



BORING LOG

CAMBRIDGE
BRO 1448(39)
TH-46 BR-28

Boring No.: B-102
Page No.: 1 of 2
Pin No.: 12J166
Checked By:

Boring Crew: GARROW, DAIGNEAULT, WHITLOCK
Date Started: 2/04/13 Date Finished: 2/21/13
VTSPG NAD83: N 761519.87 ft E 1545223.83 ft
Station: 23+50 Offset: 15.00
Ground Elevation: 649.19 ft

Casing Type: WB
I.D.: 4 in
Sampler Type: SS
I.D.: 1.5 in
Groundwater Observations
Date Depth (ft) Notes
02/06/13 7.9 AM
02/14/13 6.3 AM
02/21/13 4.3 AM
Hammer Wt: N.A. 140 lb.
Hammer Fall: N.A. 30 in.
Hammer/Rod Type: Auto/AWJ
Rig: CME 55 TRACK CE = 1.46

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. (ROD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
10	[Pattern]	A-1-b, SaGr, gry, Moist, Rec. = 1.2 ft, Broken Rocks were within sample.				7-31-27-22 (58)	8.2	47.0	37.9	15.1		
		A-1-b, SiSaGr, gry, Moist, Rec. = 0.6 ft, Roots & Broken Rock were within sample.				10-3-20-9 (23)	19.2	51.1	27.5	21.4		
20	[Pattern]	Field Note: NXDC, GrSa										
		A-1-b, SiSaGr, brn, Moist, Rec. = 0.5 ft, Broken Rocks were within sample.				2-4-7-5 (11)	14.0	48.8	30.3	20.9		
		Field Note: No Recovery				4-3-3-6 (6)						
30	[Pattern]	Field Note: NXDC, SaSi										
		A-4, Si, gry, MTW, Rec. = 0.9 ft				1-2-3-3 (5)	32.1	0.6	12.1	87.3		
40	[Pattern]	A-6, SiCl, gry, MTW, Rec. = 1.4 ft				2-2-2-3 (4)	40.6		3.7	96.3	32	13
		A-6, SiCl, gry, Moist, Rec. = 0.7 ft, No N-Value data.					39.6	0.6	99.4	35	11	
50	[Pattern]	A-4, Si, gry, Moist, Rec. = 1.5 ft				WH-2-2-3 (4)	33.9		12.0	88.0		
		A-6, SiCl, gry, Moist, Rec. = 2.0 ft				2-WH-WH-WH (WH)	33.9		1.8	98.2	35	11
60	[Pattern]	A-4, SaSi, gry, Moist, Rec. = 1.1 ft				2-4-5-7 (9)	30.9		26.8	73.2	25	6
		A-4, Si, gry, Moist, Rec. = 1.4 ft				1-2-4-5 (6)	33.0		11.4	88.6		
70	[Pattern]	A-4, SaSi, gry, Moist, Rec. = 1.0 ft				1-3-6-10 (9)	29.6		24.6	75.4		
		A-4, Si, gry, Moist, Rec. = 0.7 ft				2-5-5-4 (10)	33.4		16.7	83.3		

Notes: 1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
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I.D.: 1.5 in
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Date Depth (ft) Notes
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Hammer Fall: N.A. 30 in.
Hammer/Rod Type: Auto/AWJ
Rig: CME 55 TRACK CE = 1.46

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. (ROD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
70	[Pattern]	A-4, Si, gry, Moist, Rec. = 0.5 ft				1-1-WH-WH (1)	33.5		1.8	98.2	29	2
		A-4, Si, gry, Moist, Rec. = 1.2 ft				3-4-4-3 (8)	30.4		9.8	90.2	24	2
80	[Pattern]	A-4, SaSi, gry, Moist, Rec. = 1.2 ft				1-1-4-4 (5)	24.2		27.4	72.6		
		A-4, SaSi, gry, Moist, Rec. = 1.4 ft				2-3-4-1 (7)	26.8		24.0	76.0		
90	[Pattern]	Field Note: Cleaned out casing. Appears to be Gr Sa										
		A-1-b, SiGrSa, gry, Moist, Rec. = 0.3 ft				7-2-3-5 (5)	9.8		35.7	39.2	25.1	
100	[Pattern]	Field Note: Cleaned out casing. Appears to be Gravel										
		A-2-4, GrSiSa, gry, Moist, Rec. = 0.7 ft				31-R (R)	9.6		29.4	37.5	33.1	
110	[Pattern]	102.0 ft - 107.0 ft, Silvery-green, Phyllite, Moderately soft, Moderately weathered, Poor rock, NXMDC, RMR = 25	1 (80)	54 (0)	6 (6)	5 (5)	6 (6)					Top of Bedrock @ 102.0 ft
		107.0 ft - 112.0 ft, Silvery-green, Phyllite, Moderately soft, Slightly weathered, Poor rock, NXMDC, RMR = 25	2 (80)	94 (10)	6 (6)	6 (6)	7 (7)	7 (7)				
Hole stopped @ 112.0 ft												
Remarks: Ground surface elevation estimated from topographic plan.												

