



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

BORING LOG

PITTSFIELD  
BRF 022-1(23)  
VT-100 BR-124

Boring No.: B-102 A  
Page No.: 1 of 2  
Pin No.: 86E060  
Checked By: CEE

Boring Crew: GARROW, SALISBURY  
Date Started: 8/09/11 Date Finished: 8/18/11  
VTSPG NAD83: N 456919.82 ft E 1555733.68 ft  
Station: 131+75 Offset: 17.00  
Ground Elevation: 890.0 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 55 TRACK CE = 1.46

Groundwater Observations		
Date	Depth (ft)	Notes
08/11/11	14.0	AM
08/11/11	15.0	End of Day

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blow/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		A-2-4, GrSa, brn, Moist, Rec. = 0.5 ft	1-1-2-3 (3)	13.3	20.9	64.2	14.9
		A-1-a, SaGr, brn, Moist, Rec. = 0.7 ft	3-3-4-4 (7)	8.9	54.5	36.7	8.8
5		A-1-a, SaGr, brn, Moist, Rec. = 0.7 ft	3-9-5-6 (14)	8.4	56.3	36.2	7.5
		A-1-b, SaGr, brn, Moist, Rec. = 0.5 ft	1-5-6-7 (11)	11.6	41.3	39.9	18.8
10		Field Note: No Recovery	3-2-3-3 (5)				
		A-1-a, SaGr, grn-brn, Moist, Rec. = 1.2 ft	17-12-9 (21)	10.3	64.7	27.6	7.7
		A-1-a, SaGr, grn-brn, MTW, Rec. = 1.0 ft	9-7-6-5 (13)	15.4	56.5	35.1	8.4
15		A-1-b, SaGr, grn-brn, MTW, Rec. = 0.3 ft, Stone in end of sampler.	7-5-3-7 (8)	13.5	49.7	41.4	8.9
		A-1-b, SaGr, grn-brn, MTW, Rec. = 1.2 ft	5-16-14 (30)	15.9	53.8	32.3	13.9
		A-1-a, SaGr, brn, MTW, Rec. = 1.0 ft	10-11-8 (19)	10.7	61.0	28.4	10.6
20		A-1-a, SaGr, gry-brn, MTW, Rec. = 0.7 ft	10-9-8-6 (17)	14.4	62.3	27.8	9.9
		A-1-a, SaGr, brn, MTW, Rec. = 1.0 ft	11-7-8-9 (15)	11.8	68.3	21.5	10.2
25		A-1-a, SaGr, brn, MTW, Rec. = 1.0 ft	5-13-11 (24)	11.8	68.6	20.9	10.5
		A-1-b, SaGr, gry, MTW, Rec. = 1.0 ft	9-16-14 (30)	12.6	52.9	31.9	15.2
30		A-1-a, Gr, gry, Moist, Rec. = 0.7 ft	4-6-6-12 (12)	5.4	84.1	12.4	3.5

Notes: 1. Stratification lines represent approximate boundary between material types. Transition may be gradual.  
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Hammer/Rod Type: Auto/AWJ  
Rig: CME 55 TRACK CE = 1.46

Groundwater Observations		
Date	Depth (ft)	Notes
08/11/11	14.0	AM
08/11/11	15.0	End of Day

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blow/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Field Note: Sleaved casing down to 3.0 inch at 35.0 feet					
		Field Note: BXDC, Cleaned out casing. Appears to be Gravelly Sand					
		A-1-b, SiSaGr, grn-gry, Moist, Rec. = 1.0 ft	12-26-26-24 (52)	10.1	40.9	37.8	21.3
40		Field Note: BXDC, Appears to be Gravelly Sand					
		A-1-a, SaGr, grn-gry, Moist, Rec. = 0.7 ft	10-9-5-4 (14)	8.1	68.9	21.8	9.3
45		Field Note: BXDC, Cobble					
		A-1-a, SaGr, gry, Moist, Rec. = 1.0 ft	6-13-5-6 (18)	10.2	58.8	31.9	9.3
50		Field Note: BXDC, Cobble					
		A-1-a, SaGr, brn, Moist, Rec. = 0.9 ft	3-3-3-10 (6)	11.5	52.5	39.6	7.9
55		A-1-a, SaGr, brn, Moist, Rec. = 1.2 ft	14-13-13-11 (26)	9.4	56.9	30.3	12.8
60		Field Note: BXDC, Gravel					
		Hole stopped @ 62.0 ft Due to casing breaking off.					
65		Remarks: 1. Drillers stopped drilling this hole because the casing broke off. 2. About five feet of three inch casing remains in the ground. 3. Drillers setup beside this hole and continued drilling. (B-102B)					

