



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

BORING LOG

RUTLAND CITY  
BRF 3000(18)  
TH-13 BR-14

Boring No.: B-101  
Page No.: 1 of 1  
Pin No.: 96J244  
Checked By: CEE

Boring Crew: GARROW, SALISBURY  
Date Started: 8/09/12 Date Finished: 8/10/12  
VTSPG NAD83: N 399164.67 ft E 1512913.26 ft  
Station: 3+42 Offset: -16.00  
Ground Elevation: 528.65 ft

Casing: WB  
Sampler: 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 TRACK CE = 1.34

Groundwater Observations

Date	Depth (ft)	Notes
08/10/12	7.0	Seated in Bedrock.

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 %	LL %	PI %	
10	[Pattern]	A-1-b, SaGr, brn, Moist, Rec. = 0.8 ft, Roots & Leaves were within sample.				1-1-2-6 (3)	15.7	46.1	37.1	16.8			
		A-4, GrSaSi, brn, Moist, Rec. = 1.0 ft, Some Asphalt Pavement was within sample.				6-6-3-4 (9)	17.3	27.6	35.1	37.3			
		A-2-4, SiSa, brn, Wet, Rec. = 0.3 ft				2-2-1-2 (3)	25.5	2.2	75.5	22.3			
		A-2-4, SiGrSa, brn, Wet, Rec. = 0.8 ft				2-1-1-1 (2)	31.9	23.3	54.7	22.0			
		A-2-4, Sa, brn, Wet, Rec. = 0.4 ft, Sticks & Wood were within sample.				1-1-1-1 (2)	40.1	0.8	81.4	17.8			
		A-2-4, SiSa, brn, Wet, Rec. = 0.4 ft, Pieces of Wood were within sample.				1-1-1-1 (2)	53.0	10.6	55.4	34.0			
		A-4, CISi, gry, Wet, Rec. = 2.0 ft				1-1-WH-WH (1)	40.8		0.2	99.8	36	8	
		Visual Description: CISi, gry, Wet, Rec. = 2.0 ft, Material similar to 12-14 ft.				WR-WR-WH-WH (WH)	41.4						
		A-6, SiCl, gry, Wet, Rec. = 2.0 ft				WR-WR-WH-WH (WH)	40.6		0.2	99.8	36	11	
		Visual Description: SiCl, gry, Wet, Rec. = 2.0 ft, Material similar to 16-18 ft.				(WH)	40.5						
20	[Pattern]	Visual Description: SiCl, gry, Wet, Rec. = 2.0 ft, Material similar to 16-18 ft.				(WH)	40.0						
		Visual Description: SiCl, gry, Wet, Rec. = 2.0 ft, Material similar to 16-18 ft.				(WH)	43.9						
		Visual Description: SiCl, gry, Wet, Rec. = 2.0 ft, Material similar to 24-26 ft.				(WH)	46.5		0.3	99.7	40	12	
		A-6, SiCl, gry, Wet, Rec. = 2.0 ft				(WH)							
30	[Pattern]	A-4, Si, gry, Wet, Rec. = 1.2 ft				WH-WH-1-1 (1)	34.9		7.4	92.6			
		A-6, SiCl, gry, Wet, Rec. = 2.0 ft				WR-WR-WH-WH (WH)	47.1		1.9	98.1	40	14	
40	[Pattern]	A-4, Si, gry, MTW, Rec. = 0.5 ft				1-2-2-2 (4)	39.4		1.0	99.0			
		A-4, Si, gry, Wet, Rec. = 1.4 ft, Lab Note: Broken Rock was within sample.				2-3-2-2 (5)	30.9	7.4	1.7	90.9			
50	[Pattern]	Field Note: BXDC, Cobbles, Fractured Rock											
		Field Note: Incompetent Fractured Rock											
60	[Pattern]	52.0 ft - 57.0 ft, Light gray, Dolomite, with closely spaced jointing. Moderately hard, Unweathered, Poor rock, BXGDC, RMR = 38	1 (NA)	70 (0)	3								
		57.0 ft - 58.0 ft, BXGDC, No Recovery. Drillers reported as "Seam".	2 (NA)	0 (0)	3								
		58.0 ft - 63.0 ft, Light gray, Dolomite, with closely spaced jointing. Moderately hard, Unweathered, Poor rock, BXGDC, RMR = 38	3 (NA)	58 (0)	3								
		Hole stopped @ 63.0 ft											

Top of Bedrock @ 52.0 ft

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 RUTLAND CITY BRF 3000(18).CPJ VERMONT AOT.GDT 9/10/12



