



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

BORING LOG

IRASBURG  
STP CULV(30)  
VT-58 BR-6&7

Boring No.: B-101

Page No.: 1 of 1

Pin No.: 11C266

Checked By: LAR

Boring Crew: GARROW, JUDKINS  
Date Started: 10/11/12 Date Finished: 10/11/12  
VTSPG NAD83: N 843693.56 ft E 1691783.85 ft  
Station: \_\_\_\_\_ Offset: \_\_\_\_\_  
Ground Elevation: \_\_\_\_\_

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 CE = 1.33

Groundwater Observations

Date	Depth (ft)	Notes
10/11/12	15.0	Bedstream Bottom

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
		Asphalt Pavement, 0.0 ft - 0.8 ft							
		A-4, SiSa, brn, Moist, Rec. = 1.0 ft	7-3-3-3 (6)	15.4	12.4	44.2	43.4		
10		Visual Description:, SiGrSa, brn, Moist, Rec. = 0.8 ft	22-13-13-7 (26)						
		Visual Description:, GrSa, brn, Moist, Rec. = 0.8 ft	3-2-5-4 (7)						
		Field Note:, No Recovery, Stone in sampler.	7-6-4-2 (10)						
20		A-2-4, SiSa, Dk/brn, MTW, Rec. = 0.9 ft	4-2-1-1 (3)	42.1	0.5	64.7	34.8		
		Visual Description:, SiSa, Dk/brn, MTW, Rec. = 1.5 ft	1-2-1-2 (3)						
		Visual Description:, SiSa, yellow, MTW, Rec. = 0.1 ft	7-5-8-8 (13)						
		Field Note:, No Recovery	11-8-8-8 (16)						
		A-4, Si, gry, Wet, Rec. = 0.9 ft	7-5-3-4 (8)	26.5		17.3	82.7		
30		Visual Description:, Si, gry, MTW, Rec. = 1.4 ft	2-3-2-2 (5)						
		A-4, Si, gry, MTW, Rec. = 1.4 ft	2-3-5-5 (8)	26.0		17.0	83.0		
		Visual Description:, Si, gry, MTW, Rec. = 1.2 ft	2-3-4-6 (7)						
		A-4, Si, gry, MTW, Rec. = 1.5 ft	3-3-4-5 (7)	24.7		1.6	98.4	23	6
		Visual Description:, Si with little clay, gry, MTW, Rec. = 1.6 ft	3-3-3-4 (6)						
40		Field Note:, No Recovery in Shelby Tube							
		Visual Description:, SiCl, gry, Moist, Rec. = 1.8 ft	3-3-4-6 (7)						
		A-6, SiCl, gry, MTW, Rec. = 1.5 ft	4-5-7-6 (12)	26.5		0.8	99.2	29	11
		Visual Description:, SiCl, gry, MTW, Rec. = 1.8 ft	3-4-6-6 (10)						
50		Visual Description:, SiCl, gry, MTW, Rec. = 1.6 ft	5-4-4-6 (8)						
		Hole stopped @ 50.0 ft							
		Remarks: 15.0 feet to bed of stream.							

Notes:

1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. CE is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.



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BORING LOG

IRASBURG  
STP CULV(30)  
VT-58 BR-6&7

Boring No.: B-102  
Page No.: 1 of 1  
Pin No.: 11C266  
Checked By: LAR

Boring Crew: GARROW, JUDKINS  
Date Started: 10/12/12 Date Finished: 10/12/12  
VTSPG NAD83: N 843671.01 ft E 1691807.52 ft  
Station: \_\_\_\_\_ Offset: \_\_\_\_\_  
Ground Elevation: \_\_\_\_\_

Casing: WB  
Sampler: SS  
Type: \_\_\_\_\_  
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 CE = 1.33

