



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

BORING LOG

PITTSFORD
 NH 019-3(491)
 US-7

Boring No.: **B-201**

Page No.: 1 of 1

Pin No.: 85B008

Checked By: MLM

Boring Crew: JUDKINS, DAIGNEAULT, HOOK
 Date Started: 10/02/14 Date Finished: 10/03/14
 VTSPG NAD83: N 132184.18 m E 460081.88 m
 Station: 5+819 Offset: 9.00
 Ground Elevation: 184.70 m

Casing Sampler
 Type: WB SS
 I.D.: 10.16 cm 3.81 cm
 Hammer Wt: N.A. 140 lb.
 Hammer Fall: N.A. 30 in.
 Hammer/Rod Type: Auto/AWJ
 Rig: CME 55 TRACK C_r = 1.46

Groundwater Observations

Date	Depth (m)	Notes
10/03/14		No water to depth.

Depth (m)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/15cm (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
1		A-2-4, SiGrSa, brn, Moist, Rec. = 0.30 m, Lab Notes: Sample was rusty-orange in color. Broken Rock was within sample.	1-10-6-10 (16)	3.9	29.7	45.1	25.2
		A-1-b, SiGrSa, brn, Moist, Rec. = 0.15 m, Lab Note: Broken Rock was within sample.	9-10-9-9 (19)	2.1	38.9	39.7	21.4
2		A-2-4, SiSa, brn, Moist, Rec. = 0.36 m, Lab Note: Broken Rock was within sample.	6-7-6-2 (13)	2.9	11.5	66.6	21.9
		A-2-4, SiSa, brn, Moist, Rec. = 0.36 m	3-3-3-3 (6)	3.2	12.2	60.9	26.9
3		A-2-4, SiGrSa, brn, Moist, Rec. = 0.30 m, Lab Note: Broken Rock was within sample.	3-2-4-2 (6)	2.7	24.1	55.1	20.8
		A-2-4, SiGrSa, brn, Moist, Rec. = 0.21 m	4-2-4-3 (6)	2.5	31.5	47.4	21.1
4		A-2-4, Sa, brn, Moist, Rec. = 0.15 m, Lab Note: Material similar to 4.2-4.8m. Insufficient sample for testing.	7-8-7-3 (15)	24.7	2.0	86.9	11.1
		Visual Description: Sa, brn, Moist, Rec. = 0.03 m, Lab Note: Material similar to 4.8-5.4m. Insufficient sample for testing.	7-6-5-4 (11)				
5		A-2-4, Sa, brn, Moist, Rec. = 0.20 m	4-3-3-3 (6)	22.8	0.4	87.5	12.1
		Field Note: No Recovery, Cleaned out casing.	7-8-7-7 (15)				
6		A-2-4, Sa, brn, Moist, Rec. = 0.24 m	6-7-6-6 (13)	23.4	0.2	84.5	15.3
		A-2-4, Sa, brn, Moist, Rec. = 0.12 m	7-7-6-4 (13)	26.7		87.1	12.9
7		Field Note: No Recovery, Cleaned out casing.	7-7-6-10 (13)				
8							
9							
10		A-2-4, Sa, brn, Moist, Rec. = 0.32 m	10-9-9-10 (18)	18.5	0.3	85.1	14.6
11		Field Note: Cleaned out casing					
		Visual Description: Broken Rock with little sand, brn, Moist, Rec. = 0.10 m	8-8-15-9 (23)				
12		Field Note: Cleaned out casing					
		Field Note: No Recovery	9-9-6-5 (15)				
13		Hole stopped @ 12.80 m					
14		Remarks: Hole collapsed at 11.34m.					

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 PITTSFORD NH 019-3(491).GPJ VERMONT AOT.GDT 12/18/14



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

BORING LOG

PITTSFORD
 NH 019-3(491)
 US-7

Boring No.: B-202
 Page No.: 1 of 1
 Pin No.: 85B008
 Checked By: MLM

Boring Crew: NIETO, DAIGNEAULT, HOOK
 Date Started: 10/09/14 Date Finished: 10/13/14
 VTSPG NAD83: N 132203.54 m E 460096.64 m
 Station: 5+822 Offset: 33.20
 Ground Elevation: 191.00 m

Casing WB Sampler SS
 I.D.: 10.16 cm 3.81 cm
 Hammer Wt: N.A. 140 lb.
 Hammer Fall: N.A. 30 in.
 Hammer/Rod Type: Auto/AWJ
 Rig: CME 55 TRACK C_s = 1.46