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BORING LOG

RUTLAND CITY  
BRF 3000(18)  
TH-13 BR-14

Boring No.: B-102

Page No.: 1 of 1

Pin No.: 96J244

Checked By: CEE

Boring Crew: GARROW, SALISBURY  
Date Started: 8/08/12 Date Finished: 8/09/12  
VTSPG NAD83: N 399225.08 ft E 1512923.07 ft  
Station: 3+92 Offset: 17.00  
Ground Elevation: 529.71 ft

Casing: WB  
Sampler: SS  
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 45C TRACK CE = 1.34

Groundwater Observations

Date	Depth (ft)	Notes
08/09/12	6.1	Seated in Bedrock.

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 %	LL %	PI %		
10	[Diagonal Hatching]	A-4, SaSi, brn, Moist, Rec. = 0.8 ft, Roots & Leaves were within sample.				1-3-2-3 (5)	35.3	13.6	36.7	49.7				
		A-4, SaSi, brn, Moist, Rec. = 0.2 ft				2-1-1-1 (2)	31.2	12.2	37.4	50.4				
		Visual Description:., Cisi, gry-brn, Moist, Rec. = 1.3 ft, Material similar to 8-10 ft.				2-2-2-1 (3)	36.3							
		Visual Description:., Cisi, gry, Moist, Rec. = 1.3 ft, Material similar to 8-10 ft.				WH-WH-2-1 (2)	38.0							
		A-4, Cisi, gry, MTW, Rec. = 2.0 ft				WH-WH-2-1 (2)	40.4	0.4	99.6	34	7			
		Visual Description:., SiCl, gry, Wet, Rec. = 2.0 ft, Material similar to 12-14 ft.				(2)	39.2							
		A-6, SiCl, gry, Wet, Rec. = 2.0 ft				(WR)	39.3	0.3	99.7	36	11			
		Visual Description:., SiCl, gry, Wet, Rec. = 1.8 ft, Material similar to 12-14 ft.				(WH)	40.7							
		Visual Description:., SiCl, gry, Wet, Rec. = 2.0 ft, Material similar to 18-20 ft.				(WH)	38.8							
		A-6, SiCl, gry, Wet, Rec. = 2.0 ft				(WR)	39.2	0.3	99.7	35	11			
20	[Diagonal Hatching]	Visual Description:., SiCl, gry, Wet, Rec. = 2.0 ft, Material similar to 18-20 ft.				(WH)	38.0							
		A-6, SiCl, gry, Wet, Rec. = 2.0 ft				(WR)	46.6	0.2	99.8	40	14			
		Visual Description:., SiCl, gry, Wet, Rec. = 2.0 ft, Material similar to 22-24 ft.				(WR)	46.6							
		A-4, Si, gry, Wet, Rec. = 2.0 ft				(WR)	39.1	1.5	98.5					
		A-4, Si, gry, Wet, Rec. = 2.0 ft												
		A-4, Si, gry, Wet, Rec. = 2.0 ft												
		A-4, Si, gry, Wet, Rec. = 2.0 ft												
		A-4, Si, gry, Wet, Rec. = 2.0 ft												
		A-4, Si, gry, Wet, Rec. = 2.0 ft												
		A-4, Si, gry, Wet, Rec. = 2.0 ft												
30	[Diagonal Hatching]	A-4, Si, gry, Wet, Rec. = 2.0 ft				WH-WH-2-2 (2)	37.3	0.6	99.4					
		A-4, Si, gry, Wet, Rec. = 2.0 ft				1-1-1-1 (2)	40.4	1.1	98.9					
		A-4, SiGr, gry, Wet, Rec. = 0.8 ft, Broken Rock was within sample.				1-13-15-18 (28)	15.6	44.4	14.8	40.8				
		Field Note:., BXDC, Incompetent Fractured Rock												
		47.0 ft - 52.0 ft, Light gray, Dolomite, with closely spaced jointing. Moderately hard, Unweathered, Poor rock, BXMDC, RMR = 38	1 (NA)	100 (20)	2 3 3 4 4									
		52.0 ft - 57.0 ft, Light gray, Dolomite, with closely spaced jointing. Moderately hard, Unweathered, Poor rock, BXGDC, RMR = 38	2 (NA)	42 (0)	4 7 6 6 6									
		Hole stopped @ 57.0 ft												
		Top of Bedrock @ 47.0 ft												

Notes: 1. Stratification lines represent approximate boundary between material types. Transition may be gradual.  
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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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