



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

BORING LOG

HARTFORD  
 NH 020-2(37)  
 US-4 MM 0.8

Boring No.: B-101

Page No.: 1 of 1

Pin No.: 12B480

Checked By: CEE

Boring Crew: GARROW, JUDKINS  
 Date Started: 11/29/12 Date Finished: 12/04/12  
 VTSPG NAD83: N 414130.80 ft E 1654091.10 ft  
 Station: 228+42 Offset: -10.00  
 Ground Elevation: 694.5 ft

Casing: WB  
 Sampler: SS  
 Type: WB 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 CE = 1.46

Groundwater Observations

Date	Depth (ft)	Notes
12/04/12	4.8	AM

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
0.0 - 1.0	Asphalt Pavement	Asphalt Pavement, 0.0 ft - 1.0 ft					
1.0 - 1.7	A-2-4, SiSa, Dk/brn, Moist, Rec. = 0.7 ft	A-2-4, SiSa, Dk/brn, Moist, Rec. = 0.7 ft	5-3-3-2 (6)	18.0	14.0	61.2	24.8
1.7 - 3.0	A-4, SiSa, Dk/gry, Moist, Rec. = 1.3 ft	A-4, SiSa, Dk/gry, Moist, Rec. = 1.3 ft	5-5-4-8 (9)	14.2	14.6	46.2	39.2
3.0 - 11.0	Field Note: NXDC, Silt, 11'-12'	Field Note: NXDC, Silt, 11'-12'					
11.0 - 15.0	Field Note: Visual Description: Broken Rock with Sand, Dk/gry, Moist, Rec. = 0.4 ft, Insufficient sample for testing.	Field Note: Visual Description: Broken Rock with Sand, Dk/gry, Moist, Rec. = 0.4 ft, Insufficient sample for testing.	R@5.0"	8.2			
15.0 - 17.0	Field Note: NXDC, Boulder, 15'-17'	Field Note: NXDC, Boulder, 15'-17'					
17.0 - 17.3	A-4, SaSi, gry, Moist, Rec. = 0.3 ft	A-4, SaSi, gry, Moist, Rec. = 0.3 ft	R@3.5"	9.3	18.4	34.3	47.3
17.3 - 18.3	Field Note: NXDC, Cobbles, 17.3'-18.3'	Field Note: NXDC, Cobbles, 17.3'-18.3'					
18.3 - 20.3	Field Note: NXDC, Boulder, 20.3'-22'	Field Note: NXDC, Boulder, 20.3'-22'					
20.3 - 25.0	A-4, GrSaSi, Dk/gry, Moist, Rec. = 0.6 ft	A-4, GrSaSi, Dk/gry, Moist, Rec. = 0.6 ft	25-35-36-R (71)	9.3	29.2	30.5	40.3
25.0 - 27.0	Field Note: NXDC, Cobbles, 27'-28'	Field Note: NXDC, Cobbles, 27'-28'					
27.0 - 38.7	A-4, GrSaSi, Dk/gry, Moist, Rec. = 1.5 ft	A-4, GrSaSi, Dk/gry, Moist, Rec. = 1.5 ft	8-22-36-38 (58)	9.1	20.5	36.0	43.5
38.7 - 39.7	Field Note: NXDC, Boulder, 36'-38'	Field Note: NXDC, Boulder, 36'-38'					
39.7 - 39.7	Field Note: No Recovery, 38'-39.7'	Field Note: No Recovery, 38'-39.7'	25-33-35-R (68)				
39.7 - 46.0	Field Note: NXDC, Silt, 46'-47'	Field Note: NXDC, Silt, 46'-47'					
46.0 - 54.4	A-4, GrSaSi, gry, Moist, Rec. = 0.9 ft	A-4, GrSaSi, gry, Moist, Rec. = 0.9 ft	13-15-23-R (38)	9.8	24.4	34.6	41.0
54.4 - 57.0	Field Note: NXDC, 54.4'-57.0'	Field Note: NXDC, 54.4'-57.0'					
57.0 - 66.0	A-4, SaSi, gry, Moist, Rec. = 1.0 ft	A-4, SaSi, gry, Moist, Rec. = 1.0 ft	35-28-37-R (65)	9.1	15.5	40.9	43.6
66.0 - 67.0	Field Note: NXDC, Silt, 66'-67'	Field Note: NXDC, Silt, 66'-67'					
67.0 - 67.3	Field Note: No Recovery, 67'-67.3'	Field Note: No Recovery, 67'-67.3'	R@3.5"				
67.3 - 71.0	Field Note: NXDC, Silt, 71'-72'	Field Note: NXDC, Silt, 71'-72'					
71.0 - 72.9	A-2-4, SiSaGr, gry, Moist, Rec. = 0.6 ft	A-2-4, SiSaGr, gry, Moist, Rec. = 0.6 ft	28-R@4.5"	8.1	37.6	32.9	29.5
72.9	Hole stopped @ 72.9 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. 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.

