



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

BORING LOG

ESSEX
STP 5400(7)
VT 2A, VT 289 MAST ARMS

Boring No.: **B-101**
Page No.: **1 of 1**
Pin No.: **13D330**
Checked By: **CEE**

Boring Crew: JUDKINS, DAIGNEAULT, HOOK
Date Started: 3/25/15 Date Finished: 3/25/15
VTSPG NAD83: N 735170.42 ft E 1478018.75 ft
Station: 104+61.5 Offset: -48.90
Ground Elevation: 350.0 ft

Casing: H.S.A. 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_r = 1.34

Groundwater Observations

Date	Depth (ft)	Notes
03/25/15	21.7	While drilling.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		A-1-b, SaGr, orange-brn, Moist, Rec. = 1.3 ft, Lab Note: Broken Rock was within sample. Frost area.	13-32-18-15 (50)	10.7	44.6	42.8	12.6
		A-3, GrSa, brn, Moist, Rec. = 1.5 ft, Lab Note: Broken Rock was within sample.	11-9-8-6 (17)	5.6	26.5	63.9	9.6
5		A-2-4, Sa, brn, Moist, Rec. = 1.6 ft	7-7-7-7 (14)	7.6	6.8	78.2	15.0
		A-2-4, Sa, brn, Moist, Rec. = 1.5 ft	7-6-7-8 (13)	13.9	0.8	87.6	11.6
10		A-2-4, GrSa, brn, Moist, Rec. = 0.5 ft, Lab Note: Broken Rock was within sample. Stone stuck in end of sampler.	13-13-13-11 (26)	8.2	26.3	57.7	16.0
		A-2-4, Sa, brn, MTW, Rec. = 2.0 ft, Lab Note: Broken Rock was within sample.	6-6-7-7 (13)	20.7	2.6	80.5	16.9
		A-2-4, Sa, brn, Wet, Rec. = 0.5 ft, Lab Note: Broken Rock was within sample. Stone stuck in end of sampler.	3-5-5-6 (10)	23.2	16.2	67.7	16.1
15		A-4, SaSi, brn, MTW, Rec. = 1.6 ft	3-3-5-4 (8)	26.9	0.7	48.0	51.3
20		A-4, Si, gry, MTW, Rec. = 1.7 ft, Lab Note: A few layers of clay were noticeable. Sample tested: (NP)	1-1-2-2 (3)	31.5	0.1	4.7	95.2
		A-4, Si, gry, Wet, Rec. = 1.6 ft, Lab Note: A few layers of clay were noticeable. Sample tested: (NP)	2-3-1-2 (4)	31.5	0.1	8.0	91.9
25		Hole stopped @ 25.0 ft					
		Remarks: 1. Hole collapsed at 2.4 ft. 2. High blow counts from 0-2 feet due to frost.					

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_r 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 ESSEX STP 5400(7).GPJ VERMONT AOT.GDT 4/27/15



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

BORING LOG

ESSEX
STP 5400(7)
VT 2A, VT 289 MAST ARMS

Boring No.: **B-102**
Page No.: **1 of 1**
Pin No.: **13D330**
Checked By: **CEE**

Boring Crew: JUDKINS, DAIGNEAULT, HOOK
Date Started: 3/25/15 Date Finished: 3/25/15
VTSPG NAD83: N 735195.94 ft E 1478102.37 ft
Station: 104+53.5 Offset: 38.10
Ground Elevation: 350.0 ft

