



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

BORING LOG

DUXBURY
BF 013-4(47)
VT 100 Br. #193

Boring No.: **B-101**

Page No.: 1 of 1

Pin No.: 16b001

Checked By: MLM

Boring Crew: WHITLOCK, JUDKINS, NIETO
 Date Started: 4/18/16 Date Finished: 4/18/16
 VTSPG NAD83: N 664052.37 ft E 1572920.80 ft
 Station: 20+50.3 Offset: -11.30
 Ground Elevation: 504.4 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 55 TRACK C = 1.41

Groundwater Observations		
Date	Depth (ft)	Notes
04/18/16	12.9	W.T. after drilling

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, SiSaGr, brn, Moist, Rec. = 0.8 ft, Lab Note: Broken rock and plant material was within sample. Field Note:, NXDC, cleaned out casing				1-5-12-28 (17)	14.1	41.4	38.5	20.1
		A-2-4, GrSa, brn-Lt/brn, Moist, Rec. = 1.1 ft, Lab Note: Broken rock was within sample.				6-4-3-4 (7)	13.2	29.1	56.5	14.4
5		A-2-4, Sa, Lt/brn, Moist, Rec. = 1.0 ft Field Note:, NXDC, cleaned out casing				4-4-3-2 (7)	10.6	4.3	83.6	12.1
		A-2-4, Sa, Lt/brn, Moist, Rec. = 0.5 ft				3-3-3-2 (6)	18.5	10.1	79.3	10.6
10		A-1-b, SaGr, Lt/brn, Moist, Rec. = 0.6 ft				4-3-4-5 (7)	13.4	48.8	33.1	18.1
		A-1-b, GrSa, brn, Moist, Rec. = 0.9 ft Field Note:, NXDC, cleaned out casing				9-5-17-9 (22)	12.4	36.3	50.6	13.1
15		A-1-a, SaGr, gry-brn, Moist, Rec. = 1.0 ft, Lab Note: Broken rock was within sample. Field Note:, NXDC, cleaned out casing				6-43-20-9 (63)	10.5	60.2	27.9	11.9
		A-1-a, SaGr, gry-brn, Moist, Rec. = 1.1 ft, Lab Note: A lot of broken and weathered rock was within sample. Field Note:, NXDC, cleaned out casing				12-12-18-39 (30)	12.4	61.6	28.4	10.0
15		A-1-b, SaGr, gry-Dk/gry, Moist, Rec. = 0.7 ft, Lab Note: A lot of broken and weathered rock was within sample. Field Note:, NXDC, cleaned out casing				25-R@3.5" (R)	12.2	44.3	38.0	17.7
		A-1-b, SiSaGr, Dk/gry, Moist, Rec. = 0.4 ft, Lab Note: Sample consisted entirely of weathered rock.				25-R@5.0" (R)	11.0	48.7	30.4	20.9
20		18.4 ft - 23.4 ft, Dark gray to black, Pyrite bearing graphitic PHYLLITE, with siliceous laminae. Slight rust staining on joints. Hard, Very slightly weathered, Fair rock, NX, RMR=41	1 (75-80)	100 (44)	5					
		23.4 ft - 28.4 ft, Dark gray to black, Slightly vuggy pyrite bearing graphitic PHYLLITE, with siliceous laminae. Very faint rust staining and some calcification on joints. Moderately hard, Very slightly weathered, Fair rock, NX, RMR=46	2 (75-80)	100 (53)	6					
25					7					
					7					
30		Hole stopped @ 28.4 ft			9					
		Remarks: Top of Bedrock at 18.4 feet. Hole collapsed at 12.6 feet.			10					

Notes:
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 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.



