOGGED BY: Meg Staines			
DRILLING METHOD: Geoprobe			PROJECT MANAGER: Nancy Love			
SAMPLING METHOD: Macrocore			BORING DIAMETER: 2"		BORING DEPTH: 50'	
DEPTH TO GW (ft) FROM BG: NA		DATE: 04/25/2018		NOTES: Located on south side of Building 46, east side of Building 46A.		
DEPTH (ft)	PID READINGS (ppm)	RECOVERY (%)	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES



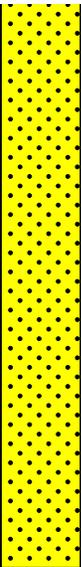
DEPTH (ft)	PID READING (ppm)	RECOVERY	SOIL CLASS	OVERBURDEN / ROCK DESCRIPTION	NOTES
0				White and red, mottled, damp, stiff Silty CLAY.	
-13.0	1.4				
-14.0	0.8	100%		Red, mottled with white, damp, very stiff Silty CLAY.	
	1.2		CL		
	1.7				
-15.0	2.4				
	1.4				
-16.0	1.3				
	2.6				
-17.0	20.0		ML	Yellowish brown, mottled with white and yellow, damp, stiff Clayey SILT, some weathered intervals.	15:30 Collected soil sample at 17' BG.
	4.1				
-18.0	2.8	100%	CL	Red, mottled with white and yellow, damp, very stiff, plastic Silty CLAY.	
	2.9				
-19.0	7.7			Yellow, white, and brownish yellow, mottled, damp, stiff Clayey SILT, some weathered intervals.	
	2.3		ML		
-20.0	---				

-21.0	---			Light brownish yellow, mottled with black, damp, dense, very fine SAND & SILT, trace Mica.	
	0		SM		
-22.0	0	63%			
	0			Yellow, red, and white, mottled, damp, stiff Clayey SILT, some weathered lenses, some weathered fine Gravel lenses, little Silty CLAY lenses.	
-23.0	0				
	0.5				
-24.0	---		ML		Poor recovery 24-28 - liner got stuck in the Macrocore. Lost most of the soil during extraction.
-25.0	---				

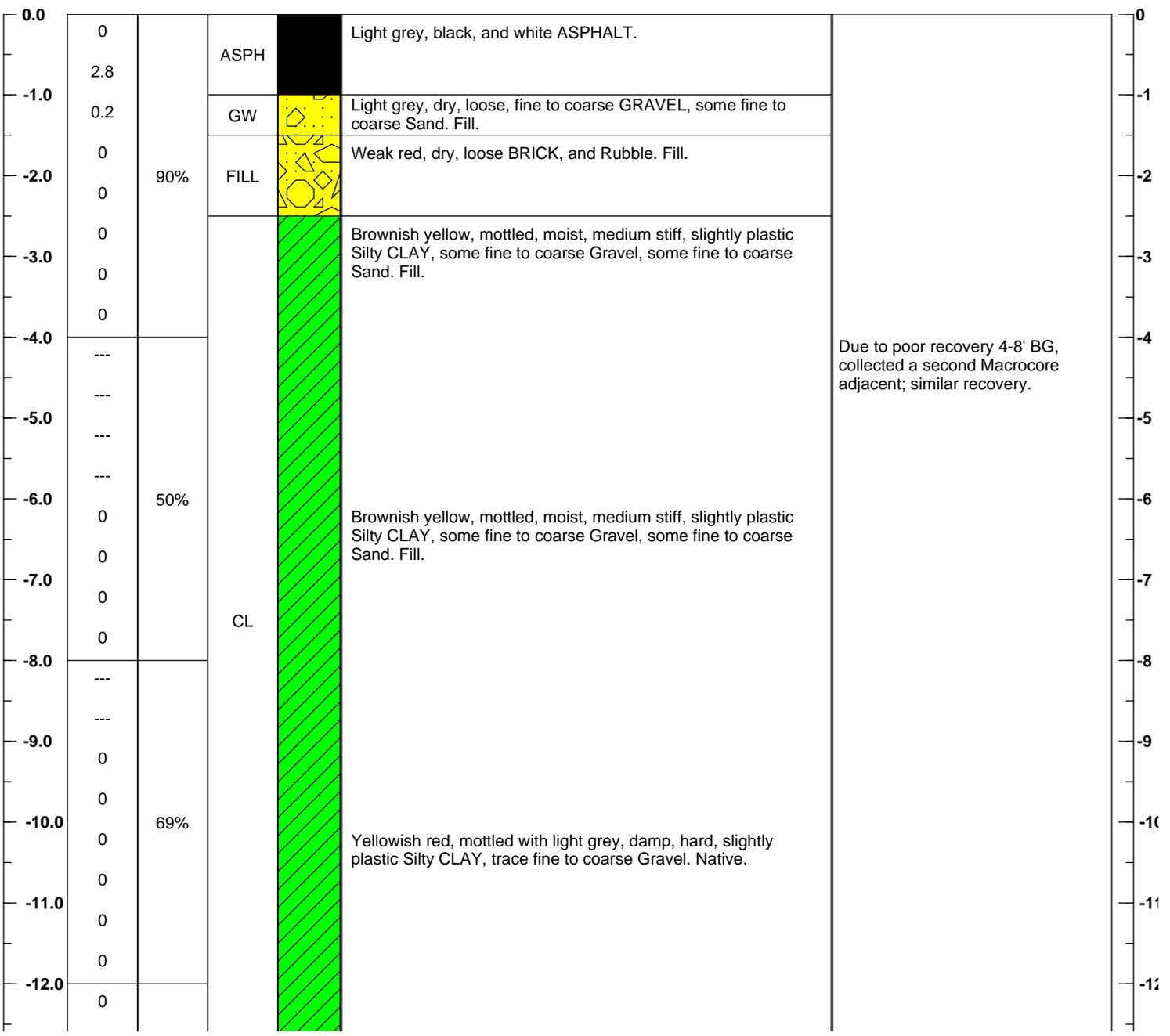
-26.0	---	25%		Red, damp, hard, plastic Silty CLAY.	
	---		CL		
-27.0	0				
	0				
-28.0	0		ML/CL	Yellow and very pale brown, mottled with Black, damp, very stiff SILT & CLAY.	

-29.0	0		ML/ CL	Yellow and very pale brown, mottled with Black, damp, very stiff SILT & CLAY.	-29
0	0				0
-30.0	0	100%	CL	Very pale brown, mottled with black and yellow, damp, stiff, fine Sandy CLAY, trace Mica.	-30
0	0				0
-31.0	0			Very pale brown and weak red, mottled with reddish yellow, damp, very stiff CLAY & SILT.	-31
0	0				0
-32.0	0		CL/ ML		-32
0	0				0
-33.0	0				-33
0	0				0
-34.0	0	100%	CL	Weak red, mottled with black, white, and yellow, damp, very stiff, slightly plastic Silty CLAY.	-34
0	0				0
-35.0	0			Very weak red, mottled with yellow, white, and black, damp, stiff Clayey SILT, some Silt seams.	-35
0	0				0
-36.0	---		ML		-36
0	---				0
-37.0	---				-37
0	---				0
-38.0	---	38%		Yellow and white, mottled, damp, dense, very fine SAND & SILT.	-38
0	---				0
-39.0	0		SM		-39
0	0			Color change only 39.5-41' BG: yellow, white, and brownish yellow.	0
-40.0	---				-40
0	---				0
-41.0	---			White, mottled with trace yellow, damp, dense, fine SAND, little Silt.	-41
0	---				0
-42.0	0				-42
0	0	60%	SP		0
-43.0	0				-43
0	0				0
-44.0	0				-44
0	0				0

PROJECT CG-17-1111		SOIL BORING LOG SB-03		PAGE 4 OF 4	
DEPTH (ft)	PID READING (ppm)	RECOVERY	SOIL CLASS	OVERBURDEN / ROCK DESCRIPTION	NOTES

-45.0	0				White, mottled with trace yellow, damp, dense, fine SAND, little Silt.	
---	---					
-46.0	---					
---	---					
-47.0	---		SP			
---	---	50%				
-48.0	0					
---	0					
-49.0	0					
---	0					
-50.0	0				Bottom of boring 50' BG.	

PROJECT CG-17-1111		SOIL BORING LOG SB-04		PAGE 1 OF 3		
PROJECT: Additional Phase II Environmental Site Assessment			DATE STARTED: 04/23/2018			
LOCATION: AFRH - 3700 N Capitol St NW, Washington, DC 20011			DATE/TIME COMPLETED: 04/23/2018 17:00			
DRILLING COMPANY: Tidewater, Inc.			LOGGED BY: Meg Staines			
DRILLING METHOD: Geoprobe			PROJECT MANAGER: Nancy Love			
SAMPLING METHOD: Macrocore			BORING DIAMETER: 2"		BORING DEPTH: 32'	
DEPTH TO GW (ft) FROM BG: 29.7		DATE: 04/23/2018		NOTES: Located on west side of Building 46A.		
DEPTH (ft)	PID READINGS (ppm)	RECOVERY (%)	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES



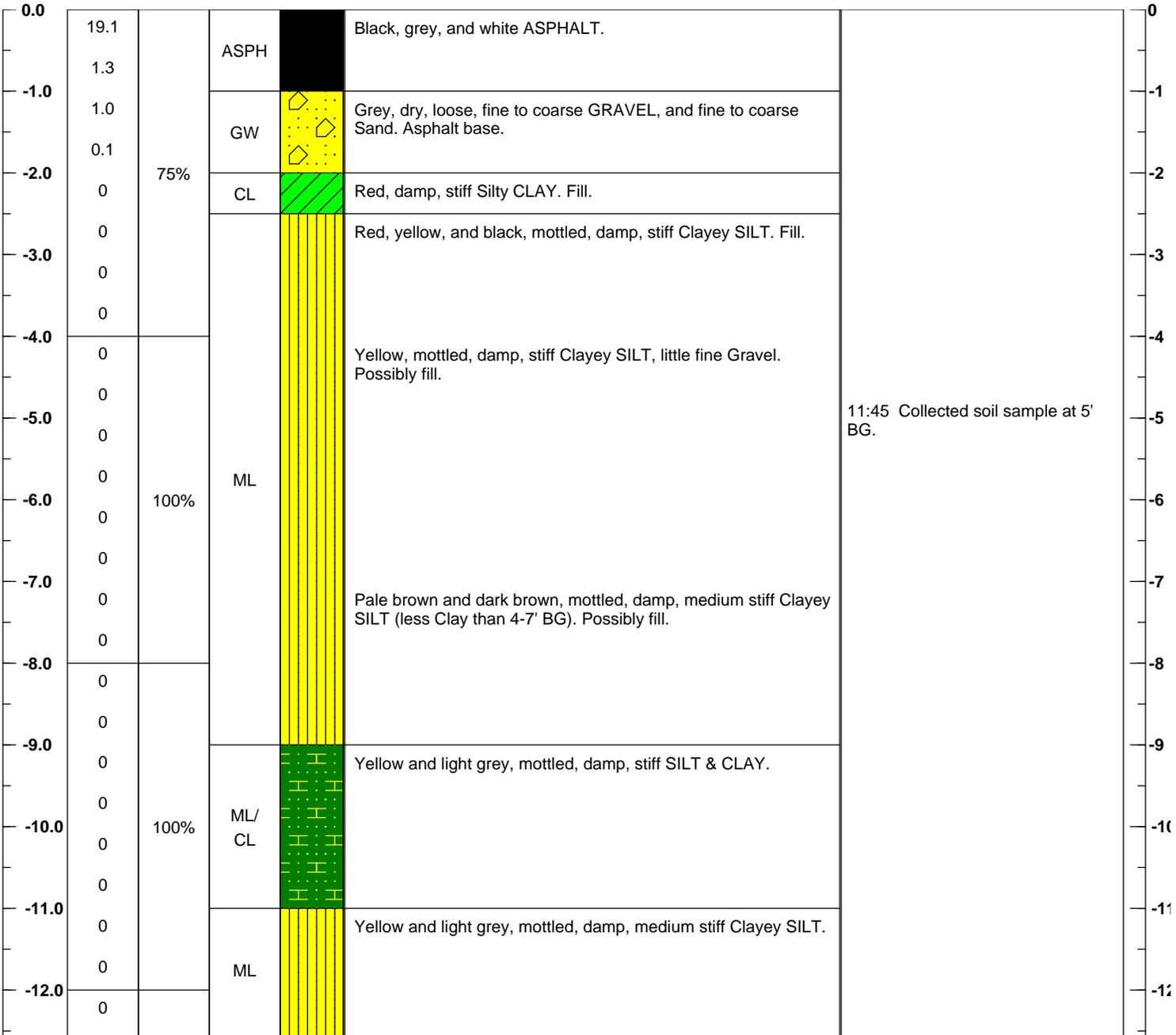
PROJECT CG-17-1111		SOIL BORING LOG SB-04		PAGE 2 OF 3	
DEPTH (ft)	PID READING (ppm)	RECOVERY	SOIL CLASS	OVERBURDEN / ROCK DESCRIPTION	NOTES

-13.0	0	100%	CL	Yellowish red, mottled with light grey, damp, hard, slightly plastic Silty CLAY, trace fine to coarse Gravel. Layer at 13' BG (4" thick): light brownish yellow and white, damp, medium dense, fine GRAVEL, some fine to coarse Sand, some Silt.	-13
0	0		SC	Brownish yellow, mottled with light grey, damp, dense, Clayey fine SAND.	-14
-14.0	0		GW	Yellow and white, damp, hard, fine to coarse rounded quartz GRAVEL, some fine to coarse Sand, little Silt.	-14
0	0	100%	CL	Light grey, mottled with yellowish red, damp, stiff, fine Sandy CLAY.	-15
-15.0	0		SC	Pale yellow, very pale brown, and white, damp, hard, Clayey fine to coarse SAND, some fine quartz Gravel.	-16
-16.0	0		CL	Red, light grey, and yellow, mottled, damp, stiff, slightly plastic Silty CLAY.	-17
-17.0	0	100%	CL	Red, light grey, and yellow, mottled, damp, stiff, slightly plastic Silty CLAY.	-18
0	0		CL	Red, light grey, and yellow, mottled, damp, stiff, slightly plastic Silty CLAY.	-19
-18.0	0		CL	Red, light grey, and yellow, mottled, damp, stiff, slightly plastic Silty CLAY.	-19
-19.0	0	50%	CL	Red, light grey, and yellow, mottled, damp, stiff, slightly plastic Silty CLAY.	-20
-20.0	---		CL	Red, light grey, and yellow, mottled, damp, stiff, slightly plastic Silty CLAY.	-21
-21.0	---		SC	Brownish yellow, mottled, damp, dense, Clayey fine to coarse SAND, some fine Gravel.	-21
-22.0	0	75%	SC	Brownish yellow, mottled, damp, dense, Clayey fine SAND, little fine Gravel.	-22
-23.0	0		SC	Brownish yellow, mottled, damp, dense, Clayey fine SAND, little fine Gravel.	-23
-24.0	0		SC	Brownish yellow, mottled, damp, dense, Clayey fine SAND, little fine Gravel.	-24
-25.0	0	75%	SC	Brownish yellow, mottled, damp, dense, Clayey fine SAND, little fine Gravel.	-25
-26.0	0		SC	Brownish yellow, mottled, damp, dense, Clayey fine SAND, little fine Gravel.	-26
-27.0	0		ML	Brownish yellow, mottled, damp, medium stiff Clayey SILT, some fine to coarse Sand.	-27
-28.0	0		ML	Brownish yellow, mottled, damp, medium stiff Clayey SILT, some fine to coarse Sand.	-28

PROJECT CG-17-1111		SOIL BORING LOG SB-04		PAGE 3 OF 3	
DEPTH (ft)	PID READING (ppm)	RECOVERY	SOIL CLASS	OVERBURDEN / ROCK DESCRIPTION	NOTES

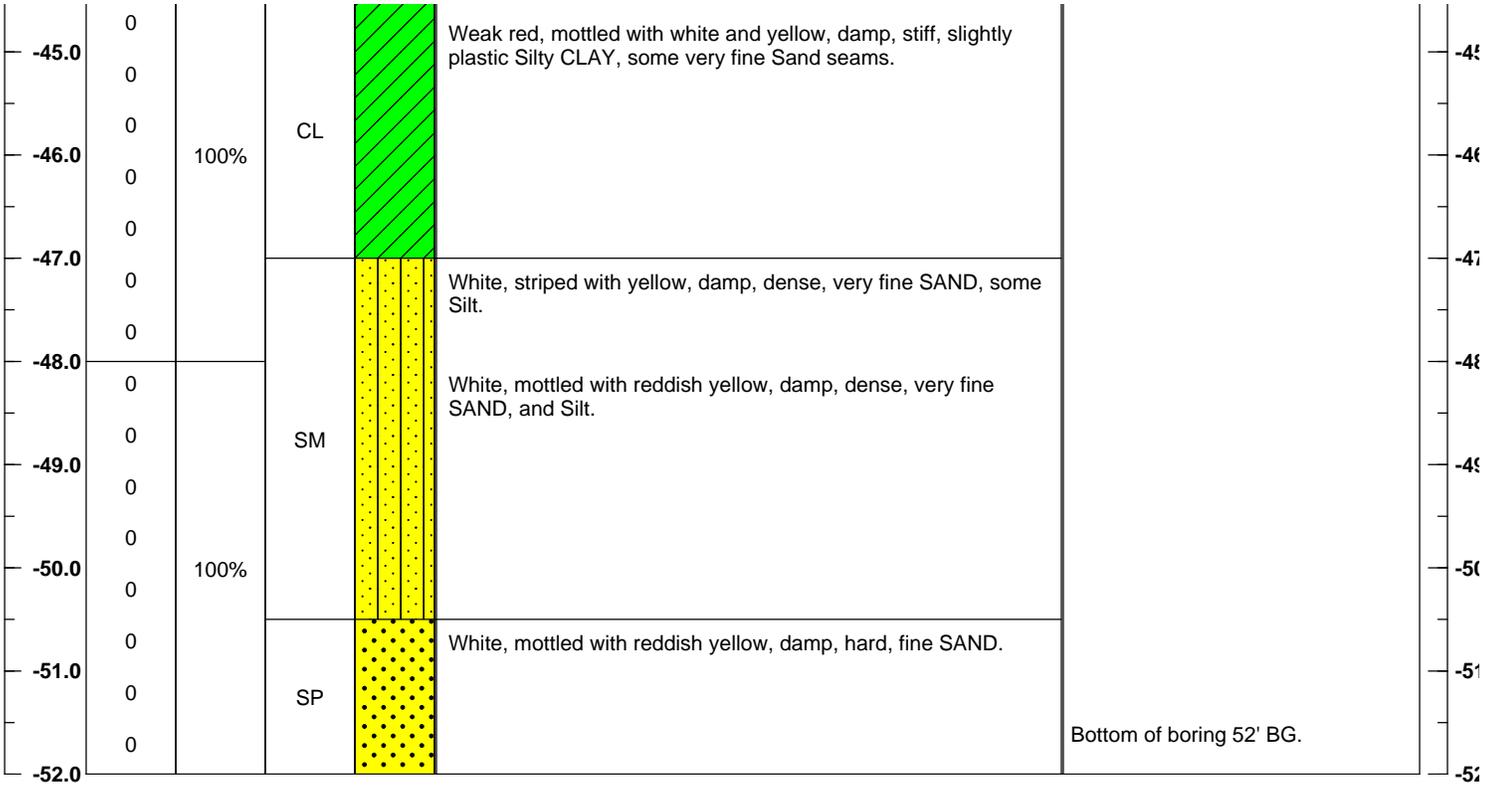
-29.0	0	95%	ML	Brownish yellow, mottled, damp, medium stiff Clayey SILT, some fine to coarse Sand.	15:45 Collected soil sample at 29.5' BG.
-30.0	0.1		CL	Brownish yellow, moist to wet, soft Silty CLAY, some fine to coarse Sand. Damp 30.5-31' BG.	Perched groundwater encountered at 30-30.5' BG.
-31.0	0			Red, mottled with light grey and black, damp, hard, slightly plastic Silty CLAY.	Bottom of boring 32' BG.
-32.0	0				

PROJECT CG-17-1111		SOIL BORING LOG SB-05		PAGE 1 OF 4		
PROJECT: Additional Phase II Environmental Site Assessment		DATE STARTED: 04/24/2018				
LOCATION: AFRH - 3700 N Capitol St NW, Washington, DC 20011		DATE/TIME COMPLETED: 04/24/2018 14:00				
DRILLING COMPANY: Tidewater, Inc.		LOGGED BY: Meg Staines				
DRILLING METHOD: Geoprobe		PROJECT MANAGER: Nancy Love				
SAMPLING METHOD: Macrocore		BORING DIAMETER: 2"		BORING DEPTH: 52'		
DEPTH TO GW (ft) FROM BG: NA		DATE: 04/24/2018		NOTES: Located in roadway west of southwest corner of Building 46A.		
DEPTH (ft)	PID READINGS (ppm)	RECOVERY (%)	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES

