

VT <small>Working to Get You There</small> Vermont Agency of Transportation		STATE OF VERMONT AGENCY OF TRANSPORTATION CONSTRUCTION AND MATERIALS BUREAU CENTRAL LABORATORY		BORING LOG		Boring No.: B-105				
				Williston-Essex STP SGNL(46) VT 2A		Page No.: 1 of 1				
						Pin No.: 151017				
						Checked By: ZMH				
Boring Crew: GARROW, NIETO		Casing		Sampler		Groundwater Observations				
Date Started: 5/20/16 Date Finished: 5/20/16		Type: WB		SS		Date				
VTSPG NAD83: N 732224.84 ft E 1487003.73 ft		I.D.: 4 in		1.5 in		Depth (ft)				
Station: 203+23.30 Offset: -44.90		Hammer Wt: N.A.		140 lb.		Notes				
Ground Elevation: 497.3 ft		Hammer Fall: N.A.		30 in.		05/20/16 5.9 W.T. after drilling.				
		Hammer/Rod Type: Auto/AWJ								
		Rig: CME 55 TRACK		CE = 1.41						
Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)		Run (Dip deg.)	Core Rec. % (ROD %)	Blows/ft (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Asphalt pavement, 0.0 ft - 0.7 ft								
		A-1-A, SaGr, gry, Moist, Rec. = 1.1 ft, Lab Note: A lot of broken rock was within the sample.				12-15-13-9 (28)	5.2	64.4	26.6	9.0
		A-3, Sa, Lt/brn, Moist				6-4-4-5 (8)	6.3	9.4	80.4	10.2
5		Field Note: NXDC, Cleaned out casing								
		A-1-B, GrSa, gry, Moist				2-2-2-6 (8)	14.1	45.4	51.6	3.0
		Field Note: NXDC, Cleaned out casing								
		A-4, GrSaSi, gry-Lt/brn, Moist				2-2-2-5 (4)	18.9	23.3	35.2	41.5
		Field Note: NXDC, Cleaned out casing								
10		A-4, SaSi, Lt/brn-gry, Moist, Lab Note: A thin rust colored layer was within the sample.				7-8-7-10 (15)	13.8	15.9	32.1	52.0
		A-4, GrSaSi, Lt/brn, Moist				3-R (R)	13.7	23.4	25.2	51.4
		Field Note: NXDC, Cleaned out casing								
15										
		16.5 ft - 21.5 ft, Gray, Vuggy Phyllite, with quartz veins. Vugs are on weathered rusty surface from 16.5-17.0 ft. Rust staining on joints. Moderately hard, Slightly weathered, Poor rock, NX, RMR=39		R-1 (40-45)	84 (13)	Top of Bedrock @ 16.5 ft				
20										
		Hole stopped @ 21.5 ft								
25		Remarks: Hole collapsed at 21.5 feet.								
Notes: 1. Stratification lines represent approximate boundary between material types. Transition may be gradual. <<SUB>><<SUB>> 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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VT <small>Working to Get You There</small> Vermont Agency of Transportation		STATE OF VERMONT AGENCY OF TRANSPORTATION CONSTRUCTION AND MATERIALS BUREAU CENTRAL LABORATORY		BORING LOG		Boring No.: B-106					
				Williston-Essex STP SGNL(46) VT 2A		Page No.: 1 of 1					
						Pin No.: 151017					
						Checked By: ZMH					
Boring Crew: JUDKINS, GARROW		Casing		Sampler		Groundwater Observations					
Date Started: 4/12/16 Date Finished: 4/12/16		Type: WB		SS		Date					
VTSPG NAD83: N 732205.78 ft E 1487101.32 ft		I.D.: 4 in		1.5 in		Depth (ft)					
Station: 203+83.90 Offset: 33.90		Hammer Wt: N.A.		140 lb.		Notes					
Ground Elevation: 499.7 ft		Hammer Fall: N.A.		30 in.		04/12/16 14.2 W.T. after drilling.					
		Hammer/Rod Type: Auto/AWJ									
		Rig: CME 45C TRACK		CE = 1.41							
Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)		Run (Dip deg.)	Core Rec. % (ROD %)	Drill Rate minutes/ft	Blows/ft (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Concrete, 0.0 ft - 0.6 ft									
		A-1-a, SaGr, gry, Moist, Lab Note: Broken rock was within sample.					5-9-14-19 (23)	3.5	63.5	26.2	10.3
		A-2-4, Sa, brn, Moist Field Note: Cleaned out casing					15-16-12-14 (28)	8.5	1.3	87.2	11.5
5		A-1-b, SaGr, gry, Moist, Lab Note: Broken rock and a very small amount of clay was within sample. The Sample tested non-plastic. Field Note: Cleaned out casing					16-12-11-12 (23)	11.3	55.3	26.5	18.2
		A-2-4, SaSiGr, gry, Moist, Lab Note: Some clay was within sample. Sample tested non plastic. Field Note: Cleaned out casing					11-10-5-7 (15)	13.8	41.5	24.3	34.2
		A-2-4, SiGrSa, brn, Moist, Lab Note: Sticks and twigs and some clay was within sample. Sample tested non-plastic. Field Note: Cleaned out casing					9-8-6-11 (14)	17.5	33.6	34.0	32.4
10		A-4, GrSaSi, brn, Moist, Lab Note: Some clay was within sample. Sample tested non-plastic.					5-5-6-7 (11)	14.6	27.1	30.9	42.0
		Field Note: Cleaned out casing					20-20-3-5 (R)				
15		A-1-a, SaGr, brn-gry, Moist, Lab Note: Broken rock was within sample.						9.1	63.3	22.7	14.0
		17.0 ft - 22.0 ft, Light gray to green, Phyllite, with quartz veins. Rust staining on joints and few slickensides. Moderately hard, Very slightly weathered, Poor rock, NX, RMR=25		1 (45)	100 (0)	5	Top of Bedrock @ 17.0 ft				
		22.0 ft - 27.0 ft, Light gray to green, Phyllite, with quartz veins and rare pyrite. Faint rust and orange staining along joints. Moderately hard, Unweathered, Fair rock, NX, RMR=49		2 (40)	100 (64)	5					
20											
		Hole stopped @ 27.0 ft									
25											
		Remarks: Hole collapsed @ 14.1. 1.) Moved boring due to underground utilities. Offset 36.0									
30											
Notes: 1. Stratification lines represent approximate boundary between material types. Transition may be gradual. <<SUB>><<SUB>> 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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PROJECT NAME:	WILLISTON-ESSEX
PROJECT NUMBER:	STPG SGNL(46)
FILE NAME: t151017rm.dgn	PLOT DATE: 3/21/2017
PROJECT LEADER: M. LACROIX	DRAWN BY: K. RECORD
DESIGNED BY: K. RECORD	CHECKED BY: M. LACROIX
BORING LOG SHEET 3	SHEET 10 OF 66