STATE OF VERMONT
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CENTRAL LABORATORY

BORING LOG

DUXBURY
BF 013-4(47)
VT 100 Br. #193

Boring No.: B-102

Page No.: 1 of 1

Pin No.: 16b001

Checked By: MLM

Boring Crew: WHITLOCK, JUDKINS, GARROW
Date Started: 4/13/16 Date Finished: 4/14/16
VTSPG NAD83: N 664065.35 ft E 157061.03 ft
Station: 21+88.5 Offset: 15.00
Ground Elevation: 497.4 ft

Type: WB Casing SS Sampler
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 55 TRACK C = 1.41

Groundwater Observations		
Date	Depth (ft)	Notes
04/14/16	6.4	W.T. before drilling

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RCD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
5		A-2-4, GrSiSa, brn, Moist, Rec. = 0.5 ft, Lab Note: Broken rock and plant material was within sample.				1-1-2-4 (3)	19.1	25.5	43.6	30.9
		Field Note: No Recovery, Stone in end of sampler.				1-2-3-3 (5)				
10		A-3, GrSa, brn, MTW, Rec. = 1.0 ft				2-3-2-WH (5)	16.3	24.2	67.6	8.2
		A-2-4, Sa, brn, Wet, Rec. = 1.0 ft Field Note: Cleaned out casing				2-2-4-8 (6)	20.7	17.6	69.7	12.7
15		A-1-b, SaSiGr, gry, MTW, Rec. = 0.7 ft, Lab Note: Broken rock, pieces of wood, and wood fibers were within sample. A small amount of clay was within sample. Sample tested non-plastic. Field Note: Cleaned out casing				3-5-10-20 (15)	12.8	53.2	22.2	24.6
		A-1-b, SaGr, gry-brn, Moist, Rec. = 0.8 ft Field Note: Cleaned out casing				18-18-15-8 (33)	12.1	47.8	35.4	16.8
		A-4, SaSi, brn, Moist, Rec. = 0.8 ft				3-4-4-5 (8)	25.5	2.8	44.9	52.3
20		A-4, Si, gry, Moist, Rec. = 0.6 ft				8-8-6-6 (14)	30.0	0.8	10.4	88.8
		A-2-4, SiSa, brn, Moist, Rec. = 0.7 ft				24.3	13.2	55.3	31.5	
25		A-4, SaSi, gry, MTW, Rec. = 1.2 ft				7-6-9-9 (15)	26.0	9.8	30.2	60.0
		A-2-4, SiSaGr, gry, Moist, Rec. = 1.1 ft, Lab Note: A lot of broken and weathered rock was within sample.				8-8-12-22 (20)	14.7	41.6	29.9	28.5
		A-1-b, SiSaGr, gry, Moist, Rec. = 1.0 ft, Lab Note: A lot of broken and weathered rock was within sample.				30-28-R@1.0"	12.4	47.1	31.5	21.4
30		21.1 ft - 26.1 ft, Dark gray, Vuggy pyrite bearing graphitic PHYLLITE, with siliceous laminae. Extensive rust staining on joints. Medium to soft, Moderately weathered, Poor rock, NX, RMR=30	1 (80)	60 (0)	4					
		26.1 ft - 27.2 ft, Dark brown, PHYLLITE, and silty gravel. Very soft, Very severely weathered, Poor rock, NX, RMR=36	2 (78)	56 (20)	2					
35		27.2 ft - 30.1 ft, Dark gray, Pyrite bearing graphitic PHYLLITE, with siliceous laminae. Minor rust staining on joints. Hard, Very slightly weathered, Poor rock, RMR=36			6					
		30.1 ft - 35.1 ft, Dark gray to black, Pyrite bearing graphitic PHYLLITE, with siliceous laminae. Clean joints. Hard, Unweathered, Good rock, NX, RMR=61	3 (78)	90 (100)	4					
Hole stopped @ 35.1 ft										
Remarks: Top of Bedrock 21.1 feet. Hole collapsed at 8.9 feet.										

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 may occur due to other factors than those present at the time measurements were made.