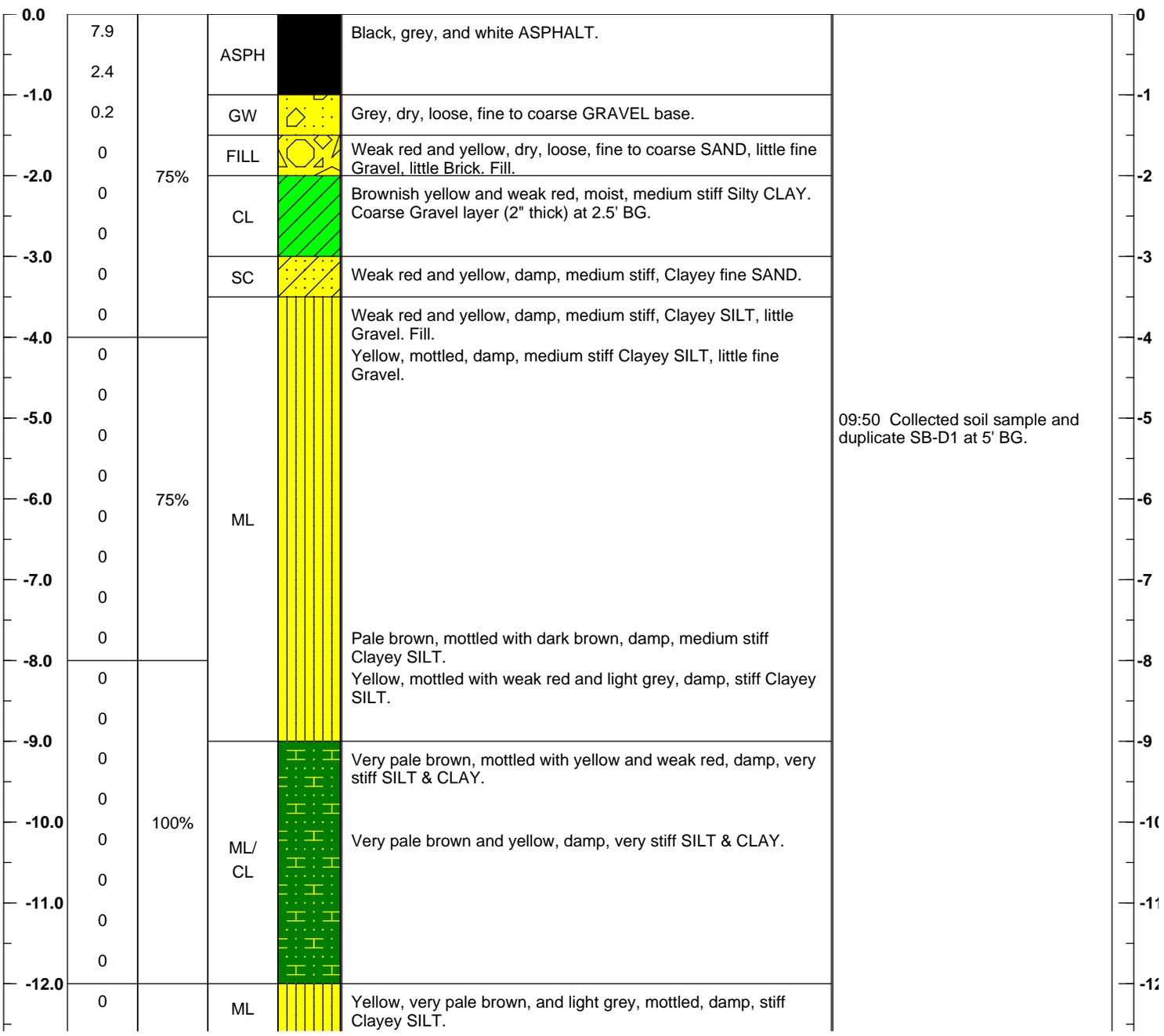


DEPTH (ft)	PID READING (ppm)	RECOVERY	SOIL CLASS	OVERBURDEN / ROCK DESCRIPTION	NOTES	
-29.0	0	80%	ML	Pale brown, mottled, damp, stiff Clayey SILT.		
-29.0	0		CL	Red, very pale brown, and weak red, mottled, damp, stiff, plastic Silty CLAY.		
-30.0	0			Red, very pale brown, weak red, and black, mottled, damp, stiff, plastic Silty CLAY.		
-31.0	0			Weak red, mottled with black, damp, stiff, slightly plastic Silty CLAY.		
-32.0	0	75%	ML/CL	Weak red, mottled with black, reddish yellow, and light grey, damp, stiff SILT & CLAY, little fine Sand seams.		
-33.0	0			Weak red, mottled with black, reddish yellow, and light grey, damp, stiff SILT & CLAY.		
-34.0	0		CL	Red, weak red, and brown, mottled, damp, stiff, slightly plastic Silty CLAY.		
-35.0	0			Yellow, white, pale yellow, dark grey, and very pale brown, striped, damp, dense, fine SAND, little Clay.		
-36.0	0	95%	SP	White, damp, dense, very fine SAND, and Silt, trace Mica.		
-37.0	0		SM	Weak red, mottled with white and yellow, damp, stiff, slightly plastic Silty CLAY, some very fine Sand seams.		
-38.0	0					
-39.0	0		CL			
-40.0	0	95%	SM	Weak red, mottled with white and yellow, damp, stiff, slightly plastic Silty CLAY, some very fine Sand seams.		
-41.0	0					
-42.0	0		CL			
-43.0	0					
-44.0	0					

PROJECT CG-17-1111		SOIL BORING LOG SB-05		PAGE 4 OF 4	
DEPTH (ft)	PID READING (ppm)	RECOVERY	SOIL CLASS	OVERBURDEN / ROCK DESCRIPTION	NOTES

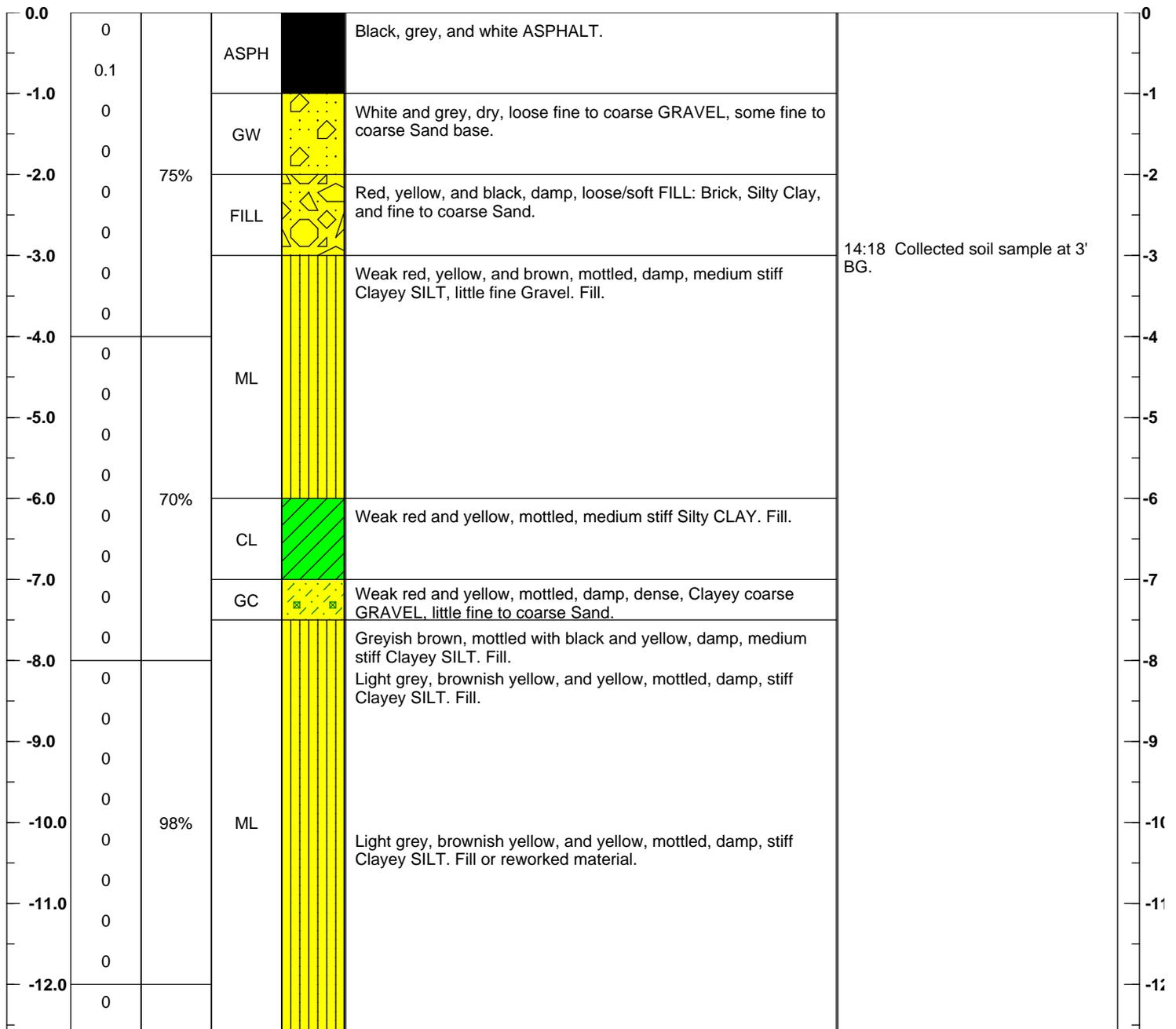


PROJECT CG-17-1111		SOIL BORING LOG SB-06		PAGE 1 OF 2		
PROJECT: Additional Phase II Environmental Site Assessment		DATE STARTED: 04/24/2018				
LOCATION: AFRH - 3700 N Capitol St NW, Washington, DC 20011		DATE/TIME COMPLETED: 04/24/2018 11:14				
DRILLING COMPANY: Tidewater, Inc.		LOGGED BY: Meg Staines				
DRILLING METHOD: Geoprobe		PROJECT MANAGER: Nancy Love				
SAMPLING METHOD: Macrocore		BORING DIAMETER: 2"		BORING DEPTH: 28'		
DEPTH TO GW (ft) FROM BG: NA - caved		DATE: 04/24/2018		NOTES: Located adjacent to the southwest corner of Building 46A.		
DEPTH (ft)	PID READINGS (ppm)	RECOVERY (%)	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES

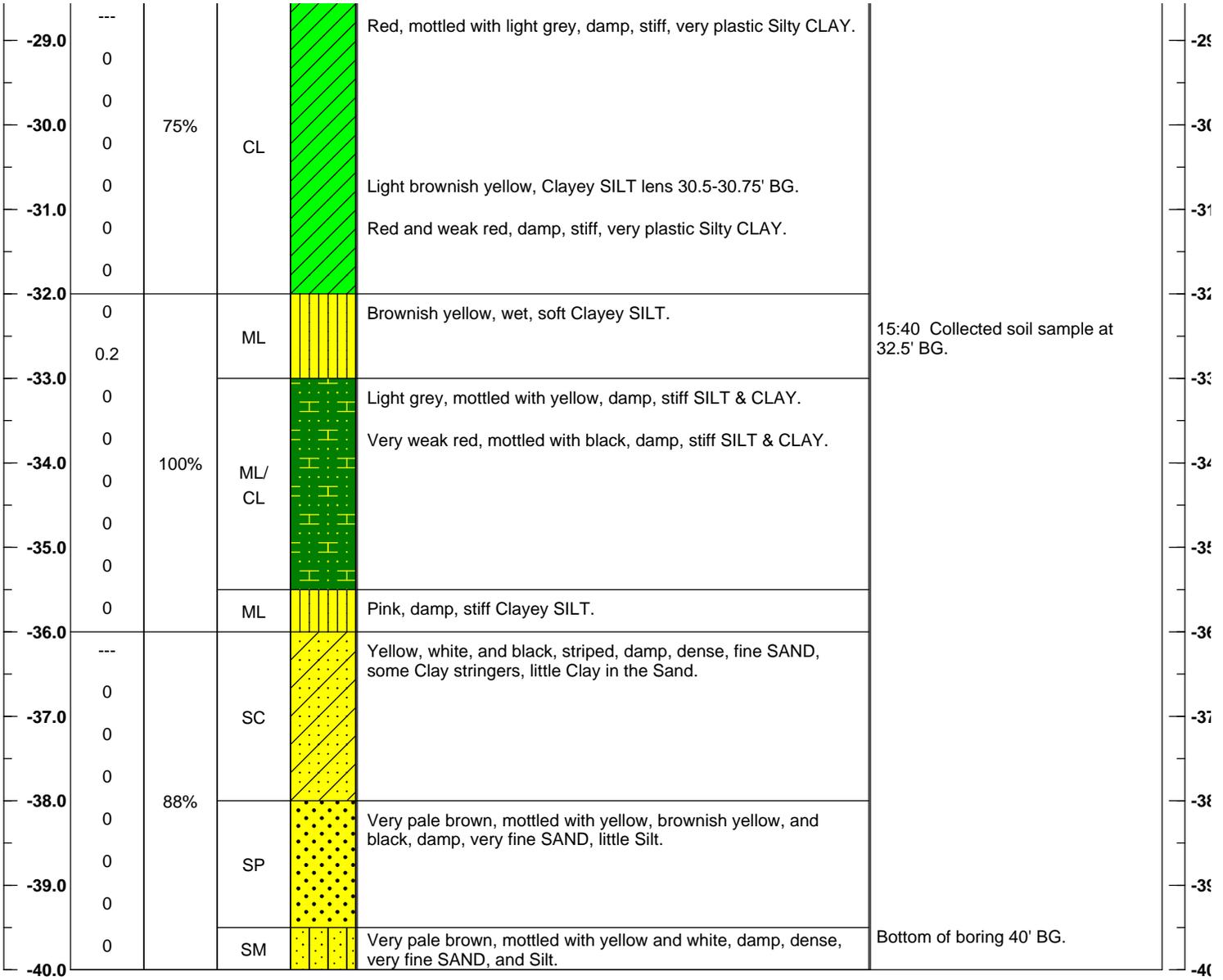


DEPTH (ft)	PID READING (ppm)	RECOVERY	SOIL CLASS	OVERBURDEN / ROCK DESCRIPTION	NOTES
-13.0	0	95%	ML	Yellow, very pale brown, and light grey, mottled, damp, stiff Clayey SILT.	
-14.0	0			Clayey coarse GRAVEL lens (3" thick) at 13.75-14' BG.	
-15.0	0		SC	Yellow, mottled, damp, Clayey fine SAND.	
-16.0	0	98%	GW	White and yellow, dry, hard, fine to coarse GRAVEL, some fine to coarse Sand.	
-17.0	0		GC	White, yellow, and pale brown, damp, very dense, Clayey fine to coarse GRAVEL, some fine to coarse Sand.	
-18.0	0				
-19.0	0	100%	CL	Weak red, yellow, and light grey, damp, stiff Silty CLAY.	
-20.0	0				
-21.0	0		ML	Pale brown, mottled, damp, stiff Clayey SILT.	
-22.0	0	100%	SM	Very dark brown, mottled, damp, dense, fine SAND & SILT.	
-23.0	0				
-24.0	0		SC	Pale yellow and pale brown, mottled, damp, very dense, Clayey fine to coarse SAND, little fine Gravel.	
-25.0	0	100%	SM	Very dark brown, wet, soft, very fine SAND & SILT. Swamp sediments.	Perched groundwater encountered 25-26' BG.
-26.0	0			Yellow, damp, dense, fine SAND & SILT 26-26.25' BG.	
-27.0	0		ML	Pale brown, mottled, damp, stiff Clayey SILT, little Mica.	
-28.0	0		CL	Red, mottled, damp, stiff, plastic Silty CLAY.	Bottom of boring 28' BG.

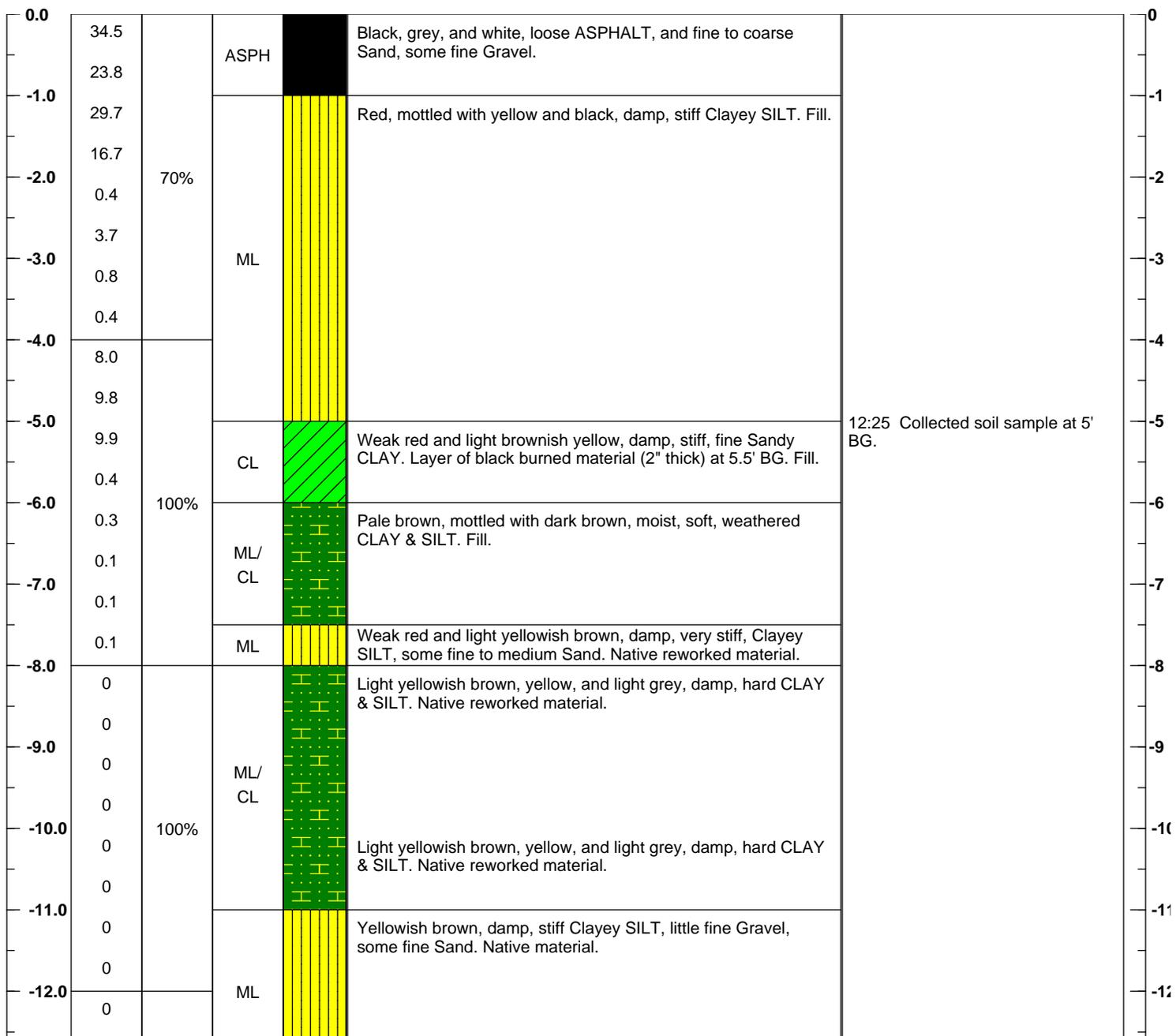
PROJECT CG-17-1111		SOIL BORING LOG SB-07		PAGE 1 OF 3		
PROJECT: Additional Phase II Environmental Site Assessment		DATE STARTED: 04/24/2018				
LOCATION: AFRH - 3700 N Capitol St NW, Washington, DC 20011		DATE/TIME COMPLETED: 04/24/2018 17:15				
DRILLING COMPANY: Tidewater, Inc.		LOGGED BY: Meg Staines				
DRILLING METHOD: Geoprobe		PROJECT MANAGER: Nancy Love				
SAMPLING METHOD: Macrocore		BORING DIAMETER: 2"		BORING DEPTH: 40'		
DEPTH TO GW (ft) FROM BG: NA - caved		DATE: 04/24/2018		NOTES: Located southwest of southwest corner of Building 46A.		
DEPTH (ft)	PID READINGS (ppm)	RECOVERY (%)	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES



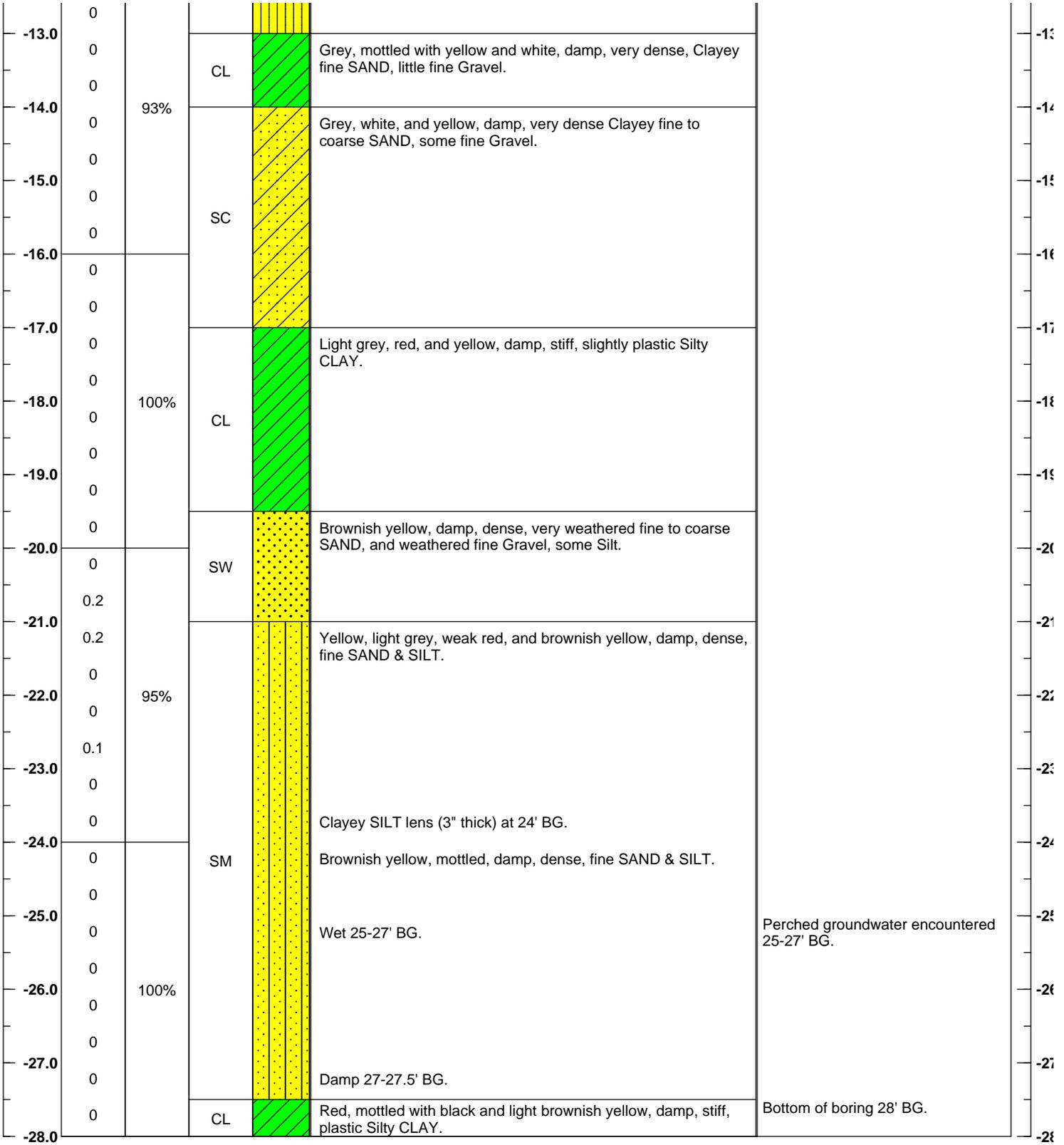
PROJECT CG-17-1111		SOIL BORING LOG SB-07		PAGE 3 OF 3	
DEPTH (ft)	PID READING (ppm)	RECOVERY	SOIL CLASS	OVERBURDEN / ROCK DESCRIPTION	NOTES



