



STATE OF VERMONT
AGENCY OF TRANSPORTATION
CONSTRUCTION AND
MATERIALS BUREAU
CENTRAL LABORATORY

BORING LOG

**NEWFANE
BF 0106(6)
TH-2 BR-12**

Boring No.: **B-101**
Page No.: 1 of 1
Pin No.: 13J306
Checked By: TDE

Boring Crew: JUDKINS, HOOK
Date Started: 6/24/15 Date Finished: 6/29/15
VTSPG NAD83: N 163305.11 ft E 1593357.33 ft
Station: 40+24 Offset: 0.27LT
Ground Elevation: 521.55 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

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 %
0.0 - 0.75		Asphalt Pavement, 0.0 ft - 0.75 ft								
0.75 - 5.0		A-1-b, GrSa, brn, Moist, Rec. = 1.1 ft				15-22-12-8 (34)	9.0	36.6	47.4	16.0
5.0 - 10.0		Field Note: Cleaned out with roller cone Visual Description: Broken Rock with sand, red-brn, MTW, Rec. = 0.3 ft				2-2-2-5 (4)	9.6			
10.0 - 15.0		Field Note: NXDC, Cleaned out casing. Appears to be Concrete and Broken Rock								
15.0 - 20.0		A-1-a, SaGr, Lt/gry, Moist, Rec. = 0.7 ft				19-35-R@0.0" (R)	11.5	44.4	40.5	15.1
20.0 - 22.8		Field Note: NXDC, Cleaned out casing. Appears to be Concrete and Broken Rock								
22.8 - 27.8		Field Note: Appears to be Concrete & Broken Rock Field Note: NXDC, Cleaned out casing. Appears to be Concrete and Broken Rock				R@1.0" (R)				
27.8 - 30.0		Field Note: No Movement Field Note: Cleaned out casing, NXDC				R@1.0" (R)				
30.0 - 32.8		22.8 ft - 27.8 ft, Fill & Concrete. NXMDC	1	20	3					
32.8 - 37.8		27.8 ft - 32.8 ft, Dark gray, To black porphyritic AMPHIBOLITE, with rust staining on joints. Hard, Very slightly weathered, Poor rock, NXMDC, RMR = 22	2 (75)	20 (0)	2					
37.8 - 39.0		32.8 ft - 37.8 ft, Dark gray, To black porphyritic AMPHIBOLITE, with rust staining on joints. Hard, Very slightly weathered, Fair rock, NXMDC, RMR = 43	3 (75)	96 (71)	2					
39.0 - 40.0					3					
40.0 - 41.0					3					
41.0 - 42.0					2					
42.0 - 43.0					2					
Hole stopped @ 37.8 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 NEWFANE BF 0106(6), GPJ, VERMONT AOT, GDT, 7/30/15



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BORING LOG

**NEWFANE
BF 0106(6)
TH-2 BR-12**

Boring No.: **B-102**
Page No.: **1 of 1**
Pin No.: **13J306**
Checked By: **TDE**

Boring Crew: JUDKINS, HOOK
Date Started: 6/25/15 Date Finished: 6/29/15
VTSPG NAD83: N 163291.32 ft E 1593370.76 ft
Station: 40+44 Offset: 0.23LT
Ground Elevation: 521.45 ft

Casing: 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

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 %	Groundwater Observations			
											Date	Depth (ft)	Notes	
		Asphalt Pavement, 0.0 ft - 0.52 ft												
		A-1-b, GrSa, orange-brn, Moist, Rec. = 1.7 ft				30-20-18-12 (38)	6.9	45.5	40.8	13.7				
5		Field Note:, NXDC, Cleaned out casing												
		Field Note:, No Recovery, Appears to be gravelly sand				6-3-2-2 (5)								
		Field Note:, NXDC, Cleaned out casing												
10		Visual Description:, Broken Rock with sand, blk-brn, Moist, Rec. = 0.2 ft				R@2.5" (R)	8.7							
		Field Note:, NXDC, Cleaned out casing. Appears to be weathered rock												
15		Visual Description:, Broken Rock with sand, gry-brn, Moist, Rec. = 0.2 ft				R@2.5" (R)	11.7							
		Field Note:, NXDC, Cleaned out casing												
		16.0 ft - 21.0 ft, Light gray, Strongly foliated amphibole-mica-SCHIST, with rust staining on joints. Medium hard, Moderately weathered, Poor rock, NXMDC, RMR = 22	1 (70)	34 (0)	2									
					2									
					3									
					3									
					3									
20		21.0 ft - 21.6 ft, Tan, Strongly foliated amphibole-mica-SCHIST, with rust on joints. Medium hard, Moderately weathered												
		21.6 ft - 22.8 ft, Light gray, Strongly foliated amphibole-mica-SCHIST, with rust on joints. Hard, Slightly weathered												
		22.8 ft - 26.0 ft, Dark gray, Porphyritic AMPHIBOLITE, with rust on joints. Hard, Very slightly weathered, Poor rock, NXMDC, RMR = 36	2 (70-75)	98 (37)	2									
					2									
					3									
					3									
					3									
					3									
		Hole stopped @ 26.0 ft												
		Remarks: Hole collapsed at 14.0 ft.												

