



STATE OF VERMONT
 AGENCY OF TRANSPORTATION
 CONSTRUCTION AND
 MATERIALS BUREAU
 CENTRAL LABORATORY

BORING LOG

Orleans Village
 BF 0310(7)
 Bridge 108 VT-58

Boring No.: **B-201**

Page No.: 1 of 1

Pin No.: 13j084

Checked By: SPM

Boring Crew: Nieto, Judkins, Mazzei
 Date Started: 6/06/17 Date Finished: 6/07/17
 VTSPG NAD83: N 842596.69 ft E 1717588.81 ft
 Station: 41+83.03 Offset: 9.18
 Ground Elevation: 740.1 ft

Type: WB
 I.D.: 4 in
 Hammer Wt: N.A.
 Hammer Fall: N.A.
 Hammer/Rod Type: Auto/AWJ
 Rig: CME 45C SKID
 Sampler: SS
 1.5 in
 140 lb.
 30 in.
 CE = 1.42

Groundwater Observations		
Date	Depth (ft)	Notes
06/07/17		No W.T. Observed

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (ROD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Asphalt Pavement, 0.0 ft - 0.56 ft								
		A-1-b, GrSa, brn, Moist, Rec. = 0.7 ft				11-9-4-2 (13)	8.7	25.5	61.9	12.6
		A-2-4, GrSa, brn, Moist, Rec. = 0.9 ft				7-4-4-9 (8)	10.4	27.0	60.5	12.5
5		A-2-4, GrSa, brn, Moist, Rec. = 1.6 ft				5-4-2-2 (6)	8.0	28.1	60.1	11.8
		A-2-4, GrSa, brn, Moist, Rec. = 0.8 ft				2-2-2-3 (4)	6.0	21.1	65.9	13.0
		Field Note:, NXDC, cleaned out casing								
10		A-1-b, Sa, gry, Moist, Rec. = 0.1 ft				5-3-4-6 (7)	42.4	17.6	75.4	7.0
		Field Note:, NXDC, cleaned out casing								
		A-1-a, SaGr, brn-gry, Moist, Rec. = 0.3 ft, Lab Note: Pieces of metal were within sample				2-3-4-5 (7)	12.6	56.3	33.5	10.2
		Field Note:, NXDC, cleaned out casing								
15		A-1-a, SaGr, brn-Lt/brn, Moist, Rec. = 0.4 ft, Lab Note: Broken rock was within sample				15-8-R@5" (R)	11.3	62.3	30.6	7.1
		Field Note:, NXDC, cleaned out casing, Cobbles				R@0" (R)				
		Field Note:, No Recovery								
		Field Note:, NXDC, cleaned out casing, Cobbles								
		A-1-a, SaGr, gry, Moist, Rec. = 0.2 ft, Lab Note: Broken and weathered rock was within sample				R@2.5" (R)	7.5	65.7	20.6	13.7
		Field Note:, NXDC, cleaned out casing	1 (85)	76 (12.9)	5					
20		17.5 ft - 22.5 ft, Dark gray & black, PHYLLITE, with mineralization of sulfidic lenses and veining of calcium carbonate oriented into planar joints. Joint surfaces are crenulated with scallops of comingled sulfides and calcium carbonate, and stained with oxidation. Hard, Moderately weathered, Poor rock, NX, RMR=31			6					
		Field Note:, Seam encountered while coring			9					
					6					
					13					
25		22.5 ft - 26.5 ft, Dark gray & black, PHYLLITE, with mineralization of sulfidic lenses and thin veining of calcium carbonate oriented into the planar joints. Joint surfaces expose scallops of comingled sulfides and calcium carbonate, and stained with a bright orange oxidation. Hard, Slightly weathered, Fair rock, NX, RMR=46	2 (73)	95 (46.4)	4					
					5					
					6					
					7					
30		26.5 ft - 31.5 ft, Dark gray & black, Quartz and mica rich META-LIMESTONE, with planar joints and calcium carbonate veins that mimic foliation of micas. Hard, Unweathered, Good rock, NX, RMR=71	3 (70)	100 (86)	4					
					4					
					5					
					5					
					5					
		Hole stopped @ 31.5 ft								
		Remarks: 1. Field Note: Water return lost while coring rock at 26.0 feet and was not regained.								