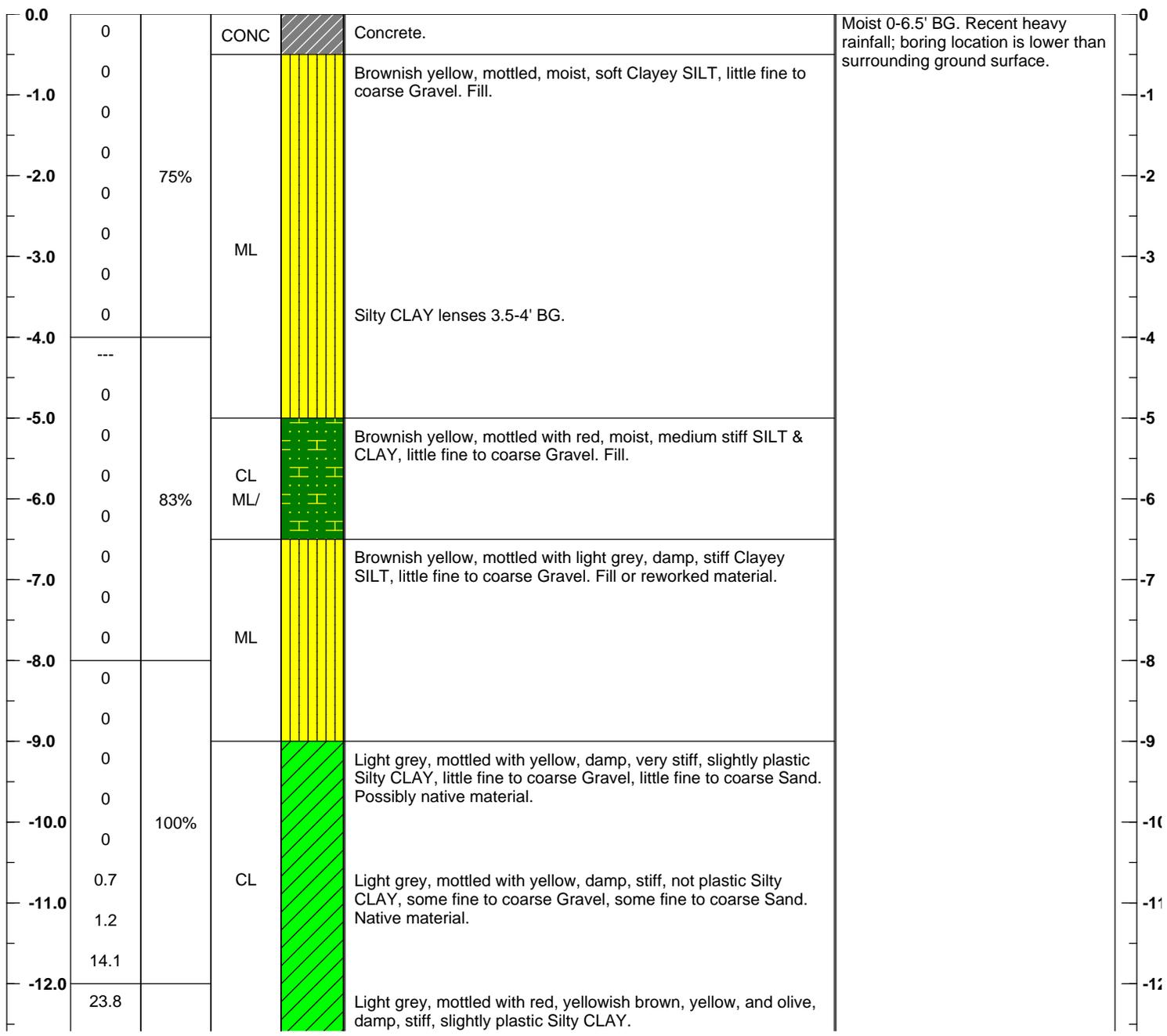
PROJECT CG-17-1111		SOIL BORING LOG SB-08		PAGE 1 OF 2		
PROJECT: Additional Phase II Environmental Site Assessment		DATE STARTED: 05/01/2018				
LOCATION: AFRH - 3700 N Capitol St NW, Washington, DC 20011		DATE/TIME COMPLETED: 05/01/2018 14:00				
DRILLING COMPANY: Tidewater, Inc.		LOGGED BY: Meg Staines				
DRILLING METHOD: Geoprobe		PROJECT MANAGER: Nancy Love				
SAMPLING METHOD: Macrocore		BORING DIAMETER: 2"		BORING DEPTH: 28'		
DEPTH TO GW (ft) FROM BG: 20.5		DATE: 05/01/2018		NOTES: Located south of Building 46A, on the ramp, southwest of the USTs.		
DEPTH (ft)	PID READINGS (ppm)	RECOVERY (%)	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES



PROJECT CG-17-1111		SOIL BORING LOG SB-08		PAGE 2 OF 2	
DEPTH (ft)	PID READING (ppm)	RECOVERY	SOIL CLASS	OVERBURDEN / ROCK DESCRIPTION	NOTES



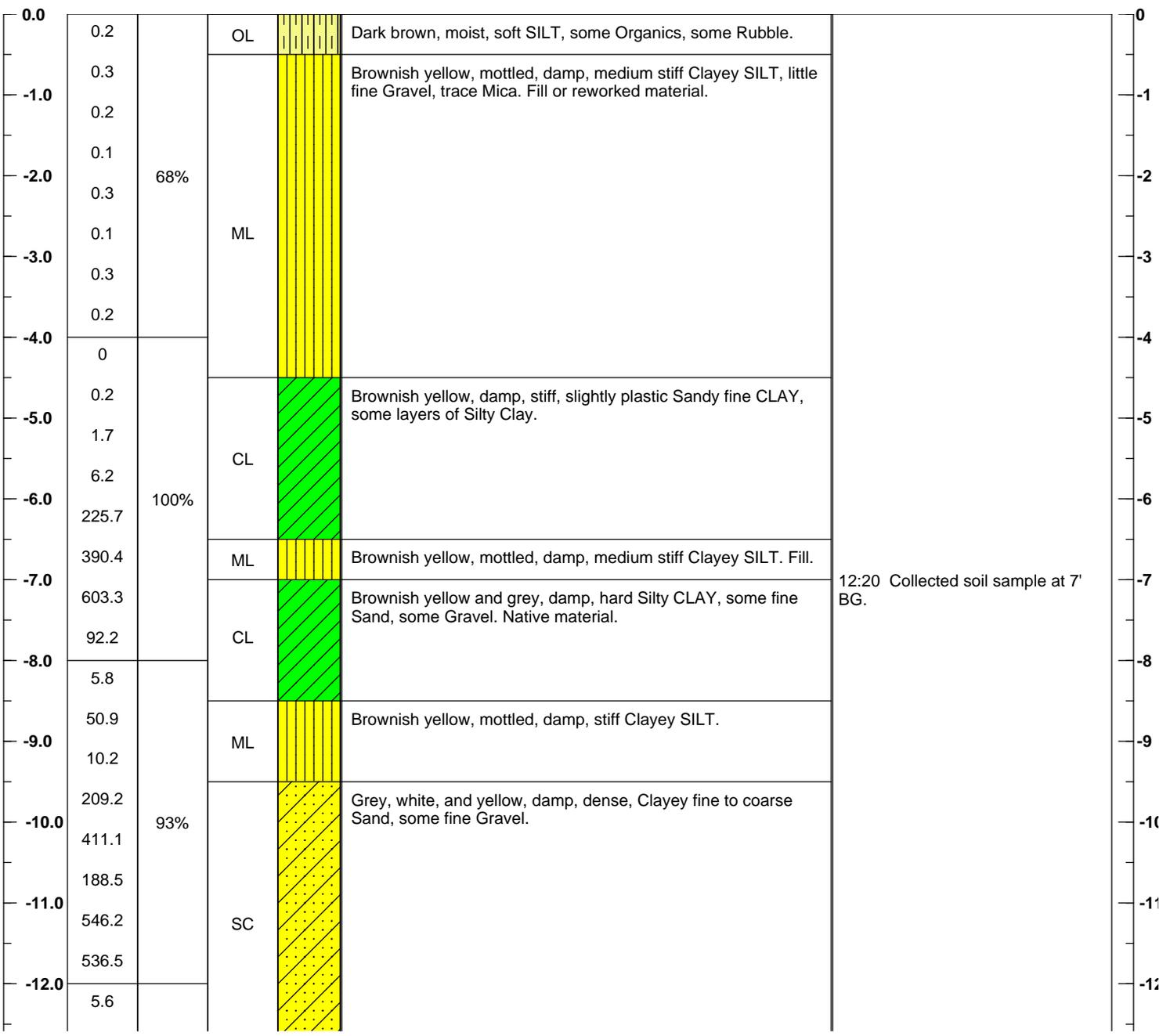
PROJECT CG-17-1111		SOIL BORING LOG SB-09		PAGE 1 OF 2		
PROJECT: Additional Phase II Environmental Site Assessment		DATE STARTED: 04/26/2018				
LOCATION: AFRH - 3700 N Capitol St NW, Washington, DC 20011		DATE/TIME COMPLETED: 04/26/2018 16:00				
DRILLING COMPANY: Tidewater, Inc.		LOGGED BY: Meg Staines				
DRILLING METHOD: Geoprobe		PROJECT MANAGER: Nancy Love				
SAMPLING METHOD: Macrocore		BORING DIAMETER: 2"		BORING DEPTH: 26'		
DEPTH TO GW (ft) FROM BG: NA - caved DATE: 04/26/2018		NOTES: Located south of Building 46A, north of the USTs.				
DEPTH (ft)	PID READINGS (ppm)	RECOVERY (%)	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES



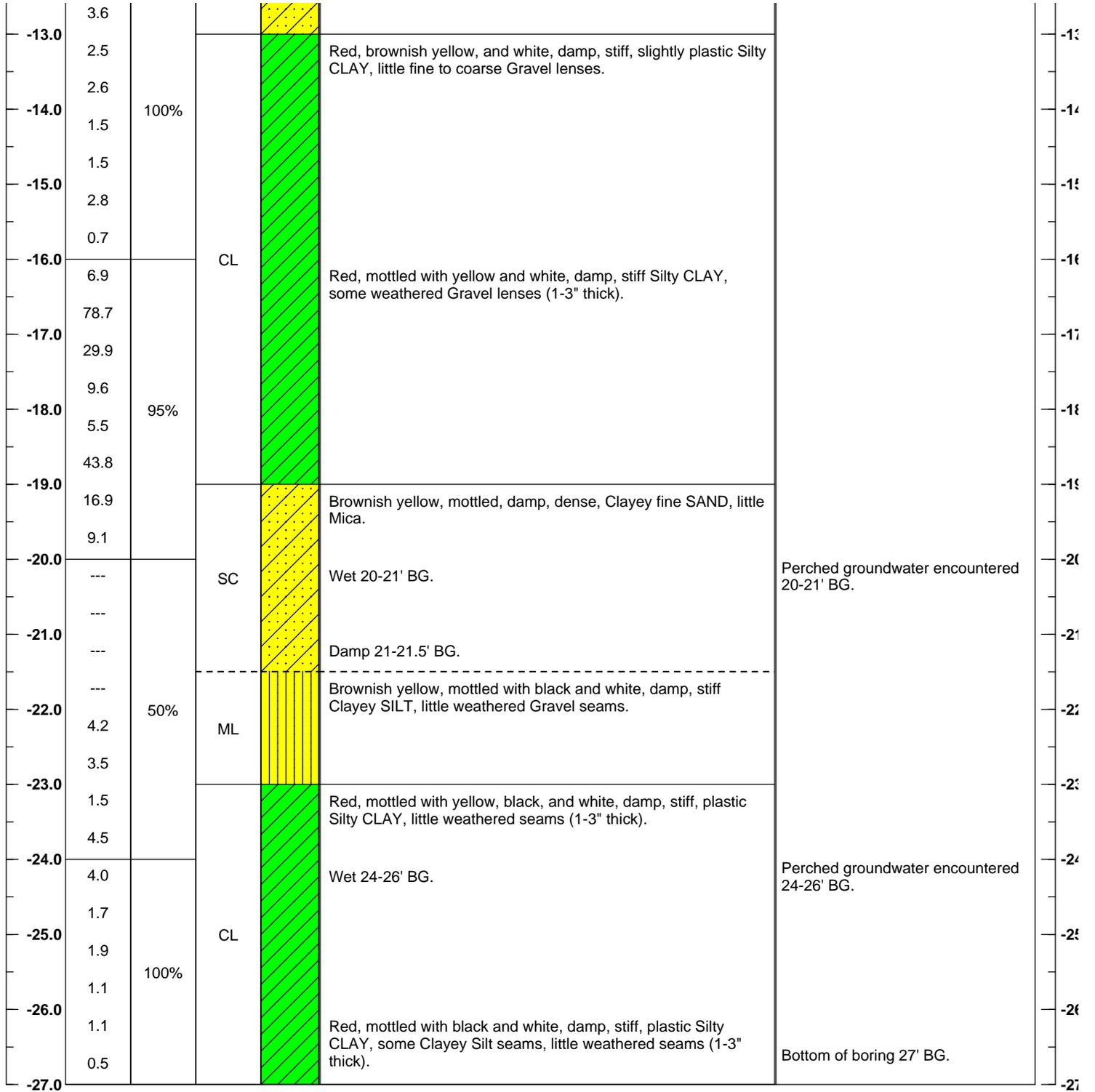
DEPTH (ft)	PID READING (ppm)	RECOVERY	SOIL CLASS	OVERBURDEN / ROCK DESCRIPTION	NOTES
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-13.0	22.7	100%	CL	Light grey, mottled with red, yellowish brown, yellow, and olive, damp, stiff, slightly plastic Silty CLAY.	
-14.0	13.3				
-14.0	3.2	100%	ML/CL	Brownish yellow and light grey, mottled, damp, stiff, not plastic Silty CLAY, and weathered Silt lenses.	14:30 Collected soil sample at 14' BG.
-15.0	59.2				
-15.0	21.7	100%	CL	Red, white, yellow and brownish yellow, mottled, damp, very stiff Silty CLAY, little Silt lenses.	
-16.0	4.3				
-16.0	2.2	100%	ML	Brownish yellow, weak red, and light grey, mottled, damp, stiff, SILT & CLAY, some weathered Silt lenses.	
-17.0	0.3				
-17.0	2.7	100%	SM	Brownish yellow and very pale brown, mottled, damp, fine SAND & SILT, trace Mica.	
-18.0	3.8				
-18.0	0.2	100%	ML	Brownish yellow, wet, soft Clayey SILT.	Perched groundwater encountered 21-23' BG.
-19.0	0				
-19.0	0	100%	ML	Brownish yellow, wet, soft SILT, and fine Sand.	
-20.0	0				
-20.0	0.2	100%	CL	Red, mottled with brownish yellow and dark brown, damp, stiff, not plastic Silty CLAY, little weathered Silt seams.	
-21.0	0.5				
-21.0	2.8	100%	CL	Red, mottled with black, wet, stiff, plastic Silty CLAY.	Perched groundwater encountered 24-25' BG.
-22.0	0				
-22.0	0	100%	CL	Weak red Clayey SILT lens 24.75-25' BG.	
-23.0	1.9				
-23.0	0	100%	CL	Damp 25-26' BG.	Bottom of boring 26' BG.
-24.0	0				
-24.0	0	100%	CL		
-25.0	0				
-25.0	0.5	100%	CL		
-26.0	0.2				

PROJECT CG-17-1111		SOIL BORING LOG SB-10		PAGE 1 OF 2		
PROJECT: Additional Phase II Environmental Site Assessment			DATE STARTED: 04/26/2018			
LOCATION: AFRH - 3700 N Capitol St NW, Washington, DC 20011			DATE/TIME COMPLETED: 04/26/2018 13:40			
DRILLING COMPANY: Tidewater, Inc.			LOGGED BY: Meg Staines			
DRILLING METHOD: Geoprobe			PROJECT MANAGER: Nancy Love			
SAMPLING METHOD: Macrocore			BORING DIAMETER: 2"		BORING DEPTH: 27'	
DEPTH TO GW (ft) FROM BG: 18		DATE: 04/26/2018		NOTES: Located SE of SE corner of Building 46A, NE of the USTs.		
DEPTH (ft)	PID READINGS (ppm)	RECOVERY (%)	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES



DEPTH (ft)	PID READING (ppm)	RECOVERY	SOIL CLASS	OVERBURDEN / ROCK DESCRIPTION	NOTES
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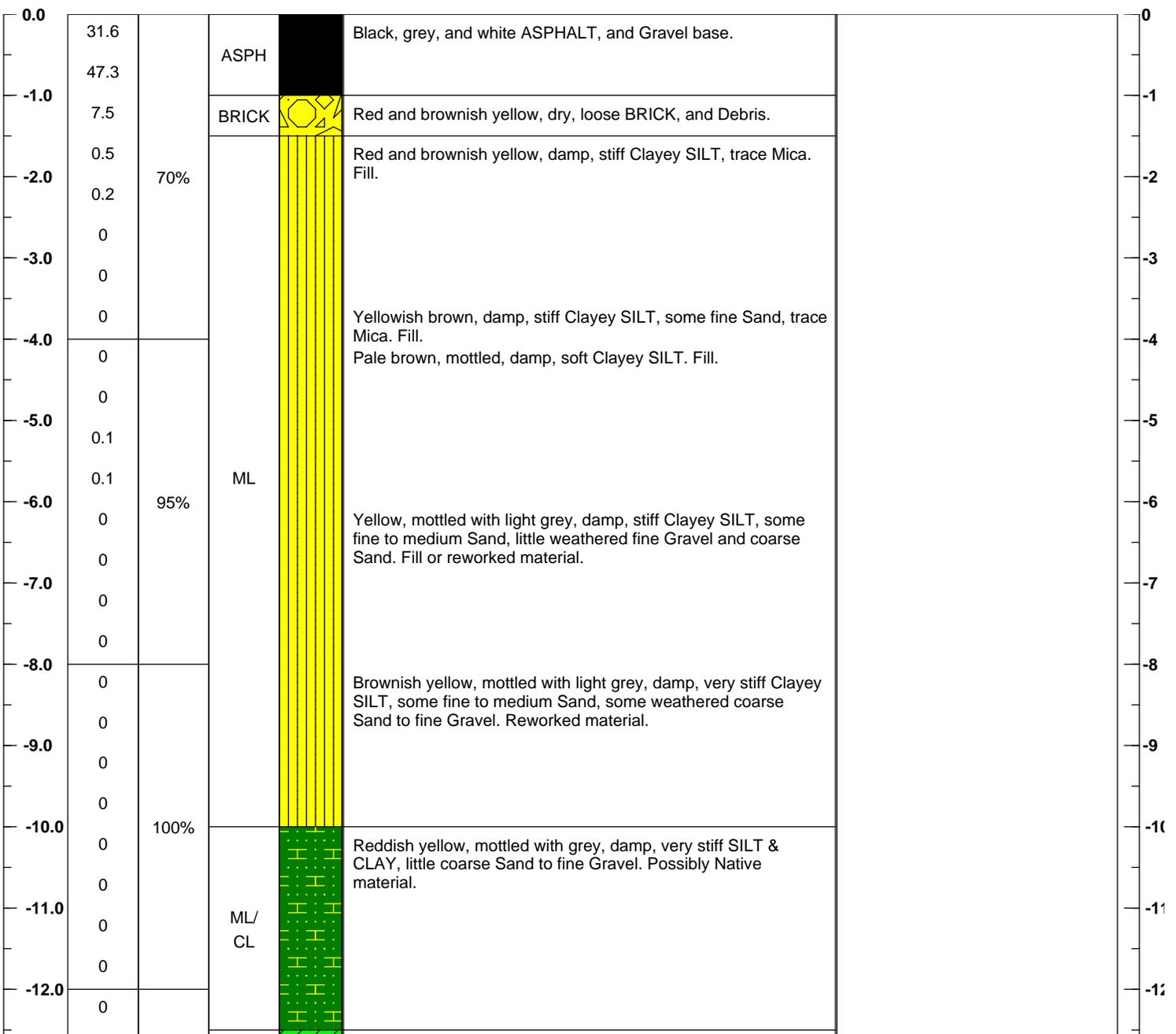


Perched groundwater encountered 20-21' BG.

Perched groundwater encountered 24-26' BG.

