



BORING LOG

STRAFFORD
BF 0177(10)
VT-132 BR-29

Boring No.: **B-101**
Page No.: **1 of 2**
Pln No.: **13J088**
Checked By: **CEE**

Boring Crew: **GARROW, HOOK, DAIGNEAULT**
Date Started: **12/12/13** Date Finished: **1/10/14**
VTSPG NAD83: **N 486404.17 ft E 1677419.41 ft**
Station: **11+85** Offset: **-7.00**
Ground Elevation: **888.0 ft**

Casing Sampler
Type: **WB SPLIT BARREL**
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 45C SKID C = 1.33**

Groundwater Observations
Date Depth Notes
12/23/13 12.9 After 10 days.
01/09/14 9.6 AM
01/14/14 12.6 AM

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. (ROD %)	Drill Rate (min/feet)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Asphalt Pavement, 0.0 ft - 1.15 ft								
5		A-2-4, GrSa, Lt/brn, Moist, Rec. = 1.2 ft, Cleaned out with roller cone. A-2-4, Sa, brn, Moist, Rec. = 0.8 ft				10-6-4-6 (10) 5-3-4-6 (7)	13.5 17.6	24.7 18.7	56.7 61.5	18.6 19.8
		Field Note: No Recovery Field Note: NXDC, Cleaned out casing.				R@5.0"				
10		A-1-b, SaGr, brn, Moist, Rec. = 0.3 ft, Lab Note: Lots of Broken Rock was within sample. Field Note: NXDC, Cleaned out casing. Field Note: No Recovery Field Note: NXDC, Cleaned out casing.				44-R@1.0" R@1.0"	9.3	56.0	30.7	13.3
15		A-2-4, SiSa, gry-brn, MTW, Rec. = 0.5 ft, NXDC, Cleaned out casing. A-1-a, SaGr, gry-brn, MTW, Rec. = 0.3 ft, Lab Note: Sample was mostly Broken Rock. A-1-b, GrSa, brn, Moist, Rec. = 1.2 ft A-1-b, GrSa, brn, Moist, Rec. = 1.0 ft				10-2-1-3 (3) 12-10-8-12 (18) 14-22-20-22 (42) 17-15-13-13 (28)	39.8 10.7 12.0 13.1	8.4 60.3 32.2 25.5	67.9 29.1 49.7 60.6	23.7 10.6 18.1 13.9
20		A-1-b, GrSa, brn, Moist, Rec. = 0.9 ft Field Note: NXDC, Cleaned out casing.				24-15-13-R@5.0" (28)	12.5	36.9	50.5	12.6
25		A-1-b, GrSa, brn, Moist, Rec. = 0.8 ft, Lab Note: Broken Rock was within sample.				4-12-17-31 (29)	13.5	20.1	66.5	13.4
30		Visual Description: Broken Rock, gry, Moist, Rec. = 0.3 ft Field Note: Pulled casing and changed bit Field Note: NXDC, Cleaned out casing.				3-R@3.5"	11.4			
35		A-2-4, GrSa, brn, Moist, Rec. = 1.0 ft, Lab Note: Broken Rock was within sample.				29-44-R@2.5" (R)	13.9	32.6	49.4	18.0

Notes: 1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
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Date Started: **12/12/13** Date Finished: **1/10/14**
VTSPG NAD83: **N 486404.17 ft E 1677419.41 ft**
Station: **11+85** Offset: **-7.00**
Ground Elevation: **888.0 ft**

Casing Sampler
Type: **WB SPLIT BARREL**
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 45C SKID C = 1.33**

Groundwater Observations
Date Depth Notes
12/23/13 12.9 After 10 days.
01/09/14 9.6 AM
01/14/14 12.6 AM

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. (ROD %)	Drill Rate (min/feet)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
40		Field Note: NXDC, Cleaned out casing. A-2-4, Sa, brn, Moist, Rec. = 1.1 ft				26-34-R@2.5" (R)	17.8	7.4	74.6	18.0
45		A-1-b, GrSa, Dk/brn, Moist, Rec. = 1.1 ft				16-8-22-R@2.5" (30)	18.2	27.8	52.8	19.4
50		Field Note: NXDC, Cleaned out casing. A-1-b, GrSa, Dk/brn, Moist, Rec. = 1.0 ft				39-43-R@2.5" (R)	14.9	30.3	53.9	15.8
55		Field Note: NXDC, Cleaned out casing. Field Note: No Recovery				R@6.0"				
60		57.1 ft - 59.1 ft, Gray, Micaceous quartz-rich Limestone, Hard, Unweathered, Fair rock, NXDC, RMR = 57 59.1 ft - 63.1 ft, Gray, Micaceous quartz-rich Limestone, Hard, Unweathered, Good rock, NXDC, RMR = 65	1 (60) 2 (60)	65 (0) 90 (50)	5 11					
65		63.1 ft - 67.1 ft, Gray, Micaceous quartz-rich Limestone, Hard, Unweathered, Good rock, NXDC, RMR = 74	3 (60)	100 (93)	10					
70		Hole stopped @ 67.1 ft								
75		Remarks: 1. Increment weathered hindered the days able to drill within the start and finish date. 2. Hole collapsed at 16.3 ft. (01/14/14)								