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BORING LOG

Boring No.: **B-103**

**NEWFANE
 BF 0106(6)
 TH-2 BR-12**

Page No.: 1 of 1

Pin No.: 13J306

Checked By: TDE

Boring Crew: JUDKINS, HOOK
 Date Started: 6/22/15 Date Finished: 6/25/15
 VTSPG NAD83: N 163233.47 ft E 1593434.43 ft
 Station: 41+25 Offset: 5.29LT
 Ground Elevation: 521.01 ft

Casing: 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

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 %
0.0 - 0.68		Asphalt Pavement, 0.0 ft - 0.68 ft								
0.68 - 1.2		A-1-b, GrSa, brn, Moist, Rec. = 1.2 ft				12-10-22-9 (32)	7.4	43.7	44.4	11.9
1.2 - 5.0		Field Note:, NXDC, Cleaned out casing								
5.0 - 9.3		Visual Description:, Broken Rock (washed), orange-brn, Moist, Rec. = 0.4 ft				5-1-2-1 (3)	5.5			
9.3 - 10.0		Field Note:, Cleaned out casing, NXDC								
10.0 - 11.2		Visual Description:, Concrete & Broken Rock pieces, gry, Moist, Rec. 0.1 ft				R@1.0" (R)				
11.2 - 16.2		11.2 ft - 16.2 ft, Concrete, steel, and rock fill. NXMDC	1	82	5					
16.2 - 16.8		16.2 ft - 16.8 ft, Rock fill. NXMDC			2					
16.8 - 18.2		16.8 ft - 18.2 ft, Concrete			2					
18.2 - 19.3		18.2 ft - 19.3 ft, Rock fill			5					
19.3 - 19.6		19.3 ft - 19.6 ft, Concrete			5					
19.6 - 21.2		19.6 ft - 21.2 ft, Rock fill			3					
21.2 - 22.1		21.2 ft - 22.1 ft, Concrete & Rock			5					
22.1 - 23.7		22.1 ft - 23.7 ft, Concrete filled joints and rock	3		2					
23.7 - 27.1		NXMDC 23.7 ft - 27.1 ft, Gray, AMPHIBOLITE, with 80-85 degree dipping joints that have rust and purple staining along surface. Hard, Slightly weathered, Poor rock, RMR = 22	(-)	100 (0)	2					
27.1 - 27.1		Hole stopped @ 27.1 ft			2					
27.1 - 30.0		Remarks: Concrete was encountered at 9.3 ft.			2					
30.0 - 30.0					2					

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BORING LOG

NEWFANE
BF 0106(6)
TH-2 BR-12

Boring No.: **B-104**

Page No.: 1 of 1

Pin No.: 13J306

Checked By: TDE

Boring Crew: JUDKINS, HOOK, HULBERT
Date Started: 6/30/15 Date Finished: 6/30/15
VTSPG NAD83: N 163214.74 ft E 1593445.08 ft
Station: 41+45.3 Offset: 0.22RT
Ground Elevation: 521.12 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

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 %
0.0 - 0.5		Asphalt Pavement, 0.0 ft - 0.5 ft								
0.5 - 1.1		A-1-b, GrSa, brn, Moist, Rec. = 1.1 ft				14-12-8-5 (20)	10.6	38.2	48.0	13.8
1.1 - 5.0		Field Note:, Cleaned out casing with roller cone								
5.0 - 9.0		A-2-4, Sa, Lt/brn, Moist, Rec. = 0.9 ft, Lab Note: Sample was orange colored.				2-2-3-4 (5)	21.4	0.7	80.4	18.9
9.0 - 10.0		Field Note:, NXDC, Cleaned out casing								
10.0 - 15.0		Visual Description:, Severly weathered rock, Lt/brn, Moist, Rec. = 1.7 ft				19-18-17-22 (35)	20.2			
15.0 - 16.9		Field Note:, NXDC, Cleaned out casing								
16.9 - 15.1		Visual Description:, Severly weathered rock, grn-blk, Moist, Rec. = 0.7 ft	1 (-)	100 (0)	3	R@1.0" (R)	14.0			
15.1 - 20.1		15.1 ft - 20.1 ft, Dark gray, Massive AMPHIBOLITE, with vertical rust staining on joints. Hard, Very slightly weathered, Poor rock, NXMDC, RMR = 22			5	Top of Bedrock @ 15.1 ft				
20.1 - 25.1		20.1 ft - 25.1 ft, Dark gray, AMPHIBOLITE, with rust staining on joints. Hard, Slightly weathered, Poor rock, NXMDC, RMR = 29	2 (70-75)	100 (32)	2					
25.1 - 25.1		Hole stopped @ 25.1 ft			3					
25.1 - 25.1		Remarks: Hole collapsed at 16.9 ft.			4					

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