



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

BORING LOG

MILTON
IM 089-3(66)
I-89 NB&SB BR-81 NB&SB

Boring No.: B-101
Page No.: 1 of 1
Pin No.: 10A060
Checked By: TDE

Boring Crew: PORTER, GARROW, SALISBURY
Date Started: 9/08/11 Date Finished: 9/12/11
VTSPG NAD83: N 779326.07 ft E 1473558.31 ft
Station: 2781+35.6 Offset: -48.80
Ground Elevation: 208.0 ft

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
09/12/11	57.0	AM

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Drill Rate minutes/ft	Blows/ft (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
0.0		Asphalt Pavement, 0.0 ft - 1.0 ft								
1.0		Field Note: Gravel				9-10-14	11.0	0.7	90.2	9.1
1.3		A-3, Sa, brn, MTW, Rec. = 1.3 ft				1-1-1-1 (2)	18.6	1.0	92.0	7.0
1.6		A-3, Sa, brn, MTW, Rec. = 1.6 ft				12-14-20-24 (34)	12.6	0.7	92.7	6.6
1.8		A-3, Sa, brn, MTW, Rec. = 1.8 ft				5-13-15-16 (28)	11.1	3.4	87.5	9.1
1.8		A-3, Sa, brn, MTW, Rec. = 1.8 ft				9-16-26-33 (42)	11.7	1.7	88.5	9.8
1.6		A-3, Sa, brn, MTW, Rec. = 1.6 ft				12-21-28-31 (49)	12.4	1.9	88.9	9.2
1.4		A-3, Sa, brn, MTW, Rec. = 1.4 ft				8-15-20-22 (35)	13.6	4.4	85.8	9.8
1.5		A-2-4, Sa, brn, MTW, Rec. = 1.5 ft				10-17-24-22 (41)	12.6	3.7	83.3	13.0
1.5		A-3, Sa, brn, MTW, Rec. = 1.5 ft				16-22-35-45 (57)	14.0	5.0	87.2	7.8
1.7		A-3, Sa, brn, MTW, Rec. = 1.7 ft				23-29-33-42 (62)	14.6	4.8	87.5	7.7
1.5		A-2-4, Sa, brn, MTW, Rec. = 1.5 ft				11-22-32-48 (54)	14.2	3.7	85.5	10.8
1.1		A-4, SaSi, gry, MTW, Rec. = 1.1 ft, A small area of tiny root mass was within sample.				4-8-10-12 (18)	33.0		20.1	79.9
1.8		A-4, SaSi, gry, MTW, Rec. = 1.8 ft				1-2-1-1 (3)	29.6	0.1	25.3	74.6
1.5		A-4, SaSi, gry, MTW, Rec. = 1.5 ft, Chunks of Wood were within sample.				1-2-3-4 (5)	50.5		34.7	65.3
1.7		A-4, SiSa, gry, MTW, Rec. = 1.7 ft				1-4-8-4 (12)	34.7		51.5	48.5
79.5		Field Note: No Recovery				8-9-14-17 (23)				
79.5		79.5 ft - 81.5 ft, Gray, Phyllitic Slate, with calcite veins. Iron staining present. Moderately hard, Very slightly weathered, Poor rock, NXDC, RMR = 22	1 (15)	37 (0)	10					
81.5		81.5 ft - 86.5 ft, Gray, Phyllitic Slate, with calcite veins. Moderately hard, Unweathered, Good rock, NXMDC, RMR = 84	2 (15)	100 (100)	10					
86.5		86.5 ft - 89.5 ft, Gray, Phyllitic Slate, with few calcite veins. Iron staining present from 87.25 to 87.6 feet. Moderately hard, Unweathered, Good rock, NXMDC, RMR = 81	3 (15)	97 (83)	10					
89.5		Hole stopped @ 89.5 ft			10					
					10					
					10					
					10					

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.