Groundwater Observations		
Date	Depth (m)	Notes
10/13/14	5.60	AM

Depth (m)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/15cm (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
2		A-1-b, Sa, brn, Moist, Rec. = 0.33 m, Lab Note: Sample was rusty-orange in color.	1-1-2-3 (3)	5.2	16.2	68.0	15.8
		A-1-b, GrSa, brn, Moist, Rec. = 0.21 m, Lab Note: Sample was rusty-orange in color.	4-4-3-4 (7)	2.5	30.5	58.5	11.0
		A-1-b, GrSa, brn, Moist, Rec. = 0.32 m	3-2-4-4 (6)	1.8	42.9	46.8	10.3
2		A-2-4, Sa, brn, Moist, Rec. = 0.15 m	8-9-7-9 (16)	22.6	2.4	80.5	17.1
		A-3, Sa, brn, Moist, Rec. = 0.18 m	10-7-3-2 (10)	13.9	7.9	83.2	8.9
4		A-2-4, Sa, brn, Moist, Rec. = 0.12 m, Lab Note: One piece of Broken Rock was within sample.	9-4-4-4 (8)	17.6	10.8	75.7	13.5
		A-1-b, Sa, brn, Moist, Rec. = 0.02 m	19-19-24-25 (43)	27.6	3.6	95.3	1.1
6		A-2-4, SiSa, brn, Moist, Rec. = 0.24 m	9-8-7-7 (15)	14.3	2.2	73.9	23.9
		A-2-4, SiSa, brn, Moist, Rec. = 0.30 m	6-5-7-7 (12)	17.3	0.7	78.1	21.2
		A-2-4, SiSa, brn, Moist, Rec. = 0.35 m	5-6-7-8 (13)	14.6	0.1	77.2	22.7
		A-2-4, SiSa, brn, Moist, Rec. = 0.30 m	8-7-7-8 (14)	12.6	0.1	75.8	24.1
		A-2-4, SiSa, brn, Moist, Rec. = 0.33 m	8-7-8-7 (15)	15.1	0.7	73.3	26.0
8		A-2-4, SiSa, brn, Moist, Rec. = 0.33 m	2-5-7-6 (12)	15.0	0.1	76.4	23.5
10		A-2-4, Sa, brn, Moist, Rec. = 0.28 m	8-7-9-8 (16)	16.5		84.7	15.3
12		A-2-4, Sa, brn, Moist, Rec. = 0.39 m	5-5-7-8 (12)	19.2		84.1	15.9
14		A-2-4, Sa, brn, Moist, Rec. = 0.39 m	5-6-7-8 (13)	16.3		85.6	14.4
14		A-2-4, Sa, brn, Moist, Rec. = 0.36 m, Lab Note: Broken Rock was within sample.	6-6-7-14 (13)	9.7	3.7	80.3	16.0
16		A-4, SaSi, brn-gry, MTW, Rec. = 0.60 m	6-4-5-4 (9)	18.1	13.7	30.7	55.6
18		A-1-b, SiSaGr, brn, MTW, Rec. = 0.28 m, Lab Note: Broken Rock was within sample.	48-29-6-5 (35)	11.7	46.0	33.5	20.5
		Hole stopped @ 17.20 m					

Remarks:
 Hole collapsed at 3.54m.

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 PITTSFORD NH 019-3(491).GPJ VERMONT AOT.GDT 12/18/14



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

BORING LOG

PITTSFORD
 NH 019-3(491)
 US-7

Boring No.: **B-203**

Page No.: 1 of 1

Pin No.: 85B008

Checked By: MLM

Boring Crew: DAIGNEAULT, HOOK
 Date Started: 10/20/14 Date Finished: 10/20/14
 VTSPG NAD83: N 133199.91 m E 459220.67 m
 Station: 7+154 Offset: 3.40
 Ground Elevation: 152.90 m

Casing: WB Sampler: SS
 I.D.: 10.16 cm 3.81 cm
 Hammer Wt: N.A. 140 lb.
 Hammer Fall: N.A. 30 in.
 Hammer/Rod Type: Auto/AWJ
 Rig: CME 45C SKID C = 1.33

Groundwater Observations

Date	Depth (m)	Notes
10/20/14	3.62	Puddled in bedrock.

Depth (m)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Drill Rate minutes/0.3m	Blows/15cm (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
0.00 - 0.27		Asphalt Pavement, 0.00 m - 0.27 m								
0.5		A-1-b, SiGrSa, blk-brn, Moist, Rec. = 0.21 m				11-9-5-4 (14)	10.6	33.1	45.5	21.4
1.0		A-1-b, SiSaGr, blk-brn, MTW, Rec. = 0.06 m, Lab Note: Broken Rock was within sample.				5-7-7-7 (14)	14.8	40.8	34.9	24.3
1.5		A-1-b, SiSaGr, brn, MTW, Rec. = 0.09 m, Lab Note: Broken Rock was within sample.				4-4-3-3 (7)	11.9	41.3	37.9	20.8
2.0		Visual Description: Broken Rock with sand, red-brn, Moist, Rec. = 0.09 m				3-4-4-10 (8)	10.6			
3.0		A-4, SaGrSi, brn-white, Moist, Rec. = 0.18 m, Lab Note: Broken Rock was within sample.				13-12-12-48 (24)	12.8	35.2	22.9	41.9
3.5		Field Note: No Recovery				(R)				
3.5 - 4.90		3.38 m - 4.90 m, Light gray, Dolomite, with closely spaced horizontal jointing. Very hard, Unweathered, Poor rock, BXMDC, RMR = 28	1 (?)	84 (0)	7					
4.0					7					
4.5					6					
5.0		4.90 m - 6.43 m, Light gray, Dolomite, with close to very closely spaced horizontal jointing. Very hard, Unweathered, Poor rock, BXMDC, RMR = 33	2 (?)	73 (17)	7					
5.5					8					
6.0					7					
6.5					7					
6.5		Hole stopped @ 6.43 m			6					
7.0		Remarks: Hole collapsed at 4.63m.								
7.5										

