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

BORING LOG

Rutland Bridge Replacement
23828.1000.32000

Boring No.: B-102A
Page No.: 1 of 2
Pin No.: BRF 3000(16)
Checked By: J. MacGregor

Boring Crew: M. Blakely, D. Spielvogel
Date Started: 2/17/12 Date Finished: 2/21/12
VTSPG NAD83: N 401635.66 ft E 1509827.60 ft
Station: 100+32.00 Offset: 33.7 R
Ground Elevation: 530.1 ft

	Casing	Sampler
Type:	WB	SS
I.D.:	3 in	1.5 in
Hammer Wt:	140 lb.	140 lb.
Hammer Fall:	30 in.	30 in.
Hammer/Rod Type:	Manual/NW	
Rig:	CME 550 ATV	CE = 1

Groundwater Observations

Date	Depth (ft)	Notes
12/17/12	10.1	Estimated

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
15		(GM), f.c. GRAVEL, Some Silt, Some f.m.c. Sand, compact, brown, wet, Rec. = 0.6 ft			22-22-19-26 (41)				
20		(GM), becomes very compact, Rec. = 0.5 ft			25-63-50/3" (R)				
		(GM), Cobbles/Boulders	R-1	100 (0)					
25		Insufficient Recovery, Rec. = 0.1 ft			100/5" (R)				
30		No Recovery, Rec. = 0.0 ft			200/2" (R)				
		(GM), f.c. GRAVEL, Some Silt, Some f.m.c. Sand, very compact, brown, wet, Rec. = 0.4 ft			100/6" (R)				
35		(ML)							
		(ML), SILT, Some f. Sand, very compact, brown, wet, Rec. = 0.7 ft			36-56-50/4" (R)				
40		(ML), SILT, Some f. Sand, trace f. gravel, very compact, brown, wet, Rec. = 1.1 ft			50-70-50/4" (R)		2.0	28.2	69.8
45		(ML-TILL)							
		(ML-TILL), SILT, Some f. Sand, little f. gravel, very compact, gray, wet, Rec. = 0.8 ft			72-50/3"		18.8	19.0	62.2

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.

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Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
					(R)				
50		(ML-TILL), Similar Soil, Rec. = 0.5 ft			200/6" (R)				
		Hole stopped @ 49.5 ft							

Remarks:
Boring was offset from location B-102 and casing was advanced to a depth of 14 feet without sampling.

A piece of c. gravel was lodged in the shoe of sample S-3 when first driven. A second spoon was driven at the same depth but no sample was recovered.

Boulders and cobbles were encountered while driving and washing casing below a depth of 14 feet.

Boring was advanced open hole below a depth of 39 feet.

The description of the classification of the materials is based on USCS criteria that gravel is defined as material retained on a #4 sieve or larger. Laboratory data provided follows AASHTO classification guidelines that gravel is defined as material retained on a #10 sieve or larger.

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