BORING LOG 2 MILTON IM 089-3(66).GPJ VERMONT AOT.GDT 9/22/11



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

BORING LOG

MILTON
IM 089-3(66)
I-89 NB&SB BR-81 NB&SB

Boring No.: B-102
Page No.: 1 of 1
Pin No.: 10A060
Checked By: TDE

Boring Crew: PORTER, HOLT
Date Started: 8/11/11 Date Finished: 8/17/11
VTSPG NAD83: N 779305.00 ft E 1473652.53 ft
Station: 2781+31.7 Offset: 47.70
Ground Elevation: 208.0 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 CE = 1.33

Groundwater Observations

Date	Depth (ft)	Notes
08/17/11	49.0	AM

Depth (ft)	Strata (i)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Asphalt Pavement, 0.0 ft - 1.0 ft					
	X X X	Field Note: 1.0'-2.6', Crushed Stone					
	O O O	A-2-4, Sa, brn, Moist, Rec. = 0.9 ft	2-5-5-7 (10)	11.5	1.2	85.5	13.3
10	O O O	A-1-a, SaGr, brn, Moist, Rec. = 0.5 ft, Broken Rock was within sample.	6-8-8-4 (16)	7.3	56.7	36.9	6.4
	O O O	A-3, Sa, brn, Moist, Rec. = 1.3 ft	8-21-31-41 (52)	14.1	2.8	88.1	9.1
20	O O O	A-2-4, SiSa, brn, Moist, Rec. = 1.4 ft	9-11-13-15 (24)	14.8	5.3	64.5	30.2
	O O O	A-2-4, Sa, brn, Moist, Rec. = 1.4 ft	15-26-29-34 (55)	11.8	1.2	79.6	19.2
30	O O O	A-2-4, SiSa, brn, Moist, Rec. = 1.5 ft	12-19-22-24 (41)	13.0	1.2	78.5	20.3
	O O O	A-3, Sa, brn, Moist, Rec. = 1.6 ft	20-32-43-47 (75)	12.1	1.4	88.6	10.0
40	O O O	A-3, Sa, brn, Moist, Rec. = 1.5 ft	23-30-36-43 (66)	14.0	5.9	84.1	10.0
	O O O	A-3, Sa, brn, Moist, Rec. = 1.65 ft	11-16-20-25 (36)	13.5	5.5	87.2	7.3
50	O O O	A-3, Sa, brn, Moist, Rec. = 1.7 ft	12-14-19-27 (33)	11.2	2.8	89.1	8.1
	O O O	A-3, Sa, brn, Moist, Rec. = 1.4 ft	8-14-21-23 (35)	15.6	2.4	89.0	8.6
60	O O O	A-3, Sa, brn, Moist, Rec. = 1.3 ft	16-23-21-21 (44)	17.9	1.8	88.9	9.3
		Field Note: Rollar coned ahead to 72.0 feet., Unable to continue boring because of scheduled construction.					
		Hole stopped @ 72.0 ft NLTD					

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.

BORING LOG 2 MILTON IM 089-3(66).GPJ VERMONT AOT.GDT 9/22/11



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

BORING LOG

MILTON
 IM 089-3(66)
 I-89 NB&SB BR-81 NB&SB

Boring No.: B-103
 Page No.: 1 of 1
 Pin No.: 10A060
 Checked By: TDE

Boring Crew: PORTER, GARROW, SALISBURY
 Date Started: 9/13/11 Date Finished: 9/14/11
 VTSPG NAD83: N 779448.80 ft E 1473607.80 ft
 Station: 2782+65.2 Offset: -22.30
 Ground Elevation: 153.0 ft

Casing: 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 TRACK CE = 1.34

Groundwater Observations		
Date	Depth (ft)	Notes
09/14/11	1.75	AM

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
5		A-1-b, SaGr, gry, MTW, Rec. = 1.5 ft, Lots of Broken Rock was within sample.				5-6-1-1 (7)	19.9	51.3	34.4	14.3
10		A-2-4, GrSa, gry, MTW, Rec. = 0.8 ft, Wood pieces were within sample. Field Note: NXDC, Broken ledge pieces				3-R@3.5"	22.9	21.1	64.8	14.1
15		11.0 ft - 16.0 ft, Gray, Phyllitic Slate, with calcite veins. Moderately hard, Unweathered, Very good rock, NXMDC, RMR = 81	1 (55)	100 (88)	6	Top of Bedrock @ 11.0 ft				
20		16.0 ft - 21.0 ft, Gray, Phyllitic Slate, with calcite veins. Iron stained joint at 16.35', at 18.6'-18.8', and at 19.6'-19.8'. Moderately hard, Very slightly weathered, Fair rock, NXMDC, RMR = 67	2 (55)	100 (64)	6					

Hole stopped @ 21.0 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. 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.