Groundwater Observations

Date	Depth (ft)	Notes

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
0.0 - 0.8		Asphalt Pavement, 0.0 ft - 0.8 ft							
0.8 - 1.4		Visual Description:, SaGr, brn, Moist, Rec. = 0.6 ft	8-8-8-7 (16)						
1.4 - 1.9		Visual Description:, Broken Rock pieces, gry, Moist, Rec. = 0.1 ft Field Note:, Boulder	14-R@6.0"						
1.9 - 2.3		Visual Description:, GrSa, brn, MTW, Rec. = 0.4 ft	4-4-3-3 (7)						
2.3 - 2.7		Field Note:, No Recovery, Stone in sampler.	4-3-2-4 (5)						
2.7 - 3.1		Visual Description:, One stone with little sand, gry, Moist, Rec. = 0.1 ft	3-4-3-4 (7)						
3.1 - 3.8		A-2-4, GrSiSa, Dk/gry, MTW, Rec. = 0.7 ft	4-6-5-2 (11)	17.6	26.1	40.2	33.7		
3.8 - 4.6		Visual Description:, GrSiSa, gry, MTW, Rec. = 0.8 ft	4-4-4-3 (8)						
4.6 - 5.7		A-4, SaSi, gry, Wet, Rec. = 1.1 ft	2-2-4-4 (6)	26.5	0.4	43.7	55.9		
5.7 - 7.2		Visual Description:, SiSa, gry, Wet, Rec. = 1.5 ft	2-4-4-4 (8)						
7.2 - 8.9		A-4, ClSi, gry, Moist, Rec. = 1.7 ft	4-5-5-5 (10)	22.9		3.2	96.8	25	8
8.9 - 10.6		Visual Description:, ClSi, gry, MTW, Rec. = 1.3 ft	2-5-4-6 (9)						
10.6 - 12.4		A-6, SiCl, gry, MTW, Rec. = 1.8 ft	2-4-3-3 (7)	26.3		1.0	99.0	30	11
12.4 - 13.8		Visual Description:, ClSi, gry, MTW, Rec. = 1.4 ft	2-4-5-5 (9)						
13.8 - 15.2		A-4, ClSi, gry, MTW, Rec. = 1.4 ft	3-3-6-6 (9)	24.4		16.6	83.4	23	8
15.2 - 16.8		Visual Description:, ClSi, gry, MTW, Rec. = 1.4 ft	2-4-6-5 (10)						
16.8 - 18.4		A-4, ClSi, gry, MTW, Rec. = 1.6 ft	4-5-6-4 (11)	23.1		13.3	86.7	24	10
18.4 - 19.8		Visual Description:, SiCl, gry, MTW, Rec. = 1.4 ft	3-6-9-12 (15)						
19.8 - 21.4		A-6, SiCl, gry, MTW, Rec. = 1.6 ft	4-8-10-12 (18)	24.1		5.5	94.5	34	14
21.4 - 23.0		Visual Description:, SiCl, gry, MTW, Rec. = 1.6 ft	4-8-12-16 (20)						
23.0 - 50.0		Hole stopped @ 50.0 ft							

Remarks:  
15.0 feet to bed of stream.

Notes:

1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
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3. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

BORING LOG 2 IRASBURG STP CULV(30).GPJ VERMONT AOT.GDT 1/28/13



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BORING LOG

IRASBURG  
 STP CULV(30)  
 VT-58 BR-6&7

Boring No.: B-103  
 Page No.: 1 of 1  
 Pin No.: 11C266  
 Checked By: LAR

Boring Crew: GARROW, JUDKINS  
 Date Started: 10/10/12 Date Finished: 10/10/12  
 VTSPG NAD83: N 840357.40 ft E 1699907.54 ft  
 Station: \_\_\_\_\_ Offset: \_\_\_\_\_  
 Ground Elevation: \_\_\_\_\_

Casing: WB  
 Sampler: SS  
 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 CE = 1.33

Groundwater Observations

Date	Depth (ft)	Notes

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
0.0 - 0.6		Asphalt Pavement, 0.0 ft - 0.6 ft							
0.6 - 1.0		Visual Description:, Sa with little Gravel, gry, Moist, Rec. = 0.6 ft	5-4-4-4 (8)						
1.0 - 1.5		Field Note:, Boulders & Cobbles							
1.5 - 2.0		Field Note:, No Recovery, gry, Moist, Appears to be Silt.	2-1-2-2 (3)						
2.0 - 2.5		A-6, SiCl, gry, MTW, Rec. = 1.5 ft	(WH)	35.1	0.6	3.0	96.4	33	11
2.5 - 3.0		CISi Shelby Tube, gry, MTW, Rec. = 0.8 ft, 19.0 ft - 21.0 ft							
3.0 - 3.5		A-4, CISi, gry, MTW, Rec. = 1.7 ft	(6)	24.2	1.4	16.5	82.1	26	8
3.5 - 4.0		A-4, Si, gry, MTW, Rec. = 1.1 ft	(2)	22.4		12.9	87.1	20	5
4.0 - 4.5		Visual Description:, GrSaSi, gry, Wet, Rec. = 0.2 ft	(2)						
4.5 - 5.0		A-6, SiCl, gry, Wet, Rec. = 0.3 ft	(2)	19.1				34	18
5.0 - 5.5		Visual Description:, CISi, gry, Wet, Rec. = 0.7 ft	(WH)						
5.5 - 6.0		A-4, SaCISi, gry, Wet, Rec. = 1.7 ft	(WH)	31.5		20.0	80.0	23	9
6.0 - 6.5		Visual Description:, SaCISi, gry, Wet, Rec. = 0.6 ft	1-3-5-5 (8)						
6.5 - 7.0		A-2-4, Sa, gry, MTW, Rec. = 1.7 ft	4-3-3-4 (6)	16.9	5.3	77.5	17.2		
7.0 - 7.5		A-1-b, GrSa, gry, MTW, Rec. = 0.6 ft	8-4-5-6 (9)						
7.5 - 8.0		A-1-b, GrSa, gry, MTW, Rec. = 0.5 ft	8-7-9-11 (16)	10.1	21.8	69.7	8.5		
8.0 - 8.5		Visual Description:, Sa, gry, MTW, Rec. = 1.1 ft	14-11-11-11 (22)						
8.5 - 9.0		A-2-4, Sa, gry, MTW, Rec. = 1.1 ft	6-6-10-10 (16)	13.5	7.9	78.3	13.8		
9.0 - 45.0		Hole stopped @ 45.0 ft							
50.0		Remarks: Top of river bed is 16.0 feet below ground surface.							

