



BORING LOG

Highgate RD 144B (43)
(GeoDesign #730-08.16)
Bridge #25, Highgate, VT

Boring No.: 0-111
Page No.: 1 of 2
Pin No.: P20171
Checked By: JFW/SJK

Boring Crew: J. Barrenbridge (COO), A. Baribault (GeoDesign)
Date Started: 8/21/14 Date Finished: 8/21/14
VTSFG NUMBERS: N 085184.00 H E 1514085.00 H
Station: 12+10 Offset: 3.00
Ground Elevation: 221 ft

Casing Sampler
Type: FJ SS
I.O.S.: 4 in 1.30 in
Hammer Mt: 140 lb. 140 lb.
Hammer Fall: 30 in. 30 in.
Hammer/Red Type: Auto/SMJ
Rig: ONE SSBK ATV CE = 1.5

Groundwater Observations (3)		
Date	Depth (ft)	Notes
08/21/14		None observed.

Depth (ft)	Sheet (1)	CLASSIFICATION OF MATERIALS (Description)	Avg. (ft)	No. of Cuts (ft)	No. of Samples (ft)	Moisture Content (%)	Gravel (%)	Sand (%)	Fines (%)
2.5		S1 (0.5'-2'): Medium dense, light brown fine to coarse SAND, some fine Gravel, little SILT, trace asphalt fragments (from above), metal. (ROUND BRSE) Res. = 0.7 ft (ANSIMO W145 Classification: A-1-b.)			10-5-5 (16)	4.5	48.7	37.8	15.5
5.0		S2 (2'-4'): Loose, light brown fine to medium SAND, little fine Gravel, trace SILT (more in lower 4'), metal. (ROUND BRSE) Res. = 1.2 ft (ANSIMO W145 Classification: A-1-b.)			4-3-3-4	6.2	28.8	63.8	8.3
7.5		S3 (4'-6'): Loose brown fine to coarse SAND, some SILT, little fine to coarse Gravel, wet. (FILL) Res. = 0.8 ft (ANSIMO W145 Classification: A-1-b.)			3-3-2-2 (5)	14.5	35.7	44.0	20.3
10.0		S4 (6'-8'): Loose, brown fine to coarse SAND, little fine Gravel, little SILT, wet. (FILL) Res. = 0.5 ft (ANSIMO W145 Classification: A-1-b.)			3-3-3-2 (8)	16.8	38.0	57.8	12.2
12.5		S5 (8.5'-10'): Loose, brown with orange fine to coarse SAND, some fine Gravel, some SILT, wet. (FILL) Res. = 0.5 ft (ANSIMO W145 Classification: A-1-b.)			4-3-4 (7)	15.0	40.4	38.5	23.1
15.0		S6 (10'-12'): Medium dense, light brown with orange and gray fine to coarse SAND and SILT, some fine to coarse Gravel, metal to wet. Res. = 1.5 ft (ANSIMO W145 Classification: A-4.)			0-0-0-0 (15)	14.5	28.8	33.8	38.8
17.5		S7 (12'-14'): Medium dense, light brown fine to coarse SAND and fine to coarse GRANUL, little SILT, wet. Res. = 1.2 ft (ANSIMO W145 Classification: A-1-b.)			0-11-0 (18)	11.8	38.3	31.5	18.2
20.0		S8 (14'-16'): Medium dense, light brown fine to coarse SAND, some SILT, some fine to coarse Gravel (friable, platy), metal to wet. Res. = 1.4 ft (ANSIMO W145 Classification: A-2-4.)			15-11-0 (31)	16.8	33.4	34.1	32.5
22.5		S9 (16'-17.4'): Relaxed, light brown, orange and gray fine to coarse SAND, some SILT, some fine Gravel (friable, platy), metal. Gray Rock fragments in open area (lower 2" of sample). Res. = 1.0 ft (ANSIMO W145 Classification: A-2-4.)			0-10-0 (10)	16.4	37.0	29.8	33.1
25.0		S10 (18' - 18.8'): Relaxed, gray fine to coarse SAND and fine GRANUL (friable), little SILT, wet. (POSSIBLE WEATHERED ROCK) (ANSIMO W145 Classification: A-1-b.) Res. = 0.8 ft			20-11-0 (16)	14.7	51.1	28.8	22.1

1. Classification lines represent approximate boundary between material types. Transition may be gradual.
2. 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 other conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.



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22.5		C1 (20.2'-24'): Very poor quality, moderately hard, fine-grained, slightly weathered gray with white/light gray banding SLATE. Fracturing approximately 30 degrees from horizontal.	C1	78 (9)	0.14				
25.0		C2 (24'-28.7'): Very poor quality, moderately hard, fine-grained, slightly weathered gray with white/light gray banding SLATE. Fracturing approximately 30 degrees from horizontal.	C2	67 (24)	0.18				
27.5					0.17				
30.0					0.23				
32.5					0.13				
35.0					0.08				
37.5					0.15				
40.0					0.15				
42.5					0.12				
Note stopped @ 31.8 ft									
<p>Remarks:</p> <ol style="list-style-type: none"> Hammer energy correction factor is assumed. Material descriptions may not accurately reflect in-situ conditions due to wash-drive drilling methods. Sample S2 not performed according to ASTM D1526 (soil was not cleared with the roller bit prior to sampling). Casing driven to 0.5 feet deep prior to sampling S3. Loss of water observed from approximately 6 to 0.5 feet deep. Casing driven to 18 feet deep prior to S10. Roller bit advanced ahead of casing to 20.2 feet; followed by the casing driven to 20.2 feet prior to core. Core barrel block of 3' 10" in core run C1. Wash water return light brown, turning gray during coring of C1. Some water loss may be due to leak on rig. Bedrock cores obtained with a 31/2" dia rock core barrel. 									

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