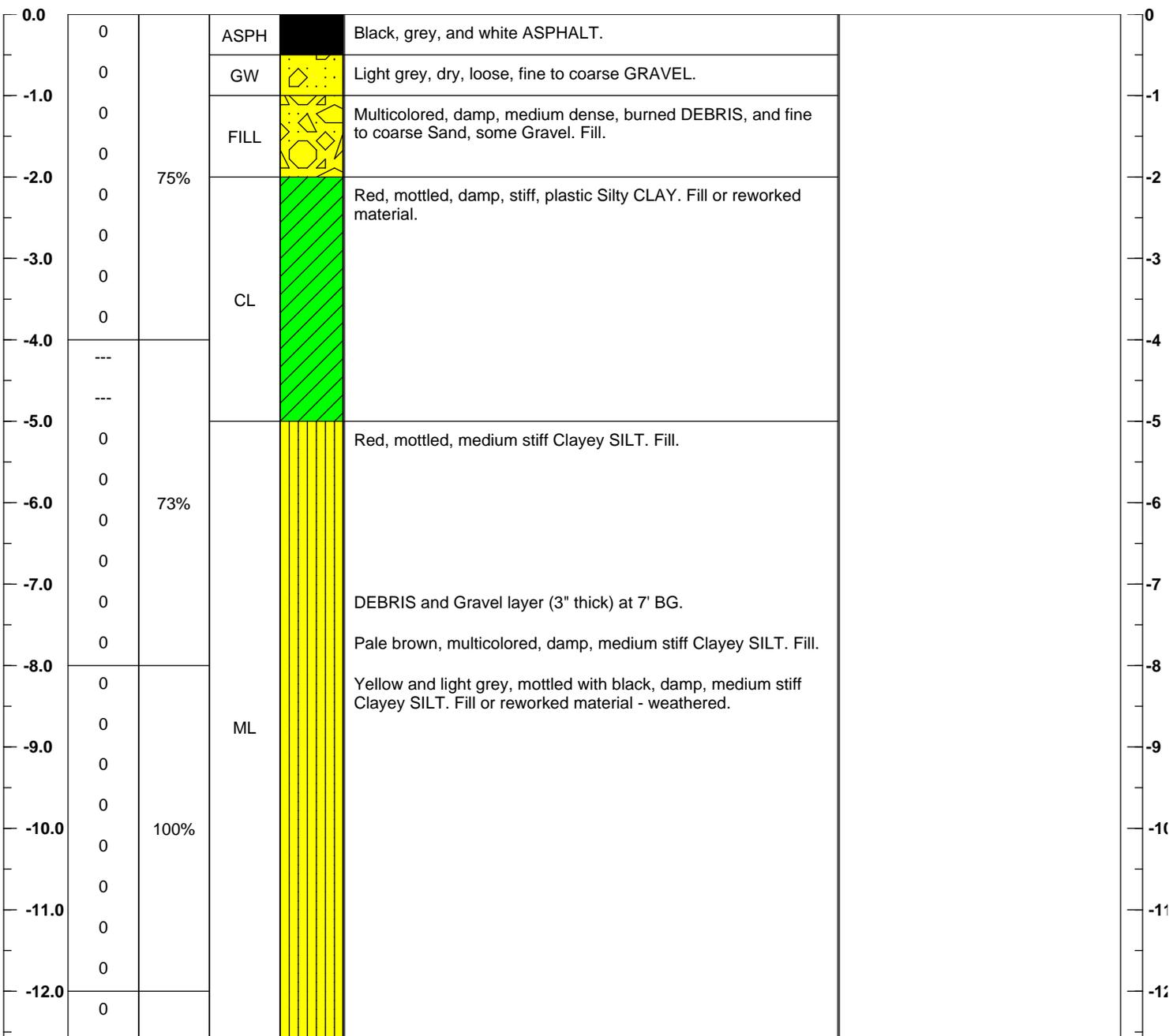
Bottom of boring 27' BG.

PROJECT CG-17-1111		SOIL BORING LOG SB-11		PAGE 1 OF 2		
PROJECT: Additional Phase II Environmental Site Assessment			DATE STARTED: 05/01/2018			
LOCATION: AFRH - 3700 N Capitol St NW, Washington, DC 20011			DATE/TIME COMPLETED: 05/01/2018 11:10			
DRILLING COMPANY: Tidewater, Inc.			LOGGED BY: Meg Staines			
DRILLING METHOD: Geoprobe			PROJECT MANAGER: Nancy Love			
SAMPLING METHOD: Macrocore			BORING DIAMETER: 2"		BORING DEPTH: 28'	
DEPTH TO GW (ft) FROM BG: 20.7		DATE: 05/01/2018		NOTES: Located south of Building 46A and the USTs, north of Building 71.		
DEPTH (ft)	PID READINGS (ppm)	RECOVERY (%)	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES



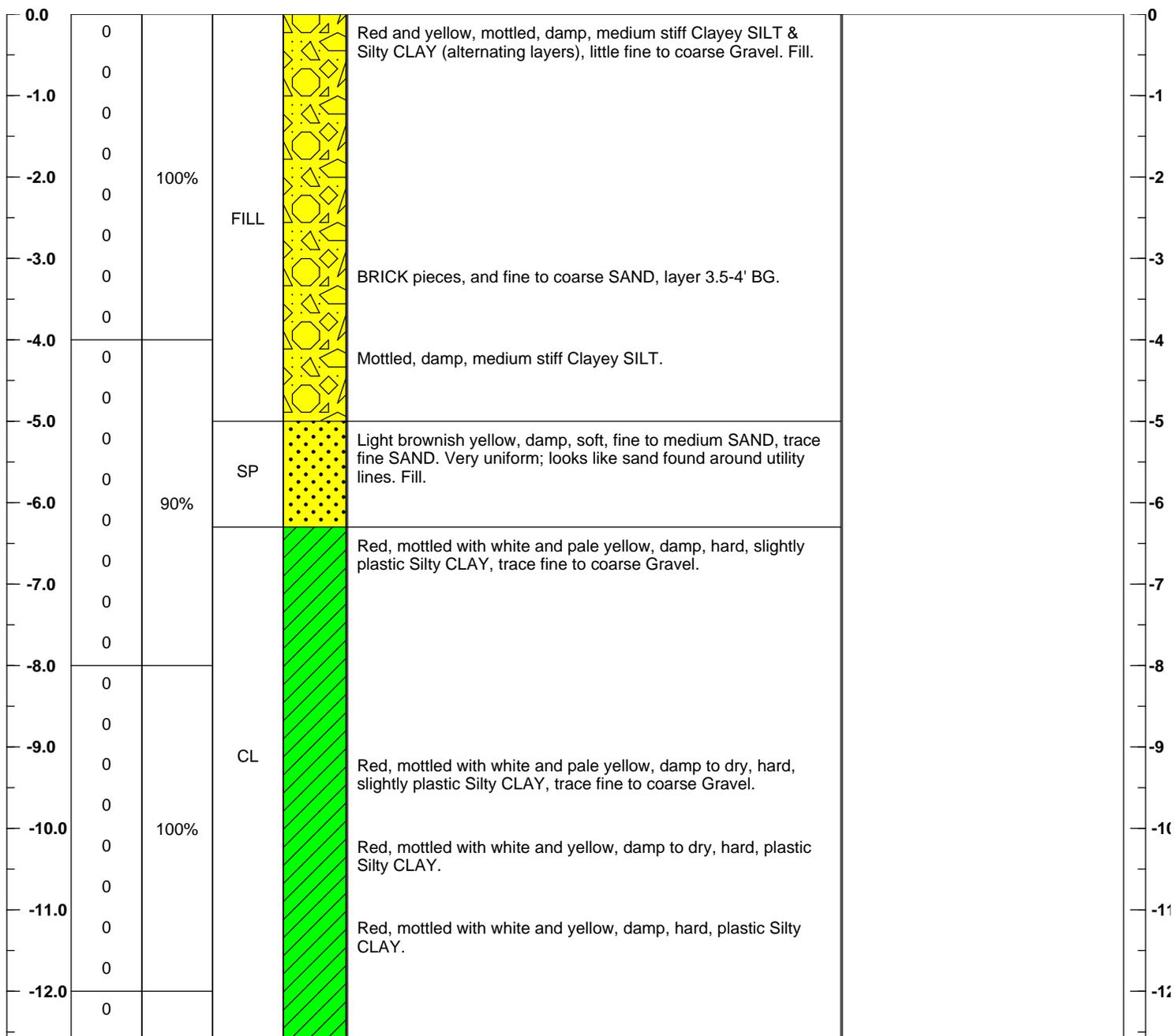
-13.0	0		CL	Light grey, damp, very stiff, fine Sandy CLAY, some fine Gravel.	
	0		GW	White, light grey, and yellow, damp, hard, fine to coarse quartz GRAVEL, some Clayey fine to coarse Sand.	
-14.0	0	100%	SC	Grey, yellow, and white, damp, dense, Clayey fine to coarse SAND, little fine Gravel. Color change only at 14.5' BG: yellow.	
	0		CL	Light grey, mottled with yellow, damp, stiff, slightly plastic Silty CLAY. Red, yellow, and white, mottled, damp, stiff, plastic Silty CLAY.	
-17.0	0.6		CL		
	0.3		CL		
-18.0	0.2	100%	CL		
	0		GP	Brownish yellow, damp, dense, very weathered, fine GRAVEL & fine to coarse SAND.	
-19.0	0		GP		
	0.3		ML/CL	Weak red, mottled with white and yellow, damp, stiff, CLAY & SILT, little Mica, and a weathered Silt lens.	
-20.0	0.1		ML/CL		
	0.2		ML/CL		
-21.0	0.5		ML/CL		
	0.6		ML	Pale brown, damp, stiff Clayey SILT, trace Mica.	10:05 Collected soil sample at 21.5' BG.
-22.0	0.3	90%	ML		
	0.1		SM	Brownish yellow, mottled, damp, dense, fine SAND, and Silt.	
-23.0	0.1		SM		
	0.1		ML/CL	Weak red, mottled with dark brown, black, and white, damp, stiff SILT & CLAY, some very weathered Gravel lenses.	Perched groundwater encountered 24-26' BG.
-24.0	0		ML/CL		
	0.2		ML/CL		
-25.0	0.2		ML/CL	Wet 24-26' BG.	
	0		ML/CL		
-26.0	0.3	100%	ML/CL		
	0		ML/CL		
-27.0	0.1		CL	Red, mottled with white, yellow, and black, damp, very stiff, plastic Silty CLAY.	
	0		CL		
-28.0	0		CL		Bottom of boring 28' BG.

PROJECT CG-17-1111		SOIL BORING LOG SB-12		PAGE 1 OF 3		
PROJECT: Additional Phase II Environmental Site Assessment		DATE STARTED: 04/25/2018				
LOCATION: AFRH - 3700 N Capitol St NW, Washington, DC 20011		DATE/TIME COMPLETED: 04/25/2018 10:55				
DRILLING COMPANY: Tidewater, Inc.		LOGGED BY: Meg Staines				
DRILLING METHOD: Geoprobe		PROJECT MANAGER: Nancy Love				
SAMPLING METHOD: Macrocore		BORING DIAMETER: 2"		BORING DEPTH: 32'		
DEPTH TO GW (ft) FROM BG: NA - caved		DATE: 04/25/2018		NOTES: Located in roadway, SW of SW corner of Building 71.		
DEPTH (ft)	PID READINGS (ppm)	RECOVERY (%)	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES



-13.0	0		ML	Damp, medium stiff Clayey SILT. Fill/reworked material.		-13
	0			Light grey and brownish yellow, mottled, damp, stiff SILT & CLAY. Native.	Borehole caved at 13.7' BG after Macrocore and rods were pulled out.	-14
-14.0	0	100%	ML/ CL	Light grey and brownish yellow, mottled, damp, stiff SILT & CLAY, some fine to medium Sand seams.		-14
	0			Coarse GRAVEL layer (2" thick) at 15' BG.		-15
-15.0	0			Coarse GRAVEL layer (2" thick) at 16' BG.		-16
-16.0	0		SW	Pale yellow, mottled, damp, hard, fine to coarse SAND, and fine quartz Gravel.		-16
-17.0	0		CL	Red, yellow, and light grey, mottled, damp, stiff, plastic Silty CLAY.		-17
-18.0	0	100%				-18
-19.0	0			Red, yellow, and white, mottled, damp, stiff Clayey SILT, and weathered Gravel.		-19
-20.0	0		ML	Very pale brown, mottled, damp, medium stiff Clayey SILT.		-20
-21.0	0			Weathered GRAVEL layer (3" thick) at 21.75-22' BG.		-21
-22.0	0	100%				-22
-23.0	0		ML/ CL	Very pale brown, mottled with yellow, damp, stiff SILT & CLAY, some Silt seams.	09:45 Collected soil sample at 24' BG.	-23
-24.0	0					-24
-25.0	0		SC	Pale yellow, wet, loose, Clayey fine SAND.	Perched groundwater encountered at 25-26' BG.	-25
-26.0	0	100%		Very pale brown, mottled with yellow, damp, stiff, Clayey fine SAND.		-26
-27.0	0		ML	Very pale brown, damp, stiff Clayey SILT.		-27
-28.0	---		CL	Red, mottled, damp, stiff, plastic Silty CLAY.		-28
				Red, mottled with light grey, black, and yellow, damp, stiff, plastic Silty CLAY.		-28

PROJECT CG-17-1111		SOIL BORING LOG SB-13		PAGE 1 OF 4		
PROJECT: Additional Phase II Environmental Site Assessment			DATE STARTED: 04/25/2018			
LOCATION: AFRH - 3700 N Capitol St NW, Washington, DC 20011			DATE/TIME COMPLETED: 04/25/2018 14:36			
DRILLING COMPANY: Tidewater, Inc.			LOGGED BY: Meg Staines			
DRILLING METHOD: Geoprobe			PROJECT MANAGER: Nancy Love			
SAMPLING METHOD: Macrocore			BORING DIAMETER: 2"		BORING DEPTH: 50'	
DEPTH TO GW (ft) FROM BG: NA		DATE: 04/25/2018		NOTES: Located at top of hill, SE of SE corner of Building 71.		
DEPTH (ft)	PID READINGS (ppm)	RECOVERY (%)	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES



DEPTH (ft)	PID READING (ppm)	RECOVERY	SOIL CLASS	OVERBURDEN / ROCK DESCRIPTION	NOTES	
-29.0	0	85%	CL	Red, mottled, damp, very stiff, plastic Silty CLAY.		
0	ML		Red and very pale brown, mottled with black, damp Clayey SILT.			
-30.0	0		CL	Red, mottled with black, damp, stiff Silty CLAY.		
0	0					
-31.0	0	80%	ML	Very pale brown and weak red, mottled with black, damp, stiff Clayey SILT. Slightly moist 31-32' BG; damp 32-33' BG.		
0	0					
-32.0	---					
0	0					
-33.0	0	68%	CL	Red and weak red, mottled with yellow and black, damp, very stiff, plastic Silty CLAY.		
0	0					
-34.0	0					
0	0					
-35.0	0	46%	ML/CL	Weak red and very pale brown, mottled with black and white, damp, stiff SILT & CLAY.		
0	0					
-36.0	0.3					14:00 Collected soil sample at 36' BG.
0	0					
-37.0	0	46%	SC	White, mottled with weak red, damp, dense, fine Sandy CLAY, some interbedded lenses of Silty Clay and Clayey very fine Sand.		
0	0					
-38.0	0					
0	0					
-39.0	0	46%	ML	Yellow and white striped, damp, stiff SILT, some very fine SAND.		
0	0					
-40.0	0					
0	0					
-41.0	0	46%	SM	White and yellow striped, damp, dense, very fine SAND, and Silt.		
0	0					
-42.0	0					
0	0					
-43.0	0	46%				
0	0					
-44.0	0					

PROJECT CG-17-1111		SOIL BORING LOG SB-13		PAGE 4 OF 4	
DEPTH (ft)	PID READING (ppm)	RECOVERY	SOIL CLASS	OVERBURDEN / ROCK DESCRIPTION	NOTES

-45.0	0	40%	SM	White and yellow striped, damp, dense, very fine SAND, and Silt.	Bottom of boring 50' BG.	
-46.0	0			SP		White, mottled with yellow, damp, dense, fine SAND, little Silt.
-47.0	0					
-48.0	0					
-49.0	0					
-50.0	0					

PROJECT CG-17-1111		SOIL BORING LOG SB-14		PAGE 1 OF 2		
PROJECT: Additional Phase II Environmental Site Assessment			DATE STARTED: 04/26/2018			
LOCATION: AFRH - 3700 N Capitol St NW, Washington, DC 20011			DATE/TIME COMPLETED: 04/26/2018 10:38			
DRILLING COMPANY: Tidewater, Inc.			LOGGED BY: Meg Staines			
DRILLING METHOD: Geoprobe			PROJECT MANAGER: Nancy Love			
SAMPLING METHOD: Macrocore			BORING DIAMETER: 2"		BORING DEPTH: 20'	
DEPTH TO GW (ft) FROM BG: 14.9		DATE: 04/26/2018		NOTES: Located southeast of the southeast corner of Building 46		
DEPTH (ft)	PID READINGS (ppm)	RECOVERY (%)	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES



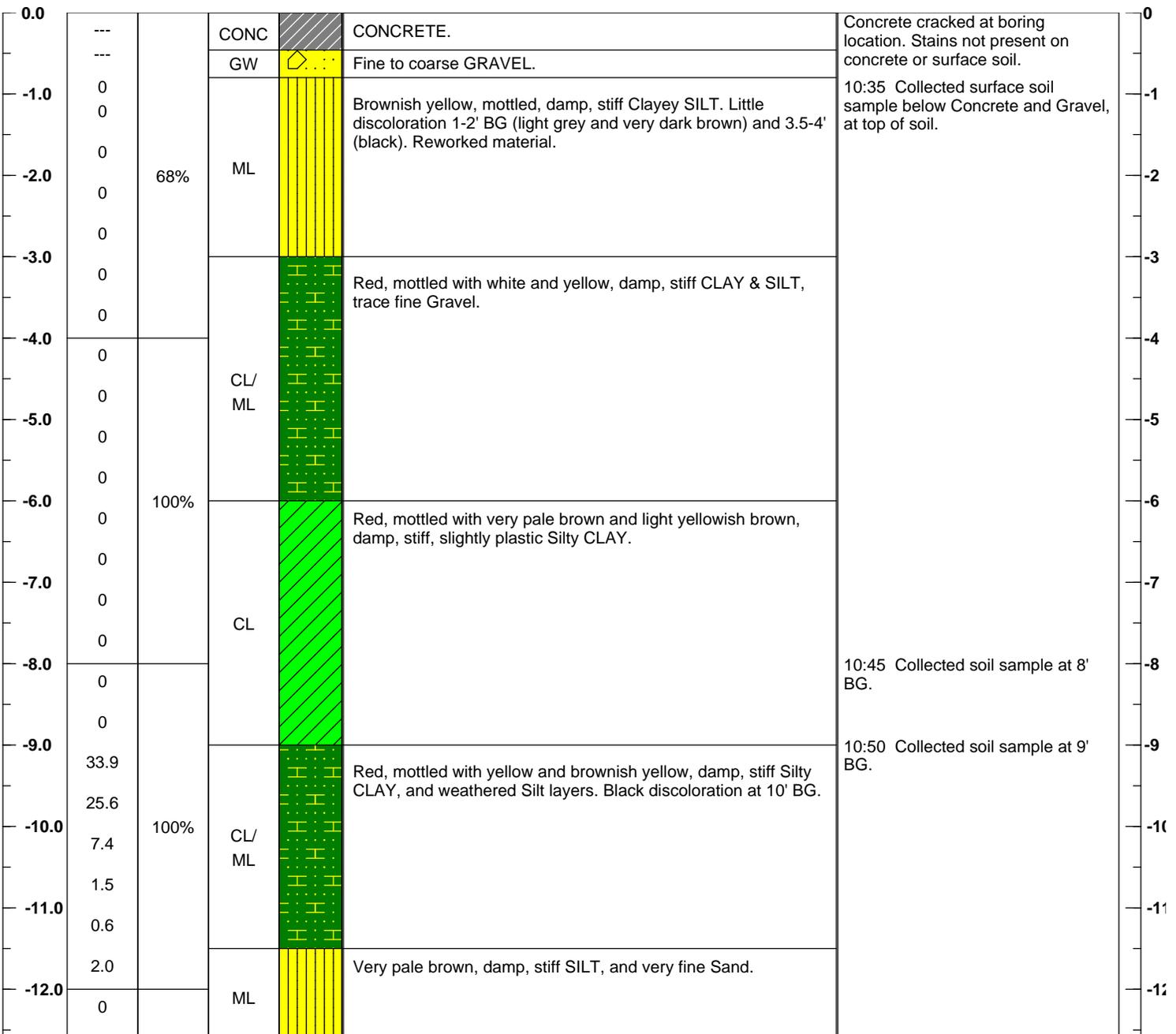
PROJECT CG-17-1111		SOIL BORING LOG SB-14		PAGE 2 OF 2	
DEPTH (ft)	PID READING (ppm)	RECOVERY	SOIL CLASS	OVERBURDEN / ROCK DESCRIPTION	NOTES

-13.0	0					
	0					
-14.0	0	100%				
	0					
-15.0	0					
	0					
-16.0	0		CL	Red, mottled with yellow and black, wet, medium stiff, very plastic Silty CLAY.	Perched groundwater encountered 16-19' BG.	
	0					
-17.0	0					
	0					
-18.0	0	100%		Red, yellow, and light grey, mottled, wet, stiff, slightly plastic Silty CLAY, some weathered Gravel lenses.		
	0					
-19.0	0			Wet 16-19' BG. Damp 19-19.5' BG.		
	0					
-20.0	0		ML	Yellow, mottled with light grey, damp, stiff Clayey SILT, some very weathered fine Gravel.	Bottom of boring 20' BG.	

