

ESTIMATED MIN. PILE TIP
EL. 471.00

BORING LOG		Boring No.: B-101	
RUTLAND CITY BRF 3000(19) TH-10 BR-17		Page No.: 1 of 1	
STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH SECTION SUBSURFACE INFORMATION		Pin No.: 08J096	
Checked By: CAA		Checked By: CAA	
Boring Crew: PORTER, GARROW, WELLS		Type: Casing Sampler	
Date Started: 5/27/10 Date Finished: 6/02/10		I.D.: 4 in 1.5 in	
VTSPG NAD83: N 402148.07 ft E 1507184.27 ft		Hammer Wt: N.A. 140 lb	
Station: 7+45 Offset: -11.50		Hammer Fall: N.A. 30 in	
Ground Elevation: 517.0 ft		Hammer/Rod Type: Auto/AWJ	
		Rig: CME 55 TRACK C _u = 1.46	
Groundwater Observations		Date	
Date		Depth (ft)	
06/01/10		7.9	
Notes		Prior to drilling.	
CLASSIFICATION OF MATERIALS (Description)		Blow/ft (N Value)	
Date		Moisture Content %	
Gravel %		Sand %	
Fines %			
0-4	A-1-b, SaGr, brn, Moist, Rec. = 0.7 ft, Broken rock was within sample.	WH-4-6 (4)	16.5
4-7	A-1-b, SaGr, white, Moist, Rec. = 0.8 ft, Sample was mostly broken rock (Marble).	10-4-7-10 (11)	12.1
7-9	A-1-a, SaGr, brn, Moist, Rec. = 0.9 ft, Concrete & Broken rock (Quartzite) were within sample.	5-5-4-4 (9)	17.6
9-10	A-2-4, SiSa, brn, MTW, Rec. = 0.5 ft	4-2-2-3 (4)	29.8
10-11	A-4, SaSi, brn-gry, MTW, Rec. = 1.3 ft	2-1-1-2 (2)	31.0
11-12	A-4, SiSa, brn-gry, MTW, Rec. = 1.7 ft, A small amount of decayed wood pieces were within sample.	1-1-1-1 (2)	37.7
12-13	A-4, SaSi, gry, MTW, Rec. = 1.3 ft, A small amount of decayed wood pieces were within sample.	WH-8-10-18 (18)	31.1
13-14	Field Note: NXDC, Cobbles		
14-15	A-2-4, SiGrSa, gry, Moist, Rec. = 1.0 ft	6-8-8-18 (16)	13.2
15-16	Field Note: NXDC, Cobbles		
16-17	Field Note: NXDC, Cobbles, Cleaned out casing.		
17-18	Field Note: No recovery, Appears to be Broken Rock		
18-19	Field Note: Boulder		
19-20	Field Note: NXDC, Advanced casing to 28.0 ft., Cleaned out casing.		
20-21	A-2-4, SiSa, brn, Moist, Rec. = 1.4 ft	4-22-32-36 (54)	18.5
21-22	A-1-b, SiSaGr, gry, MTW, Rec. = 0.9 ft, Broken rock was within sample.	18-39-40-R(1.5) (73)	9.2
22-23	Field Note: Advanced and cleaned out casing		
23-24	A-4, SaSi, gry, Moist, Rec. = 1.5 ft	20-24-45-50 (69)	16.3
24-25	Hole stopped @ 40.0 ft Casing broke off at 35.0 ft.		

BORING LOG 2 RUTLAND CITY BRF 3000(19) G.P.J. VERMONT AOT.GDT. 11/30/10

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_u 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.

ESTIMATED MIN. PILE TIP
EL. 471.00

BORING LOG		Boring No.: B-101A	
RUTLAND CITY BRF 3000(19) TH-10 BR-17		Page No.: 1 of 1	
STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH SECTION SUBSURFACE INFORMATION		Pin No.: 08J096	
Checked By: CAA		Checked By: CAA	
Boring Crew: PORTER, GARROW		Type: Casing Sampler	
Date Started: 6/08/10 Date Finished: 6/09/10		I.D.: 4 in 1.5 in	
VTSPG NAD83: N 402151.03 ft E 1507180.17 ft		Hammer Wt: N.A. 140 lb	
Station: 7+40 Offset: -11.50		Hammer Fall: N.A. 30 in	
Ground Elevation: 517.5 ft		Hammer/Rod Type: Auto/AWJ	
		Rig: CME 55 TRACK C _u = 1.46	
Groundwater Observations		Date	
Date		Depth (ft)	
06/09/10		8.0	
Notes		Prior to drilling.	
CLASSIFICATION OF MATERIALS (Description)		Run (Dip deg.)	
Date		Core Rec. % (RCD %)	
Drill Rate (min/ft)		Blow/ft (N Value)	
Moisture Content %		Gravel %	
Sand %		Fines %	
0-10	NXDC, 0.0 ft - 11.0 ft, Advanced and cleaned out casing.		
10-11	NXDC, 11.0 ft - 12.0 ft, Cobbles		
11-12	NXDC, 12.0 ft - 16.5 ft, Advanced and cleaned out casing.		
12-13	NXDC, 16.5 ft - 18.0 ft, Cobbles		
13-14	NXDC, 18.0 ft - 21.0 ft, Advanced and cleaned out casing.		
14-15	NXDC, 21.0 ft - 23.0 ft, Cobbles		
15-16	NXDC, 23.0 ft - 41.8 ft, Advanced and cleaned out casing.		
16-17	NXDC, 41.8 ft - 43.0 ft, Cobbles		
17-18	Visual Classification, SiSa (HP), gry, Moist, Rec. = 0.3 ft, Insufficient sample for testing.	R/4.5 (R)	
18-19	NXDC, 47.0 ft - 50.0 ft, Cleaned out casing.		
19-20	A-4, SaGrSi (HP), gry, Moist, Rec. = 0.7 ft	45-R/3.5 (R)	9.5
20-21	NXDC, Cobbles, 51.5 ft - 53.0 ft, Cleaned out casing.		
21-22	NXDC, (HP), 53.0 ft - 54.0 ft		
22-23	Boulder, 54.0 ft - 55.0 ft		
23-24	A-4, GrSi (HP), gry, Moist, Sample from NXMDC core.		
24-25	58.0 ft - 63.0 ft, Light gray, Quartzite, with closely spaced iron stained jointing. Very hard, Moderately weathered, Fair rock, NXMDC	1 (?)	100 (14)
25-26	63.0 ft - 68.0 ft, Same as Run #1, NXMDC	2 (?)	100 (32)
26-27	Hole stopped @ 68.0 ft		

