SOIL BORING LOGS

GEODESIGN INCORPORATED
P.O. Box 699
Windsor, VT 05089
Tel: (802) 674-2033

1233 Shelburne Road, Suite E-1
South Burlington, VT 05403
Tel: (802) 652-5140

BORING LOG

Project Name: Shelburne-South Burlington NH EGC 019-4(19)

Boring No.: B-217
Page No.: 1 of 2
File No.: 750-03.8
Checked By: RSA

Boring Company: M&W Soils Engineering
Foreman: Mike Hitchcock
GeoDesign Rep.: Rob Achilles
Date Started: October 4, 2002 — Date Finished: October 4, 2002
N. Coordinate: 39820.0 ft — E. Coordinate: 18.0 ft
Ground Surface Elevation (feet): 155.0
Station: 39820 — Offset: 18.0 ft R

Casing:	Sampler:
Type: H.S.A.	SS
I.D./O.D.: 3.25 in.	2.0 in.
Hammer Wt.: NA	140 lbs
Hammer Fall: NA	30 in.
Rig Type: Mobile Drill B-47	
Other: Track mounted	

Groundwater Observations

Date and Time	Depth (ft)	Elevation (ft)	Notes
▽ 10/4/02 9:49 AM	20.5	134.5	mrk (20.5')
▽ 10/4/02 1:30 PM	22.0	133.0	open hole
▽			
▽			

Sample Information

Depth (ft)	Casing Blows/ft	Number	Type	Penetration (inches)	Recovery (inches)	Depth (ft)	Blows 0-6	Blows 6-12	Blows 12-18	Blows 18-24	Coring Time (min./ft)	PID Result
						0.0						
5		1	SS	24.0	6.0	4.5	7	12	6	5		-
10		2	SS	24.0	15.0	10.0	5	6	6	7		-
		3	SS	24.0	18.0	12.0	6	5	7	5		-
15		4	SS	24.0	4.0	14.0	6	5	7	5		-
		5	SS	24.0	6.0	16.5	13	8	5	8		
		6	SS	24.0	18.0	18.5	3	7	11	8		
20		7	SS	24.0	18.0	20.5	16	22	24	20		
25		8	SS	24.0	24.0	25.0	16	16	24	34		-

Sample Description (Classification System: Burmister)

- Surface: 5" of Asphalt with 12" of Gravel base.
- Brown-black Silty CLAY, trace fine Sand, moist (from auger cuttings).
- S-1) Very Stiff, SILT and CLAY, little fine to medium Sand, pieces of coarse Gravel in spoon tip, moist.
- S-2) Stiff, brown-gray SILT and CLAY, little fine to medium Sand, trace Root Fibers, moist.
- S-3) Similar to S-2.
- S-4) Similar to S-2, except possible Cinders in sample.
- S-5) Black, soft spongy wood, moist. Wood fibers can be pulled apart by hand. Possible stump.
- S-6) Similar to S-5.
- S-7) Dense, gray SILT, little fine Sand, wet.
- S-8) Similar to S-7.

Strata Description (Elevation & Depth (feet))

- SAND and GRAVEL (Fill)
- 152.0 — 3.0 SILT and CLAY (Fill)
- 138.5 — 16.5 Decomposed Wood (Fill)
- 134.5 ▽ — 20.5 SILT and SAND ▼

Remarks
(0): Groundsurface elevation estimated from VAOT cross-section based on locations taped from existing features and plotted by GeoDesign. Elevations and locations should be considered accurate only to the degree implied by the method used.
(4-8'): Possible petroleum odor in auger cuttings.
(8-9'): Observed higher drilling resistance on probable cobble or boulder.
(12-14'): Observed possible black staining and hydrocarbon odor in SS sample.
(20.5): Groundwater depth based on water inside borehole during drilling.

Notes:
1) Soil Samples screened in the field using a thermal Environmental Systems Model 580S Photoionization Detector. The meter was calibrated relative to a benzene-in-air standard. ND = None Detected, - = Sample Not Screened
2) Stratification Lines Represent Approximate Boundary Between Material Types, Transitions May Be Gradual.
3) Water Level Readings Have Been Made At Times And Under Conditions Stated, Fluctuations Of Groundwater May Occur Due To Other Factors Than Those Present At The Time Measurements Were Made. AC = After Coring; Rock
4) Sample Type Coding: A = Auger; C = Core; PS = Piston Sampler; SS = Split Barrel (Split Spoon); ST = Shelby Tube; V = Vane
5) Proportions Used: Trace = 1-10%; Little = 10-20%; Some = 20-35%; And = 35-50%

Boring No.: B-217

OFFICES LOG WL 750-03.8.GPJ GEODSGN.GDT 1/22/03

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		9	SS	18.0		30.0	35	54	125			-
35		10	SS	24.0	18.0	35.0	24	52	51	54		-
40												
45		11	SS	5.0	5.0	44.0	117/5"					-
50												
55												
60												

Sample Description (Classification System: Burmister)

- S-9) Similar to S-7, except very dense.
- S-10) Very dense, gray Clayey SILT, wet.
- S-11) Very dense, gray Clayey SILT, little fine to medium Sand with pieces of red fine Gravel, wet.

Strata Description (Elevation & Depth (feet))

- SILT and SAND *(Continued)*
- 120.0 — 35.0 SILT
- 110.5 — 44.5 Bottom of Borehole at 44.5 ft

Remarks
(29-29.5'): Observed higher drilling resistance on possible cobble.
(40-40.5' and 43-43.5'): Observed higher drilling resistance on possible cobble.
(44.5'): Observed possible SS sampler refusal on possible boulder or bedrock.

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DATUM
VERTICAL NGVD 1929
HORIZONTAL NAD 1927

4/4/03

SHELBURNE – SOUTH BURLINGTON

SURVEYED BY V.S.C. INC. DATE
DRAWN BY E.A.A. INC. DATE
TRACED BY E.A.A. INC. DATE

PROJECT NH-EGC-019-4(28)
SOIL BORING DRAWING NO. 8
SHEET NO. 232 OF 283