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BORING LOG: 2 PITTSFIELD BRF 022-1(23).DPI VERMONT AGI.DOT 9/14/11

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BORING LOG

PITTSFIELD  
BRF 022-1(23)  
VT-100 BR-124

Boring No.: B-102 B  
Page No.: 1 of 2  
Pin No.: 86E060  
Checked By: CEE

Boring Crew: GARROW, SALISBURY  
Date Started: 8/23/11 Date Finished: 8/26/11  
VTSFG NAD83: N 456914.94 ft E 1555732.65 ft  
Station: 131+70 Offset: 17.00  
Ground Elevation: 890.0 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 55 TRACK CE = 1.46

Groundwater Observations		
Date	Depth (ft)	Notes
08/23/11	14.2	
08/26/11	14.5	

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (lip deg.)	Core Rec. (ROD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
5		Field Note: Cobble Field Note: Advanced casing to 39.5 feet								
40		Field Note: BXDC, Boulder Field Note: Sleaved down to a 3.0 inch casing								

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Boring No.: B-102 B  
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VTSFG NAD83: N 456914.94 ft E 1555732.65 ft  
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Hammer Fall: N.A. 30 in.  
Hammer/Rod Type: Auto/AWJ  
Rig: CME 55 TRACK CE = 1.46

Groundwater Observations		
Date	Depth (ft)	Notes
08/23/11	14.2	
08/26/11	14.5	

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (lip deg.)	Core Rec. (ROD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
50		Field Note: BXDC, Boulder & Cobbles								
55		Field Note: BXDC, Cobbles								
65		Visual Classification, Gravel with stone chips, brn-gry, Moist, Rec. = 0.3 ft, Insufficient sample for testing.				15- R@6.0"				
70		Field Note: BXDC, Sa Gr A-1-b, GrSa (Stone chips), brn, Moist, Rec. = 0.3 ft, Results are from an inadequate size sample.				6-6-8-11 (14)	3.9	47.0	46.9	6.1
75		A-2-4, SiSa, brn, Moist, Rec. = 0.3 ft				5-6-12- 11 (18)	18.9	9.9	61.9	28.2
80		A-1-a, Gr, gry, Moist, Rec. = 0.3 ft, Results are from an inadequate size sample. Lab Note: Sample was Gravel with broken rock. 77.5 ft - 82.5 ft, Gray-green, Sericite chlorite Schist, with calcite bands. Moderately hard, Unweathered, Very good rock, BXMDC, RMR = 89	1 (15)	100 (100)	10 8 5 5	R@6.0" Top of Bedrock	2.4	96.6	1.5	1.9
85		82.6 ft - 87.6 ft, Gray-green, Sericite chlorite Schist, with calcite bands. Moderately hard, Unweathered, Very good rock, BXMDC, RMR = 89	2 (15)	98 (100)	5 6 8 8					
		Hole stopped @ 87.6 ft								

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BORING LOG 2 PITTSFIELD BRF 022-1(23).D\FJ VERMONT AOT.GDT 9/14/11

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VT-100 BR-124

Boring No.: B-103  
Page No.: 1 of 2  
Pin No.: 86E060  
Checked By: CEE

Boring Crew: GARROW, SALISBURY  
Date Started: 8/01/11 Date Finished: 8/04/11  
VTSFG NAD83: N 457003.53 ft E 1555714.49 ft  
Station: 132+53 Offset: -19.00  
Ground Elevation: 891.5 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 CE = 1.46

Groundwater Observations		
Date	Depth (ft)	Notes
08/01/11	15.7	AM
08/04/11	16.0	AM

