



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

BORING LOG

WATERBURY
IM 089-2(43)
EXIT #10 NB OFF RAMP-A BR-47

Boring No.: B-107
Page No.: 1 of 1
Pin No.: 10A076
Checked By: CEE

Boring Crew: GARROW, WERNER, PORTER
Date Started: 3/23/11 Date Finished: 3/30/11
VTSPG NAD83: N 671488.32 ft E 1575297.66 ft
Station: 107+83.71 Offset: -22.18
Ground Elevation: 473.44 ft

Casing Type: WB
Sampler Type: 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 = 1.33

Groundwater Observations		
Date	Depth (ft)	Notes
03/30/11	47.7	After 24 hr.

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 %
0.0 - 0.5		Asphalt Pavement, 0.0 ft - 0.5 ft								
0.5 - 1.15		Concrete, 0.5 ft - 1.15 ft								
1.15 - 3.0		3 inch minus rock, 1.65 ft - 3.0 ft								
3.0 - 10.0		A-1-b, SiSaGr, gry, Wet, Rec. = 0.6 ft, Rock Fill was within sample.				13-11-8-8 (19)	15.7	49.0	27.3	23.7
10.0 - 20.0		A-1-a, SaGr, gry, Wet, Rec. = 0.5 ft, Rock Fill was within sample.				1-5-9-22 (14)	12.0	61.1	24.5	14.4
20.0 - 30.0		A-1-a, SaGr, gry, Wet, Rec. = 0.8 ft, Rock Fill was within sample.				3-14-18-21 (32)	8.7	59.9	25.3	14.8
30.0 - 40.0		A-1-a, SaGr, gry, Wet, Rec. = 1.0 ft, Rock Fill was within sample.				17-23-37-38 (60)	8.7	56.3	29.2	14.5
40.0 - 45.0		Visual Classification, GrSa (Rock Fill), gry, Wet, Rec. = 0.2 ft, Insufficient sample for testing. No blow counts due to hammer not operating properly.					15.7			
45.0 - 50.0		A-1-a, SaGr, gry, Wet, Rec. = 0.5 ft, Sample was mostly Rock Fill.				40-58-R (R)	8.4	64.4	21.7	13.9
50.0 - 55.0		A-1-b, SiGrSa, brn, Moist, Rec. = 0.8 ft, Chunks of wood were within sample.				14-42-53-R (R)	11.4	35.0	40.9	24.1
55.0 - 60.0		A-2-4, SiGrSa, gry, Moist, Rec. = 1.1 ft				14-25-45-39 (70)	10.1	33.2	36.8	30.0
60.0 - 65.0		A-1-b, SaGr, gry, Moist, Rec. = 0.8 ft				25-20-23-36 (43)	13.7	47.8	34.7	17.5
65.0 - 70.0		A-4, Si, brn, Wet, Rec. = 0.4 ft				29-59-R (R)	27.4	4.5	9.8	85.7
70.0 - 75.0		A-4, Si, gry, Wet, Rec. = 1.5 ft				2-3-4-8 (7)	31.0		3.5	96.5
75.0 - 80.0		A-4, Si, gry, Wet, Rec. = 1.1 ft				4-20-41-10 (61)	28.3	3.8	6.7	89.5
80.0 - 85.0		A-4, Si, gry, Wet, Rec. = 1.4 ft, Advanced casing to 70.5 feet. Used the manual hammer for blow counts. Manual hammer correction: 1.15				5-4-7-15 (11)	33.1	0.7	4.1	95.2
85.0 - 86.7		69.7 ft - 72.7 ft, Light gray, Quartz-sericite-chlorite Phyllitic Schist, Moderately hard, Unweathered, Fair rock, NXMDC	1 (65)	67 (0)	10 (14)					
86.7 - 87.7		72.7 ft - 77.7 ft, Same as Run #1. Moderately hard, Unweathered, Fair rock, NXMDC, Low RQD value may be due to mechanical breakage during drilling.	2 (65)	94 (36)	20 (15)					
87.7 - 89.7		77.7 ft - 79.7 ft, Same as Run #1. Moderately hard, Unweathered, Good rock, NXMDC	3 (65)	100 (85)	8 (7)					
89.7 - 90.0		Hole stopped @ 79.7 ft			8 (12)					

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.

BORING LOG 2 WATERBURY IM 089-2(43).GPJ VERMONT AOT.GDT 4/13/11