Notes: 1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
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BORING LOG 2 CAMBRIDGE BRO 1448(39).DPT VERMONT.AOT.GDT 3/12/13

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

BORING LOG

CAMBRIDGE
BRO 1448(39)
TH-46 BR-28

Boring No.: B-103
Page No.: 1 of 2
Pin No.: 12J166
Checked By:

Boring Crew: GARROW, DAIGNEAULT, WHITLOCK
Date Started: 2/25/13 Date Finished: 2/28/13
VSPG NAD83: N 761493.24 ft E 1545283.52 ft
Station: 24+07 Offset: -17.00
Ground Elevation: 648.64 ft

Type: WB
I.D.: 4 in
Hammer Wt: N.A.
Hammer Fall: N.A.
Hammer/Rod Type: Auto/AWJ
Rig: CME 55 TRACK
Casing: WB
Sampler: SS
Date: 02/26/13
Depth (ft): 3.4
Notes: AM
Blows/6" (N Value): 2-3-2-4 (5)
Moisture Content %: 15.9
Gravel %: 59.1
Sand %: 33.5
Fines %: 7.4
LL %: 32.0
Pl %: 0.3
4-4-4-6 (8)
15.9 59.1 33.5 7.4
2-3-3-5 (6)
32.0 0.3 4.5 95.2
1-WH-WH-1 (WH)
32.9 5.6 94.4 27 7
2-1-2-2 (3)
36.8 7.8 92.2 29 10
1-WH-1 (1)
56.9 6.1 93.9 30 9
1-3-6-3 (9)
31.2 22.1 77.9
4-5-4-4 (9)
38.4 0.1 11.3 88.6 28 9
2-2-3-3 (5)
34.5 11.7 88.3
2-2-3-3 (5)
30.1 43.2 56.8
2-3-2-2 (5)
33.0 15.2 84.8
WH-WH-WH-2 (WH)
36.0 2.0 98.0 31 4

Groundwater Observations		
Date	Depth (ft)	Notes
02/26/13	3.4	AM
02/28/13	3.3	AM

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. (ROD %)	Drill Rate (min/ft)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	Pl %
		Field Note: Cleaned out casing										
		Field Note: No Recovery										
		Field Note: Lost Water Return at 6.0 ft.										
10		A-1-a, SaGr, brn, MTW, Rec. = 0.5 ft, Broken Rock was within sample.										
		Field Note: Cleaned out casing. Appears to be SaSi										
		A-4, Si, gry, MTW, Rec. = 1.2 ft, A very thin layer of Clay was noticeable.										
20		A-4, Cisi, gry, MTW, Rec. = 2.0 ft										
		A-4, Cisi, gry, MTW, Rec. = 1.4 ft										
30		A-4, Cisi, gry, MTW, Rec. = 1.6 ft, Regained Water Return at 29.0 ft.										
		A-4, SaSi, gry, MTW, Rec. = 1.5 ft										
		Field Note: Cleaned out casing. Appears to be Si Sa										
40		A-4, Cisi, gry, MTW, Rec. = 1.2 ft										
		A-4, Si, gry, MTW, Rec. = 1.8 ft, A very thin layer of Clay was noticeable.										
50		A-4, SaSi, gry, MTW, Rec. = 1.0 ft										
		A-4, Si, gry, MTW, Rec. = 1.4 ft										
		A-4, Si, gry, MTW, Rec. = 2.0 ft										

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Gravel %: 59.1
Sand %: 33.5
Fines %: 7.4
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4-4-4-6 (8)
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30.1 43.2 56.8
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Groundwater Observations		
Date	Depth (ft)	Notes
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		A-4, SaSi, gry, MTW, Rec. = 2.0 ft, A very thin layer of Clay was noticeable.										
70		A-4, Si, gry, MTW, Rec. = 1.8 ft										
		Field Note: Cleaned out casing. Appears to be Sa Gr										
80		A-1-b, SiSaGr, gry, Moist, Rec. = 0.4 ft										
		Field Note: Cleaned out casing. Appears to be Sa										
90		Field Note: No Recovery										
		Field Note: No Recovery										
100		98.2 ft - 102.2 ft, Soft, Broken, Weathered Rock. Poor rock, NXDC										
		102.2 ft - 107.2 ft, Silvery-green, Quartz-muscovite-chlorite Schist, Moderately hard, Unweathered, Fair rock, NXMDC, RMR = 56	1 (80)	100 (62)	4	5						
		107.2 ft - 112.2 ft, Silvery-green, Quartz-muscovite-chlorite Schist, Moderately hard, Unweathered, Good rock, NXMDC, RMR = 63	2 (80)	100 (92)	5	7						
		Hole stopped @ 112.2 ft										
		Remarks: Ground surface elevation estimated from topographic plan.										

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BORING LOG 2 CAMBRIDGE BRO 1448(39) GP1 VERMONT DOT 3/12/13

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