



**Richmond
BF 0284(28)
US-2 Br #32**

Boring Crew: GARROW, NIETO
Date Started: 9/15/15 Date Finished: 9/15/15
VTSPG NAD83: N 690754.92 ft E 1522623.11 ft
Station: 271+70 Offset: 22.00
Ground Elevation: 312.3 ft

Casing: WB Sampler: SS
Type: WB 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 = n/a

Groundwater Observations

Date	Depth (ft)	Notes
09/15/15	4.1	After Drilling.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
2-9		A-1-a, SaGr, blk-brn, Moist, Rec. = 1.0 ft, Lab Note: A lot of asphalt pavement and some wood fiber was within sample.	8-7 (17)	9.4	73.0	24.3	2.7
2-9		A-1-a, SaGr, gry, Moist, Rec. = 0.7 ft	7-9-4 (16)	12.4	66.1	26.4	7.5
5		A-1-b, GrSa, brn, Moist, Rec. = 0.6 ft	5-2-1-3 (3)	21.0	24.6	62.9	12.5
6-8		No Recovery, 6.0 ft - 8.0 ft Field Note:., Cleaned out casing.	6-2-2-1 (4)				
8-10		A-2-4, SiSa, gry, Moist, Rec. = 0.8 ft, Lab Note: Sample tested Non-Plastic.	2-2-2-3 (4)	23.4	7.8	68.9	23.3
10-11		A-1-b, Sa, gry, Moist, Rec. = 0.7 ft	3-2-2-4 (4)	18.9	11.1	80.0	8.9
11-13		A-1-b, Sa, gry, Moist, Rec. = 0.8 ft	2-2-2-3 (4)	18.6	13.8	77.0	9.2
14-16		No Recovery, 14.0 ft - 16.0 ft	4-4-3-4 (7)				
20-21		A-1-a, SaGr, gry, Moist, Rec. = 0.6 ft, Lab Note: Broken Rock was within sample.	13-7-10-6 (17)	8.9	67.6	24.3	8.1
25-26		A-2-4, Sa, Lt/brn-gry, Moist, Rec. = 1.0 ft	5-3-3-4 (6)	20.5	19.5	63.3	17.2
30-31		A-3, Sa, Lt/brn, Moist, Rec. = 1.0 ft	4-4-5-6 (9)	22.2		92.1	7.9
35-37		No Recovery, 35.0 ft - 37.0 ft	4-7-4-6 (11)				
Hole stopped @ 37.0 ft							
40	Remarks: Hole Collapsed at 4.2 feet.						

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.



STATE OF VERMONT
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BORING LOG

Boring No.: **B-102**
 Page No.: 1 of 1
 Pin No.: 13c070
 Checked By: CEE

Richmond
BF 0284(28)
US-2 Br #32

Boring Crew: HOOK, GARROW, NIETO
 Date Started: 9/11/15 Date Finished: 9/14/15
 VTSPG NAD83: N 690793.88 ft E 1522677.90 ft
 Station: 272+20 Offset: -22.70
 Ground Elevation: 316.8 ft

