

 STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH SECTION SUBSURFACE INFORMATION		BORING LOG		Boring No.: B-102 Page No.: 1 of 3 Pln No.: 13J302 Checked By: MLM						
Boring Crew: <u>DAVISON, JUDKINS, HOOK</u> Date Started: <u>7/02/14</u> Date Finished: <u>7/17/14</u> VTSFG NAD83: <u>N 321165.60 ft E 1604160.35 ft</u> Station: <u>44+44</u> Offset: <u>-10.20</u> Ground Elevation: <u>929.5 ft</u>		Casing Sampler I.D.: <u>WB SS</u> 4 in 1.5 in Hammer Wt: <u>N.A.</u> <u>140 lb.</u> Hammer Fall: <u>N.A.</u> <u>30 In.</u> Hammer/Rod Type: <u>Auto/AWJ</u> Rlg: <u>CME 45C SKID</u> <u>C = 1.33</u>		Groundwater Observations Date Depth (ft) Notes 07/08/14 12.5 While drilling. 07/09/14 3.3 Before drilling. 07/15/14 10.1 While drilling.						
Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip-sep)	Core Rec. (ROD %)	Drill Rate (min/ft)	Blow#* (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
0		Asphalt Pavement, 0.0 ft - 0.64 ft								
0		A-1-b, GrSa, brn, Moist, Rec. = 0.7 ft, Lab Note: Broken Rock was within sample.				8-9-12-9 (20)	9.9	39.7	43.8	16.5
5		A-1-b, SiGrSa, brn, Moist, Rec. = 1.6 ft				5-5-4-4 (9)	8.8	33.1	46.3	20.6
5		A-1-b, SiGrSa, brn, Moist, Lab Note: Broken Rock was within sample.				4-11-4- (15)	9.8	35.3	42.5	22.2
10		Visual Description: Sandy Gravel with broken rock, gry, Moist, Rec. = 2 ft, Lab Note: Insufficient sample for testing.				11-6-2-2 (8)	27.7	0.8	56.8	42.4
10		A-4, SiSa, brn, Moist, Rec. = 1.5 ft				3-3-3-3 (6)	13.4	27.1	50.1	22.8
10		A-2-4, SiGrSa, brn, Moist, NXDC, Cleaned out casing.								
10		A-2-4, Sa, brn, MTW, Rec. = 0.25 ft				4-12-15-19 (27)	24.5	1.6	85.1	13.3
15		A-1-a, SaGr, brn-white, MTW, Rec. = 1.0 ft, Lab Note: Broken Rock was within sample, NXDC, Cleaned out casing.				25-25- (36)	11.8	49.5	38.8	11.7
15		Visual Description: Broken Rock, white, Dry, Rec. = 0.1 ft, NXDC, Cleaned out casing.				R@1.0* (83)				
15		Field Note: No Recovery, Appears to be GrSa				0-4-2-5-14 (67)				
20		A-2-4, Sa, brn, Moist, Rec. = 1.0 ft				15-11-8-10 (19)	24.9	1.0	84.0	15.0
20		Field Note: No Recovery				6-5-5-7 (10)				
25		A-2-4, Sa, brn, Moist, Rec. = 0.9 ft				3-5-6-5 (11)	23.1	0.2	84.6	15.2
30		A-2-4, SiSa, brn, MTW, Rec. = 1.0 ft				6-7-8-8 (15)	27.3	0.1	74.0	25.9
35		A-2-4, SiSa, brn, MTW, Rec. = 0.7 ft				8-6-6-8 (12)	26.6	0.1	74.0	25.9
40		A-2-4, SiSa, brn, Moist, Rec. = 0.7 ft				4-5-6-7 (11)	24.1		73.6	26.4
45		A-2-4, SiSa, brn, MTW, Rec. = 0.6 ft				4-6-7-8 (13)	29.5		75.4	24.6

