



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

BORING LOG

WAITSFIELD  
 BHF 013-4(39)  
 VT-100 BR-177

Boring No.: **B-101**  
 Page No.: 1 of 1  
 Pin No.: 12B136  
 Checked By: CEE

Boring Crew: JUDKINS, DAIGNEAULT  
 Date Started: 10/24/13 Date Finished: 10/24/13  
 VTSPG NAD83: N 609889.50 ft E 1553134.70 ft  
 Station: 13+51 Offset: -4.70  
 Ground Elevation: 728.3 ft

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 C = 1.46

Groundwater Observations

Date	Depth (ft)	Notes
		No water to depth.

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 %
		Asphalt Pavement, 0.0 ft - 0.55 ft								
		A-1-b, SiSaGr, brn, Moist, Rec. = 0.7 ft				22-27-12-13 (39)	6.1	48.9	30.9	20.2
2.5		Visual Description: Weathered Rock with silt & sand, brn, Moist, Rec. = 0.6 ft					11.7			
		Visual Description: Weathered & Broken Rock with sand, brn-gry, Moist, Rec. = 0.2 ft				R@2.5"	11.3			
5.0		4.0 ft - 9.0 ft, Light gray, Phyllitic Schist, Moderately soft, Unweathered, Fair rock, NXMDC, RMR = 54	1 (65)	94 (70)	4					
					4					
					4					
					4					
					4					
10.0		9.0 ft - 14.0 ft, Light gray, Phyllitic Schist, Moderately soft, Unweathered, Good rock, NXMDC, Quartz vein from 11.5-13.0 ft., RMR = 61	2 (65)	100 (96)	4					
					4					
					5					
					9					
					10					
15.0		Hole stopped @ 14.0 ft								
17.5										
20.0										
22.5										

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 is the hammer energy correction factor.  
 3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

BORING LOG 2 WAITSFIELD BHF 013-4(39).GPJ VERMONT AOT.GDT 11/7/13



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BORING LOG

**WAITSFIELD**  
**BHF 013-4(39)**  
**VT-100 BR-177**

Boring No.: **B-102**  
Page No.: **1 of 1**  
Pin No.: **12B136**  
Checked By: **CEE**

Boring Crew: JUDKINS, DAIGNEAULT  
Date Started: 10/23/13 Date Finished: 10/23/13  
VTSPG NAD83: N 609920.30 ft E 1553154.10 ft  
Station: 13+77 Offset: 21.00  
Ground Elevation: 731.0 ft

Casing: WB Sampler: SS  
Type: WB 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 C = 1.46

Groundwater Observations

Date	Depth (ft)	Notes
10/23/13	2.2	Casing removed.

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 %
2.5		A-1-b, SiGrSa, Dk/brn, Moist, Rec. = 1.1 ft				4-3-3-2 (6)	19.6	26.1	51.8	22.1
		A-4, GrSaSi, Dk/brn, Moist, Rec. = 1.2 ft				2-1-3-R@5.0" (4)				
5.0		4.0 ft - 9.0 ft, Light gray, Phyllitic Schist, Moderately soft, Unweathered, Fair rock, NXMDC, RMR = 58	1 (65)	100 (82)	6	Top of Bedrock @ 4.0 ft				
7.5					6					
					5					
					6					
					5					
10.0		9.0 ft - 14.0 ft, Light gray, Phyllitic Schist, Moderately soft, Unweathered, Good rock, NXMDC, RMR = 61	2 (65)	100 (90)	4					
12.5					4					
					4					
					5					
15.0	Hole stopped @ 14.0 ft									
17.5	Remarks: Hole collapsed at 6.1 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 may occur due to other factors than those present at the time measurements were made.

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BORING LOG

WAITSFIELD  
BHF 013-4(39)  
VT-100 BR-177

Boring No.: **B-103**  
Page No.: **1 of 2**  
Pin No.: **12B136**  
Checked By: **CEE**

Boring Crew: **JUDKINS, DAIGNEAULT**  
Date Started: **10/21/13** Date Finished: **10/23/13**  
VTSPG NAD83: **N 610040.20 ft E 1553078.80 ft**  
Station: **15+10** Offset: **26.20**  
Ground Elevation: **716.0 ft**