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CENTRAL LABORATORY

BORING LOG

DUXBURY
BF 013-4(47)
VT 100 Br. #193

Boring No.: **B-103**
Page No.: 1 of 1
Pin No.: 16b001
Checked By: MLM

Boring Crew: WHITLOCK, JUDKINS, NIETO
Date Started: 4/19/16 Date Finished: 4/19/16
VTSPG NAD83: N 664065.06 ft E 1572963.93 ft
Station: 20+95.4 Offset: -11.50
Ground Elevation: 509.9 ft

Type: WB
I.D.: 4 in
Hammer Wt: N.A.
Hammer Fall: N.A.
Hammer/Rod Type: Auto/AWJ
Rig: CME 55 TRACK
C. = 1.41

Casing: WB
Sampler: SS

Groundwater Observations		
Date	Depth (ft)	Notes
04/19/16	12.5	W.T. after drilling

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 %
0.0 - 0.63		Asphalt Pavement, 0.0 ft - 0.63 ft								
0.63 - 1.1		A-1-b, GrSa, Lt/brn, Moist, Rec. = 1.1 ft				10-11-11-10 (22)	5.2	36.0	53.1	10.9
1.1 - 1.2		Field Note:, Cleaned out casing								
1.2 - 1.7		A-2-4, GrSiSa, Lt/brn, Moist, Rec. = 1.2 ft				4-4-6-6 (10)	14.1	20.0	53.5	26.5
1.7 - 2.0		Field Note:, Cleaned out casing								
2.0 - 3.1		A-2-4, Sa, Lt/brn, Moist, Rec. = 1.1 ft				7-6-6-7 (12)	9.6	15.7	70.2	14.1
3.1 - 3.9		Field Note:, Cleaned out casing								
3.9 - 4.8		A-3, Sa, Lt/brn, Moist, Rec. = 0.9 ft				2-2-3-5 (5)	12.4	18.6	71.8	9.6
4.8 - 5.7		Field Note:, Cleaned out casing								
5.7 - 7.7		A-1-a, SaGr, Lt/brn, Moist, Rec. = 2.0 ft, Lab Note: Broken rock was within sample.				15-18-16-14 (34)	8.8	67.6	27.1	5.3
7.7 - 8.4		Field Note:, Cleaned out casing								
8.4 - 9.1		A-1-b, SaGr, gry, Moist, Rec. = 0.7 ft, Lab Note: Broken and weathered rock was within sample.				16-49-R@5.0" (R)	12.3	50.0	30.8	19.2
9.1 - 10.1		Field Note:, NXDC, Cleaned out casing								
10.1 - 10.5		A-1-b, SiGrSa, gry, Moist, Rec. = 0.4 ft, Lab Note: A lot of broken and weathered rock was within sample.				R@5.0" (R)	10.4	32.8	46.0	21.2
10.5 - 10.7		A-1-a, SaGr, gry, Moist, Rec. = 0.2 ft, Lab Note: Sample consisted entirely of broken and weathered rock.	1 (75-80)	62 (0)	3	R@2.5" (R)	8.5	57.4	30.5	12.1
10.7 - 10.8		26.5 ft - 31.5 ft, Dark gray to black, Graphitic PHYLLITE, with siliceous laminae. Rust staining along joints. Medium hard, Slightly weathered, Poor rock, NX, RMR=27			4					
10.8 - 10.9					4					
10.9 - 11.0					5					
11.0 - 11.1					5					
11.1 - 11.2					6					
11.2 - 11.3					6					
11.3 - 11.4					6					
11.4 - 11.5					6					
11.5 - 11.6					6					
11.6 - 11.7					6					
11.7 - 11.8					6					
11.8 - 11.9					6					
11.9 - 12.0					6					
12.0 - 12.1					6					
12.1 - 12.2					6					
12.2 - 12.3					6					
12.3 - 12.4					6					
12.4 - 12.5					6					
12.5 - 12.6					6					