APPENDIX G

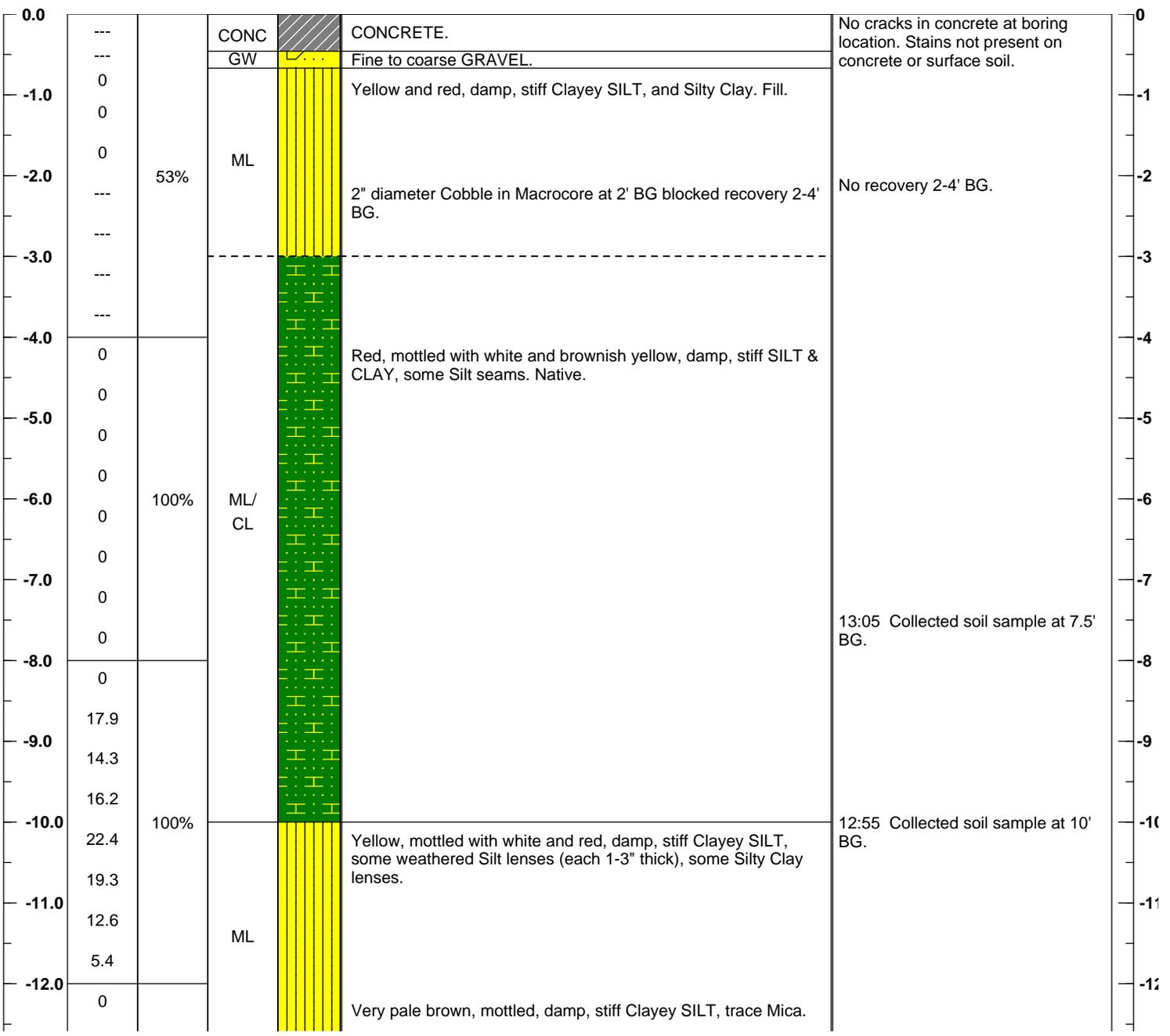
BUILDING 76 – SOIL BORING LOGS

PROJECT CG-17-1111		SOIL BORING LOG SB-76-01		PAGE 1 OF 2		
PROJECT: Additional Phase II Environmental Site Assessment			DATE STARTED: 04/27/2018			
LOCATION: AFRH - 3700 N Capitol St NW, Washington, DC 20011			DATE/TIME COMPLETED: 04/27/2018 12:15			
DRILLING COMPANY: Tidewater, Inc.			LOGGED BY: Meg Staines			
DRILLING METHOD: Geoprobe			PROJECT MANAGER: Nancy Love			
SAMPLING METHOD: Macrocore			BORING DIAMETER: 2"		BORING DEPTH: 26'	
DEPTH TO GW (ft) FROM BG: NA			DATE: NA		NOTES: PID reading immediately below Concrete at top of soil: 0ppm.	
DEPTH (ft)	PID READINGS (ppm)	RECOVERY (%)	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES



-13.0	0				
0	0		ML		11:30 Collected soil sample at 13' BG.
-14.0	0	100%		Very pale brown, damp, stiff Clayey SILT.	-14'
0	0				-15'
-15.0	0		SP	Yellow and white, damp, dense, fine to medium SAND.	-15'
0	0				-16'
-16.0	0				-17'
-17.0	0		CL	Weak red, mottled, damp, stiff Silty CLAY.	-17'
0	0	100%		4" fine SAND lens at 18.5' BG.	-18'
-18.0	0				-19'
-19.0	0			Weak red, mottled, damp, stiff Clayey SILT.	-20'
0	0			Weak red, mottled with yellow and black, damp, stiff Clayey SILT.	-21'
-20.0	0		ML		Borehole stayed open to 25.9' BG. No groundwater encountered.
0	0	100%		Weak red, mottled, damp, stiff Clayey SILT.	-22'
-21.0	0				-23'
0	0			4" fine SAND lens at 24' BG.	-24'
-22.0	0				-25'
-23.0	0		SM	Very pale brown, damp, dense, fine SAND, and Silt.	Bottom of boring 26' BG.
0	0	100%			-26'
-24.0	0				-26'
-25.0	0				-26'
-26.0	0				-26'

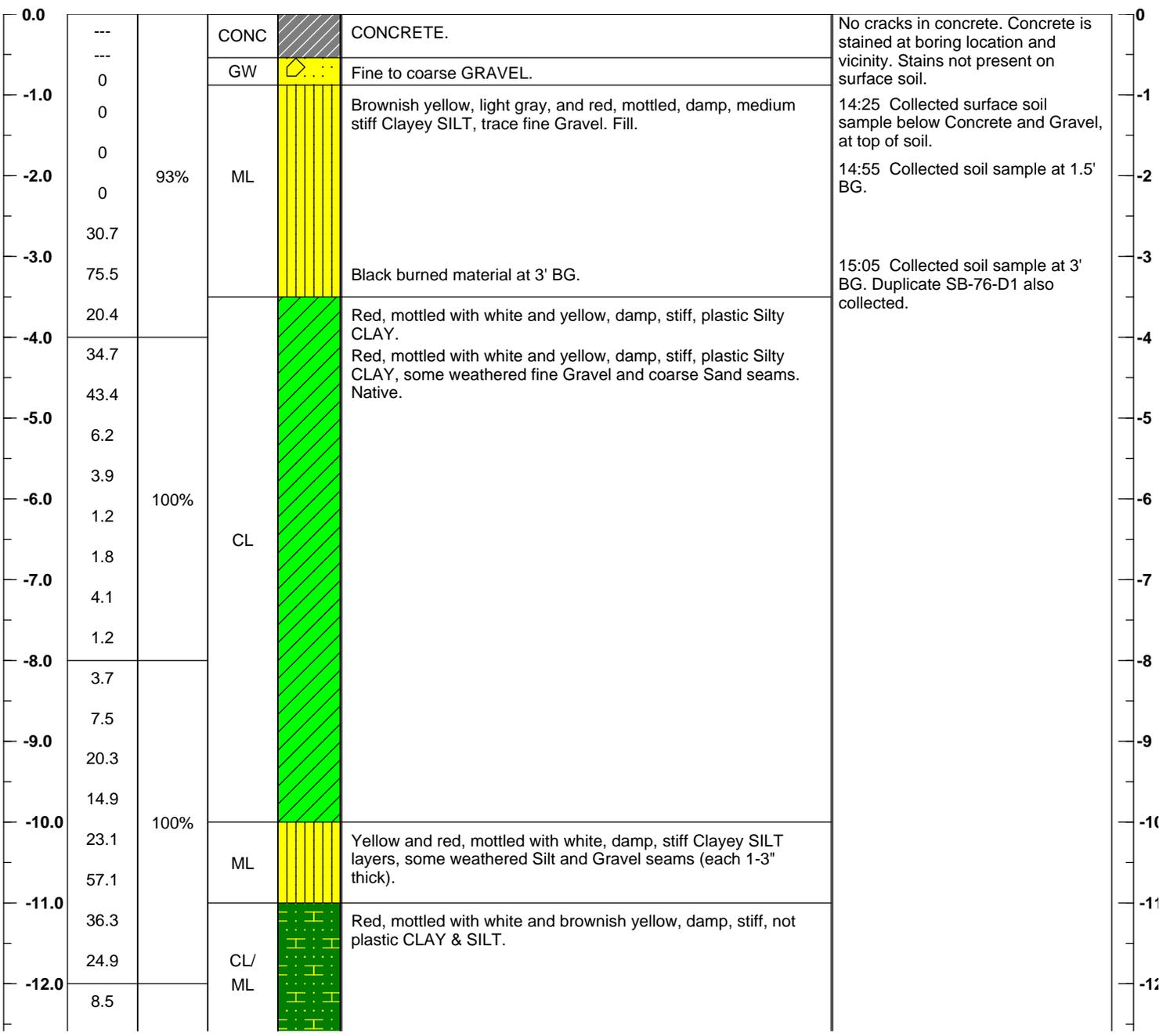
PROJECT CG-17-1111		SOIL BORING LOG SB-76-02		PAGE 1 OF 2		
PROJECT: Additional Phase II Environmental Site Assessment			DATE STARTED: 04/27/2018			
LOCATION: AFRH - 3700 N Capitol St NW, Washington, DC 20011			DATE/TIME COMPLETED: 04/27/2018 14:01			
DRILLING COMPANY: Tidewater, Inc.			LOGGED BY: Meg Staines			
DRILLING METHOD: Geoprobe			PROJECT MANAGER: Nancy Love			
SAMPLING METHOD: Macrocore			BORING DIAMETER: 2"		BORING DEPTH: 26'	
DEPTH TO GW (ft) FROM BG: NA			DATE: NA		NOTES: PID reading immediately below Concrete at top of soil: 0ppm.	
DEPTH (ft)	PID READINGS (ppm)	RECOVERY (%)	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES



PROJECT CG-17-1111		SOIL BORING LOG SB-76-02		PAGE 2 OF 2	
DEPTH (ft)	PID READING (ppm)	RECOVERY	SOIL CLASS	OVERBURDEN / ROCK DESCRIPTION	NOTES

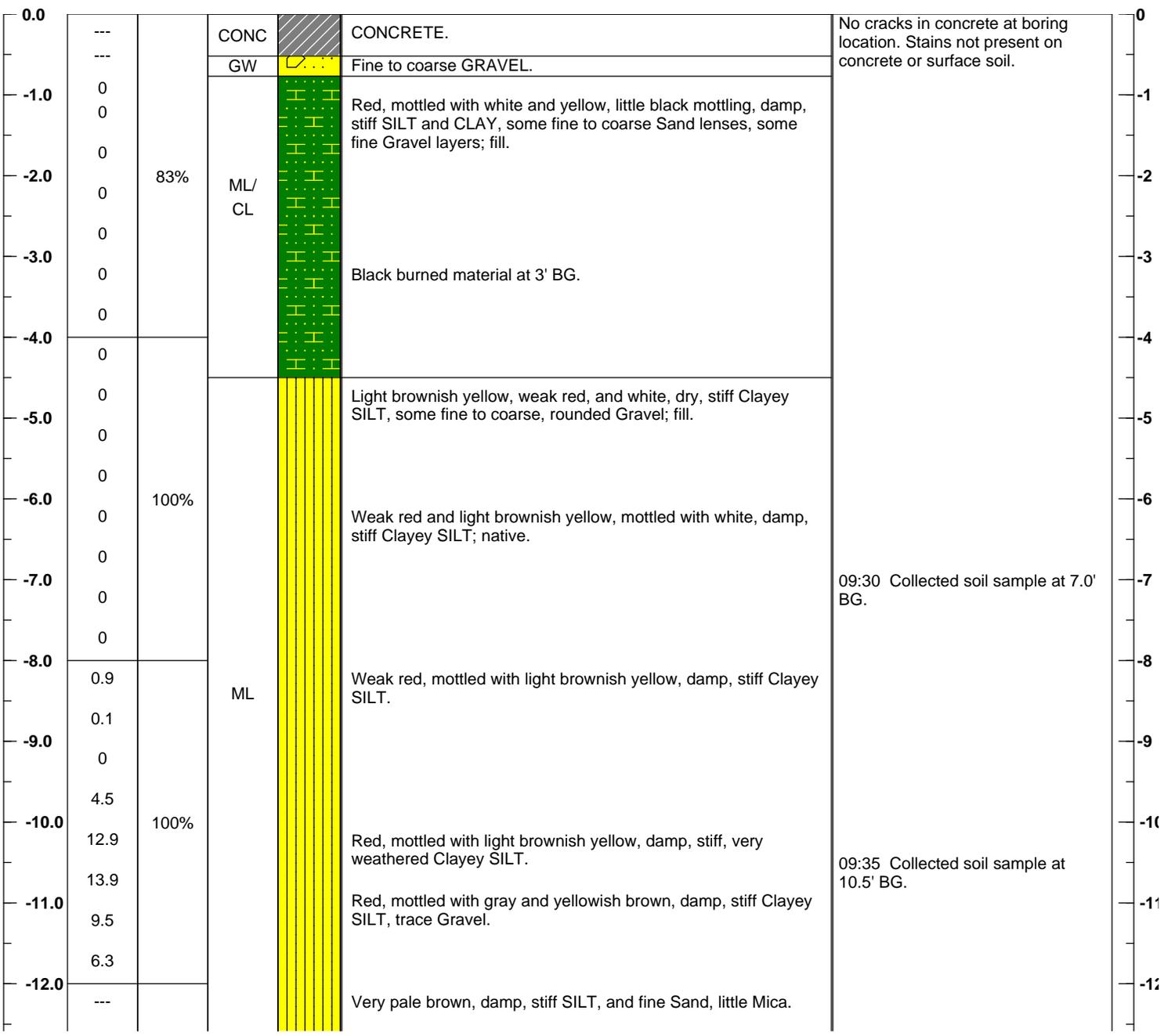
-13.0	1.6					
	0.1			Very pale brown, mottled with black, fine to medium SAND seam at 13-13.25' BG.		
-14.0	0	100%	ML	Very pale brown, mottled, damp, stiff Clayey SILT, trace Mica.	13:15 Collected soil sample at 14' BG.	
	0			Weathered SILT seam at 14.75-15' BG.		
-15.0	0			Red, mottled with white and brownish yellow, damp, stiff Silty CLAY lenses, and Silt seams.		
	0		CL/ML			
-16.0	0.3					
	0.1					
-17.0	0.1			Pale brown, mottled with black, damp, stiff Clayey SILT, trace Mica.		
	0	100%	ML			
-18.0	0					
	0					
-19.0	0			Weak red and brownish yellow, damp, stiff SILT & CLAY.		
	0		ML/CL			
-20.0	0					
	0					
-21.0	0			Very pale brown and brownish yellow, damp, dense, fine to medium SAND, some Silt, some Clayey Silt lenses.		
	0	100%	SM		Boring caved in at 21.8' BG. No groundwater encountered.	
-22.0	0					
	0					
-23.0	0			Brownish yellow, mottled with black and very pale brown, damp, stiff CLAY & SILT.		
	0		CL/ML			
-24.0	0					
	0					
-25.0	0	100%		Very pale brown, mottled, damp, stiff Clayey SILT, some fine Sand, some fine Sand seams.	Bottom of boring 26' BG.	
	0		ML			
-26.0	0					

PROJECT CG-17-1111		SOIL BORING LOG SB-76-03		PAGE 1 OF 2		
PROJECT: Additional Phase II Environmental Site Assessment			DATE STARTED: 04/27/2018			
LOCATION: AFRH - 3700 N Capitol St NW, Washington, DC 20011			DATE/TIME COMPLETED: 04/27/2018 17:30			
DRILLING COMPANY: Tidewater, Inc.			LOGGED BY: Meg Staines			
DRILLING METHOD: Geoprobe			PROJECT MANAGER: Nancy Love			
SAMPLING METHOD: Macrocore			BORING DIAMETER: 2"		BORING DEPTH: 26'	
DEPTH TO GW (ft) FROM BG: NA			DATE: NA		NOTES: PID reading immediately below Concrete at top of soil: 0ppm.	
DEPTH (ft)	PID READINGS (ppm)	RECOVERY (%)	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES



-13.0	16.4		CL/ML		
	5.8			Pale brown, damp, medium stiff Clayey SILT, trace Mica.	
-14.0	3.5	98%	ML		
	3.9			Black mottling at 14.5-15' BG.	
-15.0	2.4				
	2.0				
-16.0	1.7		SP	Yellow, white, and brownish yellow, damp, dense, fine to medium SAND, little Silt.	
	13.1				
-17.0	10.5			Pale brown and weak red, mottled with black, damp, stiff Clayey SILT.	
	14.6				
-18.0	6.0	100%		Fine to medium SAND lens at 17.7-18' BG.	
	3.0		ML	Pale brown and weak red, mottled with black, damp, stiff Clayey SILT.	16:45 Collected soil sample at 18' BG.
-19.0	1.8				
	1.6				
-20.0	1.3			Pale brown, damp, stiff Clayey SILT, little Silty Clay lenses.	
	1.0				
-21.0	0.8				
	0.5		SM	Yellow, mottled with black, damp, dense, fine SAND, and Silt.	
-22.0	0.5				
	0.3	100%	CL	Red, mottled with light brownish yellow, damp, stiff Silty CLAY.	
-23.0	29.5		ML	Brownish yellow and very pale brown, damp, stiff Clayey SILT.	
	0.2				Borehole caved in at 23.4' BG. No groundwater encountered.
-24.0	0.2		SM	Very pale brown, damp, dense, fine SAND, some Silt.	
	0.5				
-25.0	1.1		ML/CL	Weak red, mottled with black, damp, stiff SILT & CLAY.	
	0.1	100%			
-26.0	0		ML	Very pale brown, mottled with brown, damp, stiff Clayey SILT, little fine Sand seams.	Bottom of boring 26' BG.

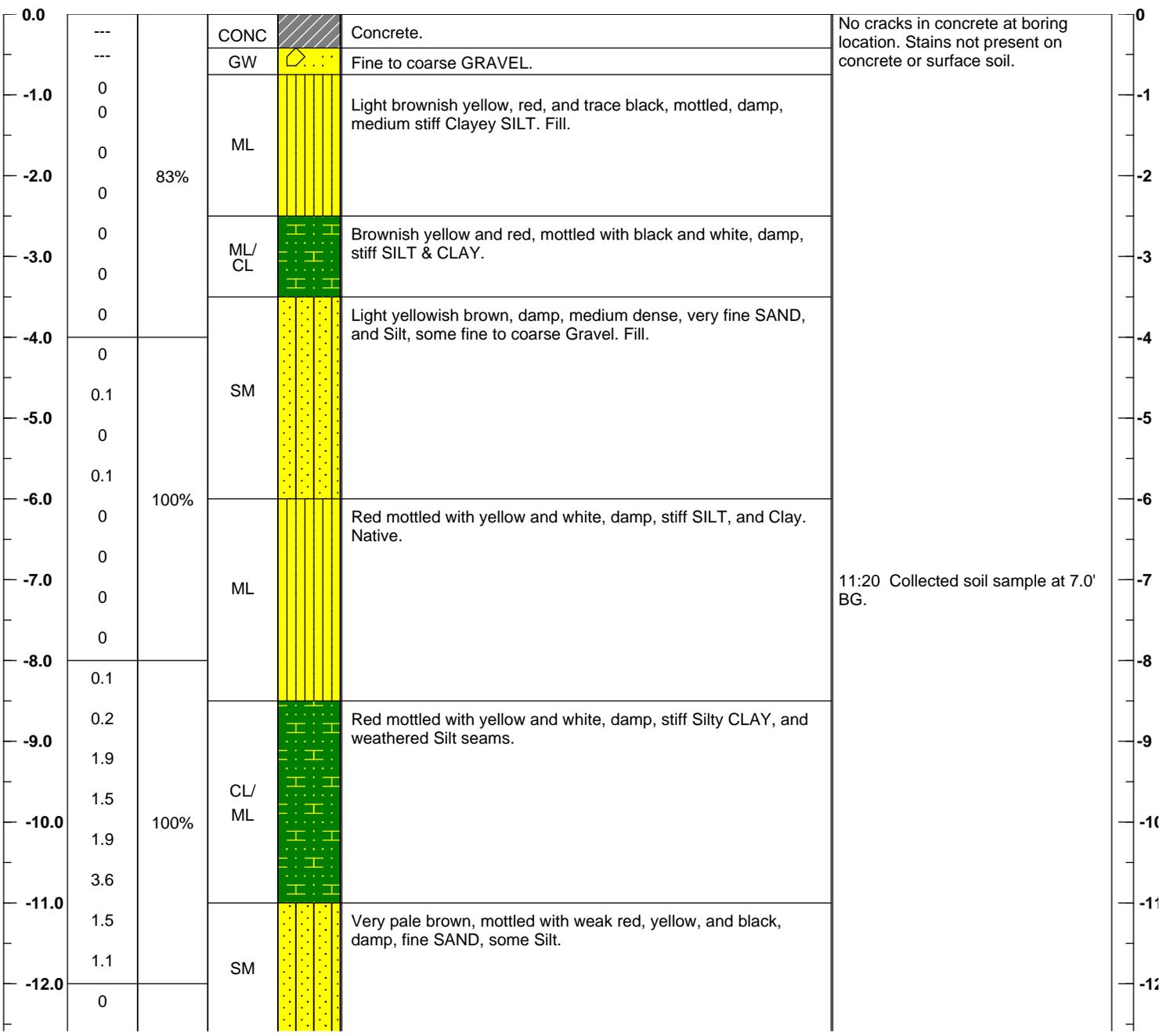
PROJECT CG-17-1111		SOIL BORING LOG SB-76-04		PAGE 1 OF 2		
PROJECT: Additional Phase II Environmental Site Assessment			DATE STARTED: 04/30/2018			
LOCATION: AFRH - 3700 N Capitol St NW, Washington, DC 20011			DATE/TIME COMPLETED: 04/30/2018 10:45			
DRILLING COMPANY: Tidewater, Inc.			LOGGED BY: Meg Staines			
DRILLING METHOD: Geoprobe			PROJECT MANAGER: Nancy Love			
SAMPLING METHOD: Macrocore			BORING DIAMETER: 2"		BORING DEPTH: 26'	
DEPTH TO GW (ft) FROM BG: NA			DATE: NA		NOTES: PID reading immediately below Concrete at top of soil: 0ppm.	
DEPTH (ft)	PID READINGS (ppm)	RECOVERY (%)	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES



PROJECT CG-17-1111		SOIL BORING LOG SB-76-04		PAGE 2 OF 2	
DEPTH (ft)	PID READING (ppm)	RECOVERY	SOIL CLASS	OVERBURDEN / ROCK DESCRIPTION	NOTES

