

STATE OF VERMONT AGENCY OF TRANSPORTATION CONSTRUCTION AND MATERIALS BUREAU CENTRAL LABORATORY		BORING LOG		Boring No.: B-101	
		DUXBURY BF 013-4(47) VT 100 Br. #193		Page No.: 1 of 1	
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		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 55 TRACK C_s = 1.41	Groundwater Observations Date: 04/18/16 Depth (ft): 12.9 Notes: W.T. after drilling		

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RAD %)	Drill Rate minutes/ft	Blows/ft (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/bm, 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
		A-2-4, Sa, Lt/bm, 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/bm, Moist, Rec. = 0.5 ft				3-3-3-2 (6)	18.5	10.1	79.3	10.6
		A-1-b, SaGr, Lt/bm, Moist, Rec. = 0.6 ft				4-3-4-5 (7)	13.4	48.8	33.1	18.1
10		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
		A-1-a, SaGr, gry-brn, Moist, Rec. = 1.0 ft, Lab Note: Broken rock was within sample. Field Note: NXDC, cleaned out casing				6-4-3-20-9 (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.				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					
					7					
					7					
					9					
25										
30										
Hole stopped @ 28.4 ft										
Remarks: Top of Bedrock at 18.4 feet. Hole collapsed at 12.6 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.

BOTTOM OF ABUT NO 2 FOOTING EL 486.00

BORING LOG 2 DUXBURY BF 013-4(47) GPJ VERMONT AOT.GDT 4/28/16

STATE OF VERMONT AGENCY OF TRANSPORTATION CONSTRUCTION AND MATERIALS BUREAU CENTRAL LABORATORY		BORING LOG		Boring No.: B-102	
		DUXBURY BF 013-4(47) VT 100 Br. #193		Page No.: 1 of 1	
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		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 55 TRACK C_s = 1.41	Groundwater Observations Date: 04/14/16 Depth (ft): 6.4 Notes: W.T. before drilling		

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RAD %)	Drill Rate minutes/ft	Blows/ft (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. Field Note: No Recovery, Stone in end of sampler.				1-1-2-4 (3)	19.1	25.5	43.6	30.9
		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
		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
10		A-4, SaSi, brn, Moist, Rec. = 0.8 ft				3-4-4-5 (8)	25.5	2.8	44.9	52.3
		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 (15)	24.3	13.2	55.3	31.5
15		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
20		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" (R)	12.4	47.1	31.5	21.4
		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					
					3					
					2					
					2					
25		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					
		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					
					5					
					9					
					9					
30		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					
					7					
					5					
					6					
					5					
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.
 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.

BORING LOG 2 DUXBURY BF 013-4(47) GPJ VERMONT AOT.GDT 4/28/16

TYLIN INTERNATIONAL	PROJECT NAME: DUXBURY	PLOT DATE: 5/23/2016
	PROJECT NUMBER: BF 013-4(47)	DRAWN BY: S. MORGAN
	FILE NAME: z16b001b0gl.dgn	CHECKED BY: J. OLUND
	DESIGNED BY: VTRANS	SHEET 37 OF 69