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

BORING LOG

Richford BRF 0302(29)
Richford, VT
GeoDesign # 750-09.13

Boring No.: B-3
Page No.: 1 of 3
Pin No.: 12I158
Checked By: JFW

Boring Crew: J. Leonhardt (TransTech), A. Baribault (GeoDesign)
Date Started: 9/05/13 Date Finished: 9/06/13
VTSPG NAD83: N 909729.53 ft E 1592615.18 ft
Station: 44+58 Offset: 6' L
Ground Elevation: 437 ft

	Casing	Sampler
Type:	F.J	N.A.
I.D.:	4 in	2 in
Hammer Wt:	140 lb.	N.A.
Hammer Fall:	30 in.	N.A.
Hammer/Rod Type:	Auto/WWJ	
Rig:	CME 550X ATV	CE = ~1.5

Groundwater Observations (3)		
Date	Depth (ft)	Notes
09/06/13	9.7	In casing (15 hrs.)

Depth (ft)	Strata()	CLASSIFICATION OF MATERIALS (Description)	Run (Rip Dep.)	Core Rec. % (RQD %)	Drill Rate min/ft	Blows/6" (N Value)(2)	Moisture Content %	Gravel %	Sand %	Fines %
0		6" Asphalt								
		Inferred Fill								
5										
10		Inferred Silt/Sand								
15										
20		Inferred Glacial Till								
25										

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.
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.

CORRECTION BORING LOG 750-09.13 RICHFORD VTRANS.GPJ VERMONT.GDT 11/12/13

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35										
40										
45		C1 (45' to 50'): Poor quality, moderately hard, fine grained, silvery gray-green with white GNEISS. With occasional Quartz bedding. Fractures between 30 and 70 degrees from horizontal.	C1	72 (38)	2.25 3 2 2.5 2					
50		Top of Bedrock @ 45.0 ft Hole stopped @ 50.0 ft								
55										

Remarks:
1) Hammer efficiency correction factor is assumed. Strata breaks and composition are inferred from roller bit and casing resistance observed during borehole advance and soil samples collected in nearby Borings B-1 and B-4. Elevation, station and offset are estimated by GeoDesign from site plans provided by VTrans and taped measurements from existing features made in the field by GeoDesign personnel. They should be considered accurate only to the degree implied by the method of location used.
2) Casing driven to 8' deep. Note advancement rate slowed considerably at approximately 7.7' deep.
3) Wash water observed to be grayish-brown in color from surface to 12' deep before turning gray below 12' deep.
4) Noted grinding of roller bit from approximately 7.5' to 8.5' deep on inferred gravel.
5) Infer strata change to Silt / Sand at 8.5' deep due to significant increase in bit advancement rate.
6) Infer strata change to glacial till due to decrease in bit advancement rate at 17' deep.
7) Note decrease in advancement rate at 22' deep through inferred dense glacial till soils. Consistent, slow rate from 22' to 41.5' deep, with an increase from 41.5' to 43.5' deep
8) Inferred gravelly zones within the glacial till matrix based on drilling resistance / behavior from 31' to 31.5' deep, 38' to 38.5' deep, and 43.5' to 44' deep.
9) Borehole backfilled with winter sand mix and topped with approximately 3 inches of cold patch asphalt at the ground surface.
10) All visual descriptions are per the Burmister classification system.

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65										
70										
75										
80										
85										

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