12.6 - 12.7					6					
12.7 - 12.8					6					
12.8 - 12.9					6					
12.9 - 13.0					6					
13.0 - 13.1					6					
13.1 - 13.2					6					
13.2 - 13.3					6					
13.3 - 13.4					6					
13.4 - 13.5					6					
13.5 - 13.6					6					
13.6 - 13.7					6					
13.7 - 13.8					6					
13.8 - 13.9					6					
13.9 - 14.0					6					
14.0 - 14.1					6					
14.1 - 14.2					6					
14.2 - 14.3					6					
14.3 - 14.4					6					
14.4 - 14.5					6					
14.5 - 14.6					6					
14.6 - 14.7					6					
14.7 - 14.8					6					
14.8 - 14.9					6					
14.9 - 15.0					6					
15.0 - 15.1					6					
15.1 - 15.2					6					
15.2 - 15.3					6					
15.3 - 15.4					6					
15.4 - 15.5					6					
15.5 - 15.6					6					
15.6 - 15.7					6					
15.7 - 15.8					6					
15.8 - 15.9					6					
15.9 - 16.0					6					
16.0 - 16.1					6					
16.1 - 16.2					6					
16.2 - 16.3					6					
16.3 - 16.4					6					
16.4 - 16.5					6					
16.5 - 16.6					6					
16.6 - 16.7					6					
16.7 - 16.8					6					
16.8 - 16.9					6					
16.9 - 17.0					6					
17.0 - 17.1					6					
17.1 - 17.2					6					
17.2 - 17.3					6					
17.3 - 17.4					6					
17.4 - 17.5					6					
17.5 - 17.6					6					
17.6 - 17.7					6					
17.7 - 17.8					6					
17.8 - 17.9					6					
17.9 - 18.0					6					
18.0 - 18.1					6					
18.1 - 18.2					6					
18.2 - 18.3					6					
18.3 - 18.4					6					
18.4 - 18.5					6					
18.5 - 18.6					6					
18.6 - 18.7					6					
18.7 - 18.8					6					
18.8 - 18.9					6					
18.9 - 19.0					6					
19.0 - 19.1					6					
19.1 - 19.2					6					
19.2 - 19.3					6					
19.3 - 19.4					6					
19.4 - 19.5					6					
19.5 - 19.6					6					
19.6 - 19.7					6					
19.7 - 19.8					6					
19.8 - 19.9					6					
19.9 - 20.0					6					
20.0 - 20.1					6					
20.1 - 20.2					6					
20.2 - 20.3					6					
20.3 - 20.4					6					
20.4 - 20.5					6					
20.5 - 20.6					6					
20.6 - 20.7					6					
20.7 - 20.8					6					
20.8 - 20.9					6					
20.9 - 21.0					6					
21.0 - 21.1					6					
21.1 - 21.2					6					
21.2 - 21.3					6					
21.3 - 21.4					6					
21.4 - 21.5					6					
21.5 - 21.6					6					
21.6 - 21.7					6					
21.7 - 21.8					6					
21.8 - 21.9					6					
21.9 - 22.0					6					
22.0 - 22.1					6					
22.1 - 22.2					6					
22.2 - 22.3					6					
22.3 - 22.4					6					
22.4 - 22.5					6					
22.5 - 22.6					6					
22.6 - 22.7					6					
22.7 - 22.8					6					
22.8 - 22.9					6					
22.9 - 23.0					6					
23.0 - 23.1					6					
23.1 - 23.2					6					
23.2 - 23.3					6					
23.3 - 23.4					6					
23.4 - 23.5					6					
23.5 - 23.6					6					
23.6 - 23.7					6					