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 PITTSFORD NH 019-3(491).GPJ VERMONT AOT.GDT 12/18/14



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

BORING LOG

PITTSFORD
 NH 019-3(491)
 US-7

Boring No.: B-204
 Page No.: 1 of 1
 Pin No.: 85B008
 Checked By: MLM

Boring Crew: GARROW, HOOK, NIETO
 Date Started: 10/14/14 Date Finished: 10/15/14
 VTSPG NAD83: N 133305.85 m E 459136.54 m
 Station: 7+289 Offset: -18.40
 Ground Elevation: 157.50 m

Casing Type: WB Sampler: SS
 I.D.: 10.16 cm 3.81 cm
 Hammer Wt: N.A. 140 lb.
 Hammer Fall: N.A. 30 in.
 Hammer/Rod Type: Auto/AWJ
 Rig: CME 55 TRACK C_s = 1.46

Groundwater Observations

Date	Depth (m)	Notes
10/15/14	1.28	AM

Depth (m)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Drill Rate minutes/0.3m	Blows/15cm (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	
0.5		A-2-4, GrSiSa, brn, Moist, Rec. = 0.24 m, Lab Note: Material was rusty-orange in color.				1-12-9-6 (21)	10.2	26.2	42.8	31.0	
1.0		A-4, SiSa, Lt/brn, Moist, Rec. = 0.21 m, Lab Note: Material was rusty-orange in color.				7-10-9-8 (19)	4.4	10.9	45.5	43.6	
1.5		A-2-4, GrSiSa, Lt/brn, Moist, Rec. = 0.18 m, Lab Note: Broken Rock was within sample.				4-3-3-6 (6)	7.6	21.0	44.7	34.3	
2.0		A-2-4, SiGrSa, Lt/brn-white, Moist, Rec. = 0.24 m, Lab Note: Broken Rock was within sample.				5-15-R (R)	2.8	35.1	36.4	28.5	
2.5		2.16 m - 3.68 m, Light gray, Dolomite, Very hard, Unweathered, Fair rock, BXGDC, RMR = 48	1 (?)	66 (49)	5	Top of Bedrock @ 2.16 m					
3.0			4								
3.5			4								
4.0			5								
4.5			5								
5.0		3.68 m - 5.20 m, Light gray, Dolomite, Very hard, Unweathered, Fair rock, BXGDC, RMR = 57	2 (?)	94 (87)	4						
5.5			4								
6.0			5								
6.5			4								
7.0			5								
7.5		Hole stopped @ 5.20 m									
		Remarks: Hole collapsed at 1.43m.									

- 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.



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

BORING LOG

PITTSFORD
NH 019-3(491)
US-7

Boring No.: B-205

Page No.: 1 of 1

Pin No.: 85B008

Checked By: MLM

Boring Crew: GARROW, HOOK, NIETO

Date Started: 10/15/14 Date Finished: 10/17/14

VTSPG NAD83: N 133298.10 m E 459125.18 m

Station: 7+289 Offset: -32.10

Ground Elevation: 160.10 m

Type: WB SS
I.D.: 10.16 cm 3.81 cm
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 (m)	Notes
10/15/14	0.67	While drilling.

Depth (m)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Drill Rate minutes/0.3m	Blows/15cm (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
0.5		A-4, SaSi, brn-Lt/brn, Moist, Rec. = 0.39 m, Lab Note: Material was rusty-orange color.				1-2-1-2 (3)	14.3	19.1	39.4	41.5
1.0		A-4, SaSi, Lt/brn, Moist, Rec. = 0.48 m				4-5-7-6 (12)	7.2	19.7	34.2	46.1
1.5		A-4, SaSi, Lt/brn-white, Moist, Rec. = 0.30 m, Lab Note: Broken Rock was within sample.					3-9-R (R)	6.9	8.6	43.0
		Field Note:, NXDC, Cleaned out casing								
2.0		1.82 m - 2.73 m, Light gray, Dolomite, Very hard, Unweathered, Fair rock, BXGDC, RMR = 43	1 (?)	66 (22)	5	Top of Bedrock @ 1.82 m				
2.5					5					
3.0						5				
		2.73 m - 2.91 m, No Recovery. BXGDC core barrel broke.								
		Hole stopped @ 2.91 m								

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 PITTSFORD NH 019-3(491).GPJ VERMONT AOT.GDT 12/18/14