BORING LOG 2 HARTFORD NH 020-2(37).GPJ VERMONT AOT.GDT 1/28/13



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BORING LOG

HARTFORD  
 NH 020-2(37)  
 US-4 MM 0.8

Boring No.: B-102  
 Page No.: 1 of 1  
 Pin No.: 12B480  
 Checked By: CEE

Boring Crew: GARROW, JUDKINS, WHITLOCK  
 Date Started: 11/27/12 Date Finished: 11/28/12  
 VTSPG NAD83: N 141176.50 ft E 1654040.40 ft  
 Station: 228+07 Offset: -67.00  
 Ground Elevation: 667.3 ft

Casing Sampler  
 Type: H.S.A. & WB SS  
 I.D.: 3.25 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 CE = 1.46

Groundwater Observations

Date	Depth (ft)	Notes
11/27/12	12.8	While Drilling.
11/29/12	19.5	AM

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
		A-2-4, GrSaSi, gry-Dk/brn, Moist, Rec. = 0.9 ft	WH-2-3 (2)	13.3	21.0	47.7	31.3	19	2
		A-4, SaSi, Dk/brn-gry, Moist, Rec. = 1.6 ft	10-39-49-R (88)	10.5	16.1	40.3	43.6	20	2
10		A-4, SiSa, gry, Moist, Rec. = 1.6 ft	3-8-16-R (24)	11.3	12.4	49.1	38.5	19	2
		A-1-b, SiSaGr, gry, Moist, Rec. = 0.6 ft	16-R (R)	5.5	47.7	31.1	21.2		
20		Visual Description:, Broken Rock with Silty Sand, gry, Moist, Rec. = 0.3 ft	(R)	2.1					
		Field Note:, No sample taken, Switched to 4.0" wash bore, due to Cobbles & Boulders	(R)						
30		Field Note:, NXDC, Cobbles, 28.6'-30' A-4, GrSiSa, gry, Moist, Rec. = 1.1 ft	38-31-R (R)	8.3	25.6	37.6	36.8		
40		Field Note:, NXDC, Cobbles, 38.3'-40.0' Visual Description:, Broken Rock, gry, Moist, Rec. = 0.2 ft	40-55-R (R)						
50		Field Note:, NXDC, 48.6'-50.0' A-4, GrSaSi, gry, Moist, Rec. = 0.8 ft	35-R (R)	8.8	24.1	37.2	38.7		
60		Field Note:, NXDC, Cobbles, 59'-60' A-4, GrSaSi, gry, Moist, Rec. = 0.4 ft	(R)	9.6	31.4	32.3	36.3		
70		Field Note:, No sample, Refusal Hole stopped @ 68.3 ft	(R)						

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BORING LOG

HARTFORD  
 NH 020-2(37)  
 US-4 MM 0.8

Boring No.: B-103

Page No.: 1 of 1

Pin No.: 12B480

Checked By: CEE

Boring Crew: GARROW, JUDKINS, DAIGNEAULT  
 Date Started: 12/05/12 Date Finished: 12/05/12  
 VTSPG NAD83: N 414469.10 ft E 1654230.80 ft  
 Station: 229+87 Offset: -10.00  
 Ground Elevation: 692.8 ft

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

Groundwater Observations

Date	Depth (ft)	Notes
12/05/12	8.8	During Drilling.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
0.0 - 1.4		Asphalt Pavement, 0.0 ft - 1.4 ft							
1.4 - 10.8		A-1-b, SiGrSa, brn, Moist, Rec. = 0.4 ft	2-4-3-2 (7)	14.1	33.4	46.4	20.2		
10.8 - 21.0		Field Note:, NXDC, Cobbles, 10.8'-12.0' Field Note:, No Recovery	8-9-16-20 (25)						
21.0 - 30.6		Field Note:, NXDC, Cobbles, 21.0'-22.0' A-4, GrSaSi, gry, Moist, Rec. = 1.3 ft	18-18-18-22 (36)	9.6	26.4	34.0	39.6	19	2
30.6 - 41.2		Field Note:, NXDC, GrSaSi, 30.6'-32.0' A-4, GrSaSi, gry, Moist, Rec. = 1.0 ft	11-16-22-26 (38)	10.1	25.7	32.8	41.5	18	1
41.2 - 50.0		Field Note:, NXDC, Gravel, 41.2'-42.0' Field Note:, No Recovery	16-21-25-28 (46)						
50.0 - 60.7		Field Note:, NXDC, Gravel, 50.0'-52.0' A-4, SiSa, gry, Moist, Rec. = 1.2 ft	23-29-36-R (65)	9.3	14.7	44.6	40.7		
60.7 - 70.5		Field Note:, NXDC, Gravel, 60.7'-62.0' A-2-4, SaGrSi, gry, Moist, Rec. = 0.9 ft	15-17-19-R (36)	9.0	33.9	30.6	35.5	18	2
70.5 - 72.4		Field Note:, NXDC, Gravel, 70.5'-72.0' Visual Description:, SiSaGr, gry, Moist, Rec. = 0.2 ft, Insufficient sample for testing.	R@5.0"						
Hole stopped @ 72.4 ft									

Notes: 1. Stratification lines represent approximate boundary between material types. Transition may be gradual.  
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