

VTTrans		STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH SECTION SUBSURFACE INFORMATION		BORING LOG		Boring No.: B-102				
VTTrans		STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH SECTION SUBSURFACE INFORMATION		CAVENDISH BO 1442(38) TH-1 BR-58		Page No.: 1 of 3 Pln No.: 13J302 Checked By: MLM				
Boring Crew: <u>DAVISON, JUDKINS, HOOK</u>		Type: <u>WB SS</u>		Casing Sampler		Groundwater Observations				
Date Started: <u>7/02/14</u> Date Finished: <u>7/17/14</u>		I.D.: <u>4 in 1.5 in</u>		Date		Date				
VTSFG NAD83: <u>N 321165.60 ft E 1604160.35 ft</u>		Hammer Wt: <u>N.A. 140 lb.</u>		07/08/14		12.5 While drilling.				
Station: <u>44+44</u> Offset: <u>-10.20</u>		Hammer Fall: <u>N.A. 30 In.</u>		07/09/14		3.3 Before drilling.				
Ground Elevation: <u>929.5 ft</u>		Hammer/Rod Type: <u>Auto/AWJ</u>		07/15/14		10.1 While drilling.				
		Rlg: <u>CME 45C SKID</u>		C = <u>1.33</u>						
Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip-sep)	Core Rec. % (ROD %)	Drill Rate (min/feet)	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		Field Note: NXDC, Cleaned out casing.				R@0.10* (83)				
15		Visual Description: Broken Rock, white, Dry, Rec. = 0.1 ft, NXDC, Cleaned out casing.				0-4-2-5-14 (67)				
15		Field Note: No Recovery, Appears to be GrSa				15-11-8-10 (19)	24.9	1.0	84.0	15.0
20		A-2-4, Sa, brn, Moist, Rec. = 1.0 ft				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
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>		Type: <u>WB SS</u>		Casing Sampler		Groundwater Observations				
Date Started: <u>7/02/14</u> Date Finished: <u>7/17/14</u>		I.D.: <u>4 in 1.5 in</u>		Date		Date				
VTSFG NAD83: <u>N 321165.60 ft E 1604160.35 ft</u>		Hammer Wt: <u>N.A. 140 lb.</u>		07/08/14		12.5 While drilling.				
Station: <u>44+44</u> Offset: <u>-10.20</u>		Hammer Fall: <u>N.A. 30 In.</u>		07/09/14		3.3 Before drilling.				
Ground Elevation: <u>929.5 ft</u>		Hammer/Rod Type: <u>Auto/AWJ</u>		07/15/14		10.1 While drilling.				
		Rlg: <u>CME 45C SKID</u>		C = <u>1.33</u>						
Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip-sep)	Core Rec. % (ROD %)	Drill Rate (min/feet)	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
95										
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Ground Elevation: <u>929.5 ft</u>		Hammer/Rod Type: <u>Auto/AWJ</u>		07/15/14		10.1 While drilling.				
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Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip-sep)	Core Rec. % (ROD %)	Drill Rate (min/feet)	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.								R@0.0" (R)
120		Field Note: BXDC, Cleaned out casing.								
120		A-2-4, GrSiSa, Ltbrn-gry, Moist, Rec. = 0.1 ft								R@0.5" (R)
125										11.4 23.5 47.3 29.2
130		A-4, GrSaSl, gry, Moist, Rec. = 0.1 ft								R@0.5" (R)
135		133.5 ft - 134.5 ft. Dark green, Amphibolite, Hard, Unweathered, Fair rock, BX, RMR=52								1 94 4 4
135		134.5 ft - 138.5 ft. Light gray to white, Gneissic hornblende-biotite Tonallite, closely spaced horizontal jointing, Hard, Unweathered, Fair rock, RMR=52								(2) (0) 4 6 6 4
140		138.5 ft - 143.5 ft. Light gray to white, Gneissic hornblende-biotite Tonallite, Hard, Unweathered, Good rock, BX, RMR=72								2 74 2 2
140										(2) (60) 3 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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