Notes:
 1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
 2. N Values have not been corrected for hammer energy, C 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 Crew: <u>DAVISON, JUDKINS, HOOK</u> Date Started: <u>7/02/14</u> Date Finished: <u>7/17/14</u> VTSFG NAD83: <u>N 321165.60 ft E 1604160.35 ft</u> Station: <u>44+44</u> Offset: <u>-10.20</u> Ground Elevation: <u>929.5 ft</u>		Casing Sampler I.D.: <u>WB SS</u> 4 in 1.5 in Hammer Wt: <u>N.A.</u> <u>140 lb.</u> Hammer Fall: <u>N.A.</u> <u>30 In.</u> Hammer/Rod Type: <u>Auto/AWJ</u> Rlg: <u>CME 45C SKID</u> <u>C = 1.33</u>		Groundwater Observations Date Depth (ft) Notes 07/08/14 12.5 While drilling. 07/09/14 3.3 Before drilling. 07/15/14 10.1 While drilling.						
Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip-sep)	Core Rec. (ROD %)	Drill Rate (min/ft)	Blow#* (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
0		A-2-4, SiSa, brn, Moist, Rec. = 0.6 ft				5-6-7-8 (13)	27.5		73.4	26.6
55		Field Note: NXDC, Cleaned out casing.				3-6-8-8 (14)	28.6	0.1	74.9	25.0
60		A-2-4, SiSa, brn, Moist, Rec. = 0.7 ft				10-9-10-11 (19)	25.5	2.8	72.5	24.7
65		A-2-4, Sa, brn, Wet, Rec. = 0.5 ft				8-13-12-11 (25)	32.7	2.8	77.6	19.6
70		Field Note: No Recovery				6-9-10- (19)				
75		A-2-4, SiSa, brn, Moist, Rec. = 1.2 ft				6-12-15-19 (27)	24.1	2.8	73.4	23.8
80		A-2-4, SiSa, brn, Moist, Rec. = 0.8 ft				10-15-19-20 (34)	22.9	3.4	73.0	23.6
85		A-2-4, SiSa, brn, Moist, Rec. = 1.0 ft				11-15-19-21 (34)	24.1	0.7	73.1	26.2
90		A-2-4, SiSa, brn, Moist, Rec. = 0.8 ft				15-20-22-23 (42)	22.5	2.9	64.5	32.6

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Boring Crew: <u>DAVISON, JUDKINS, HOOK</u> Date Started: <u>7/02/14</u> Date Finished: <u>7/17/14</u> VTSFG NAD83: <u>N 321165.60 ft E 1604160.35 ft</u> Station: <u>44+44</u> Offset: <u>-10.20</u> Ground Elevation: <u>929.5 ft</u>		Casing Sampler I.D.: <u>WB SS</u> 4 in 1.5 in Hammer Wt: <u>N.A.</u> <u>140 lb.</u> Hammer Fall: <u>N.A.</u> <u>30 In.</u> Hammer/Rod Type: <u>Auto/AWJ</u> Rlg: <u>CME 45C SKID</u> <u>C = 1.33</u>		Groundwater Observations Date Depth (ft) Notes 07/08/14 12.5 While drilling. 07/09/14 3.3 Before drilling. 07/15/14 10.1 While drilling.								
Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip-sep)	Core Rec. (ROD %)	Drill Rate (min/ft)	Blow#* (N Value)	Moisture Content %	Gravel %	Sand %	Fines %		
0		A-2-4, SiSa, brn, Moist, Rec. = 0.5 ft				9-16-18-7 (34)			21.3	0.2	77.7	22.1
105		Field Note: NXDC, Cleaned out casing, Appears to be cobbles.										
105		Field Note: Went inside 4" casing with 3" casing.										
110		Field Note: BXDC, Cleaned out casing.										
110		Field Note: No Recovery, Appears to be a boulder.										
115												
120		Field Note: BXDC, Cleaned out casing.										
120		A-2-4, GrSiSa, Ltbrn-gry, Moist, Rec. = 0.1 ft										
125												
130		A-4, GrSaSl, gry, Moist, Rec. = 0.1 ft										
135		133.5 ft - 134.5 ft. Dark green, Amphibolite, Hard, Unweathered, Fair rock, BX, RMR=52 134.5 ft - 138.5 ft. Light gray to white, Gneissic hornblende-biotite Tonallite, closely spaced horizontal jointing, Hard, Unweathered, Fair rock, RMR=52	1 (2)	94 (0)	4 (4) 6 (4) 4							
140		138.5 ft - 143.5 ft. Light gray to white, Gneissic hornblende-biotite Tonallite, Hard, Unweathered, Good rock, BX, RMR=72	2 (7)	74 (60)	2 (3) 2 (3) 3							
145		Hole stopped @ 143.5 ft										

Remarks:
 1. Groundwater was noted by the drillers at 13.2 ft and 12.9 ft on 7/17/14 and 7/18/14, respectively.
 2. Hole collapsed at 13.0 ft.

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