BORING LOG 2 MILTON IM 089-3(66).GPJ VERMONT AOT.GDT 9/22/11



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

BORING LOG

MILTON
IM 089-3(66)
I-89 NB&SB BR-81 NB&SB

Boring No.: B-104
Page No.: 1 of 1
Pin No.: 10A060
Checked By: TDE

Boring Crew: PORTER, SALISBURY
Date Started: 9/14/11 Date Finished: 9/14/11
VTSPG NAD83: N 779433.14 ft E 1473676.38 ft
Station: 2782+62.0 Offset: 48.00
Ground Elevation: 153.0 ft

Casing: WB
Sampler: SS
Type: WB
I.D.: 4 in
Hammer Wt: N.A. 140 lb.
Hammer Fall: N.A. 30 in.
Hammer/Rod Type: Auto/AWJ
Rig: CME 45C TRACK CE = 1.34

Groundwater Observations		
Date	Depth (ft)	Notes
09/14/11	2.5	While drilling.

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (ROD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
5		A-1-b, GrSa, brn, MTW, Rec. = 1.0 ft, Lots of Wood was within sample.				9-10-10-8 (20)	27.1	33.9	54.1	12.0		
10		A-4, SiSa, gry, MTW, Rec. = 1.2 ft, A small amount of Wood was within sample.				4-3-2-2 (5)	34.0	2.3	60.7	37.0		
15		A-4, SiSa, gry, MTW, Rec. = 1.6 ft, A small amount of charcoal colored material was noticeable. (decaying small sticks)				1-1-1-1 (2)	48.4		61.4	38.6		
20		A-4, Si, gry, MTW, Rec. = 1.2 ft				8-6-5-6 (11)	20.8	11.0	8.6	80.4	24	4
25		21.7 ft - 26.7 ft, Gray, Phyllitic Slate, with calcite veins. Calcite growth observed along joint surface at 25.6 ft.. Moderately hard, Unweathered, Good rock, NXMDC, RMR = 77	1 (60)	94 (62)	5							
30		26.7 ft - 31.7 ft, Gray, Phyllitic Slate, with calcite veins. Calcite coated joint observed at 27.1 ft.. Moderately hard, Unweathered, Very good rock, NXMDC, RMR = 89	2 (55)	100 (96)	5							
35		Hole stopped @ 31.7 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. 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.

BORING LOG 2 MILTON IM 089-3(66),GPJ VERMONT AOT.GDT 9/22/11



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

BORING LOG

MILTON
IM 089-3(66)
I-89 NB&SB BR-81 NB&SB

Boring No.: B-105
Page No.: 1 of 1
Pin No.: 10A060
Checked By: TDE

Boring Crew: WERNER, WELLS
Date Started: 7/22/11 Date Finished: 7/26/11
VTSPG NAD83: N 779728.04 ft E 1473636.89 ft
Station: 2785+45.0 Offset: -44.00
Ground Elevation: 155.0 ft

Casing: WB
Sampler: SS
Type: WB SS
I.D.: 3.5 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
07/27/11	5.5	AM

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (ROD %)	Drill Rate minutes/ft	Groundwater Observations				
						Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		A-4, SiSa, brn, Moist, Rec. = 2.0 ft				5-7-6-5 (13)	9.2	6.6	55.4	38.0
		A-1-b, GrSa, brn, Moist, Rec. = 1.9 ft				2-5-7-20 (12)	9.2	31.2	67.2	1.6
5		A-2-4, SiSa, brn, MTW, Rec. = 2.0 ft				2-3-2-3 (5)	22.8	5.7	71.8	22.5
		A-2-4, SiSa, brn, Wet, Rec. = 2.0 ft				2-3-3-2 (6)	23.8	4.0	73.6	22.4
		A-2-4, Sa, brn, Wet, Rec. = 1.6 ft				4-3-5-3 (8)	19.7	16.5	67.3	16.2
10		A-1-b, Sa, brn, Wet, Rec. = 1.8 ft				2-5-4-5 (9)	12.2	15.3	73.5	11.2
		A-1-b, GrSa, brn, Wet, Rec. = 0.2 ft				R@2.0"	13.4	20.9	69.2	9.9
		12.2 ft - 17.2 ft, Gray, Slate, with thin calcite veins. Moderately hard, Unweathered, Very good rock, NXMDC, RMR=89	1 (30)	96 (94)	5	Top of Bedrock @				12.2 ft
15					5					
					4					
					4					
					4					
					4					
20		17.2 ft - 22.5 ft, Gray, Slate, with thin calcite veins. Moderately hard, Unweathered, Very good rock, NXMDC, RMR=82	2 (30)	77 (73)	4					
					4					
					4					
					4					
					4					
25		Hole stopped @ 22.5 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. 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.