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BOTTOM OF ABUT. 1
FOOTING EL. 511.00

BORING LOG		Boring No.: B-102	
RUTLAND CITY BRF 3000(19) TH-10 BR-17		Page No.: 1 of 2	
STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH SECTION SUBSURFACE INFORMATION		Pin No.: 08J096	
Checked By: CAA		Checked By: CAA	
Boring Crew: PORTER, GARROW		Type: Casing Sampler	
Date Started: 6/02/10 Date Finished: 6/08/10		I.D.: 4 in 1.5 in	
VTSPG NAD83: N 402124.63 ft E 1507177.59 ft		Hammer Wt: N.A. 140 lb	
Station: 7+53 Offset: -11.50		Hammer Fall: N.A. 30 in	
Ground Elevation: 515.4 ft		Hammer/Rod Type: Auto/AWJ	
		Rig: CME 55 TRACK C _u = 1.46	
Groundwater Observations		Date	
Date		Depth (ft)	
06/03/10		7.6	
Notes		Prior to drilling.	
CLASSIFICATION OF MATERIALS (Description)		Run (Dip deg.)	
Date		Core Rec. % (RCD %)	
Drill Rate (min/ft)		Blow/ft (N Value)	
Moisture Content %		Gravel %	
Sand %		Fines %	
0-1	A-4, SaSi, Dk/brn, Moist, Rec. = 0.5 ft	4-4-7-9 (11)	27.2
1-2	A-1-a, SaGr, brn, Moist, Rec. = 0.7 ft, Some broken rock (Marble) was within sample.	2.5	62.6
2-3	A-1-b, SaGr, brn-white, Moist, Rec. = 1.0 ft, Lots of broken pieces of Marble rock were within sample.	4-7-12-17 (19)	8.9
3-4	Visual Classification, Broken Marble rock pieces, white, Moist, Rec. = 0.5 ft	20-7-3-3 (10)	
4-5	A-4, SiSa, brn, MTW, Rec. = 1.1 ft	4-1-1-1 (2)	35.1
5-6	A-4, SiSa, brn, MTW, Rec. = 1.5 ft	1-1-1-1 (2)	32.3
6-7	A-2-4, SiGrSa, brn, MTW, Rec. = 1.1 ft	WH-3-6-12 (9)	19.9
7-8	A-1-b, SaGr, gry, Wet, Rec. = 0.7 ft, Broken rock was within sample.	14-13-13-10 (23)	8.6
8-9	A-1-b, SaGr, gry, Wet, Rec. = 0.9 ft	13-13-14-19 (27)	12.4
9-10	Visual Classification, Broken rock (Quartzite) pieces, gry, Moist, Rec. = 0.3 ft	10-9-9-9 (18)	
10-11	Visual Classification, Broken rock (Quartzite) pieces, gry, Moist, Rec. = 0.3 ft	9-13-14-20 (27)	
11-12	NXDC, Boulder, 21.5 ft - 23.0 ft		
12-13	A-1-a, SaGr, gry, Moist, Rec. = 0.3 ft, Broken rock (Quartzite) pieces were within sample.	15-R/6 (R)	7.9
13-14	NXDC, Cobbles, 26.7 ft - 28.0 ft		
14-15	A-1-b, SaGr, gry, Moist, Rec. = 0.8 ft	6-30-30-30 (60)	7.3
15-16	NXDC, Cobbles, 32.0 ft - 33.0 ft		
16-17	A-1-b, GrSa, gry, Moist, Rec. = 1.2 ft	20-47-R/6 (R)	12.9
17-18	NXDC, Cobbles, 37.0 ft - 38.0 ft		
18-19	A-1-b, GrSa, gry-brn, Moist, Rec. = 1.0 ft	23-R/6 (R)	11.4

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BORING LOG SHEET #1	PROJECT NAME: RUTLAND CITY	PLOT DATE: 6/30/2014
	PROJECT NUMBER: BRF 3000 (19)	DRAWN BY: D.M.D.
	PROJECT LEADER: M.D.S.	CHECKED BY: P.M.P.
	DESIGNED BY: D.M.D.	SHEET 55 OF 245
	DWG. NO.:	