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BORING LOG 2 STRAFFORD BF 0177(10).GPJ, VERMONT AOT.GDT 1/30/14

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

BORING LOG

STRAFFORD
BF 0177(10)
VT-132 BR-29

Boring No.: **B-104**

Page No.: 1 of 1

Pin No.: 13J088

Checked By: CEE

Boring Crew: HOOK, DAIGNEAULT
Date Started: 1/15/14 Date Finished: 1/16/14
VTSPG NAD83: N 486464.52 ft E 1677459.89 ft
Station: 12+52 Offset: 17.50
Ground Elevation: 881.0 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 45C TRACK C = 1.34

Groundwater Observations		
Date	Depth (ft)	Notes
01/16/14	7.5	AM
01/16/14	5.3	Casing removed.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RCD %)	Drill Rate minutes/ft	Groundwater Observations				
						Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
5		A-3, Sa, brn, Moist, Rec. = 0.2 ft				2-1-WH-1 (1)	38.4	5.5	86.9	7.6
		A-2-4, Sa, brn, Moist, Rec. = 1.1 ft, Lab Note: Wood chunks were within sample.				1-2-2-3 (4)	19.9	11.7	76.6	11.7
		A-1-b, SaGr, Lt/brn, Moist, Rec. = 0.5 ft, Lab Note: Broken Rock was within sample.				2-5-10-7 (15)	9.0	50.0	43.3	6.7
		A-1-b, GrSa, gry-brn, MTW, Rec. = 1.5 ft, Lab Note: Broken Rock was within sample.				5-8-9-7 (17)	16.5	34.0	56.7	9.3
		A-1-b, GrSa, brn, Wet, Rec. = 2.0 ft, Cleaned out with roller cone.				6-6-8-9 (14)	18.7	25.5	65.3	9.2
10		A-2-4, GrSa, brn, Moist, Rec. = 0.9 ft, Cleaned out with roller cone.				5-7-7-11 (14)	15.8	25.4	56.6	18.0
		A-1-b, GrSa, brn, Moist, Rec. = 1.1 ft, Cleaned out with roller cone.				12-15-27-23 (42)	12.2	30.5	54.8	14.7
		A-1-b, GrSa, brn, Moist, Rec. = 1.1 ft, Lab Note: Broken Rock was within sample.				9-21-31-R@1.0" (52)	10.9	38.6	46.1	15.3
15		Field Note: NXDC, Cleaned out casing.				15-14-22-20 (36)	13.5	32.6	51.5	15.9
		A-2-4, GrSa, brn, Moist, Rec. = 1.2 ft, NXDC, Cleaned out casing.				12-11-16-28 (27)	12.7	34.5	52.3	13.2
		A-1-b, GrSa, brn, Moist, Rec. = 1.1 ft, Lab Note: Broken Rock was within sample.								
		Field Note: NXDC, Cleaned out casing.								
		A-2-4, SiGrSa, brn, Moist, Rec. = 0.9 ft					45-R@6.0" (R)	15.5	28.1	51.4
20		Field Note: Cobble/Hardpan, NXDC, Cleaned out casing.								
		A-2-4, SiGrSa, brn, Moist, Rec. = 0.9 ft								
25		30.0 ft - 32.0 ft, Gray, Micaceous quartz-rich Limestone, Hard, Unweathered, Fair rock, NXDC, RMR = 57	1 (60)	100 (0)	6					Top of Bedrock @ 30.0 ft
		32.0 ft - 35.0 ft, Gray, Micaceous quartz-rich Limestone, Hard, Unweathered, Good rock, NXDC, RMR = 71	2 (60)	100 (87)	7					
		35.0 ft - 40.0 ft, Gray, Micaceous quartz-rich Limestone, Hard, Unweathered, Good rock, NXDC, RMR = 71	3 (60)	86 (80)	6					
30		32.0 ft - 35.0 ft, Gray, Micaceous quartz-rich Limestone, Hard, Unweathered, Good rock, NXDC, RMR = 71			7					
		35.0 ft - 40.0 ft, Gray, Micaceous quartz-rich Limestone, Hard, Unweathered, Good rock, NXDC, RMR = 71			7					
35		35.0 ft - 40.0 ft, Gray, Micaceous quartz-rich Limestone, Hard, Unweathered, Good rock, NXDC, RMR = 71			7					
					5					
40		Hole stopped @ 40.0 ft			5					
					5					

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