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 C = 1.46**

Groundwater Observations		
Date	Depth (ft)	Notes
10/23/13	6.2	While drilling.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Drill Rate (min/ft)	Blows/ft (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
5		A-2-4, SiGrSa, brn, Moist, Rec. = 0.6 ft				WH-3-7-R @ 3.5" (10)	11.4	26.8	50.5	22.7
		Visual Description: Broken Rock (Granite) with sand, brn-gry, Moist, Rec. = 0.3 ft Field Note: NXDC, Boulder				5.0				
10		A-2-4, SaSiGr, brn, Wet, Rec. = 0.7 ft				10-16-8-6 (24)	12.6	46.8	22.1	31.1
		Visual Description: Broken Rock (Granite), gry, Moist, Rec. = 0.2 ft				22-24-30-24 (54)				
15		A-2-4, SaSiGr, brn, Wet, Rec. = 0.2 ft				10-7-6-5 (13)	10.0	47.5	24.6	27.9
		A-1-b, SiSaGr, brn, Wet, Rec. = 0.7 ft				6-5-4-7 (9)	11.7	48.1	26.6	25.3
20		Visual Description: Broken Rock with sand, gry, Wet, Rec. = 0.3 ft, Insufficient sample for testing.				5-4-4-5 (8)				
		Visual Description: Broken Rock with silty sand, Dk/gry, MTW, Rec. = 0.2 ft, Insufficient sample for testing.				2-2-2-2 (4)	21.3	17.1	62.1	20.8
25		A-2-4, SiSa, gry, Wet, Rec. = 1.3 ft				WH-1-2-3 (3)	26.2	1.4	31.6	67.0
		A-4, SaSi, gry, Wet, Rec. = 0.8 ft				WH-2-1-1 (3)	26.1	1.2	42.1	56.7
30		A-4, SaSi, gry, Wet, Rec. = 0.8 ft				2-1-1-2 (2)	27.1		46.6	53.4
		A-4, SaSi, gry, Wet, Rec. = 0.9 ft				3-1-1-1 (2)	30.7	0.9	21.1	78.0
30		A-4, SaSi, gry, Wet, Rec. = 1.1 ft, Lab Note: A small layer of clay was noticeable, but not enough for testing.				1-1-3-2 (4)	28.8		35.0	65.0
		A-4, SaSi, gry, Wet, Rec. = 0.7 ft								

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BORING LOG

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Boring No.: **B-103**  
Page No.: **2 of 2**  
Pin No.: **12B136**  
Checked By: **CEE**

Boring Crew: **JUDKINS, DAIGNEAULT**  
Date Started: **10/21/13** Date Finished: **10/23/13**  
VTSPG NAD83: **N 610040.20 ft E 1553078.80 ft**  
Station: **15+10** Offset: **26.20**  
Ground Elevation: **716.0 ft**

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 C = 1.46**

Groundwater Observations		
Date	Depth (ft)	Notes
10/23/13	6.2	While drilling.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Drill Rate (min/ft)	Blows/ft (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
40		A-4, SiSa, gry, Wet, Rec. = 0.7 ft				4-3-4-4 (7)	26.2	0.2	53.7	46.1
		A-4, SaSi, gry, Wet, Rec. = 0.9 ft				2-5-4-2 (9)	28.9	0.3	30.1	69.6
45		A-4, SaSi, gry, MTW, Rec. = 0.4 ft				3-3-5-4 (8)	5.9	7.8	39.3	52.9
		Field Note: NXDC, Cleaned out casing								
50		50.0 ft - 55.0 ft, Light gray, Phyllitic Schist, Moderately soft, Unweathered, Fair rock, NXGDC, RMR = 44	1 (65)	78 (18)	6	Top of Bedrock @ 50.0 ft				
55		55.0 ft - 60.0 ft, Light gray, Phyllitic Schist, Moderately soft, Unweathered, Good rock, NXGDC, RMR = 61	2 (65)	100 (92)	6					
60		Hole stopped @ 60.0 ft								
		Remarks: Hole collapsed at 9.2 ft.								
65										

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BORING LOG 2 WAITSFIELD BHF 013-4(39) GP1 VERMONT AOT.GDT 11/7/13

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**WAITSFIELD**  
**BHF 013-4(39)**  
**VT-100 BR-177**

Boring No.: **B-105**  
 Page No.: 1 of 1  
 Pin No.: 12B136  
 Checked By: CEE

Boring Crew: JUDKINS, DAIGNEAULT  
 Date Started: 10/24/13 Date Finished: 10/24/13  
 VTSPG NAD83: N 609903.10 ft E 1553143.30 ft  
 Station: 13+63 Offset: 6.70  
 Ground Elevation: 728.4 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 55 TRACK C<sub>c</sub> = 1.46

Groundwater Observations

Date	Depth (ft)	Notes

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
2.5		Field Note:, Probe to 3.7 ft., To ledge or boulder.					
5.0		Hole stopped @ 3.7 ft TLOB					
7.5							
10.0							
12.5							
15.0							
17.5							
20.0							
22.5							

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**WAITSFIELD**  
**BHF 013-4(39)**  
**VT-100 BR-177**

Boring No.: B-106  
 Page No.: 1 of 1  
 Pin No.: 12B136  
 Checked By: CEE

Boring Crew: JUDKINS, DAIGNEAULT  
 Date Started: 10/24/13 Date Finished: 10/24/13  
 VTSPG NAD83: N 609864.30 ft E 1553124.70 ft  
 Station: 13+29 Offset: -20.00  
 Ground Elevation: 730.1 ft

Casing Sampler  
 Type: HAND STEEL  
 I.D.: \_\_\_\_\_  
 Hammer Wt: N.A. N.A.  
 Hammer Fall: N.A. N.A.  
 Hammer/Rod Type: \_\_\_\_\_  
 Rig: \_\_\_\_\_ C =

Groundwater Observations

Date	Depth (ft)	Notes

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
2.5		Field Note:, Drove hand steel to 3.1 ft., To ledge or boulder.					
5.0		Hole stopped @ 3.1 ft TLOB					
7.5							
10.0							
12.5							
15.0							
17.5							
20.0							
22.5							

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