



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

BORING LOG

Huntington BRO 1445(35)

Boring No.: B-1

Page No.: 1 of 1

Pin No.: 12162

Checked By: ASP

Boring Crew: New Hampshire Boring, Derry, NH, CBR
 Date Started: 11/14/13 Date Finished: 11/15/13
 VTSPG NAD83: N 1527538.13 ft E 655450.20 ft
 Station: 4+01.50 Offset: 11.25R
 Ground Elevation: 1086.0 ft

Type: WB SS
 I.D.: 4.25 in 1.38 in
 Hammer Wt: N.A. N.A.
 Hammer Fall: N.A. N.A.
 Hammer/Rod Type: Manual
 Rig: CME 45C SKID CE = 1.3

Groundwater Observations

Date	Depth (ft)	Notes
11/14/13	7.5	WS
11/15/13	8.0	ACR
11/15/13	8.3	BCR

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (ROD %)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
5	[Diagonal hatching]	Rec. = 0.5 ft, 0.0 ft - 0.33 ft, 4-inches topsoil A-1-b, SaGrSi, brn, Moist, FILL			2-3-6-7 (9)	12.3	34.1	41.2	24.7
		A-2-4, GrSiSa, brn, Moist Rec. = 0.5 ft			4-3-4-5 (7)	7.4	48.4	24.8	26.8
		A-4, SiSaGr, brn, Wet, Rec. = 0.75 ft			3-3-16-15 (19)	40.6	28.5	31.4	40.1
		A-2-4, SaGrSi, red-brn, with organics from 6-8 feet Rec. = 1.16 ft			15-16-8-28 (24)	31.8	29.4	42.4	28.2
		A-2-4, SaSiGr, brn-gry, Rec. = 0.5 ft			5-9-12-20 (21)	11.5	30.8	36.7	32.5
10	[Diagonal hatching]	A-1-b, GrSaSi, gry-brn, Rec. = 0.75 ft			25-50/3" (50+)	10.8	43.2	34.3	22.5
		A-1-b, GrSaSi, brn, Weathered bedrock 10.75 ft - 12.0 ft, Weathered bedrock				7.7	62.0	22.4	15.6
15	[Diagonal hatching]	12.0 ft - 17.0 ft, Bedrock. Gray, greenish gray muscovite-quartz SCHIST, magnetite rich zone at 14.5'. moderately hard, moderately weathered from 15' to 16', remainder of run unweathered	1	90 (51.9)					
		17.0 ft - 22.0 ft, Bedrock. Gray, greenish gray muscovite-quartz SCHIST, moderately hard, unweathered	2	100 (78.3)					
25		Hole stopped @ 22.0 ft							
25		Remarks: Elevations are approximate.							

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. CE is an estimated value.
 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.
 4. Ground surface elevations indicated on the boring logs were estimated based on the grading plan provided by VAOT.

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BORING LOG

Huntington BRO 1445(35)

Boring No.: B-2

Page No.: 1 of 1

Pin No.: 12j162

Checked By: ASP

Boring Crew: New Hampshire Boring, Derry, NH, CBR
 Date Started: 11/11/13 Date Finished: 11/12/13
 VTSPG NAD83: N 1527563.22 ft E 655485.68 ft
 Station: 4+46.00 Offset: 14.00R
 Ground Elevation: 1086.0 ft

Casing WB Sampler SS
 I.D.: 4.25 in 1.38 in
 Hammer Wt: N.A. N.A.
 Hammer Fall: N.A. N.A.
 Hammer/Rod Type: Manual
 Rig: CME 45C SKID CE = 1.3

Groundwater Observations

Date	Depth (ft)	Notes
11/12/13	5.0	ACR
11/13/13	8.0	16 hrs

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (ROD %)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
5	X X X	A-2-4, SaGrSi, brn, Moist, Rec. = 1.5 ft, FILL			6-6-7-9 (13)	15.7	28.6	44.4	27.0
		A-2-4, GrSaSi, brn, Moist, Rec. = 0.7 ft			10-6-7-8 (13)	6.7	38.7	32.8	28.5
10	O	A-1-a, GrSaSi, brn-gry, Moist, Rec. = 0.8 ft			5-4-21-42 (25)	14.9	46.6	40.4	13.0
		A-1-b, GrSaSi			23-39-44-50 (83)	7.3	66.1	25.2	8.7
		A-1-a, GrSaSi, Rec. = 1.3 ft			40-40-20-41 (60)	12.2	56.7	34.7	8.6
		A-1-a, GrSaSi, Rec. = 1.0 ft			13-50/1" (50+)	14.9	66.3	29.8	3.9
		A-1-a, GrSaSi, Rec. = 0.5 ft, same as above with probable cobbles or boulder			22-34-36-100/20" (70)	11.5	27.5	22.0	50.5
15	O	10.58 ft - 12.0 ft			35-25/0" (25+)	10.0	30.6	24.3	45.1
		A-4, SiGrSa, brn-gry, Moist, Rec. = 0.8 ft							
		A-4, GrSiSa, Rec. = 0.4 ft							
20	O	14.5 ft - 16.0 ft, Probable weathered bedrock							
		16.0 ft - 21.0 ft, Gray, greenish gray muscovite-quartz SCHIST, moderately hard, unweathered	1	100 (100)	Top of Bedrock @ 16.0 ft				
25	O	21.0 ft - 26.0 ft, Gray, greenish gray muscovite-quartz SCHIST, moderately hard, unweathered	2	85 (90.2)					
		Hole stopped @ 26.0 ft							
30		Remarks: Elevations are approximate.							