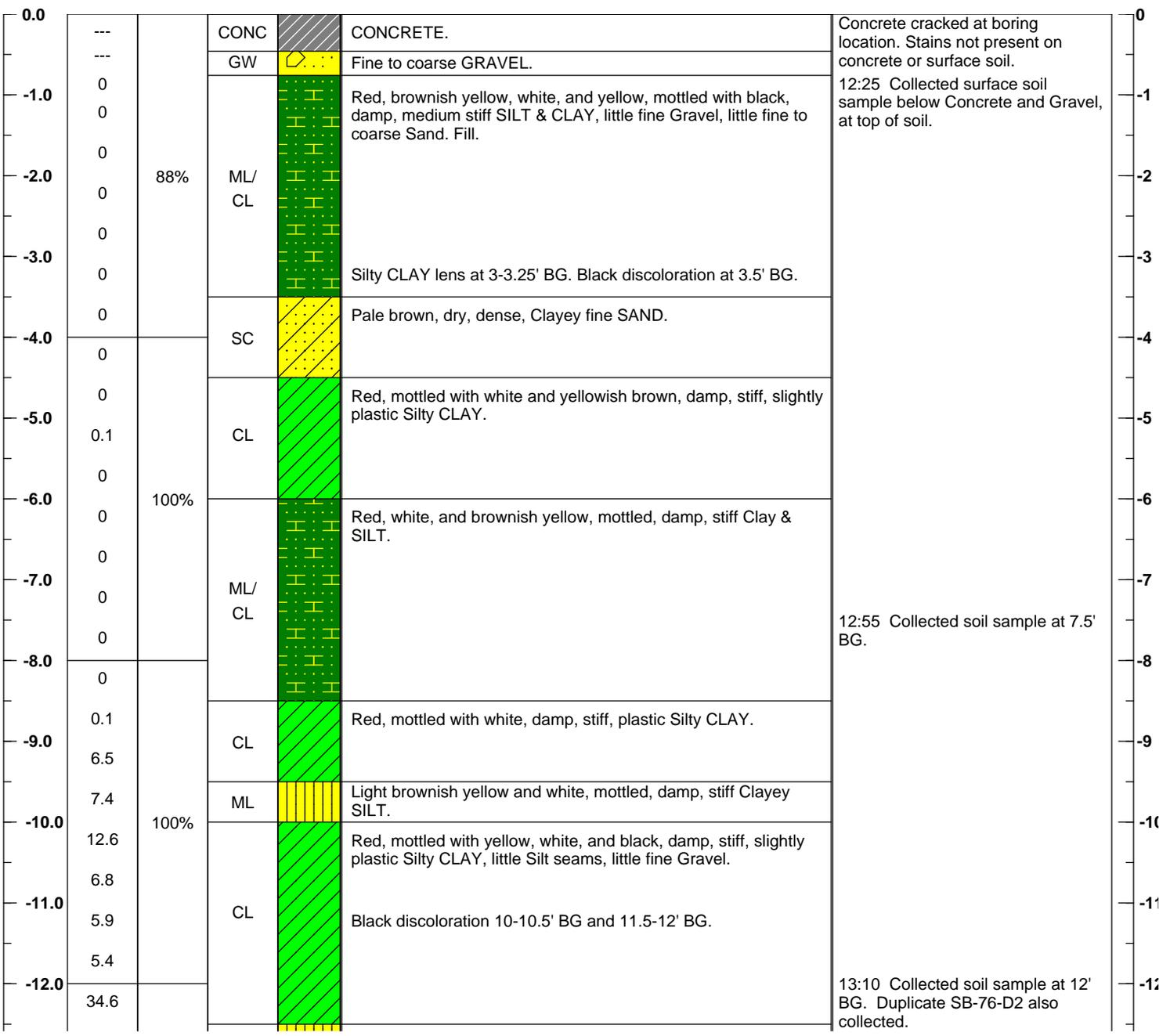
-13.0	2.8					
	1.4					
-14.0	0.9	88%	ML	Very pale brown, damp, stiff SILT and fine Sand, little Mica.		
	0.4					
-15.0	0.5					
	0.2					
-16.0	0.3		SM	Reddish yellow, mottled, damp, dense, fine SAND, some Silt, trace Mica.		
	2.2					
-17.0	0.3					
	0.3					
-18.0	0.2	100%		Very pale brown, mottled with weak red and yellow, damp, stiff CLAY & SILT, trace black mottling, trace Sand seams.		
	0.1					
-19.0	0.1					
	0.1			Clayey SILT layer, mottled with black at 19-19.25' BG.		
-20.0	0.2		CL/ ML			
	0.9					
-21.0	0.9			Very pale brown, mottled with red and black, damp, stiff SILT & CLAY, some fine to medium Sand seams, trace fine Gravel.		
	1.3					
-22.0	1.7	100%				
	1.7					
-23.0	2.1					
	1.9					
-24.0	3.3		SM	Very pale brown and weak red, mottled with black, damp, dense, fine to medium SAND, some Clayey Silt lenses.	Borehole stayed open to 25.9' BG. No groundwater encountered.	
	3.5					
-25.0	4.0	100%				
	4.5					
	8.6					10:40 Collected soil sample at 25' BG.
	9.6					
-26.0	12.9					Bottom of boring 26' BG.

PROJECT CG-17-1111		SOIL BORING LOG SB-76-05		PAGE 1 OF 2	
PROJECT: Additional Phase II Environmental Site Assessment			DATE STARTED: 04/30/2018		
LOCATION: AFRH - 3700 N Capitol St NW, Washington, DC 20011			DATE/TIME COMPLETED: 04/30/2018 12:15		
DRILLING COMPANY: Tidewater, Inc.			LOGGED BY: Meg Staines		
DRILLING METHOD: Geoprobe			PROJECT MANAGER: Nancy Love		
SAMPLING METHOD: Macrocore			BORING DIAMETER: 2"		BORING DEPTH: 26'
DEPTH TO GW (ft) FROM BG: NA			DATE: NA		NOTES: PID reading immediately below Concrete at top of soil: 0ppm.



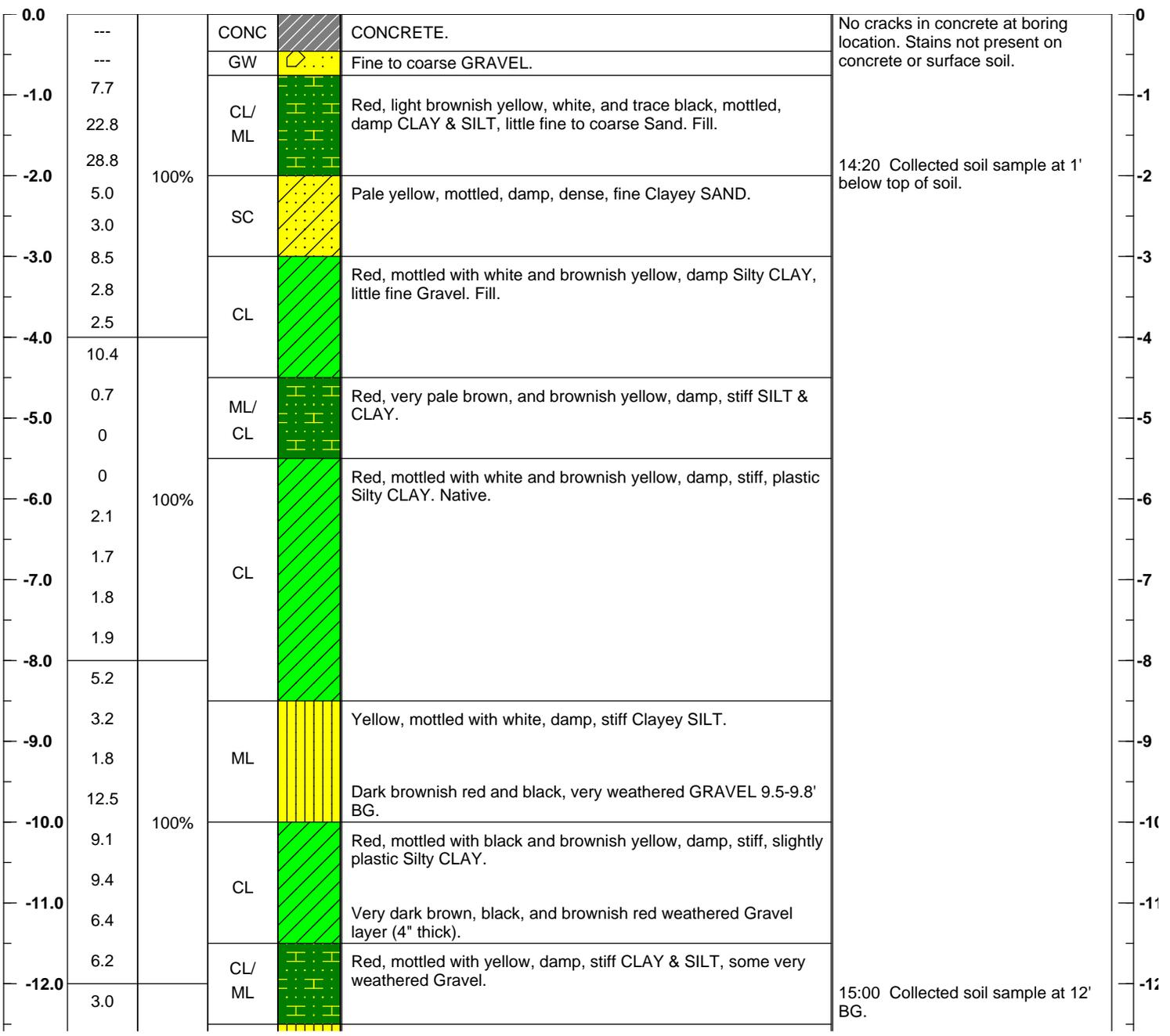
-13.0	0		SM	Very pale brown, mottled with yellow and black, damp, medium dense, fine SAND, and Silt, some fine Sand lenses, trace Mica.		-13
	0					
	0	100%	ML	Very pale brown, mottled with weak red and yellow, damp, medium stiff Clayey SILT, some very fine Sand.		-14
-14.0	0		SP	Very pale brown, mottled with yellow and white, damp, dense, fine SAND, little fine Gravel, little Silt.		-15
	0					
-15.0	9.2			Brownish red, mottled, damp, stiff SILT & CLAY, some fine Sand lenses.	11:50 Collected soil sample at 15.5' BG.	-15
	92.6					
-16.0	2.3		ML/ CL			-16
	43.8					
-17.0	42.1					-17
	22.9					
-18.0	9.9	100%		Weak red and very pale brown, mottled with black, damp, stiff Clayey SILT.		-18
	10.3					
-19.0	8.0					-19
	2.6		ML			
-20.0	0					-20
	0					
-21.0	0.1				12:00 Collected soil sample at 21' BG.	-21
	0					
-22.0	0.1			Brownish yellow and very pale brown, mottled with black, damp, dense, fine SAND, some Silt, some Silty Clay lenses. Alternating layers 20-26' BG.		-22
	0	100%				
-23.0	0					-23
	0					
-24.0	0		SM		Borehole stayed open to 24.7' BG. No groundwater encountered.	-24
	0					
-25.0	0.1					-25
	0.1				Bottom of boring 26' BG.	-26
-26.0						-26

PROJECT CG-17-1111		SOIL BORING LOG SB-76-06		PAGE 1 OF 2	
PROJECT: Additional Phase II Environmental Site Assessment			DATE STARTED: 04/30/2018		
LOCATION: AFRH - 3700 N Capitol St NW, Washington, DC 20011			DATE/TIME COMPLETED: 04/30/2018 13:50		
DRILLING COMPANY: Tidewater, Inc.			LOGGED BY: Meg Staines		
DRILLING METHOD: Geoprobe			PROJECT MANAGER: Nancy Love		
SAMPLING METHOD: Macrocore			BORING DIAMETER: 2"		BORING DEPTH: 25'
DEPTH TO GW (ft) FROM BG: NA			DATE: NA		NOTES: PID reading immediately below Concrete at top of soil: 0ppm.



-13.0	13.7	100%	ML		Very pale brown and weak red, mottled with black, damp, stiff Clayey SILT.		-13				
	8.2										
-14.0	7.5							-14			
	16.5			SC			Very pale brown, mottled, damp, dense, Clayey fine SAND.				
-15.0	8.8	75%	ML		Very pale brown, damp, stiff Clayey SILT.		-15				
	10.1										
-16.0	4.3			SM		Very pale brown, mottled with yellow and black, damp, dense, fine SAND, some Silt, some Clayey Silt stringers.					
	13.1						-16				
-17.0	8.5	100%	CL/ ML		Weak red and light brownish yellow, damp, stiff CLAY and SILT.		-17				
	3.4										
-18.0	0.9			SM		Pale yellow, damp, dense, fine SAND, and Silt.					
	1.0						-18				
-19.0	0.7	100%	ML		Yellow and weak red, damp, stiff Clayey SILT.		-19				
	0.8			SM		Light brownish yellow, damp, dense, fine SAND, some Silt.	13:15 Collected soil sample at 19' BG.				
-20.0	0.6					Dark reddish brown, dry, hard, very weathered Gravel lens at 19.5-19.75' BG. Red Silty CLAY lens 19.75-20' BG.					
	---						-20				
-21.0	---	100%	ML/ CL				-21				
	0.4										-21
-22.0	0.4										-22
	0.5										-22
-23.0	0.3	100%	ML/ CL				-23				
	0.4										-23
-24.0	0.3										-24
	0.2										-24
-25.0	0.3						-25				
						Borehole stayed open to 24.2' BG. No groundwater encountered.					
						Bottom of boring 25' BG.					

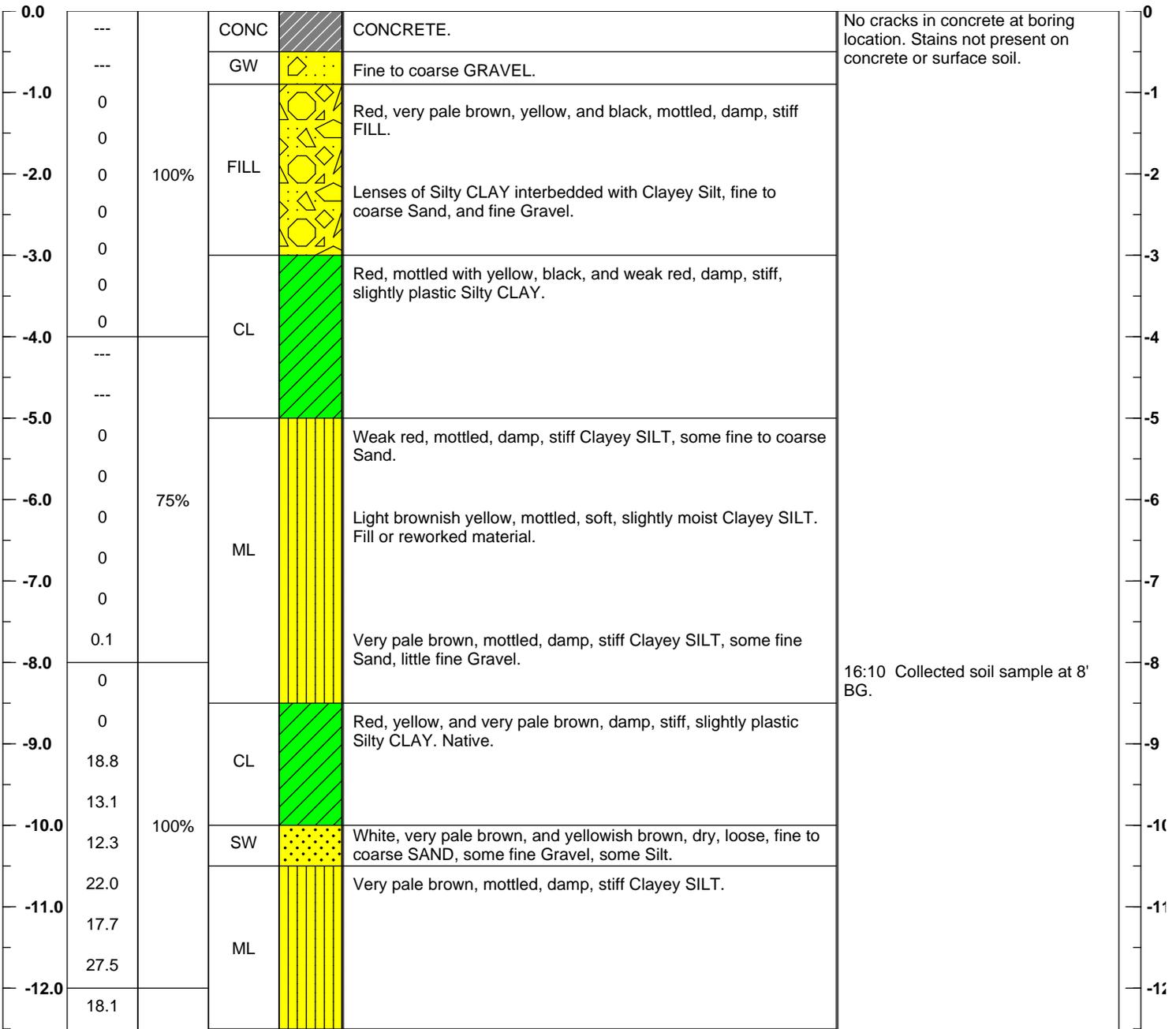
PROJECT CG-17-1111		SOIL BORING LOG SB-76-07		PAGE 1 OF 2	
PROJECT: Additional Phase II Environmental Site Assessment			DATE STARTED: 04/30/2018		
LOCATION: AFRH - 3700 N Capitol St NW, Washington, DC 20011			DATE/TIME COMPLETED: 04/30/2018 15:38		
DRILLING COMPANY: Tidewater, Inc.			LOGGED BY: Meg Staines		
DRILLING METHOD: Geoprobe			PROJECT MANAGER: Nancy Love		
SAMPLING METHOD: Macrocore			BORING DIAMETER: 2"		BORING DEPTH: 26'
DEPTH TO GW (ft) FROM BG: NA			DATE: NA		NOTES: PID reading immediately below Concrete at top of soil: 0ppm.



-13.0	2.6	100%	ML	Pale brown, mottled, damp, stiff Clayey SILT.	
	4.4				
-14.0	2.1				
	2.8				
-15.0	2.7	100%	SM	Pale brown, mottled, damp, dense, fine SAND, some Silt, some Clayey Silt lenses.	
	2.1				
-16.0	2.3				
	0				
-17.0	1.4				
	0.6				
-18.0	0.4	100%	CL	Weak red, mottled, damp, stiff, slightly plastic Silty CLAY.	
	1.1		SM	Light brownish yellow, mottled, damp, dense, fine SAND, some Silt, some Clayey Silt lenses.	
-19.0	0.7			Red, mottled with very pale brown and black, damp, stiff Clayey SILT, some fine Sand seams.	13:15 Collected soil sample at 19' BG.
	1.1				
-20.0	1.4				

-21.0	1.3	67%	ML		
	2.0				
-22.0	1.3				
	0.9				
-23.0	0.3	SM		Very pale brown, mottled with yellow and black, damp, dense, fine SAND, and Silt.	15:10 Collected soil sample at 23' BG.
	0	CL/ ML		Weak red and very pale brown, damp, stiff, not plastic CLAY & SILT.	
-24.0	0				
	0				
-25.0	0				
	0				
-26.0	0				

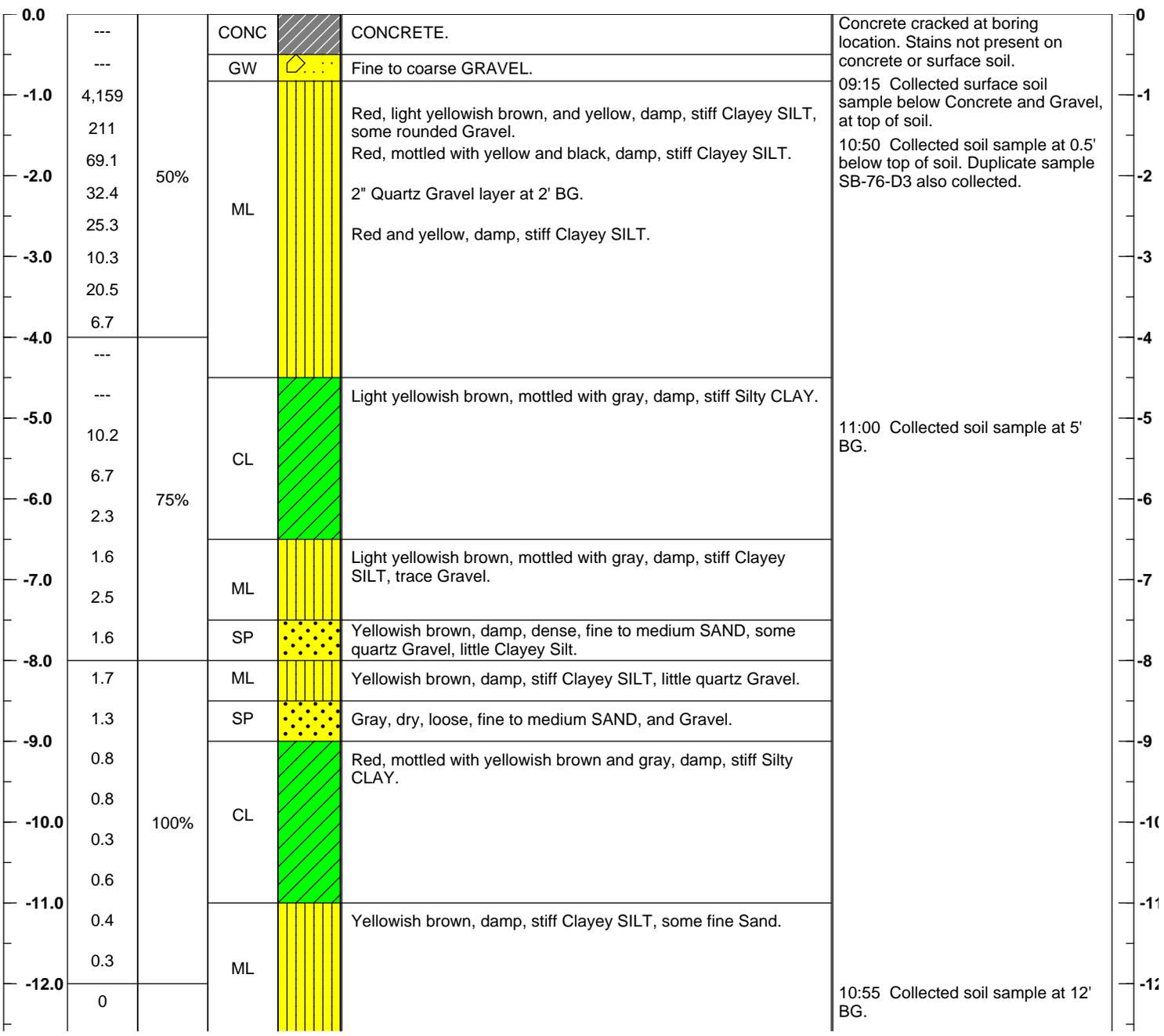
PROJECT CG-17-1111		SOIL BORING LOG SB-76-08		PAGE 1 OF 2	
PROJECT: Additional Phase II Environmental Site Assessment			DATE STARTED: 04/30/2018		
LOCATION: AFRH - 3700 N Capitol St NW, Washington, DC 20011			DATE/TIME COMPLETED: 04/30/2018 18:00		
DRILLING COMPANY: Tidewater, Inc.			LOGGED BY: Meg Staines		
DRILLING METHOD: Geoprobe			PROJECT MANAGER: Nancy Love		
SAMPLING METHOD: Macrocore			BORING DIAMETER: 2"		BORING DEPTH: 26'
DEPTH TO GW (ft) FROM BG: NA			DATE: NA		NOTES: PID reading immediately below Concrete at top of soil: 0ppm.



