



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

BORING LOG

**WATERBURY
NHG SGNL(43)
I-89 & VT-100 EXIT #10**

Boring No.: **B-101**
Page No.: 1 of 1
Pin No.: 13B018
Checked By: LAR

Boring Crew: GARROW, SALISBURY, DAIGNEAULT
Date Started: 3/25/13 Date Finished: 3/25/13
VTSPG NAD83: N 672184.97 ft E 1575013.29 ft
Station: 26+44 Offset: -3.00
Ground Elevation: 499.84 ft

Casing Type: WB Sampler: SS
I.D.: 4 in 1.5 in
Hammer Wt: N.A. 140 lb.
Hammer Fall: N.A. 30 in.
Hammer/Rod Type: Auto/AWJ
Rig: CME 55 TRACK C_r = 1.46

Groundwater Observations		
Date	Depth (ft)	Notes
		None Taken.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Asphalt Pavement, 0.0 ft - 1.2 ft								
		A-1-a, SaGr, gry, MTW, Rec. = 5.3 ft				13-22-25-R (47)	5.3	65.6	26.3	8.1
2.5		Field Note: NXDC, Cleaned out casing								
		A-1-b, SaGr, gry, MTW, Rec. = 1.2 ft, Soft & Pulverized Ledge Cut Fill				11-26-17-16 (43)	11.4	46.0	34.8	19.2
5.0		A-1-b, SiGrSa, gry, MTW, Rec. = 0.7 ft, Soft & Pulverized Ledge Cut Fill				10-R@5.0" (R)	12.3	39.9	40.0	20.1
		Field Note: NXDC, Cleaned out casing								
7.5		Field Note: BXMDC, Rec. = 0.3', Soft & Pulverized Ledge Cut Fill								
		Field Note: NXDC, Cleaned out casing								
12.5		A-1-b, SiSaGr, gry, MTW, Rec. = 0.6 ft, Soft & Pulverized Ledge Cut Fill				38-R@1.0" (R)	9.8	44.8	35.1	20.1
15.0		14.0 ft - 17.0 ft, Laminated dark-gray to black, Carbonaceous to highly graphitic Phyllite, and white quartz. Moderately hard, Unweathered, Fair rock, BXMDC, RMR = 50	1 (70)	80 (77)	5					
					5					
					5					
17.5		17.0 ft - 19.0 ft, Laminated dark-gray to black, Carbonaceous to highly graphitic Phyllite, and white quartz. Moderately hard, Unweathered, Fair rock, BXMDC, RMR = 46	2 (70)	100 (70)	4					
					4					
		Hole stopped @ 19.0 ft								

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 is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

BORING LOG 2 WATERBURY NHG SGNL(43).GPJ VERMONT AOT.GDT 4/15/13



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BORING LOG

**WATERBURY
NHG SGNL(43)
I-89 & VT-100 EXIT #10**

Boring No.: **B-102**
Page No.: 1 of 1
Pin No.: 13B018
Checked By: LAR

Boring Crew: DAIGNEAULT, GARROW, SALISBURY
Date Started: 3/26/13 Date Finished: 3/26/13
VTSPG NAD83: N 672144.29 ft E 1575062.79 ft
Station: 26+80 Offset: 50.00
Ground Elevation: 497.66 ft

Casing Type: WB Sampler: SS
I.D.: 4 in 1.5 in
Hammer Wt: N.A. 140 lb.
Hammer Fall: N.A. 30 in.
Hammer/Rod Type: Auto/AWJ
Rig: CME 55 TRACK C_r = 1.46

Groundwater Observations		
Date	Depth (ft)	Notes
03/27/13	6.8	See Remarks.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		A-1-b, SiGrSa, Dk/brn, Moist, Rec. = 1.4 ft				WH-4-7-10 (11)	14.1	32.8	47.0	20.2
2.5		Visual Description: GrSa with Broken Rock, Dk/gry, Moist, Rec. = 0.3 ft Field Note: NXDC, Possible Ledge Cut Fill				R@3.5"	8.4			
5.0		4.0 ft - 7.5 ft, Laminated dark-gray to black, Carbonaceous to highly graphitic Phyllite, and white quartz. Moderately hard, Unweathered, Poor rock, BXMDC, Unknown Dip. RMR = 36	1 (?)	11 (0)	2					
					3					
					7					
7.5		7.5 ft - 9.5 ft, Laminated dark-gray to black, Carbonaceous to highly graphitic Phyllite, and white quartz. Moderately hard, Unweathered, Poor rock, BXMDC, Unknown Dip. RMR = 36	2 (?)	40 (0)	2					
					9					
10.0		9.5 ft - 11.1 ft, Laminated dark-gray to black, Carbonaceous to highly graphitic Phyllite, and white quartz. Moderately hard, Unweathered, Fair rock, BXMDC, Unknown Dip. RMR = 46	3 (?)	100 (63)	6					
					9					
12.5		11.1 ft - 14.0 ft, Laminated dark-gray to black, Carbonaceous to highly graphitic Phyllite, and white quartz. Moderately hard, Unweathered, Fair rock, BXMDC, RMR = 41	4 (45)	90 (31)	2					
					6					
15.0		14.0 ft - 16.6 ft, Laminated dark-gray to black, Carbonaceous to highly graphitic Phyllite, and white quartz. Moderately hard, Unweathered, Fair rock, BXMDC, RMR = 50	5 (45)	85 (82)	1					
					9					
		Hole stopped @ 16.6 ft								

Remarks: Hole collapsed at 6.8 ft.

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 is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

BORING LOG 2 WATERBURY NHG SGNL(43).GPJ VERMONT AOT.GDT 4/15/13

PROJECT NAME: WATERBURY
PROJECT NUMBER: NHG SGNL(43)
FILE NAME: +13b018geo.dgn PLOT DATE: 12/31/2013
PROJECT LEADER: P. COBURN DRAWN BY: I. DEGUTIS
DESIGNED BY: I. DEGUTIS CHECKED BY: M. LACROIX
BORING DATA SHEET 1 SHEET 3 OF 17