STATE OF VERMONT
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BORING LOG

DUXBURY
BF 013-4(47)
VT 100 Br. #193

Boring No.: B-103A
 Page No.: 1 of 1
 Pin No.: 16b001
 Checked By: MLM

Boring Crew: JUDKINS, NIETO
 Date Started: 4/22/16 Date Finished: 4/22/16
 VTSPG NAD83: N 664062.47 ft E 1572966.24 ft
 Station: 20+96.9 Offset: -8.40
 Ground Elevation: 509.9 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 55 TRACK C = 1.41

Groundwater Observations		
Date	Depth (ft)	Notes

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
0.0 - 0.62		Asphalt Pavement, 0.0 ft - 0.62 ft					
2.5							
5.0							
7.5							
10.0							
12.5		Field Note:, NXDC					
13.5		Hole stopped @ 13.5 ft					
15.0		Remarks: Hole collapsed at 10.5 feet 1.) Advanced casing to 12.5 feet. 2.) Soil and rock fragments found in cuttings. Concrete was not encountered. 3.) Hit culvert at 13.5 feet and aborted drilling operations.					
17.5							

Notes:
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BORING LOG

DUXBURY
BF 013-4(47)
VT 100 Br. #193

Boring No.: **B-103B**

Page No.: 1 of 1

Pin No.: 16b001

Checked By: MLM

Boring Crew: JUDKINS, NIETO
 Date Started: 4/22/16 Date Finished: 4/22/16
 VTSPG NAD83: N 664065.15 ft E 1572967.55 ft
 Station: 20+98.9 Offset: -10.60
 Ground Elevation: 509.9 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 55 TRACK C = 1.41

Groundwater Observations		
Date	Depth (ft)	Notes
04/22/16	7.7	W.T. after drilling

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
0 - 0.63		Asphalt Pavement, 0.0 ft - 0.63 ft					
5							
10							
15							
20		Field Note:, NXDC, Weathered rock					
22.0		Hole stopped @ 22.0 ft					
25		Remarks: Hole Collapsed at 10.5 feet. 1.) Advanced boulder breaker to 15.0 feet. 2.) Advanced casing to 20.0 feet. 3.) Concrete was not encountered.					

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

DUXBURY
 BF 013-4(47)
 VT 100 Br. #193

Boring No.: B-103C
 Page No.: 1 of 1
 Pin No.: 16b001
 Checked By: MLM

Boring Crew: JUDKINS, NIETO
 Date Started: 4/22/16 Date Finished: 4/22/16
 VTSPG NAD83: N 664068.65 ft E 1572968.57 ft
 Station: 21+0.8 Offset: -13.70
 Ground Elevation: 509.8 ft

Casing Sampler
 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 55 TRACK C_r = 1.41

Groundwater Observations

Date	Depth (ft)	Notes

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
0.0 - 0.61		Asphalt pavement, 0.0 ft - 0.61 ft					
2.5							
5.0							
7.5							
10.0		Field Note:, NXDC, Broken rock and pieces of concrete found in sample. Largest piece of concrete recovered was 0.4 feet.					
12.5		Field Note:, NXDC through concrete, Pieces of broken rock and concrete.					
15.0							
17.5		Hole stopped @ 16.0 ft					
20.0		Remarks: Hole collapsed at 11.7 feet. 1.) Advanced casing to 9.5 feet. 2.) Concrete was not encountered from 14.5 to 16.0 feet.					

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 may occur due to other factors than those present at the time measurements were made.



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BORING LOG

DUXBURY
BF 013-4(47)
VT 100 Br. #193

Boring No.: **B-103D**

Page No.: 1 of 1

Pin No.: 16b001

Checked By: MLM

Boring Crew: JUDKINS, NIETO
 Date Started: 4/22/16 Date Finished: 4/22/16
 VTSPG NAD83: N 664070.84 ft E 1572969.16 ft
 Station: 21+2.0 Offset: -15.60
 Ground Elevation: 509.8 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 55 TRACK C = 1.41

Groundwater Observations

Date	Depth (ft)	Notes

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Asphalt pavement, 0.0 ft - 0.72 ft					
2.5							
5.0							
7.5							
10.0							
12.5		Hole stopped @ 12.0 ft					
15.0		Remarks: 1.) Advanced boulder breaker to 12.0 feet. 2.) Boring drilled to check for concrete. No concrete found, so hole was stopped at 12.0 feet.					