Notes: 1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
 <<SUB>><<SUB>> is the hammer energy correction factor.
 3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.



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BORING LOG

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 Bridge 108 VT-58

Boring No.: B-202

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Pin No.: 13j084

Checked By: SPM

Boring Crew: Olden, Judkins, Mazzei

Date Started: 6/08/17 Date Finished: 6/09/17

VTSPG NAD83: N 842621.01 ft E 1717557.38 ft

Station: 41+64.86 Offset: -44.23

Ground Elevation: 740.3 ft

Type: WB SS
 I.D.: 4 in 1.5 in
 Hammer Wt: N.A. 140 lb.
 Hammer Fall: N.A. 30 in.
 Hammer/Rod Type: Auto/AWJ
 Rig: CME 45C SKID CE = 1.42

Groundwater Observations

Date	Depth (ft)	Notes
06/09/17	13.5	W.T. before drilling

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Asphalt Pavement, 0.0 ft - 0.6 ft								
		Gravel, 0.6 ft - 0.97 ft								
		Concrete, 0.97 ft - 1.5 ft								
		A-1-b, GrSa, brn, Moist, Rec. = 1.0 ft				3-2-1-1 (3)	12.7	23.4	67.2	9.4
5		A-2-4, Sa, brn, Moist, Rec. = 1.3 ft				2-1-1-1 (2)	10.2	16.0	73.2	10.8
		Field Note:, Rollercone, cleaned out casing								
		Field Note:, No Recovery				3-1-1-2 (2)				
		Field Note:, Rollercone, cleaned out casing								
		Field Note:, No Recovery				3-1-3-1 (4)				
10		A-4, SiSa, brn, Wet, Rec. = 1.0 ft				1-WH (0)	44.2	6.1	56.3	37.6
		A-4, SiSa, brn, Moist, Rec. = 0.4 ft					38.8	8.4	54.4	37.2
		A-1-a, SaGr, gry, Moist, Rec. = 0.5 ft, Lab Note: Broken and weathered rock was within casing				1-1-R@6" (R)	6.9	65.0	24.5	10.5
		Field Note:, NXDC, cleaned out casing								
15		14.0 ft - 15.0 ft, Dark gray & black, Quartz rich PHYLLITE, with mineralization of sulfidic lenses that are aligned into the orientation of planar joints. Joint faces are oxidized to a bright orange/pale yellow-green. Hard, Moderately weathered, Poor rock, NX, RMR=31	1 (60)	100 (0)	7					
			2 (60)	72.5 (46.6)	5					
		15.0 ft - 19.0 ft, Dark gray & black, Quartz rich PHYLLITE, with mineralization of sulfidic lenses that are aligned into the orientation of planar joints with quartz veins strewn throughout. Joint faces are oxidized to a bright orange/pale yellow-green. Hard, Moderately weathered, Fair rock, NX, RMR=46			5					
					6					
					11					
20		19.0 ft - 20.0 ft, Light gray-blue, Quartzose LIMESTONE, interbedded with <1 inch thick beds of phyllite bound by calcium carbonate. NX	3 (55)	86 (0)	5					
		20.0 ft - 24.0 ft, Dark gray & black, Quartz rich PHYLLITE, with mineralization of sulfidic lenses that are aligned into the orientation of planar joints. Hard, Moderately weathered, Poor rock, RMR=39			3					
					12					
					5					
					11					
25		Hole stopped @ 24.0 ft								
		Remarks: 1. Sample was attempted at 14.0 feet. No penetration, no recovery. 2. Hole was sealed with bentonite/portland cement grout.								

Notes: 1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
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 3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

BORING LOG 2 ORLEANS VILLAGE BF0310(7).GPJ VERMONT AOT 13.DJT 7/18/17