



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

BORING LOG

WILLISTON
STP-HES 5500(12)
VT-2A ROADWAY

Boring No.: **B-101**

Page No.: 1 of 1

Pin No.: 12D196

Checked By: MLM

Boring Crew: JUDKINS, DAIGNEAULT, HALL
 Date Started: 8/30/13 Date Finished: 8/30/13
 VTSPG NAD83: N 720634.01 ft E 1480274.48 ft
 Station: 98+50.02 Offset: -36.00
 Ground Elevation: 358.47 ft

Type: _____
 I.D.: _____
 Hammer Wt: N.A. 140 lb.
 Hammer Fall: N.A. 30 in.
 Hammer/Rod Type: Auto/AWJ
 Rig: CME 45C TRACK C_a = 1.34

Casing Sampler

WB SS

4 in 1.5 in

N.A. 140 lb.

N.A. 30 in.

Auto/AWJ

CME 45C TRACK C_a = 1.34

Groundwater Observations

Date	Depth (ft)	Notes
08/30/13	6.0	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, GrSa, Dk/brn, Moist, Rec. = 0.8 ft	1-2-1-4 (3)	14.1	27.8	54.2	18.0		
		A-2-4, SiSa, Dk/brn, MTW, Rec. = 1.2 ft	2-3-3-2 (6)	21.8	16.3	62.6	21.1		
		A-4, Si, brn-gry, Wet, Rec. = 1.4 ft	2-3-5-5 (8)	24.6	5.6	19.0	75.4		
		A-6, SiCl, brn-gry, MTW, Rec. = 1.8 ft	4-5-5-6 (10)	25.7	0.6	9.3	90.1	32	12
10		A-4, ClSi, brn-gry, MTW, Rec. = 1.9 ft	3-5-8-7 (13)	26.5	7.8	6.6	85.6	29	8
		A-6, SiCl, brn-gry, MTW, Rec. = 1.5 ft	3-5-5-10 (10)	26.9	0.8	3.9	95.3	37	15
15		Field Note:, No Recovery	4-8-8-8 (16)						
		A-4, GrSaSi, gry, Wet, Rec. = 0.5 ft	10-22-25-25 (47)	22.0	26.5	29.2	44.3		
25		A-4, GrSaSi, gry, Moist, Rec. = 1.0 ft	19-26-R@5.0" (R)	10.2	21.9	24.6	53.5		
Hole stopped @ 26.4 ft									
Remarks: 1. Hole collapsed at 24.5 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. C_a 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 WILLISTON STP HES5500(12).GPJ VERMONT AOT.GDT 10/29/13



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BORING LOG

WILLISTON
 STP-HES 5500(12)
 VT-2A ROADWAY

Boring No.: **B-102**

Page No.: 1 of 1

Pin No.: 12D196

Checked By: MLM

Boring Crew: DAIGNEAULT, HALL
 Date Started: 9/04/13 Date Finished: 9/04/13
 VTSPG NAD83: N 720677.02 ft E 1480342.49 ft
 Station: 98+91.32 Offset: 30.20
 Ground Elevation: 355.22 ft

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 TRACK C_r = 1.34

Groundwater Observations

Date	Depth (ft)	Notes
09/04/13	1.6	While drilling.
09/04/13	0.0	After drilling.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
		A-6, SiCl, brn, Moist, Rec. = 1.1 ft	WH-WH-2-2 (2)	20.8	4.0	31.7	64.3	34	15
		A-2-4, SiSa, brn, Wet, Rec. = 0.4 ft	4-4-7-12 (11)	31.7	5.3	70.8	23.9	43	21
		A-7-6, Cl, brn, Moist, Rec. = 1.6 ft							
5		A-7-6, Cl, brn, Moist, Rec. = 1.8 ft	1-7-8-10 (15)	26.2	0.9	7.2	91.9	44	21
		A-7-6, Cl, brn, Moist, Rec. = 1.8 ft	2-8-9-12 (17)	24.8	2.2	6.0	91.8	48	26
		A-7-6, Cl, gry, Moist, Rec. = 1.9 ft	1-3-4-3 (7)	33.1	0.8	1.3	97.9	49	26
10		GrCl, gry, Moist, Rec. = 0.9 ft, 10.0 ft - 10.9 ft, Shelby Tube							
		Field Note:, Clean out with Roller Cone							
15		Field Note:, Till, HP. No Recovery	31-32-30-R@1.0" (62)						
		Field Note:, Clean out with Roller Cone							
20		Field Note:, Till, HP. No Recovery	R@5.0" (R)						
25		A-4, GrSaSi, gry, Moist, Rec. = 0.7 ft, R@25.9 ft.	(R)	9.0	21.1	29.1	49.8		
		Hole stopped @ 25.9 ft							
		Remarks: 1. Hole collapsed at 20.2 ft.							

Notes:
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 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 WILLISTON STP HES5500(12).GPJ VERMONT AOT.GDT 10/29/13



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WILLISTON
STP-HES 5500(12)
VT-2A ROADWAY

Boring No.: **B-102A**

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Pin No.: 12D196

Checked By: MLM

Boring Crew: DAIGNEAULT, GARROW
 Date Started: 10/10/13 Date Finished: 10/10/13
 VTSPG NAD83: N 720676.77 ft E 1480343.29 ft
 Station: 98+91.30 Offset: 31.00
 Ground Elevation: 355.22 ft

Type:	Casing	Sampler
I.D.:	WB	TUBE
Hammer Wt:	4.25 in	3 in
Hammer Fall:	N.A.	140 lb.
Hammer/Rod Type:	N.A.	30 in.
Rig:	Auto/AWJ	
	CME 55 TRACK	C _r = 1.46

Groundwater Observations		
Date	Depth (ft)	Notes
10/10/13	0.5	While drilling.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
2.5							
		Field Note:, Cl, gry, Rec. = 0.5 ft, Shelby Tube					
5.0							
		Field Note:, Vane Shear 1072 psf/Remold unsuccessful					
7.5							
		Field Note:, Cl, gry, Rec. = 1.8 ft, Shelby Tube					
10.0							
		Field Note:, Vane Shear 1334/459 psf					
12.5		Hole stopped @ 10.5 ft					
15.0		Remarks: 1. Vane used was 3x6 inches. 2. Vane Shear = Inital/Remold					
17.5							

Notes:

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