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 %
5		A-1-b, GrSa, brn, MTW, Rec. = 0.9 ft, Broken Rock was within sample.				WH-3-1-2 (4)	12.3	41.1	42.0	16.9
		A-1-b, GrSa, brn, MTW, Rec. = 0.7 ft, Broken Rock was within sample.				1-1-1-1 (2)	8.6	28.8	60.3	10.9
		A-1-b, GrSa, brn, MTW, Rec. = 0.7 ft, Broken Rock was within sample.				WH-WH-2-3 (2)	9.8	40.8	49.1	10.1
10		A-1-a, SaGr, brn, MTW, Rec. = 0.5 ft, Broken Rock was within sample.				5-5-5-3 (10)	5.6	61.8	30.5	7.7
		A-1-a, SaGr, brn, MTW, Rec. = 0.7 ft, Broken Rock was within sample.				2-2-3-9 (5)	4.9	70.1	23.6	6.3
		A-1-b, SaGr, brn, MTW, Rec. = 1.0 ft, Broken Rock was within sample.				7-10-10 (20)	15.1	50.4	37.2	12.4
15		A-1-a, SaGr, brn, MTW, Rec. = 0.5 ft, Broken Rock was within sample.				6-7-9-11 (16)	14.8	61.3	31.0	7.7
		A-1-a, SaGr, brn, MTW, Rec. = 0.9 ft, Broken Rock was within sample.				9-15-10 (25)	11.0	61.7	25.8	12.5
		A-1-b, SaGr, brn, MTW, Rec. = 0.3 ft, Broken Rock was within sample.				11-11-9 (20)	22.1	44.2	39.8	16.0
20		A-1-a, SaGr, brn, MTW, Rec. = 0.8 ft, Broken Rock was within sample.				5-10-10 (20)	12.9	58.6	32.4	9.0
		A-1-b, GrSa, gry-brn, MTW, Rec. = 1.2 ft, Broken Rock was within sample.				26-10-9 (28)	11.5	40.0	42.9	17.1
		A-1-a, SaGr, brn-gry, MTW, Rec. = 0.7 ft, Broken Rock was within sample.				14-7-7-4 (14)	14.2	62.7	29.0	8.3
25		A-1-b, SaGr, brn, MTW, Rec. = 0.9 ft, Broken Rock was within sample.				5-8-15-27 (23)	11.5	49.5	32.8	17.7
		A-1-a, SaGr, gry-brn, MTW, Rec. = 1.0 ft, Broken Rock was within sample.				8-14-14 (28)	7.6	61.6	29.2	9.2
		A-1-b, SaGr, gry, MTW, Rec. = 1.0 ft, Broken Rock was within sample.				15-15-16-17 (31)	9.3	55.3	31.1	13.6
35		Field Note: Began Mud Drilling								
		A-1-a, SaGr, brn, MTW, Rec. = 0.7 ft				4-8-5-5 (13)	16.9	52.8	35.4	11.8
		A-1-a, SaGr, brn, MTW, Rec. = 1.3 ft, Broken Rock was within sample.				17-20-13-13 (33)	12.0	56.8	30.1	13.1

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VT-100 BR-124

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Date	Depth (ft)	Notes
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50		A-1-a, Gr, brn, MTW, Rec. = 0.4 ft, Broken Rock was within sample.				12-18-19-16 (37)	14.0	71.8	19.5	8.7
		A-1-a, Gr, brn, MTW, Rec. = 0.9 ft, Broken Rock was within sample.				15-35-32-30 (67)	5.0	86.1	9.2	4.7
		Field Note: NXDC, Boulder								
55		A-1-a, SaGr, gry, MTW, Rec. = 1.0 ft				8-18-11 (29)	5.7	67.6	24.5	7.9
		Field Note: Sleeved casing down to 3 inch at 60.0 feet								
		A-1-a, Gr, gry, MTW, Rec. = 0.8 ft				3-6-5-5 (11)	8.0	76.3	16.6	7.1
65		A-1-a, SaGr, gry, MTW, Rec. = 0.8 ft				8-7-10-18 (17)	7.7	71.9	21.0	7.1
		Field Note: BXDC, Cobbles								
		A-2-4, SIGSa, gry, Moist, Rec. = 0.9 ft				4-9-17-13 (26)	12.7	29.2	50.0	20.8
75		Field Note: BXDC, Cobbles								
		77.3 ft - 78.3 ft, Boulders. BXDC			1	12				
		78.3 ft - 81.9 ft, Boulders. BXMDC			2	12				
85		81.9 ft - 83.3 ft, Gray-green, Sericite chlorite Schist, with calcite bands. Moderately hard, Unweathered, Very good rock, BXMDC, RMR = 89			2 cont. (45)	97.5 (100)				Top of Bedrock @ 81.9 ft
		83.3 ft - 87.3 ft, Gray-green, Sericite chlorite Schist, with calcite bands. Moderately hard, Unweathered, Very good rock, BXMDC, RMR = 89			3 (45)	100 (100)				
		Hole stopped @ 87.3 ft								

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