



STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING LOG

RUTLAND CITY
BRF 3000(19)
TH-10 BR-17

Boring No.: B-102
Page No.: 1 of 2
Pin No.: 08J096
Checked By: CAA

Boring Crew: PORTER, GARROW
Date Started: 6/02/10 Date Finished: 6/08/10
VTSPG NAD83: N 402124.63 ft E 1507177.59 ft
Station: 7+53 Offset: 11.50
Ground Elevation: 515.4 ft

Casing Sampler
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 55 TRACK CE = 1.46

Groundwater Observations		
Date	Depth (ft)	Notes
06/03/10	7.6	Prior to drilling.

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 %	
		A-4, SaSi, Dk/brn, Moist, Rec. = 0.5 ft				4-4-7-9 (11)	27.2	13.0	43.4	43.6
		A-1-a, SaGr, brn, Moist, Rec. = 0.7 ft, Some broken rock (Marble) was within sample.				4-7-12-17 (19)	8.9	55.0	35.6	9.4
		A-1-b, SaGr, brn-white, Moist, Rec. = 1.0 ft, Lots of broken pieces of Marble rock were within sample.				20-7-3-3 (10)				
5		Visual Classification, Broken Marble rock pieces, white, Moist, Rec. = 0.5 ft								
		A-4, SiSa, brn, MTW, Rec. = 1.1 ft				4-1-1-1 (2)	35.1	0.1	60.6	39.3
		A-4, SiSa, brn, MTW, Rec. = 1.5 ft				1-1-1-1 (2)	32.3		50.5	49.5
10		A-2-4, SiGrSa, brn, MTW, Rec. = 1.1 ft				WH-3-6-12 (9)	19.9	32.5	40.4	27.1
		A-1-b, SaGr, gry, Wet, Rec. = 0.7 ft, Broken rock was within sample.				14-13-10-10 (23)	8.6	52.1	29.2	18.7
15		A-1-b, SaGr, gry, Wet, Rec. = 0.9 ft				13-13-14-19 (27)	12.4	55.7	25.9	18.4
		Visual Classification, Broken rock (Quartzite) pieces, gry, Moist, Rec. = 0.3 ft				10-9-9-9 (18)				
		Visual Classification, Broken rock (Quartzite) pieces, gry, Moist, Rec. = 0.3 ft				9-13-14-20 (27)				
20		NXDC, Boulder, 21.5 ft - 23.0 ft								
		A-1-a, SaGr, gry, Moist, Rec. = 0.3 ft, Broken rock (Quartzite) pieces were within sample.				15-R/6" (R)	7.9	62.3	23.5	14.2
25		NXDC, Cobbles, 26.7 ft - 28.0 ft								
		A-1-b, SaGr, gry, Moist, Rec. = 0.8 ft				6-30-30-30 (60)	7.3	55.6	26.1	18.3
30		NXDC, Cobbles, 32.0 ft - 33.0 ft								
		A-1-b, GrSa, gry, Moist, Rec. = 1.2 ft				20-47-R/6" (R)	12.9	43.2	45.7	11.1
35		NXDC, Cobbles, 37.0 ft - 38.0 ft								
		A-1-b, GrSa, gry-brn, Moist, Rec. = 1.0 ft				23-R/6" (R)	11.4	41.5	43.3	15.2

Notes: 1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. CE is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

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						Moisture Content %	Gravel %	Sand %	Fines %	
		NXDC, 3"+ Gravel, 42.0 ft - 43.0 ft								
		A-1-b, SiGrSa, gry, Wet, Rec. = 1.2 ft								
45		Visual Classification, Broken Marble rock pieces, white, Moist, Rec. = 0.5 ft								
		NXDC, 3"+ Gravel, 47.0 ft - 49.0 ft								
		A-4, GrSaSi (HP), gry, Moist, Rec. = 1.0 ft								
50		NXDC, Cored ahead and cleaned out casing, 50.0 ft - 53.0 ft								
		A-4, SaGrSi (HP), gry-blk, Moist, Rec. = 1.0 ft								
55		Cored ahead, 54.0 ft - 58.0 ft								
		Field Note: No Recovery								
		NXDC, Cobbles, 58.3 ft - 63.0 ft, Advanced casing to 63.0 feet.								
60		Field Note: NXDC, Possible Bedrock								
65		65.0 ft - 70.0 ft, Light gray, Quartzite, with closely spaced iron stained jointing. Highly broken up from 68.0-69.3 feet. Very hard, Moderately weathered, Fair rock, NXMDC	1 (?)	100 (6)	10					
		Top of Bedrock @ 65.0 ft								
70		70.0 ft - 75.0 ft, Light gray, Quartzite, with closely spaced iron stained jointing. Gray severely weathered Phyllite from 72.2-73.3 feet. Very hard, Moderately weathered, Fair rock, NXMDC	2 (?)	100 (27)	6					
					7					
					7					
					8					
					8					
75		Hole stopped @ 75.0 ft								

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