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BORING LOG 2 IRASBURG STP CULV(30).GPJ VERMONT AOT.GDT 1/28/13



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BORING LOG

IRASBURG  
STP CULV(30)  
VT-58 BR-6&7

Boring No.: B-104

Page No.: 1 of 1

Pin No.: 11C266

Checked By: LAR

Boring Crew: GARROW, WHITLOCK  
Date Started: 10/09/12 Date Finished: 10/09/12  
VTSPG NAD83: N 840341.66 ft E 1699936.75 ft  
Station: \_\_\_\_\_ Offset: \_\_\_\_\_  
Ground Elevation: \_\_\_\_\_

Casing: WB  
Sampler: SS  
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 CE = 1.33

Groundwater Observations

Date	Depth (ft)	Notes

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
		Field Note:, Asphalt Pavement							
5		Visual Description:, SiSaGr, brn, Wet, Rec. = 0.5 ft	8-5-5-4 (10)						
10		Field Note:, Boulder							
10		Visual Description:, SiGrSa, brn, Moist, Rec. = 1.2 ft	7-4-5-7 (9)						
15		Field Note:, No Recovery, Appears to be Sandy Silt.	2-1-2-2 (3)						
20		A-4, Cisi, gry, Moist, Rec. = 1.1 ft	1-2-2-2 (4)	31.2	11.2	12.3	76.5	31	10
20		A-4, Cisi, gry, Moist, Rec. = 1.0 ft	1-1-2-3 (3)	26.1	4.2	8.2	87.6	29	10
20		SaSi Shelby Tube, gry, Moist, Rec. = 1.1 ft, 21.0 ft - 23.0 ft, Tested Non-Plastic		15.3					
25		A-4, SaCisi, gry, Moist, Rec. = 1.8 ft	(2)	22.6	11.6	21.4	67.0	22	8
25		A-4, SaGrSi with some Clay, gry, Wet, Rec. = 1.5 ft	(WH)	19.3	27.4	21.5	51.1	24	9
25		A-4, Cisi, gry, Wet, Rec. = 1.4 ft	(2)	21.5	2.6	11.6	85.8	20	7
30		A-4, SaSi, gry, MTW, Rec. = 1.4 ft	6-5-7-11 (12)	14.1	2.4	41.1	56.5		
35		Visual Description:, GrSaSi, gry, MTW, Rec. = 1.0 ft	8-7-7-10 (14)						
35		Visual Description:, SiSa, gry, Wet, Rec. = 1.3 ft	2-3-5-7 (8)						
35		A-4, SiSa, gry, Moist, Rec. = 1.4 ft	17-26-26-30 (52)	13.0		59.2	40.8		
35		Visual Description:, SiSa, gry, Moist, Rec. = 1.5 ft	18-30-39-R (69)						
40		A-4, SiSa, gry, Moist, Rec. = 0.9 ft	32-R (R)	13.3		55.0	45.0		
40		A-4, SiSa, gry, Moist, Rec. = 1.7 ft	13-32-37-R (69)			60.1	39.9		
45		Visual Description:, SiSa, gry, Moist, Rec. = 1.3 ft	31-36-R (R)						
45		Hole stopped @ 44.4 ft							

Notes: 1. Stratification lines represent approximate boundary between material types. Transition may be gradual.  
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