

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

BORING LOG
EAST MONTPELIER
BRF 037-1(7)
VT-14 BR-68

Boring No.: **B-301**
Page No.: 1 of 1
Pin No.: 98B252
Checked By: MLM

Boring Crew: **DAIGNEAULT, GARROW**
Date Started: 10/25/13 Date Finished: 10/25/13
VTSPG NAD83: N 644545.00 ft E 1643296.92 ft
Station: 144+30.6 Offset: -29.30
Ground Elevation: 677.01 ft

Type: **WB** Casing **SS** Sampler
I.D.: 4.25 in 1.5 in
Hammer Wt: N.A. 140 lb
Hammer Fall: N.A. 30 in
Hammer/Rod Type: Auto/AWJ
Rig: CME 55 TRACK C_r = 1.46

Groundwater Observations
Date: 10/25/13 Depth (ft): 3.8 Notes: While drilling.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blower (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
0.00-0.90		A-1-b, SiGrSa, brn, Moist, Rec. = 0.7 ft	WH-2-3-3 (5)	15.2	29.5	50.0	20.5
0.90-1.45		A-4, Si, brn, Moist, Rec. = 1.2 ft	2-2-2-3 (4)	30.9	1.1	5.3	93.6
1.45-3.00		A-4, Si, brn, Moist, Rec. = 1.5 ft, Sample was tested for Limits. (NP)	2-3-3-3 (6)	38.4		1.4	98.6
3.00-4.00		Field Note, No Recovery, Appears to be silt.	4-4-4-3 (8)				
4.00-5.00		A-4, Si, brn, Moist, Rec. = 1.4 ft, Sample was tested for Limits. (NP)	WH-2-2-3 (4)	37.6	2.1	1.7	96.2
5.00-10.00		A-4, Si, gry, Moist, Rec. = 1.0 ft, Sample was tested for Limits. (NP)	1-2-2-3 (4)	38.4		1.2	98.8
10.00-15.00		Field Note, No Recovery, Appears to be silt.	5-6-6-5 (12)				
15.00-20.00		Field Note, Cleaned out casing. Hit hard packed material at 19.0 ft.					
20.00-25.00		A-4, SaGrSi (HP), gry, Moist, Rec. = 1.2 ft	10-12-12-14 (24)	11.2	23.2	22.7	54.1
25.00-30.00		A-4, SaSiGr (HP), gry, Moist, Rec. = 0.9 ft	22-34-41-R@3.0" (75)	9.6	40.0	20.3	39.7
30.00-35.00		Hole stopped @ 27.0 ft					
35.00-40.00		Remarks: Hole collapsed at 22.6 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_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.

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

BORING LOG
EAST MONTPELIER
BRF 037-1(7)
VT-14 BR-68

Boring No.: **B-302**
Page No.: 1 of 1
Pin No.: 98B252
Checked By: MLM

Boring Crew: **DAIGNEAULT, GARROW**
Date Started: 10/28/13 Date Finished: 10/28/13
VTSPG NAD83: N 644677.65 ft E 1643381.89 ft
Station: 145+88.3 Offset: -25.40
Ground Elevation: 687.35 ft

Type: **WB** Casing **SS** Sampler
I.D.: 4.25 in 1.5 in
Hammer Wt: N.A. 140 lb
Hammer Fall: N.A. 30 in
Hammer/Rod Type: Auto/AWJ
Rig: CME 55 TRACK C_r = 1.46

Groundwater Observations
Date: None taken.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blower (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
0.00-0.50		A-4, SiSa, brn, Moist, Rec. = 0.5 ft	WH-WH-1-1 (1)	15.2	15.0	47.7	37.3
0.50-1.00		A-1-b, Sa, brn, Moist, Rec. = 1.2 ft	2-2-2-1 (4)	5.3	9.9	83.1	7.0
1.00-1.50		A-1-b, Sa, brn, Moist, Rec. = 0.7 ft	2-1-2-2 (3)	5.8	7.6	86.1	6.3
1.50-2.00		A-4, Si, brn, MTW, Rec. = 0.5 ft	33.0	1.2	15.3	83.5	
2.00-2.50		A-4, Si, brn, MTW, Rec. = 1.6 ft, Sample was tested for Limits. (NP)	2-2-2-2 (4)	39.9		0.3	99.7
2.50-3.00		A-4, Si, brn, MTW, Rec. = 1.5 ft, Sample was tested for Limits. (NP)	WH-1-3-3 (4)	40.2		0.4	99.6
3.00-3.50		A-4, Si, brn, MTW, Rec. = 1.6 ft, Sample was tested for Limits. (NP)	WH-2-2-3 (4)	40.6		0.6	99.4
3.50-4.00		A-4, Si, brn, MTW, Rec. = 1.2 ft, Sample was tested for Limits. (NP)	1-2-3-3 (5)	37.8		0.8	99.2
4.00-4.50		A-4, Si, brn, MTW, Rec. = 1.6 ft, Sample was tested for Limits. (NP)	3-3-3-3 (6)	36.3		1.6	98.4
4.50-5.00		A-4, Si, brn-gry, MTW, Rec. = 1.4 ft, Sample was tested for Limits. (NP)	1-3-2-3 (5)	35.0		0.8	99.2
5.00-5.50		A-4, Si, gry, MTW, Rec. = 1.3 ft	2-2-1-1 (3)	32.9	10.1	3.0	86.9
5.50-6.00		Visual Description: Broken Rock with sand, gry, Moist, Rec. = 0.3 ft, Insufficient sample for testing.	17-13-13-48 (26)				
6.00-6.50		A-4, SaSi (HP), gry, Moist, Rec. = 0.8 ft	30-R@5.0" (R)	11.7	18.5	27.6	53.9
6.50-7.00		A-4, SaSi (HP), gry, Moist, Rec. = 0.4 ft	R@5.0" (R)	9.4	17.1	26.0	56.9
7.00-7.50		Hole stopped @ 35.4 ft					