Notes:
 1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
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DUXBURY
 BF 013-4(47)
 VT 100 Br. #193

Boring No.: B-104A

Page No.: 1 of 1

Pin No.: 16b001

Checked By: MLM

Boring Crew: JUDKINS, NIETO
 Date Started: 4/20/16 Date Finished: 4/20/16
 VTSPG NAD83: N 664037.55 ft E 1572950.75 ft
 Station: 20+75.0 Offset: 11.30
 Ground Elevation: 510.5 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 55 TRACK C_r = 1.41

Groundwater Observations

Date	Depth (ft)	Notes

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
0.0 - 0.93		Asphalt pavement, 0.0 ft - 0.93 ft						
2.5								
5.0								
7.5								
8.9 - 13.0		8.9 ft - 13.0 ft, Gray, CONCRETE, 4.1 feet recovered. NX	1					
10.0								
12.5								
15.0		Hole stopped @ 13.0 ft						
17.5		Remarks: 1.) Advanced casing to 9.0 feet. 2.) Cored concrete and broke through at 13.0 feet.						

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 Z DUNDONKI DT 013-4(47) JSPJ VERMONT POT LOST 4/20/16



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

BORING LOG

DUXBURY
BF 013-4(47)
VT 100 Br. #193

Boring No.: **B-104B**

Page No.: **1 of 1**

Pin No.: **16b001**

Checked By: **MLM**

Boring Crew: JUDKINS, NIETO
 Date Started: 4/20/16 Date Finished: 4/21/16
 VTSPG NAD83: N 664039.17 ft E 1572946.47 ft
 Station: 20+71.4 Offset: 8.50
 Ground Elevation: 510.6 ft

Casing Sampler
 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 55 TRACK C_c = 1.41

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 %
		Asphalt pavement, 0.0 ft - 0.95 ft								
5										
10										
15										
20		A-1-b, SiSaGr, gry, Moist, Rec. = 1.2 ft, Lab Note: A lot of broken and weathered rock was within sample.				2-3-39-R@3.5" (42)	17.0	44.2	32.1	23.7
		Field Note: NXDC, Cleaned out casing				R@5.0" (R)	13.9	38.2	40.8	21.0
25		A-1-b, SiGrSa, gry, Moist, Rec. = 0.4 ft, Lab Note: A lot of broken and weathered rock was within sample. 22.5 ft - 27.5 ft, Dark gray to black, Vuggy pyrite bearing graphitic PHYLLITE, with siliceous laminae. Rust staining and minor calcification along joints. Calcification noted in vugs. Seam/void noted at 23.7 feet to 24.05 feet. Hard, Slightly weathered, Poor rock, NX, RMR=27	1 (78-80)	94 (0)	3 3 3 4 5					
30		27.5 ft - 32.5 ft, Dark gray to black, Vuggy pyrite bearing graphitic PHYLLITE, with siliceous laminae. Rust and brown staining along joints. Calcification noted in vugs. Hard, Slightly weathered, Poor rock, NX, RMR=36	2 (75-80)	94 (12)	4 6 6 6 7					
35		Hole stopped @ 32.5 ft								
		Remarks: Top of Bedrock at 22.5 feet. Hole collapsed at 18.9 feet.								

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_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.



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BORING LOG

DUXBURY
BF 013-4(47)
VT 100 Br. #193

Boring No.: **B-104C**

Page No.: **1 of 1**

Pin No.: **16b001**

Checked By: **MLM**

Boring Crew: JUDKINS, NIETO
 Date Started: 4/21/16 Date Finished: 4/21/16
 VTSPG NAD83: N 664037.91 ft E 1572951.27 ft
 Station: 20+75.7 Offset: 11.10
 Ground Elevation: 510.5 ft

Casing Sampler
 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 55 TRACK C_c = 1.41

Groundwater Observations

Date	Depth (ft)	Notes

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
0.0 - 0.95		Asphalt pavement, 0.0 ft - 0.95 ft					
2.5							
5.0							
7.5							
10.0		Field Note:, NXDC, cobbles and stones with pieces of concrete					
12.5		Field Note:, NXDC, cobbles and stones with pieces of concrete					
15.0		Hole stopped @ 13.5 ft					
17.5		Remarks: Hole collapsed at 8.6 feet. 1.) Advanced casing to 11.0 feet.					

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.