



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-1A/B**
Page No.: **3 of 3**
Pin No.: **12j158**
Checked By: **JFW**

Boring Crew: **J. Leonhardt (TransTech), A. Baribault (GeoDesign)**
Date Started: **9/04/13** Date Finished: **9/05/13**
VTSPG NAD83: **N 909695.07 ft E 1592596.89 ft**
Station: **44+19** Offset: **5' L**
Ground Elevation: **436.5 ft**

Casing		Sampler		Groundwater Observations ⁽³⁾		
Type:	I.D.:			Date	Depth (ft)	Notes
FJ	4 in	SS	2 in	09/04/13		See Note 3.
Hammer Wt:	140 lb.	140 lb.				
Hammer Fall:	30 in.	30 in.				
Hammer/Rod Type:	Auto/NWJ					
Rig:	CME 550X ATV	C _E = ~1.5				

Depth (ft)	Strata ⁽¹⁾	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Drill Rate minutes/ft	Blows/ft* (N Value) ⁽²⁾	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
65		5) Advanced casing in B-1B to 14' deep prior to continuing with soil sampling. 6) Noted occasional roller bit grinding/chatter below 18' deep, on inferred gravel. 7) Encountered inferred weathered bedrock at approximately 39.2' deep based on split spoon resistance. Roller bit penetration slowed to approximately 1 inch in 5 minutes at approximately 41' deep on inferred top of competent rock. Began rock core at 41' deep. 8) Used reduced drilling RPM and pressure for entire rock core. Encountered oscillations of drill string below 48' deep, most pronounced from 50' to 51' deep, where driller had to pause every 10 to 30 seconds to correct. 9) Grouted borehole with 1 bag portland cement, 1/2 bag bentonite powder, and 40 gallons water. Topped off borehole with approximately 3 inches of cold patch asphalt at the ground surface. 10) All visual descriptions are per the Burmister classification system. All lab gradations are per the AASHTO M 145 classification system.										
70												
75												
80												
85												

GEODESIGN BORING LOG 750-09.13 RICHFORD VTRANS.GPJ VERMONT AOT.GDT 10/9/13

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_e 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.

PROJECT NAME:	RICHFORD
PROJECT NUMBER:	BRF 0302(29)
FILE NAME:	st2j158bor.dgn
PROJECT LEADER:	C. CARLSON
DESIGNED BY:	H. SALLS
BORING LOGS 2	
PLOT DATE:	11-DEC-2014
DRAWN BY:	R. PELLETT
CHECKED BY:	H. SALLS
SHEET	16 OF 36