BORING LOG 2 MILTON IM 089-3(66).GPJ VERMONT AOT.GDT 9/22/11



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

BORING LOG

MILTON
IM 089-3(66)
1-89 NB&SB BR-81 NB&SB

Boring No.: B-106
Page No.: 1 of 1
Pin No.: 10A060
Checked By: TDE

Boring Crew: WERNER, WELLS
Date Started: 7/26/11 Date Finished: 7/27/11
VTSPG NAD83: N 779709.97 ft E 1473713.20 ft
Station: 2785+41.0 Offset: 34.40
Ground Elevation: 158.0 ft

Casing: WB Sampler: SS
I.D.: 3.5 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)	Run (Dip deg.)	Core Rec. % (RQD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Field Note:, Cobbles where observed from ground surface to 2.0 ft.								
		A-4, SiSa, brn, Wet, Rec. = 1.0 ft				3-4-3-5 (7)	22.6	5.6	50.8	43.6
5		A-4, GrSaSi, brn, Wet, Rec. = 0.6 ft				1-2-1-2 (3)	14.4	22.3	35.2	42.5
		Field Note:, No Recovery				1-1-1-5 (2)				
		A-1-b, GrSa, brn, Wet, Rec. = 1.6 ft				3-4-4-4 (8)	14.9	34.0	61.2	4.8
10		A-1-b, GrSa, brn, Wet, Rec. = 1.0 ft				2-3-3-2 (6)	13.9	39.9	53.0	7.1
		A-1-b, GrSa, brn, Wet, Rec. = 1.2 ft				3-4-4-6 (8)	14.0	34.8	57.6	7.6
15		Field Note:, Refusal at 14.1 ft. 14.1 ft - 19.1 ft, Gray, Slate, with thin calcite veins. One near vertical joint at top of Run is iron stained.. Moderately hard, Unweathered, Very good rock, NXMDC, RMR=89	1 (30)	96 (94)	5	Top of Bedrock @ 14.1 ft				
					5					
					4					
					4					
					5					
20		19.1 ft - 24.1 ft, Gray, Slate, with thin calcite veins. Moderately hard, Unweathered, Very good rock, NXMDC, RMR=86	2 (30)	96 (84)	5					
					4					
					4					
					4					
					4					
25		Hole stopped @ 24.1 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. 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.

BORING LOG 2 MILTON IM 089-3(66).GPJ VERMONT AOT.GDT 9/22/11



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

BORING LOG

MILTON
IM 089-3(66)
I-89 NB&SB BR-81 NB&SB

Boring No.: B-107
Page No.: 1 of 1
Pin No.: 10A060
Checked By: TDE

Boring Crew: PORTER, HOLT
Date Started: 8/19/11 Date Finished: 8/31/11
VTSPG NAD83: N 779849.88 ft E 1473654.58 ft
Station: 2786+68.1 Offset: -48.50
Ground Elevation: 202.0 ft