-13.0	24.4	100%	SM	Yellowish brown, mottled, damp, medium dense, fine SAND, and Silt, trace Mica.		-13'
	10.9		ML	Yellowish brown, mottled with white, yellow, and light gray, damp, stiff Clayey SILT.		-14'
-14.0	8.3		SP	Brownish yellow and yellow, mottled, damp, dense, fine SAND, little Silt, trace Mica.		-14'
	11.3	100%				
	8.9					-15'
-15.0	7.8					-15'
	8.6	100%				-16'
-16.0	5.4		ML	Yellowish brown, mottled, damp, stiff Clayey SILT, some fine Sand seams.		-16'
	13.9					-17'
-17.0	14.6	100%				-17'
	31.4					-18'
-18.0	27.2		CL	Red, mottled with yellow, white, and black, damp, stiff, slightly plastic Silty CLAY.	16:40 Collected soil sample at 17.5' BG.	-18'
	5.2	100%				-19'
-19.0	5.6			Weak red and brownish yellow, mottled, damp, stiff Clayey SILT, some fine Sand seams.		-19'
	7.6					-20'
-20.0	---	50%				-20'
	---			Weak red and light brownish yellow, damp, stiff Clayey SILT, and fine Sand seams, little fine Gravel.		-21'
-21.0	0					-21'
	28.8	50%				-22'
-22.0	16.8		ML	Very weak red, mottled, damp, stiff Clayey SILT.	Borehole stayed open to 24.2' BG. No groundwater encountered.	-22'
	13.2					-23'
-23.0	27.0	50%				-23'
	18.1					-24'
-24.0	16.5					-24'
	12.1	50%				-25'
-25.0	8.2		SM	Dark brown and black discoloration at 25' BG.	16:45 Collected soil sample at 25' BG.	-25'
	6.3			Pale brown, mottled with yellow and brownish yellow, damp, dense, fine to medium SAND, some Silt.	Bottom of boring 26' BG.	-26'
-26.0					-26'	

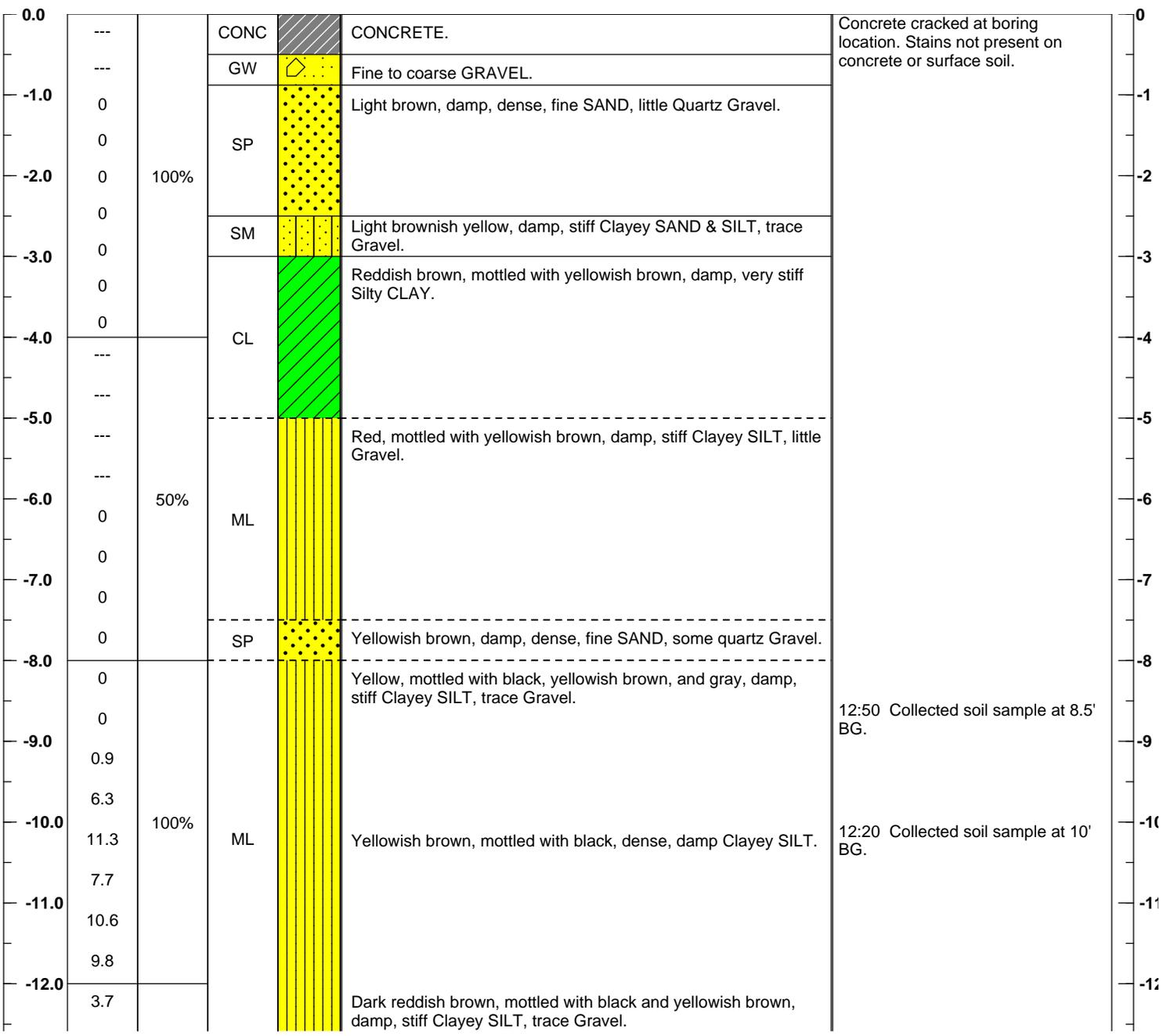
PROJECT: Additional Phase II Environmental Site Assessment	DATE STARTED: 04/30/2018	
LOCATION: AFRH - 3700 N Capitol St NW, Washington, DC 20011	DATE/TIME COMPLETED: 05/01/2018 09:30	
DRILLING COMPANY: Tidewater, Inc.	LOGGED BY: Meg Staines	
DRILLING METHOD: Geoprobe	PROJECT MANAGER: Nancy Love	
SAMPLING METHOD: Macrocore	BORING DIAMETER: 2"	BORING DEPTH: 26'
DEPTH TO GW (ft) FROM BG: NA DATE: NA		NOTES: PID reading immediately below Concrete at top of soil: 0ppm.

DEPTH (ft)	PID READINGS (ppm)	RECOVERY (%)	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES
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-13.0	0		ML	Very pale brown, mottled with reddish brown, damp, stiff Clayey SILT, some fine Sand.	
-14.0	0	100%			
-15.0	0		SP	Yellowish brown, mottled with black, damp, dense, fine to medium SAND.	
-16.0	0		ML	Reddish brown, damp, dense Clayey SILT, and fine Sand, little Gravel.	
-17.0	0		GP	Yellowish brown, damp, loose, coarse GRAVEL, little fine to medium Sand.	
-18.0	0	100%	ML	Dark brown, mottled with reddish brown, damp, stiff Clayey SILT, and fine Sand.	
-19.0	0			Dark brown, mottled with black, damp, stiff Clayey SILT, trace fine Sand.	
-20.0	0			Reddish brown, mottled with black, damp, stiff Silty CLAY.	
-21.0	0				
-22.0	0		CL	Reddish brown, mottled with black, damp, stiff Silty CLAY, little fine Sand lenses.	Borehole stayed open to 24.2' BG. No groundwater encountered.
-23.0	0	100%			
-24.0	0				
-25.0	0		SP	Yellowish brown, damp, loose, fine SAND.	Bottom of boring 26' BG.
-26.0	0				

PROJECT CG-17-1111		SOIL BORING LOG SB-76-10		PAGE 1 OF 2		
PROJECT: Additional Phase II Environmental Site Assessment			DATE STARTED: 04/30/2018			
LOCATION: AFRH - 3700 N Capitol St NW, Washington, DC 20011			DATE/TIME COMPLETED: 05/01/2018 13:15			
DRILLING COMPANY: Tidewater, Inc.			LOGGED BY: Meg Staines			
DRILLING METHOD: Geoprobe			PROJECT MANAGER: Nancy Love			
SAMPLING METHOD: Macrocore			BORING DIAMETER: 2"		BORING DEPTH: 26'	
DEPTH TO GW (ft) FROM BG: NA			DATE: NA		NOTES: PID reading immediately below Concrete at top of soil: 0ppm.	
DEPTH (ft)	PID READINGS (ppm)	RECOVERY (%)	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES

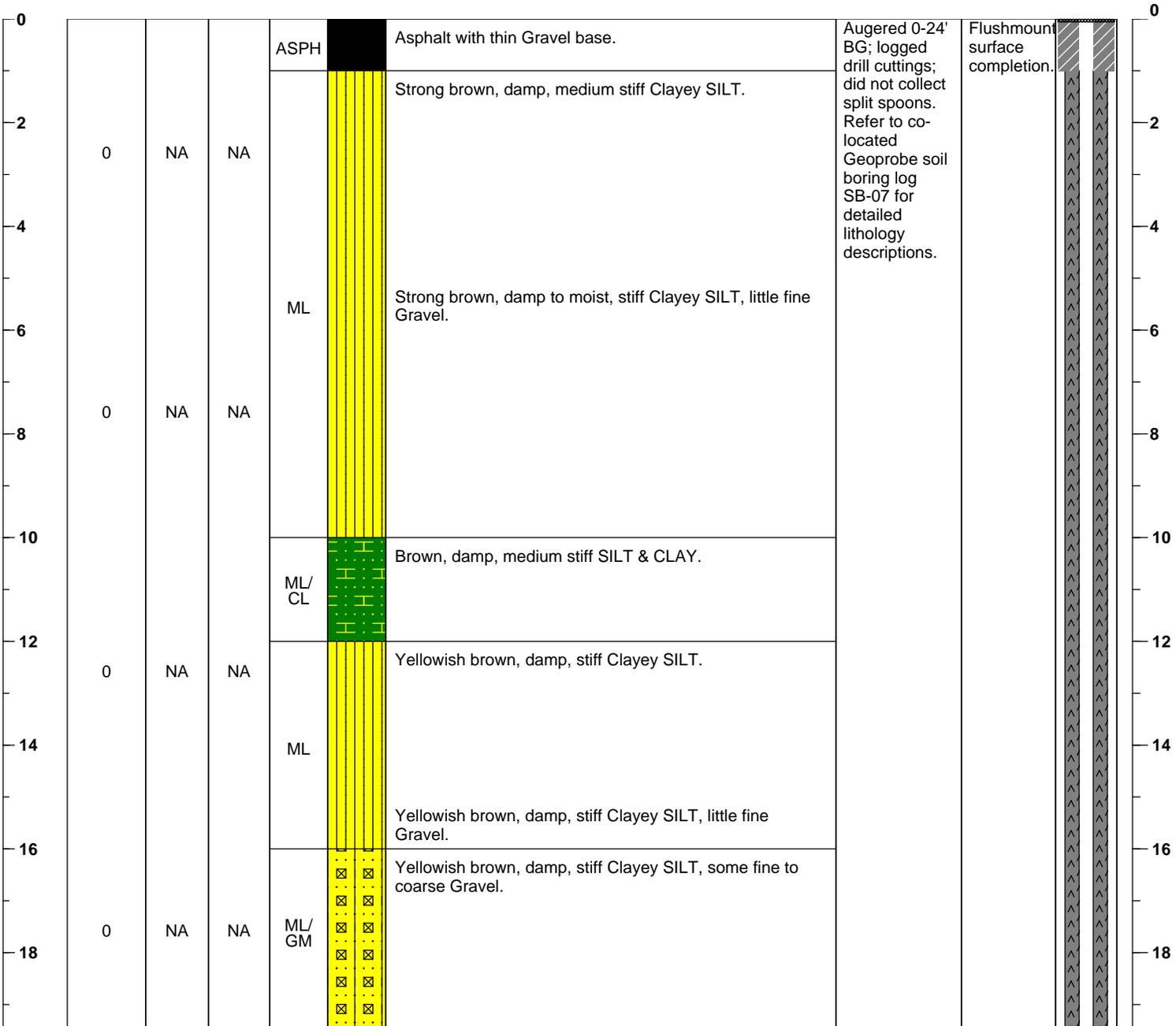


-13.0	3.6	100%	ML	Brown, mottled with black, damp, stiff Clayey SILT, little fine Sand.		
-14.0	2.1 1.9 2.0			1.8		1.5
-15.0	1.8	100%	ML	Light yellowish brown, damp, stiff Clayey SILT, and fine Sand.		
-16.0	0.8			Reddish brown, damp, stiff Clayey SILT, trace Gravel.		
-17.0	1.8			SP	Yellowish brown, damp, dense, fine to medium SAND, little Gravel.	
-18.0	0.7	100%	ML	Yellowish brown, damp, stiff Clayey SILT, little fine Sand.		
-19.0	1.2			0.8	0.6	0.6
-20.0	0.5			CL	Red, mottled with black, damp, stiff Silty CLAY.	12:55 Collected soil sample at 19.5' BG.
-21.0	---	67%	SP	Yellowish brown, mottled with black, damp, dense, fine SAND.		
-22.0	---			CL	Red, mottled with black, stiff Silty CLAY, trace Gravel.	Borehole stayed open to 23.9' BG. No groundwater encountered.
-23.0	0			0.3	0	0
-24.0	0	67%	SP	Yellowish brown, mottled with black, damp, fine SAND.		
-25.0	0			0	0	0
-26.0	0			0	0	0

APPENDIX H

BUILDING 46 – SOIL BORING/WELL CONSTRUCTION LOGS

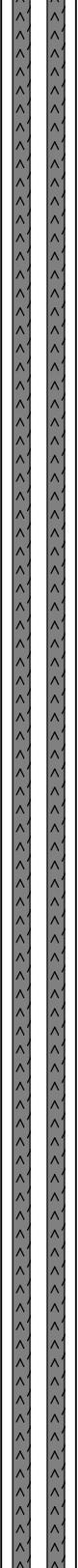
PROJECT CG-17-1111		WELL CONSTRUCTION LOG W46-2		PAGE 1 OF 5				
PROJECT: Additional Phase II Environmental Site Assessment		DATE STARTED: 05/08/2018						
LOCATION: AFRH - 3700 N Capitol St NW, Washington, DC 20011		DATE/TIME COMPLETED: 05/10/2018 19:00						
DRILLING COMPANY: Allied Well Drilling		LOGGED BY: Meg Staines						
DRILLING METHOD: Hollow Stem Augers		PROJECT MANAGER: Nancy Love						
SAMPLING METHOD: Split Spoons		WELL DIAMETER: 2"				WELL DEPTH: 114'		
DEPTH TO GW (ft) FROM BG: 106.73		DATE: 06/05/2018		BORING DIAMETER: 8"		BORING DEPTH: 117'		
DEPTH (ft)	PID READINGS (PPM)	RECOVERY (%)	BLOW COUNTS	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES	WELL COMPLETION LOG



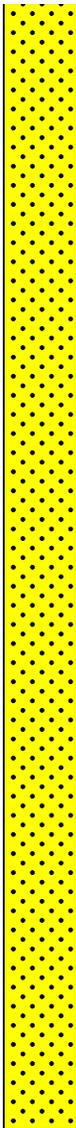
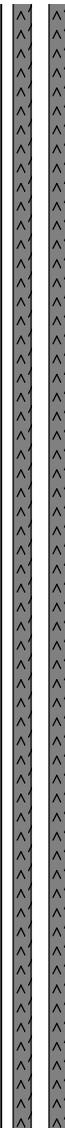
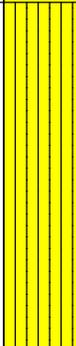
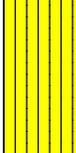
DEPTH (ft)	PID READINGS	RECOVERY (%)	BLOW COUNTS	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES	WELL COMPLETION LOG
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44	11.1 3.3 8.2 22.7	100%	10 17 26 24			Light grey, mottled with yellow, damp, medium dense, very fine SAND, little Silt.			44
46	0.3 0.7 0.8 0	100%	19 19 17 24	SP					46
48	2.5 3.5 1.8 11.5	100%	14 19 21 21	SM		Damp, medium dense, very fine SAND, and Silt.			48
50	4.8 5.3 3.1 2.5	100%	11 13 15 20	SP		White, mottled with yellow, damp, medium dense, fine to medium SAND.	Collected split spoons 40-66' BG to identify potential perched groundwater zones.		50
52	0.5 0.4 0.3 0.2	100%	15 14 14 17			White, dry, medium dense, fine to medium SAND. Light brownish yellow, mottled, damp, medium dense, fine SAND, little Silt.			52
54	0.8 0.7 0.9 0.3	100%	18 17 15 27	SP		White, mottled with brownish yellow and yellow, dry to damp, medium dense, fine SAND, trace Silt.			54
56	0 0 0 0	100%	22 19 18 19			White, damp, medium dense, fine SAND, trace Silt.			56
58	0.2 0.1 0 0	100%	13 14 16 35	ML		Yellow, mottled with white and brownish yellow, damp, dense, fine SAND, little Silt. White, dry to damp, medium dense, fine SAND, little Silt.			58
60	5.5 4.2 5.2 5.0	100%	3 12 14 21			White, dry to damp, medium dense to loose, fine to medium SAND, trace Silt. Light grey, mottled, damp Clayey SILT lens 61-61.2' BG. White, dry to damp, medium dense, fine SAND, little Silt.			60
62	0 0 0 0	100%	21 21 24 22			White, dry to damp, dense, fine SAND, trace Silt.			62
64	0 0 0 0	100%	19 19 21 22	SP		White, dry to damp, dense, fine SAND, trace Silt.			64
66	0	NA	NA					Starting at 66' BG, collected 1 split spoon every 10 ft. Descriptions of drill cuttings at this depth are not reliably representative due to mixing with soil from	66
68									68

2" Schedule 40 PVC riser pipe 0-94' BG.



DEPTH (ft)	PID READINGS	RECOVERY (%)	BLOW COUNTS	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES	WELL COMPLETION LOG
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70	0					White, mottled with yellow, dry to damp, medium dense, fine SAND, little Silt.	borehole. Therefore only split spoon lithology descriptions are presented. PID readings in between split spoons were from drill cuttings. Also checked in frequently with Driller to track observations that may indicate lithology changes in between split spoons.		70
72	0	NA	NA	72					
74	0			74					
76	0.2 0.2 0.2 0.2	100%	15 15 22 30	76					
78	0.2	NA	NA	SP		White, mottled with yellow and brownish yellow, dry to damp, dense, fine to medium SAND, trace Silt.	Augered 77-85' BG; did not collect split spoons.	78	
80				80					
82	0	NA	NA	82					
84				84					
86	0 1.5 0.1 0	100%	5 5 9 21			Yellow, mottled with light grey, brownish yellow, and very dark reddish brown, moist, medium dense, Clayey fine quartz GRAVEL, and fine to coarse SAND (3" thick lens). Moist at 86.2' BG at top of Clayey SILT.	Drilling got very tight. Still in the same Sand based on Driller observations.	86	
88	0.3 5.0			88					
90		NA	NA	ML				90	
92	0					Light grey, mottled with yellow and very dark grey, damp, stiff Clayey SILT, some damp fine Sand seams.	Augered 87-95' BG; did not collect split spoons.	92	
								92	

Bentonite seal 86-91' BG

DEPTH (ft)	PID READINGS	RECOVERY (%)	BLOW COUNTS	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES	WELL COMPLETION LOG
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94	NA	NA	NA	ML		Very pale brown, mottled with dark grey and white, damp, stiff Clayey SILT, some fine Sand seams.			94
96	0.1 0 0 0.1	100%	10 17 39 49	CL		Light grey, mottled with red and yellow, damp, hard, plastic Silty CLAY, some damp fine Sand seams. Light grey, mottled with yellow and very dark reddish brown, damp, stiff, fine Sandy CLAY, little Mica.	Augered 97-105' BG; did not collect split spoons.		96
98	0.2 0.5 0.5	NA	NA	SP		Very hard drilling.	Very hard drilling.		98
100	0.2	NA	NA	SP		Very hard drilling.	Very hard drilling.	#2 sand filter pack 91-114' BG.	100
102	0.3	100%	50/5	SM		Light grey, mottled with yellow, damp, very hard, fine SAND, little Silt.	Split spoon refusal at 105.4' BG.	20-slot 2" PVC screen 94-114' BG.	102
104	0	NA	NA	SM		Light grey, mottled with yellow and yellowish brown, damp to moist, very hard, fine SAND, some Silt. Soil cuttings from approximately 105-110' BG were moist.	Groundwater encountered at approximately 106' BG.		104
106	1.6	NA	NA	SM		Augered 105.4-115' BG; did not collect split spoons.	Augered 105.4-115' BG; did not collect split spoons.		106
108	0.1	NA	NA	SM		Encountered running sands and lost 3 feet of the borehole during well installation.	Encountered running sands and lost 3 feet of the borehole during well installation.	Bottom of well 114' BG.	108
110	0.5	NA	NA	SM		Encountered running sands and lost 3 feet of the borehole during well installation.	Encountered running sands and lost 3 feet of the borehole during well installation.	Bottom of well 114' BG.	110
112	0.1	NA	NA	SP		Encountered running sands and lost 3 feet of the borehole during well installation.	Encountered running sands and lost 3 feet of the borehole during well installation.	Bottom of well 114' BG.	112
114	0.1 0 0.1 0	100%	5 7 14 19	SP		Light grey, mottled with pink, yellow, and dark brown, wet, dense, fine SAND, little little Clay stringers, trace fine rounded Gravel.	Bottom of borehole at 117' BG.	Bottom of borehole at 117' BG.	114
116	0.1 0 0.1 0	100%	5 7 14 19	SP		Color change only at 117' BG: yellow.	Bottom of borehole at 117' BG.	Bottom of borehole at 117' BG.	116

