



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

**BORING LOG**

Springfield  
SIP CULM(47)  
US-5

Boring No.: 0-102

Page No.: 1 of 2

File No.: 13C340

Checked By: JFW

Boring Crew: T. Farrell (S.M.), B. Honey (GeoDesign)  
Date Started: 2/11/15 Date Finished: 2/11/15  
VDPS MARKS: N 304541.00 N E 1004187.00 N  
Station: 471+62 Offset: 0' R  
Ground Elevation: 345 N

Coring Sampler  
Type: ANOGR SS  
I.D.: 4.25 in 1.38 in  
Hammer Mt: H.A. 140 lb.  
Hammer Fall: H.A. 30 in.  
Hammer/Rod Type: Auto  
Rig: CME SSK ATV CE = 1.35

Groundwater Observations (3)

Date	Depth (ft)	Notes
02/11/15	43.0	Wet sample.
02/11/15	43.0	in augers.

Depth (ft)	Sheet(s)	CLASSIFICATION OF MATERIALS (Description)	Number of Tests (at depth)	Moisture Content (%)	Gravel (%)	Sand (%)	Fines (%)	LL (%)	PI (%)
0		0.4" Asphalt							
5		S1 (0.5' - 1'): Refused, brown fine to coarse SAND, some fine Gravel, little SILT, brown. Res. = 0.2 N (ANSIHO W145 Classification: A-1-b.)	50/5 <sup>c</sup> (6)	5.7	34.7	30.5	14.8	NP	NP
5		S2 (5' - 7'): Medium dense; S2A (Upper 6"): Brown fine to coarse SAND, some fine to coarse Gravel, little SILT, moist (granular slough). S2B (Lower 6"): Brown fine to coarse SAND and fine to coarse GRAVEL, some SILT, moist. Res. = 1.2 N (ANSIHO W145 Classification: A-1-a.) (ANSIHO W145 Classification: A-1-b.)	10-10-7 (17)	4.5 10.2	58.0 44.0	32.0 34.5	10.4 20.0	NP	NP
10		S3 (10' - 12'): Dense, gray-brown SILT and fine to coarse SAND, little fine to coarse Gravel, moist. Res. = 0.5 N (ANSIHO W145 Classification: A-4.)	4-0-20 (3)	12.0	27.5	38.1	30.4	NP	NP
15		S4 (15' - 17'): Medium dense, brown fine to coarse SAND and SILT, little fine to coarse Gravel, moist. Res. = 1.4 N (ANSIHO W145 Classification: A-2-4.)	3-0-15 (2)	10.0	29.3	41.7	29.0	NP	NP
20		S5 (20' - 22'): Medium dense, brown SILT and fine to coarse SAND, little fine to coarse Gravel, moist. Res. = 1.5 N (ANSIHO W145 Classification: A-4.)	3-0-15 (2)	13.3	27.7	36.8	35.7	NP	NP
25		S6 (25' - 27'): Medium dense, brown fine to coarse SAND and SILT, little fine to coarse Gravel, moist. Res. = 1.0 N (ANSIHO W145 Classification: A-2-4.)	0-14-14 (2)	8.0	31.0	42.3	26.1	NP	NP
30		S7 (30' - 32'): Medium dense, brown fine to coarse SAND, some SILT, little fine to coarse Gravel, moist. Res. = 1.2 N (ANSIHO W145 Classification: A-1-b.)	0-0-7-12 (10)	10.3	37.5	40.3	22.2	NP	NP
35		S8 (35' - 37'): Dense, brown fine to coarse SAND, some SILT, some fine to coarse Gravel, moist. Res. = 1.3 N (ANSIHO W145 Classification: A-1-b.)	7-13-35 (2)	11.3	48.0	35.1	16.3	NP	NP
40		S9 (40' - 42'): Medium dense, brown SILT, some fine Sand, little Wood/Organics, moist. (Possible Old Subsoil) Res. = 1.7 N (ANSIHO W145 Classification: A-4.)	4-4-0-0 (10)	32.7	0.0	46.3	53.1	NP	NP
45		S10 (45' - 47'): Medium dense; S10A (Upper 12") brown fine to coarse SAND, little fine to coarse Gravel, loose SILT, wet. Res. = 1.3 N (ANSIHO W145 Classification: A-1-b.) S10B (Lower 4") gray layered SILT, wet. (ANSIHO W145 Classification: A-4.)	4-5-0-7 (13)	15.0 20.1	34.5	57.7 13.0	7.0 85.0	NP	NP

Notes: 1. Stratification lines represent approximate boundary between material types. Samples may be graded.  
2. U values have not been corrected for hammer energy. CE is the hammer energy correction factor.  
3. Water final readings have been made of fines and water contents stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.



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55		S11 (50' - 52'): Medium dense, gray layered SILT, wet. Res. = 0.0 N (ANSIHO W145 Classification: A-4.)	3-0-0-7 (14)	25.7		0.2	90.8	NP	NP	
55		S12 (55' - 57'): Medium dense, gray layered SILT, wet. Res. = 0.0 N (ANSIHO W145 Classification: A-4.)	0-0-0-7 (10)	20.2		0.3	90.7	NP	NP	
60		Hole stopped @ 57.0 N								
65		Remarks: 1) U.S. Route 5 stationing, ground elevation, and coordinates shown are estimated from electronic files provided by VTrans via email on 2/25/15 and taped measurements to existing features by GeoDesign personnel. All measurements are rounded to the nearest foot. 2) Inlet SPT N-value for sample S3 (10'-12') is likely elevated due to driving a cobble/boulder with the spoon. 3) Borehole was backfilled with gravel/ouffings and cold patched upon completion. 4) Hammer energy correction factor is assumed based on hammer type. 5) Visual sample descriptions are per Burmister classification system. Laboratory testing results shown are based on testing performed by VTrans with the Gravel/Sand/SILT breakdown shown per ANSIHO W145.								

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