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 SKID C = n/a

Groundwater Observations		
Date	Depth (ft)	Notes
09/14/15	8.0	Before drilling,

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
5		A-2-4, GrSiSa, brn-Lt/brn, Moist, Rec. = 1.4 ft, Lab Note: Grass roots and wood fiber was within sample.	WH-1-2-3 (3)	8.3	30.5	53.7	15.8
		A-1-b, SaGr, brn, Moist, Rec. = 10.0 ft	1-2-4-3 (6)	6.1	48.5	36.1	15.4
10		A-2-4, SiSa, brn, Moist, Rec. = 1.1 ft	2-4-2-5 (6)	18.7	12.8	61.2	26.0
		No Recovery, 6.0 ft - 8.0 ft	5-7-8-14 (15)				
15		A-1-a, SaGr, Lt/brn, Moist, Rec. = 0.6 ft	6-10-11-8 (21)	10.1	57.7	31.6	10.7
		Field Note:., Cleaned out casing. No Recovery, 10.0 ft - 12.0 ft	5-3-2-1 (5)				
20		A-2-4, GrSa, brn, MTW, Rec. = 0.4 ft	1-2-2-3 (4)	23.9	20.4	60.8	18.8
		No Recovery, 14.0 ft - 16.0 ft	3-2-1-1 (3)				
25		No Recovery, 16.0 ft - 18.0 ft	1-2-1-4 (3)				
		A-1-b, SaGr, brn-Lt/brn, Moist, Rec. = 1.3 ft	2-4-6-6 (10)	12.5	49.4	40.4	10.2
30		Field Note:., Cleaned out casing.					
		A-2-4, Sa, Lt/brn, Moist, Rec. = 1.2 ft	3-2-4-5 (6)	21.1	4.9	78.7	16.4
35		No Recovery, 30.0 ft - 32.0 ft	WH-3-3-5 (6)				
		A-3, Sa, brn, Moist, Rec. = 1.3 ft	1-4-4-5 (8)	21.2	4.8	89.4	5.8
40		Visual Description:., SaSi, brn, Moist, Rec. = 0.1 ft, Lab Note: Possible thin layer of clay. Insufficient sample size for testing.	1-6-6-9 (12)	35.0			
	Hole stopped @ 42.0 ft						
45	Remarks: Hole Collapsed at 32.0 feet.						

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BORING LOG - 2 RICHMOND BF0284(28).GPJ VERMONT AOT.GDT 11/12/15



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BORING LOG

Richmond
BF 0284(28)
US-2 Br #32

Boring No.: **B-104**

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Pin No.: 13c070

Checked By: CEE

Boring Crew: HOOK, JUDKINS, GARROW
 Date Started: 9/10/15 Date Finished: 9/11/15
 VTSPG NAD83: N 690795.54 ft E 1522634.05 ft
 Station: 271+76.3 Offset: -19.50
 Ground Elevation: 317.7 ft

Casing Sampler
 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 45C SKID C = n/a

Groundwater Observations

Date	Depth (ft)	Notes
09/11/15	7.6	After Drilling.
09/11/15	7.6	Before Drilling.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Asphalt Pavement, 0.0 ft - 0.66 ft					
		A-1-b, SiGrSa, brn, Moist, Rec. = 1.4 ft	5-5-5-4 (10)	9.9	30.3	45.6	24.1
5		Cleaned out casing, 4.3 ft - 5.0 ft					
		A-1-b, SaGr, brn, Moist, Rec. = 1.1 ft, Lab Note: Broken Rock was within sample.	9-35-11-6 (46)	12.6	47.4	40.9	11.7
10		Cleaned out casing, 8.9 ft - 10.0 ft					
		A-1-b, GrSa, gry, Moist, Rec. = 0.5 ft	6-4-5-6 (9)	22.5	40.0	55.8	4.2
15		Cleaned out casing, 14.3 ft - 15.0 ft					
		A-1-b, SiSaGr, gry, Moist, Rec. = 0.4 ft, Lab Note: Sample tested Non-Plastic.	3-3-3-3 (6)	16.8	40.0	35.2	24.8
20		A-1-b, Sa, gry, Moist, Rec. = 0.9 ft	3-2-3-3 (5)	21.8	3.3	87.2	9.5
25		Cleaned out casing, 24.3 ft - 25.0 ft					
		A-1-a, SaGr, gry, Moist, Rec. = 0.5 ft	5-2-4-5 (6)	11.2	59.5	30.6	9.9
30		Cleaned out casing, 29.6 ft - 30.0 ft					
		A-3, Sa, gry, Moist, Rec. = 0.2 ft	6-3-4-5 (7)	23.5	7.0	85.9	7.1
35		No Recovery, 35.0 ft - 37.0 ft, Changed to Mud Drilling due to light gray sand. 35-40 feet.	9-7-7-6 (14)				
40		A-4, Si, Lt/gry, Moist, Rec. = 1.3 ft	4-5-5-6 (10)	28.4		16.6	83.4
Hole stopped @ 42.0 ft							
45		Remarks: Hole Collapsed at 7.8 feet.					

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