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
08/31/11	43.5	AM

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (ROD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
		Asphalt Pavement, 0.0 ft - 1.0 ft										
	X X X	Field Class., Crushed Stone										
		A-2-4, SiSa, brn, Moist, Rec. = 1.3 ft				5-7-7-8 (14)	11.9	0.3	66.1	33.6		
		A-2-4, Sa, brn, Moist, Rec. = 0.6 ft				5-6-7-8 (13)	17.1	2.8	86.1	11.1		
10		Field Note., NXMDC, No Recovery										
		A-2-4, Sa, brn, Moist, Rec. = 0.3 ft				17-8-8-11 (16)	12.0	8.8	77.0	14.2		
		A-2-4, Sa, brn, Moist, Rec. = 1.4 ft				10-21-29-36 (50)	8.9	12.9	75.8	11.3		
20		A-3, Sa, brn, Moist, Rec. = 1.6 ft				14-23-34-41 (57)	10.7	10.5	81.9	7.6		
		A-2-4, Sa, brn, Moist, Rec. = 1.2 ft				21-29-48-54 (77)	13.2	17.7	70.7	11.6		
30		A-1-b, GrSa, brn, Moist, Rec. = 0.6 ft				39-56 (R)	10.6	30.3	62.8	6.9		
		A-2-4, SiSa, brn, Moist, Rec. = 0.5 ft				79 (R)	13.1	16.8	62.3	20.9		
40		A-3, Sa, brn, Moist, Rec. = 0.4 ft				36-24-21-18 (45)	16.5	12.3	78.7	9.0		
		A-4, SiSi, gry, Moist, Rec. = 1.4 ft					19.5	10.1	50.7	39.2		
		A-3, Sa, grn-brn, Moist, Rec. = 0.3 ft				19-11-R@3.5"	21.3	6.5	86.2	7.3		
		A-4, SaSi, brn, Moist, Rec. = 0.6 ft					18.5	11.5	21.6	66.9	22	4
50		48.3 ft - 53.3 ft, Gray, Phyllitic Slate, with calcite bands. Moderately hard, Unweathered, Very good rock, NXMDC, RMR = 89	1 (40)	96 (96)	10 10 9 9							
		53.3 ft - 58.3 ft, Gray, Phyllitic Slate, with calcite bands. Moderately hard, Unweathered, Very good rock, NXMDC, RMR = 89	2 (40)	94 (94)	5 5 5 5							
		Hole stopped @ 58.3 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. 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.



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

BORING LOG

MILTON
 IM 089-3(66)
 I-89 NB&SB BR-81 NB&SB

Boring No.: B-108
 Page No.: 1 of 1
 Pin No.: 10A060
 Checked By: TDE

Boring Crew: PORTER, HOLT
 Date Started: 8/09/11 Date Finished: 8/11/11
 VTSPG NAD83: N 779831.69 ft E 1473748.11 ft
 Station: 2786+67.0 Offset: 46.80
 Ground Elevation: 202.0 ft

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)	Run (Dip deg.)	Core Rec. % (ROD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
0.0 - 0.75		Asphalt Pavement, 0.0 ft - 0.75 ft										
0.75 - 1.2		A-2-4, SiSa, brn, Moist, Rec. = 1.2 ft				18-17-10-9 (27)	10.9	11.0	64.8	24.2		
1.2 - 1.8		A-2-4, SiSa, brn, Moist, Rec. = 0.6 ft				5-4-21-12 (25)	16.8	12.7	61.9	25.4		
1.8 - 3.2		Field Note: 6"+ stones were encountered.										
3.2 - 4.6		A-3, Sa, brn, Moist, Rec. = 1.4 ft				6-8-14-18 (22)	10.6	11.8	78.4	9.8		
4.6 - 6.0		A-2-4, Sa, brn, Moist, Rec. = 1.4 ft				13-22-29-38 (51)	13.2	10.3	77.1	12.6		
6.0 - 7.6		A-1-b, Sa, brn, Moist, Rec. = 1.6 ft				17-32-38-39 (70)	14.9	18.7	71.4	9.9		
7.6 - 8.7		A-1-b, GrSa, brn, Moist, Rec. = 1.1 ft				22-38-46-51 (84)	7.8	20.7	70.7	8.6		
8.7 - 10.2		A-3, Sa, brn, Moist, Rec. = 1.5 ft				29-40-43-53 (83)	15.3	7.2	84.0	8.8		
10.2 - 12.2		A-7-5, Cl, brn, Moist, Rec. = 2.0 ft				1-2-3-4 (5)	46.3		2.3	97.7	68	37
12.2 - 42.4		A-6, SiCl, brn, Moist, Broken rock was within sample. 42.4 ft - 47.4 ft, Gray, Phyllitic Slate, with calcite bands. Moderately hard, Unweathered, Very good rock, NXMDC, RMR = 89	1 (10)	100 (94)	9 8 7 7	R@5.0"	25.3	16.9	14.3	68.8	31	12
42.4 - 47.4		42.4 ft - 47.4 ft, Gray, Phyllitic Slate, with calcite bands. Moderately hard, Unweathered, Very good rock, NXMDC, RMR = 89										
47.4 - 52.4		47.4 ft - 52.4 ft, Gray, Phyllitic Slate, with calcite bands. Moderately hard, Unweathered, Very good rock, NXMDC, RMR = 89	2 (10)	94 (94)								
52.4 - 52.4		Hole stopped @ 52.4 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. 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.

BORING LOG 2 MILTON IM 089-3(66).GPJ VERMONT AOT.GDT 9/22/11