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

BORING LOG
EAST MONTPELIER
BRF 037-1(7)
VT-14 BR-68

Boring No.: **B-401**
Page No.: 1 of 1
Pin No.:
Checked By: MRG

Boring Crew: **GARROW, NIETO**
Date Started: 11/18/15 Date Finished: 11/18/15
VTSPG NAD83: N 644488.50 ft E 1643254.08 ft
Station: 143+65 Offset: -17.30
Ground Elevation: 670.8 ft

Type: **H.S.A** Casing **SS** Sampler
I.D.: 3 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_r = Unknown

Groundwater Observations
Date: 11/18/15 Depth (ft): 17.1 Notes: W.T. after drilling

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blower (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
0.00-0.30		Asphalt Pavement, 0.0 ft - 0.3 ft					
0.30-1.10		A-1-b, SiGrSa, brn, Moist, Rec. = 1.1 ft	8-13-12-12 (25)	6.0	33.0	45.0	22.0
1.10-1.50		A-1-b, SiSaGr, gry, Moist, Rec. = 1.5 ft, Lab Note: Broken rock was within sample.	9-8-7-6 (15)	8.0	41.8	36.5	21.7
1.50-2.00		A-4, GrSaSi, Dk/brn, Moist, Rec. = 1.2 ft, Lab Note: Sample tested non-plastic.	3-4-5-3 (9)	17.3	22.8	31.7	45.5
2.00-2.50		A-4, SiSa, gry-brn, Moist, Rec. = 0.8 ft, Lab Note: Wood fibers and pieces of wood were within sample.	1-4-3-2 (7)	25.1	12.8	47.4	39.8
2.50-3.00		A-4, GrSaSi, gry, Moist, Rec. = 0.9 ft, Lab Note: A lot of wood fibers were within sample.	2-6-8-8 (14)	18.0	20.6	31.7	47.7
3.00-3.50		A-2-4, GrSaSi, gry, Moist, Rec. = 1.1 ft, Lab Note: Wood fibers and pieces of wood were within sample.	3-7-5-6 (12)	13.5	31.9	32.9	35.2
3.50-4.00		A-4, SaSi, gry, Moist, Rec. = 1.5 ft	2-3-20-40 (23)	13.6	17.6	27.1	55.3
4.00-4.50		A-4, SaSi, gry, Moist, Rec. = 1.5 ft, Lab Note: Wood fibers were within sample.	10-18-23-24 (46)	13.0	14.7	25.2	60.1
4.50-5.00		A-4, SaSi, gry, Moist, Rec. = 1.8 ft	13-16-46-R@3.5" (64)	12.0	15.2	21.3	63.5
5.00-5.50		A-4, SaGrSi, gry, Moist, Rec. = 0.5 ft	R@5.0" (R)	12.5	21.3	21.2	57.5
5.50-6.00		Hole stopped @ 19.5 ft					
6.00-6.50		Remarks: Hole Collapsed at 9.6 feet.					

Notes: 1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
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**VERMONT AGENCY OF TRANSPORTATION
CONSTRUCTION & MATERIALS BUREAU
GEOTECHNICAL ENGINEERING SECTION
DRILLING NOTES**

PROJECT NAME: East Montpelier PROJECT NUMBER: BRF 037-1(7) SITE: US-2 DATE: 11/19/2015
BORING CREW: Garrow, Nieto TESTED BY: J. Daigneault REVIEWED BY: MRG

BORING No.	DATE DRILLED	STATION	OFFSET (FT)	DEPTH (FT)	SAMPLE TYPE	FIELD DESCRIPTION		LABORATORY RESULTS							
						SOIL TYPE, COLOR, MOISTURE	% MOISTURE	AASHTO CLASS.	SOIL DES.	% GRAVEL	% SAND	% FINES	LIQUID LIMIT	PLASTIC LIMIT	
C-101	11/19/15	148+00	6.0	0.00-0.90	SSA	Asphalt Pavement									
				0.90-1.45		Concrete									
				1.45-3.00		Si Sa, brn, M	9.8	A-4	Si Sa	10.4	50.8	38.9	N.P.	N.P.	
				3.00-4.00		Sa Si, brn, M	15.8	A-4	Si Sa	3.3	51.1	45.7	N.P.	N.P.	
C-102	11/19/15	149+00	6.0	0.00-1.00	SSA	Asphalt Pavement									
				1.00-1.60		Concrete									
				1.60-2.50		Si Sa, brn, M	8.2	A-2-4	Si Sa	13.8	56.6	29.6	N.P.	N.P.	
				2.50-5.00		Si Sa, brn, M	9.6	A-2-4	Si Sa	16.8	52.2	31.1	N.P.	N.P.	

Sample Type "SSA" = Solid Stem Auger
No Ledge To Depth C-101, C-102
No Water To Depth C-101, C-102

SCALE: 1/4" = 1'-0"
1 0 2 4 6



PROJECT NAME: **EAST MONTPELIER**
PROJECT NUMBER: **BRF 037-1(7)**
FILE NAME: **z98b252bor_logs.dgn** PLOT DATE: **2/17/2017**
PROJECT LEADER: **T. KNIGHT** DRAWN BY: **J. SOTER**
DESIGNED BY: **VTRANS** CHECKED BY: **T. KNIGHT**
BORING LOG **BOR 6** SHEET **71** OF **158**