Casing: H.S.A. 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_r = 1.34

Groundwater Observations

Date	Depth (ft)	Notes
03/25/15	18.8	While drilling.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
5		A-1-b, SaGr, white-brn, Moist, Rec. = 1.6 ft, Lab Note: Broken Rock was within sample. Frost area.	22-23-26-17 (49)	13.8	46.6	41.6	11.8		
		A-2-4, Sa, brn, Moist, Rec. = 1.5 ft, Lab Note: Broken Rock was within sample.	16-13-6-6 (19)	7.3	11.1	75.8	13.1		
		A-2-4, Sa, brn, Moist, Rec. = 1.6 ft, Lab Note: Small pieces of plywood were within sample.	6-9-8-9 (17)	6.7	0.1	87.8	12.1		
10		A-3, Sa, brn-Dk/brn, Moist, Rec. = 1.7 ft	7-5-4-5 (9)	7.3	0.1	93.1	6.8		
		A-2-4, Sa, orange-brn, MTW, Rec. = 1.9 ft	3-3-1-2 (4)	25.8	0.1	80.5	19.4		
		A-2-4, SiSa, orange-brn, MTW, Rec. = 1.3 ft	3-4-6-4 (10)	23.2	0.1	75.6	24.3		
		A-2-4, Sa, orange-brn, MTW, Rec. = 2.0 ft	4-3-3-4 (6)	22.2	1.4	80.3	18.3		
		A-2-4, Sa, orange-brn, MTW, Rec. = 1.5 ft	2-3-2-4 (5)	20.5	2.5	78.7	18.8		
15		A-4, Si, gry, Moist, Rec. = 0.5 ft		30.4		2.2	97.8	27	2
		A-4, Si, gry, Moist, Rec. = 2.0 ft, Lab Note: A few thin layers of clay were noticeable. Sample tested: (NP)	WH-WH-WH-WH (WH)	34.1		1.0	99.0		
25		Field Note: SiCl Shelby Tube, gry, MTW, Rec. = 2.0 ft							
	Hole stopped @ 26.0 ft								
Remarks: 1. Hole collapsed at 11.3 ft. 2. High blow counts from 0-2 feet due to frost.									

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 ESSEX STP 5400(7).GPJ VERMONT AOT.GDT 4/27/15



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

BORING LOG

ESSEX
STP 5400(7)
VT 2A, VT 289 MAST ARMS

Boring No.: **B-103**
Page No.: **1 of 1**
Pin No.: **13D330**
Checked By: **CEE**

Boring Crew: JUDKINS, DAIGNEAULT, HOOK
Date Started: 3/24/15 Date Finished: 3/24/15
VTSPG NAD83: N 736272.15 ft E 1477813.69 ft
Station: 115+85.5 Offset: -33.50
Ground Elevation: 367.0 ft

Casing: H.S.A. 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_s = 1.34

Groundwater Observations		
Date	Depth (ft)	Notes
03/24/15	19.2	While drilling.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
5		A-2-4, SiGrSa, brn, Moist, Rec. = 1.5 ft, Lab Note: Broken Rock was within sample. Frost area.	11-19-26-32 (45)	20.3	20.7	58.9	20.4		
		A-1-b, SaGr, white-brn, Moist, Rec. = 0.6 ft, Lab Note: Lots of Broken Rock was within sample. Frost area.	36-32-28-22 (60)	4.9	54.7	31.1	14.2		
5		A-2-4, Sa, brn, Moist, Rec. = 1.0 ft		3.8	0.9	87.2	11.9		
		A-3, Sa, brn, Moist, Rec. = 1.8 ft	15-13-11-10 (24)	4.4		90.2	9.8		
		A-3, Sa, brn, Moist, Rec. = 1.6 ft	9-9-10-10 (19)	5.8		91.9	8.1		
		A-2-4, Sa, brn, Moist, Rec. = 1.5 ft	7-7-7-7 (14)	12.8	0.1	85.6	14.3		
10		A-2-4, Sa, brn, MTW, Rec. = 1.3 ft	5-4-3-4 (7)	20.7	0.9	72.8	26.3		
		A-4, Si, brn, MTW, Rec. = 2.0 ft, Lab Note: A small layer of clay was noticeable. Sample tested: (NP)	9-8-7-7 (15)	24.5		19.6	80.4		
		A-4, SiSa, brn, MTW, Rec. = 1.3 ft	6-7-8-8 (15)	22.4		60.8	39.2		
15		A-4, Si, gry, MTW, Rec. = 0.7 ft		28.7		3.4	96.6	29	3
		A-4, CISi, gry, MTW, Rec. = 2.0 ft	1-1-2-2 (3)	33.3		1.0	99.0	33	10
25		Shelby Tube, gry, Moist, Rec. = 2.0 ft, 22.0 ft - 24.0 ft							
		Shelby Tube, gry, Moist, Rec. = 1.2 ft, 24.0 ft - 25.2 ft	R@25.2 ft.						
Hole stopped @ 25.2 ft									
Remarks: 1. Hole collapsed at 8.5 ft. 2. High blow counts from 0-4 feet due to frost.									

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 ESSEX STP 5400(7).GPJ VERMONT AOT.GDT 4/27/15