Notes:

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BORING LOG

Huntington BRO 1445(35)

Boring No.: B-4

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Pin No.: 12j162

Checked By: ASP

Boring Crew: New Hampshire Boring, Derry, NH, CBR
 Date Started: 11/13/13 Date Finished: 11/13/13
 VTSPG NAD83: N 1527591.25 ft E 655480.80 ft
 Station: 4+66.50 Offset: 38.40R
 Ground Elevation: 1087.0 ft

Casing: WB Sampler: SS
 I.D.: 4.25 in 1.38 in
 Hammer Wt: N.A. N.A.
 Hammer Fall: N.A. N.A.
 Hammer/Rod Type: Manual
 Rig: CME 45C SKID CE = 1.3

Groundwater Observations

Date	Depth (ft)	Notes
11/13/13	7.0	ACR
11/14/13	7.0	16 hrs

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (ROD %)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Rec. = 1.2 ft, 0.0 ft - 0.33 ft, 4-inches topsoil A-4, SaSiGr, brn, Moist			2-6-8-4 (14)	37.5	2.6	59.9	37.5
		A-1-b, SaGrSi, brn, Rec. = 0.9 ft			3-6-37-22 (43)	11.6	40.8	42.8	16.4
5		A-1-a, GrSaSi, gry-brn, Rec. = 0.5 ft			27-27-19-100 (46)	7.8	59.4	25.3	15.3
		A-1-b, GrSaSi, gry-brn, Rec. = 0.3 ft			8-17-17-34 (34)	10.7	55.1	25.5	19.4
		A-1-b, GrSaSi, brn, Rec. = 1.3 ft			23-35-40-100 (75)	8.9	51.1	24.5	24.4
10		A-1-a, GrSaSi, gry-brn, Rec. = 0.5 ft			22-24-33-45 (57)	9.9	58.6	26.3	15.1
		A-4, SiSaGr, gry-brn, Rec. = 0.4 ft			50 (50+)	14.3	22.1	29.8	48.1
		A-4, SiSaGr, brn, Rec. = 0.4 ft			35-50-100 (150+)	9.7	24.7	27.3	48.0
		A-4, SiSaGr, gry-brn, Rec. = 0.2 ft, Soil classification for this sample based on visual observation			49-50 (50+)				
		A-1-a, GrSaSi, brn, Rec. = 0.2 ft, Probable weathered bedrock			50 (50+)	9.7	63.9	23.0	13.1
20		19.0 ft - 24.0 ft, Gray, greenish gray muscovite-quartz SCHIST, moderately hard, unweathered	1	57 (68.4)	Top of Bedrock @ 19.0 ft				
25		24.0 ft - 29.0 ft, Gray, greenish gray muscovite-quartz SCHIST, moderately hard, slight weathering along foliation	2	46 (41.3)					
30		Hole stopped @ 29.0 ft							

Remarks:
 Elevations are approximate.

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BORING LOG
 Huntington BRO 1445(35)

Boring No.: TP-1
 Page No.: 1 of 1
 Pin No.: 12j162
 Checked By: ASP

Boring Crew: New Hampshire Boring, Derry, NH, RJF
 Date Started: 12/06/13 Date Finished: 12/06/13
 VTSPG NAD83: N 1527544.33 ft E 655438.91 ft
 Station: 3+95.00 Offset: 22.40R
 Ground Elevation: 1082.5 ft

Casing _____ Sampler _____
 Type: _____
 I.D.: _____
 Hammer Wt: N.A. N.A.
 Hammer Fall: N.A. N.A.
 Hammer/Rod Type: _____
 Rig: KX71-3 Excavator CE =

Groundwater Observations		
Date	Depth (ft)	Notes
12/06/13		None observed

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
0.0 - 0.8		Topsoil/roots/organics, moist to wet					
		A-4, SiSaGr, brn, trace roots, soil classification for this sample based on visual observation					
		A-4, SiSaGr, olive-brn, trace weathered rock and occasional boulders ~12", soil classification for this sample based on visual observation					
5.3		5.3 ft, Apparent weathered rock					
Hole stopped @ 5.4 ft			Top of Bedrock @ 5.4 ft				
<p>Remarks: Test pit excavated by New Hampshire Boring. Excavator: Kubota KX71-3 Operator: Mike</p> <p>Although water was present within excavation, there did not appear to be a static GWL encountered. Water present in excavation appeared to be from surface run-off.</p> <p>Ground surface elevation at top of test pit 3.5 feet below bridge deck based on visual observation.</p>							

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BORING LOG

Huntington BRO 1445(35)

Boring No.: TP-2

Page No.: 1 of 1

Pin No.: 12j162

Checked By: ASP

Boring Crew: New Hampshire Boring, Derry, NH, CBR

Date Started: 11/15/13 Date Finished: 11/15/13

VTSPG NAD83: N 1527565.83 ft E 655455.38 ft

Station: 4+11.50 Offset: 37.40R

Ground Elevation: 1080.5 ft

Type: _____

I.D.: _____

Hammer Wt: N.A. N.A.

Hammer Fall: N.A. N.A.

Hammer/Rod Type: _____

Rig: Hand dug CE =

Casing _____

Sampler _____

Groundwater Observations

Date	Depth (ft)	Notes
11/15/13		None observed

Depth (ft)	Strata (t)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
0.0 - 0.5		0.0 ft - 0.5 ft, 6-inches topsoil, organics, moist, brown A-4, SiSaGr, brn					
0.5 - 4.0		A-4, SiSaGr, gray, Moist, weathered bedrock					
4.0 - 5.0		Hole stopped @ 4.0 ft					
5.0 - 30.0		Remarks: Hand dug by New Hampshire Boring. Metal rod probed throughout approximate 10-foot radius around TP-2, rod hit probable bedrock at approximately 4 feet. Elevations are approximate.					

Top of Bedrock @ 4.0 ft

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