



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

BORING LOG

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 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 45C TRACK CE = 1.34

Groundwater Observations  
Date Depth 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 (min/ft)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
0-0.8	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		
0.8-1.0	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		
1.0-1.3	A-2-4	SiSa, brn, Wet, Rec. = 0.3 ft				2-2-1-2 (5)	25.5	2.2	75.5	22.3		
1.3-1.8	A-2-4	SiGrSa, brn, Wet, Rec. = 0.8 ft				2-1-1-1 (2)	31.9	23.3	54.7	22.0		
1.8-2.2	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		
2.2-2.6	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		
2.6-3.0	A-4	CISi, gry, Wet, Rec. = 2.0 ft				1-1-WH (1)	40.8		0.2	99.8	36	8
3.0-4.0		Visual Description: CISi, gry, Wet, Rec. = 2.0 ft, Material similar to 12-14 ft.				WR-WR (1)	41.4					
4.0-6.0	A-6	SICl, gry, Wet, Rec. = 2.0 ft				WH-WH (WH)	40.6	0.2	99.8	36	11	
6.0-16.0		Visual Description: SICl, gry, Wet, Rec. = 2.0 ft, Material similar to 16-18 ft.				(WH)	40.5					
16.0-24.0		Visual Description: SICl, gry, Wet, Rec. = 2.0 ft, Material similar to 16-18 ft.				(WH)	40.0					
24.0-26.0		Visual Description: SICl, gry, Wet, Rec. = 2.0 ft, Material similar to 24-26 ft.				(WH)	43.9					
26.0-30.0	A-6	SICl, gry, Wet, Rec. = 2.0 ft				(WH)	46.5	0.3	99.7	40	12	
30.0-32.0	A-4	Si, gry, Wet, Rec. = 1.2 ft				WH-WH-1-1 (1)	34.9	7.4	92.6			
32.0-34.0	A-6	SICl, gry, Wet, Rec. = 2.0 ft				WR-WR-WH-WH (WH)	47.1	1.9	98.1	40	14	
34.0-40.0	A-4	Si, gry, MTW, Rec. = 0.5 ft				1-2-2-2 (4)	39.4	1.0	99.0			
40.0-44.0	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		
44.0-50.0		Field Note: BXDC, Cobbles, Fractured Rock										
50.0-52.0		Field Note: Incompetent Fractured Rock										
52.0-57.0		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							
57.0-58.0		57.0 ft - 58.0 ft, BXGDC, No Recovery. Drillers reported as "Seam".	2 (NA)	0 (0)	3							
58.0-63.0		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							
63.0-66.0					6							
66.0-68.0					6							
68.0-70.0					8							

BOTTOM CAP  
ELEV. 523.00

EST. PILE TIP  
ELEV. 472.00

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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BORING LOG

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 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 45C TRACK CE = 1.34

Groundwater Observations  
Date Depth 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 (min/ft)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
0-0.8	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		
0.8-1.0	A-4	SaSi, brn, Moist, Rec. = 0.2 ft				2-1-1-1 (2)	31.2	12.2	37.4	50.4		
1.0-1.3		Visual Description: CISi, gry-brn, Moist, Rec. = 1.3 ft, Material similar to 8-10 ft.				2-2-2-1 (3)	36.3					
1.3-1.8		Visual Description: CISi, gry, Moist, Rec. = 1.3 ft, Material similar to 8-10 ft.				WH-WH-2-1 (2)	38.0					
1.8-2.0	A-4	CISi, gry, MTW, Rec. = 2.0 ft				WH-WH-2-1 (2)	40.4	0.4	99.6	34	7	
2.0-2.2		Visual Description: SICl, gry, Wet, Rec. = 2.0 ft, Material similar to 12-14 ft.				(WR)	39.2					
2.2-2.6	A-6	SICl, gry, Wet, Rec. = 2.0 ft				(WH)	39.3	0.3	99.7	36	11	
2.6-3.0		Visual Description: SICl, gry, Wet, Rec. = 1.8 ft, Material similar to 12-14 ft.				(WH)	40.7					
3.0-4.0		Visual Description: SICl, gry, Wet, Rec. = 2.0 ft, Material similar to 18-20 ft.				(WR)	38.8					
4.0-6.0	A-6	SICl, gry, Wet, Rec. = 2.0 ft				(WR)	39.2	0.3	99.7	35	11	
6.0-18.0		Visual Description: SICl, gry, Wet, Rec. = 2.0 ft, Material similar to 18-20 ft.				(WH)	38.0					
18.0-22.0	A-6	SICl, gry, Wet, Rec. = 2.0 ft				(WR)	46.6	0.2	99.8	40	14	
22.0-24.0		Visual Description: SICl, gry, Wet, Rec. = 2.0 ft, Material similar to 22-24 ft.				(WR)	46.6					
24.0-30.0	A-4	Si, gry, Wet, Rec. = 2.0 ft				(WR)	39.1	1.5	98.5			
30.0-32.0	A-4	Si, gry, Wet, Rec. = 2.0 ft				WH-WH-2-2 (2)	37.3	0.6	99.4			
32.0-40.0	A-4	Si, gry, Wet, Rec. = 2.0 ft				1-1-1-1 (2)	40.4	1.1	98.9			
40.0-44.0	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		
44.0-50.0		Field Note: BXDC, Incompetent Fractured Rock										
50.0-52.0		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							
52.0-57.0		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							
57.0-60.0					4							
60.0-62.0					7							
62.0-64.0					6							
64.0-66.0					6							
66.0-68.0					6							
68.0-70.0					6							

BOTTOM CAP  
ELEV. = 523.00

EST. PILE TIP  
ELEV. 472.00

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.

PROJECT NAME: RUTLAND CITY  
PROJECT NUMBER: BRF 3000(18)  
FILE NAME: s96J244borlog.dgn  
PROJECT LEADER: C. CARLSON  
DESIGNED BY: MATERIALS & RESEARCH  
BORING LOGS  
PLOT DATE: 28-FEB-2014  
DRAWN BY: R. PELLETT  
CHECKED BY: M. E-M  
SHEET 16 OF 44