



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

BORING LOG

Springfield
STP COLU(47)
US-5

Boring No.: 0-104
Page No.: 1 of 2
File No.: 13C346
Checked By: JFW

Boring Crew: T. Farrell (SLS), B. Honey (GeoDesign)
Date Started: 2/13/15 Date Finished: 2/13/15
VTPS NAD83: N 384422.00 N E 1004081.00 N
Station: 470+63 Offset: 8' L
Ground Elevation: 340 N

Coring Sampler
Type: AUGER SS
I.B.: 4.25 in 1.30 in
Hammer Mt: N.A. 149 lb.
Hammer Fall: N.A. 30 in.
Hammer/Red Type: Auto
Rq: CMT 550K ATV CE = 1.35

Groundwater Observations (3)

Date	Depth (ft)	Notes
02/13/15	30.0	Wat sample.
02/13/15		See Remark 2.

Depth (ft)	Interval (ft)	CLASSIFICATION OF INTERVALS (Description)	Moisture Content (%)	Moisture Content (%)	Gravel %	Sand %	Fines %	LL %	PI %
0	0-4"	4" Asphalt							
4	4-11"	S1 (1' - 1.5'): Refused, brown fine to coarse S&M and fine to coarse GRAVEL, little SH, frozen. Res. = 0.2 N (ARSHO W145 Classification: A-1-b.)	50/4"	4.8	48.0	33.0	18.0	NP	NP
11	11-18"	S2 (1.5 - 2') cuttings: Light brown fine to coarse S&M, little SH, little fine to coarse Gravel, metal. (ARSHO W145 Classification: A-2-4.) Res. = 0.1 N	5-9-11-18 (17)	0.2	41.0	36.0	23.0	NP	NP
18	18-22"	S3 (2' - 2.5'): Medium dense, brown fine to coarse S&M and SILT, little fine to coarse Gravel, metal. Res. = 0.8 N (ARSHO W145 Classification: A-1-b.)							
22	22-28"	S4 (2' - 2.5'): Medium dense, brown fine to coarse S&M and fine to coarse GRAVEL, some SH, metal. Res. = 1.0 N (ARSHO W145 Classification: A-1-b.)	17-18-22-28 (28)	0.6	45.0	33.5	21.5	NP	NP
28	28-32"	S5 (3' - 3.5'): Medium dense, brown SILT and fine to coarse S&M, some fine to coarse Gravel, metal. Res. = 1.2 N	0-0-14-32 (32)						
32	32-38"	S6 (3.5 - 4'): Medium dense, brown SILT and fine to coarse S&M, little fine to coarse Gravel, metal. Res. = 1.0 N (ARSHO W145 Classification: A-2-4.)	0-10-15-38 (38)	10.2	33.2	30.4	27.4	NP	NP
38	38-44"	S7 (4' - 4.5'): Medium dense, brown fine to coarse S&M and SILT, little fine to coarse Gravel, metal. Res. = 1.1 N (ARSHO W145 Classification: A-2-4.)	0-0-0-7-44 (44)	11.5	33.0	40.8	26.2	NP	NP
44	44-48"	S8 (4.5 - 5'): Loose, brown layered SILT, vol. Res. = 0.8 N (ARSHO W145 Classification: A-4.)	2-3-3-5 (8)	33.5	0.4	10.4	88.2	NP	NP
48	48-52"	S9 (5' - 5.5'): Loose, brown layered SILT, vol. Res. = 0.8 N (ARSHO W145 Classification: A-4.)	1-3-3-0 (8)	30.0	0.3	7.7	92.0	NP	NP
52	52-56"	S10 (5.5 - 6'): Medium dense, brown layered SILT, trace fine to medium Sand (in occasional seams ~1/16" thick), vol. Res. = 1.2 N (ARSHO W145 Classification: A-4.)	3-5-0-0 (11)	27.0	1.2	10.0	88.2	NP	NP
56	56-60"	S11 (6' - 6.5'): Medium dense, brown layered SILT, vol. Res. = 1.2 N (ARSHO W145 Classification: A-4.)	5-5-7-0 (12)	28.4		11.7	88.3	NP	NP
60	60-64"	S12 (6.5 - 7'): Medium dense, gray layered SILT, trace fine to medium Sand (in occasional seams ~1/16" thick), vol. Res. = 1.1 N (ARSHO W145 Classification: A-4.)	3-0-0-0 (12)	27.4	0.8	12.0	88.6	NP	NP
64	64-68"	S13 (7' - 7.5'): Medium dense, gray layered SILT, trace fine Sand, vol. Res. = 0.8 N (ARSHO W145 Classification: A-4.)	5-5-0-0 (10)	28.0		13.0	85.0	NP	NP

Notes: 1. Stratification lines represent approximate boundary between material types. Stratification may be greater.
2. If fines have not been corrected for hammer energy, CE is the hammer energy correction factor.
3. Water level readings here have been made at time and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.



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Depth (ft)	Interval (ft)	CLASSIFICATION OF INTERVALS (Description)	Moisture Content (%)	Moisture Content (%)	Gravel %	Sand %	Fines %	LL %	PI %
44	44-47"	S14 (6.5' - 4.7'): Medium dense, gray layered SILT, vol. Res. = 1.1 N (ARSHO W145 Classification: A-4.)	0-0-0-0 (12)	25.3	0.0	0.5	99.7	NP	NP
47	47-50"	S15 (6.5' - 5.0'): Medium dense, gray layered SILT, vol. (ARSHO W145 Classification: A-4.)	5-0-7-0 (13)	25.0		0.5	99.7	NP	NP
50	Hole stopped @ 50.0 N								
55	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) At 43 foot depth, water level indicator was lowered to 43 feet and returned with wet spoils on the probe. Inferred not representative of true water level in boring. 3) Borings were backfilled with gravel/cuttings and cold patched upon completion. 4) Hammer energy correction factor is assumed based on hammer type. 5) Visual sample descriptions are per Identifier classification system. Laboratory testing results shown are based on testing performed by VTrans with the Gravel/Sand/SH breakdown shown per ARSHO W145.								

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