PROJECT CG-17-1111		WELL CONSTRUCTION LOG W46-3			PAGE 1 OF 5			
PROJECT: Additional Phase II Environmental Site Assessment				DATE STARTED: 05/11/2018				
LOCATION: AFRH - 3700 N Capitol St NW, Washington, DC 20011				DATE/TIME COMPLETED: 05/18/2018 16:00				
DRILLING COMPANY: Allied Well Drilling				LOGGED BY: Meg Staines				
DRILLING METHOD: Hollow Stem Augers				PROJECT MANAGER: Nancy Love				
SAMPLING METHOD: Split Spoons				WELL DIAMETER: 2"		WELL DEPTH: 109'		
DEPTH TO GW (ft) FROM BG: 102.70		DATE: 06/05/2018		BORING DIAMETER: 8"		BORING DEPTH: 118'		
DEPTH (ft)	PID READINGS (PPM)	RECOVERY (%)	BLOW COUNTS	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES	WELL COMPLETION LOG



0				ASPH	Asphalt with thin Gravel base.		Augered 0-20' BG; logged drill cuttings; did not collect split spoons. Refer to co-located Geoprobe soil boring log SB-11 for detailed lithology descriptions.	Flushmount surface completion.	0
2	0	NA	NA		Yellowish red, damp, medium stiff Clayey SILT, some fine to coarse Sand, little fine Gravel.				2
4									4
6									6
8	0	NA	NA		Brown, damp to moist, medium stiff Clayey SILT.				8
10				ML				Bentonite-cement grout 1-81' BG.	10
12	0	NA	NA		Strong brown, damp, medium stiff Clayey SILT, little fine Gravel.				12
14									14
16	0	NA	NA		Strong brown, damp, medium stiff Clayey SILT, little fine Gravel, little fine to coarse Sand.				16
18	0	NA	NA		Strong brown, damp, medium stiff Clayey SILT, some fine to coarse Sand, little fine Gravel.				18

DEPTH (ft)	PID READINGS	RECOVERY (%)	BLOW COUNTS	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES	WELL COMPLETION LOG
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20	0 0 0	95%	11 14 16	ML		Strong brown, damp, medium stiff Clayey SILT, some fine to coarse Sand, little fine Gravel.	Collected split spoons 20-28' BG to identify potential perched groundwater zones. Small moist spots in split spoons at 23' BG, 24' BG, and 26' BG. 2' of water accumulated in split spoon hole. Small wet spots in split spoons at 27' BG and 28' BG. 05/11/2018 11:45 Augered to 28' BG, pulled augers up 5' to 23' BG, installed temporary well screen & riser pipe; left temp. well 3 days (weekend), to see if sufficient water entered to set shallow well. Borehole protected from surface runoff. 05/14/2018 07:55 Gauged temporary well: 1.45 feet of water had accumulated; decided this was not sufficient for a well. Collected grab-groundwater sample 08:30am. Resumed drilling 05/14/2018 10:30am. Collected 1 split spoon every 5 ft 35-47' BG.	20
22	0.1		18	SM		Light brown, damp, medium dense, fine SAND, and Silt, little Mica. Reddish yellow, mottled, damp (small moist spot at 23' BG) medium dense, fine SAND & SILT, little Mica.		22
24	0 0 0	100%	12 17 17 24	ML		Very weathered GRAVEL seam (2" thick). Red, yellow, pink, and light grey, mottled, damp (small moist spot at 24' BG), stiff Clayey SILT, some Silty Clay lenses, little Mica.		24
26	0 0 0	100%	12 15 24	CL		Red, mottled with light grey, yellow, and brownish yellow, damp (small moist spot at 26' BG), stiff, slightly plastic Silty CLAY, some fine Sand & Silt seams, some Clayey Silt seams. Very weathered GRAVEL seam (2" thick). Red, mottled with yellow, light grey, pink, and black, damp (small wet spots at 27' BG and 28' BG), very stiff, plastic Silty CLAY, some Clayey Silt seams.		26
28	0 0 0	100%	13 14 19 25	CL		Very weathered GRAVEL seam (2" thick). Red, moist, very stiff, plastic Silty CLAY.		28
30				CL				30
32	0	NA	NA	CL				32
34				CL				34
36	0 0 0	85%	11 5 11 10	CL/ML		Red, mottled with yellow, damp, very stiff, plastic Silty CLAY. Weak red, mottled with black, damp, stiff CLAY & SILT.		36
38	0	NA	NA	SC		Pink, mottled with yellow and very dark grey, damp, medium dense Clayey fine SAND.		38
40	0 0 0	100%	8 13 18	ML/SC		Weak red, mottled with pink and yellow, damp, stiff Clayey SILT, and Clayey SAND lenses.		40
42	0	NA	33	SM		White, mottled with yellow, damp, dense, fine SAND, some Silt.		42
44	0	NA	NA	SM				44

DEPTH (ft)	PID READINGS	RECOVERY (%)	BLOW COUNTS	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES	WELL COMPLETION LOG
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44								
46	0 0.8 0 0	100%	10 11 17 21	SM		White, mottled with yellow and very dark grey, damp, dense, fine SAND & SILT.	Collected at least 1 split spoon every 10 ft 47-118' BG.	
48	0	NA	NA			White, mottled with yellow and very dark grey, damp, dense, fine to medium SAND.	Descriptions of drill cuttings at this depth are not reliably representative due to mixing with soil from borehole. Therefore only split spoon lithology descriptions are presented. PID readings in between split spoons were from drill cuttings. Also checked in frequently with Driller to track observations that may indicate lithology changes in between split spoons.	
50								
52	0	NA	NA					
54								
56	0 0 0 0	100%	6 7 11 14			White with trace yellow mottling, dry to damp, very hard, fine SAND, little Silt.		
58				SP		Light grey, mottled with very dark grey, damp, stiff, slightly plastic Silty CLAY lens (2" thick).		2" Schedule 40 PVC riser pipe 0-89' BG.
60	0	NA	NA				Drill cuttings did not come up 60-65' BG. Very hard drilling.	
62								
64								
66	0 0 0 0	90%	12 15 17 28			White with trace pale yellow mottling, dry to damp, very hard, fine to medium SAND, trace Silt.		
68							Augered 67-75' BG; did not collect split spoons.	

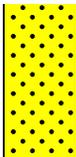
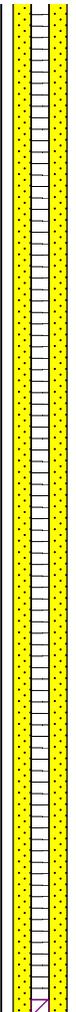
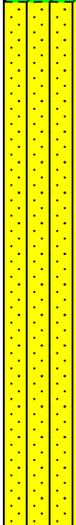
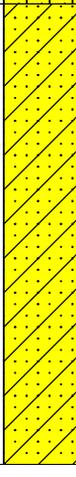
DEPTH (ft)	PID READINGS	RECOVERY (%)	BLOW COUNTS	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES	WELL COMPLETION LOG
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70	0	NA	NA		•••••			70
72					•••••			72
74	0	NA	NA		•••••			74
76	0 0 0 0	100%	10 21 40 50/4		•••••	White, mottled with yellow, damp, very hard, fine to medium SAND, little Silt.	Very little drill cuttings came up 75-80' BG. Very hard drilling.	76
78	0 0	100%	50 50/5		•••••	White, mottled with yellow, damp, very hard, fine to medium SAND, little Silt.	Split spoon refusal at 76.8' BG. Split spoon refusal at 77.9' BG.	78
80					•••••		Augered 79-85' BG; did not collect split spoons.	80
82	0	NA	NA	SP	•••••			82
84					•••••			84
86	0 0 0	100%	34 41 50/2		•••••	White, mottled with yellow and brownish yellow, damp, very hard, fine SAND, little Silt.	Split spoon refusal at 86.2' BG.	86
88					•••••		Augered 87-90' BG; did not collect split spoons.	88
90	0 0 0 0	100%	43 44 50 50/5		•••••	White, mottled with yellow, brownish yellow, reddish brown, and pink, damp, very hard, fine SAND, little Silt.	#2 sand filter pack 86-109' BG.	90
92					•••••		Split spoon refusal at 91.8' BG.	92

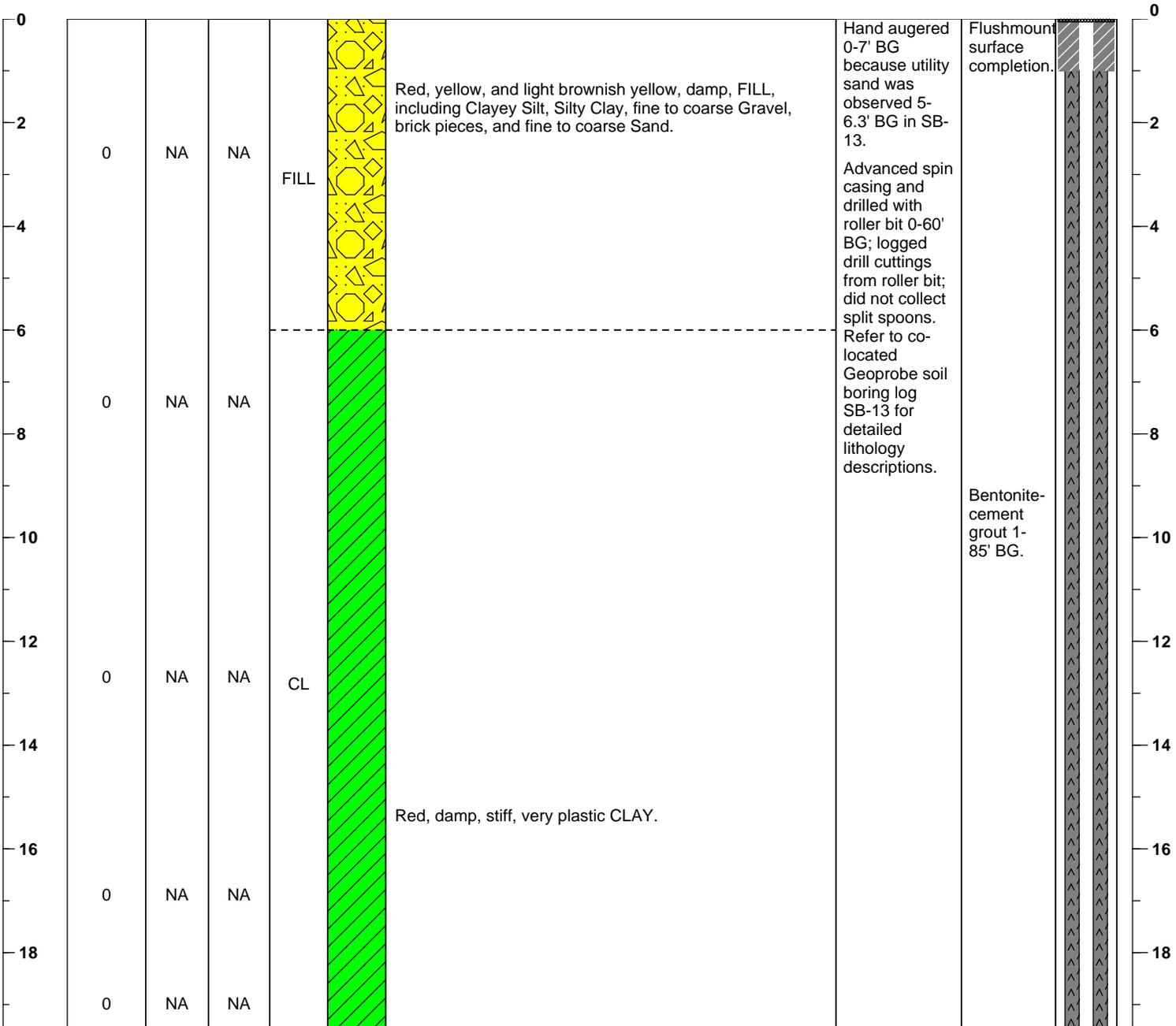
Bentonite seal 81-86' BG

#2 sand filter pack 86-109' BG.

DEPTH (ft)	PID READINGS	RECOVERY (%)	BLOW COUNTS	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES	WELL COMPLETION LOG
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94	0	NA	0	SP		White, mottled with yellow, brownish yellow, reddish brown, and pink, damp, very hard, fine SAND, little Silt.	Augered 92-100' BG; did not collect split spoons.		94
96	0	NA	0	CL		Light grey, mottled with yellow, brownish yellow, very dark grey, and pink, damp, very stiff, fine Sandy CLAY.	Drill cuttings did not come up 96-100' BG, causing very hard drilling conditions. Added 40 gallons of water to help bring up cuttings.		96
100	0 0 0	100%	18 48 50/5				Split spoon refusal at 101.4' BG.	20-slot 2" PVC screen 89-109' BG.	98
102	0	NA	NA				Augered 102-110' BG; did not collect split spoons.		100
104	0	NA	NA	SM		Yellow, wet, very hard, fine SAND, some Silt.	Groundwater encountered at approximately 103' BG. Drilling got much easier at 103' BG.	102	
106	0	100%	50/5				Split spoon refusal at 105.4' BG.	104	
108	0	NA	NA				Split spoon refusal at 111.2' BG.	106	
110	0 0 0	100%	8 24 50/2	SC		Very pale brown, mottled with yellow, moist, dense, fine SAND & SILT, some Clayey Silt lenses.	05/15/2018 Drilled 5' deeper than target depth (113' BG) in case of running sands. Running sands pushed up 11'.	108	
112	0	NA	NA				Bottom of well 109' BG. Lost 4 feet of borehole during well construction.	110	
114	0	NA	NA					Bottom of borehole at 118' BG.	112
116	0	NA	NA					114	
118								116	

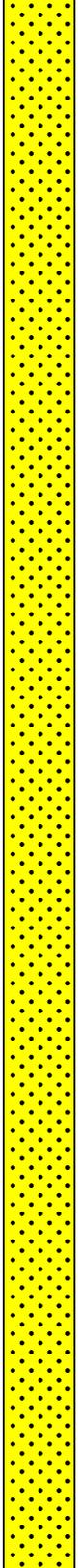
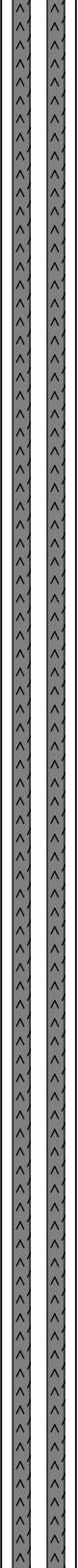
PROJECT CG-17-1111		WELL CONSTRUCTION LOG W71-2		PAGE 1 OF 5				
PROJECT: Additional Phase II Environmental Site Assessment		DATE STARTED: 05/21/2018						
LOCATION: AFRH - 3700 N Capitol St NW, Washington, DC 20011		DATE/TIME COMPLETED: 05/25/2018 08:45						
DRILLING COMPANY: Allied Well Drilling		LOGGED BY: Meg Staines						
DRILLING METHOD: Spin Casing and Roller Bit		PROJECT MANAGER: Nancy Love						
SAMPLING METHOD: Split Spoons		WELL DIAMETER: 2"		WELL DEPTH: 113'				
DEPTH TO GW (ft) FROM BG: 101.03		DATE: 06/05/2018		BORING DEPTH: 116'				
DEPTH (ft)	PID READINGS (PPM)	RECOVERY (%)	BLOW COUNTS	SOIL CLASS	GRAPHIC LOG	OVERBURDEN / ROCK DESCRIPTION	NOTES	WELL COMPLETION LOG



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20						Red, damp, stiff, very plastic CLAY.	Logged drill cuttings from roller bit, which provides good representative lithological samples, except in very Sandy material (very Sandy soil does not adhere to bit). PID readings in between split spoons were in drill cuttings. Used circulated water to keep borehole open and bring up drill cuttings. Therefore, moisture content in drill cuttings is obscured.	20
22	0	NA	NA			Brownish red, mottled with light grey, damp, very stiff, plastic Silty CLAY.		22
24	0	NA	NA					24
26	0	NA	NA					26
28	0	NA	NA					28
30	0	NA	NA			Brownish red, mottled with light grey and pale yellow, damp, stiff, very plastic Silty CLAY.		30
32	0	NA	NA	CL				32
34	0	NA	NA					34
36	0	NA	NA			Light brownish red, damp, stiff, slightly plastic Silty CLAY.		36
38	0	NA	NA					38
40	0	NA	NA				40	
42	0	NA	NA				42	
44	0	NA	NA				44	

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44	0	NA	NA						44	
46	0	NA	NA							46
48	0	NA	NA							48
50	0	NA	NA							50
52	0	NA	NA							52
54	0	NA	NA							54
56	0	NA	NA	SP		Light brownish red, dense, fine SAND.				56
58	0	NA	NA							58
60	0 0.3 1.5 1.0	100%	15 21 23 31			White, dense, fine SAND, little Silt. Silt content is just under 30%.				60
62	0	NA	NA							62
64	0	NA	NA					64		
66	0	NA	NA					66		
68	0	NA	NA					68		

Below 50' BG, moisture content is omitted from lithology descriptions because circulated drilling water obscures moisture content in drill cuttings and split spoons.

Continued to advance spin casing and roller bit 60-116' BG.

Collected 1 split spoon every 10 ft 60-116' BG.

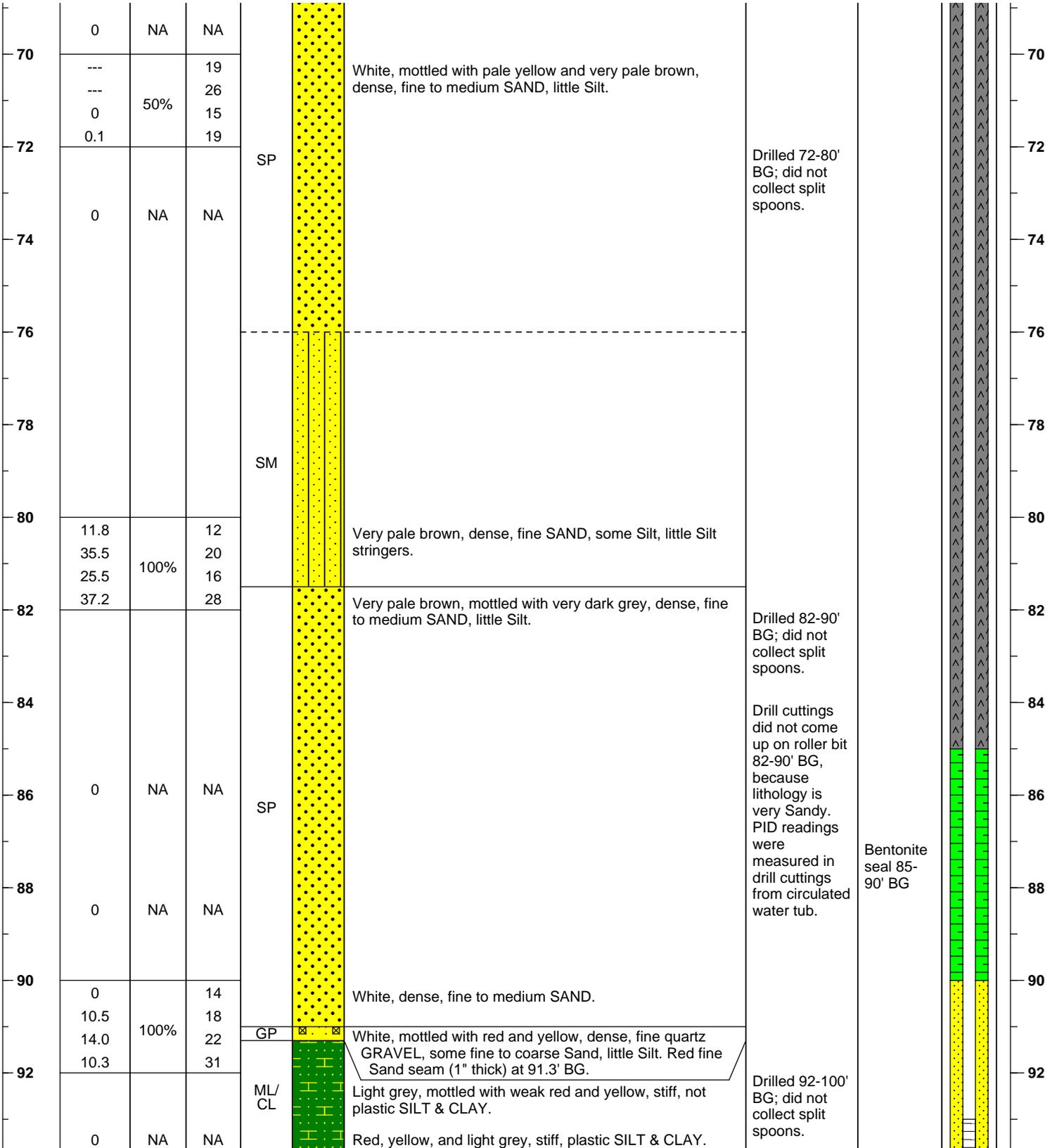
Top 1.5' of soil in split spoon 60-62' was run-up.

Drilled 62-70' BG; did not collect split spoons.

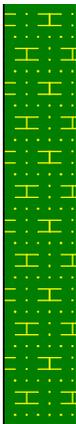
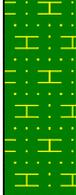
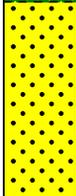
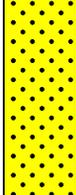
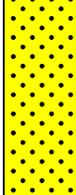
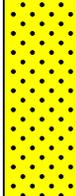
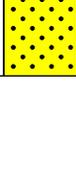
Drill cuttings did not come up on roller bit 62-70' BG, because lithology is very Sandy. PID readings were measured in drill cuttings from circulated water tub.

2" Schedule 40 PVC riser pipe 0-93' BG.

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94						Red, yellow, and light grey, mottled, stiff, plastic SILT & CLAY.		#2 sand filter pack 90-113' BG.	94
96	0	NA	NA						96
98	0	NA	NA	ML/CL					98
100	0.1 0.2	100%	19 50/2			Light grey, mottled with pale yellow, hard, not plastic SILT & CLAY, some very fine Sand.	Split spoon refusal at 100.7' BG. Drilled 102-110' BG; did not collect split spoons.		100
102									102
104	0	NA	NA			SAND, with very little Silt or Clay.		20-slot 2" PVC screen 93-113' BG.	104
106	0	NA	NA				Very hard drilling. Did not collect a split spoon sample 110-112' BG.		106
108	0	NA	NA						108
110	0	NA	NA	SP			Drilled 110-116' BG; did not collect split spoons.		110
112									112
114							Drilled 5' deeper than target depth (111' BG) in case of running sands.	Bottom of well 113' BG.	114
116							Bottom of borehole at 116' BG.	Lost 3 feet of borehole during well construction.	116