

SOIL BORING LOGS

GEO DESIGN INCORPORATED		BORING LOG		Boring No.: B-211									
P.O. Box 899 Windsor, VT 05089 Tel: (802) 674-2033		1233 Shelburne Road, Suite E-1 South Burlington, VT 05403 Tel: (802) 652-5140		Project Name									
		Shelburne-South Burlington NH EGC 019-4(19)		Page No.: 1 of 1									
				File No.: 750-03.8									
				Checked By: RSA									
Boring Company: M&W Soils Engineering		Casing: H.S.A. SS		Groundwater Observations									
Foreman: Mike Hitchcock		Type: H.S.A. SS		Date and Time									
GeoDesign Rep.: Rob Achilles		I.D./O.D.: 3.25 in. 2.0 in.		Depth (ft)									
Date Started: September 24, 2002		Date Finished: September 24, 2002		Elevation (ft)									
N. Coordinate:		E. Coordinate:		Notes									
Ground Surface Elevation (feet): 171.7		Rig Type: Acker Soil Max		9/24/02 12:00 PM mrk (20.3')									
Station: 42335		Other: Truck mounted		9/24/02 3:00 PM 9.0 162.7 open hole									
Offset: 58.0 ft R													
Depth (ft)	Sample Information								Sample Description	Strata Description			
	Casing Blows/ft	Number	Type	Penetration (inches)	Recovery (inches)	Blows / 6 inch Interval					Coring Time (min./ft)	PID Result	
						0-6	6-12	12-18					18-24
1	1	SS	24.0	11.0	0.0	2	2	3	3	-	-	S-1) Loose, brown-black SILT and fine to medium SAND, little Root Fibers (TOPSOIL).	SILT and SAND (Fill)
2	2	SS	24.0	12.0	2.0	7	6	8	10	-	-	S-2) Medium brown, fine to medium SAND, little Silt, moist.	
5	3	SS	24.0	20.0	4.0	6	8	13	14	-	-	S-3) Very stiff, brown CLAY, moist.	167.7 4.0 CLAY
10	4	SS	24.0	18.0	6.0	10	12	17	50/3"	-	-	S-4) Top 16" - Very stiff, brown CLAY, trace fine Sand, moist. Increasing fine to medium Sand content with depth. Bottom 2" - Brown, fine to medium SAND and SILT, moist.	161.7 10.0 GLACIAL TILL
15	6	SS	10.0	8.0	14.5	43	50/4"			-	-	S-6) Very dense, brown-gray, fine to medium SAND and SILT, trace fine Gravel, moist.	151.4 20.3 Bottom of Borehole at 20.0 ft
20	7	SS	3.0	20.0	100/3"					-	-	S-7) Very dense, gray fine to coarse SAND, little Silt, moist.	

(0'): Boring performed at proposed VAOT staked boring location. Groundsurface elevation and station/offset based on VAOT survey data.
 (0'): Possible bedrock outcrop along north side of Holmes Road behind VW dealership, approximately 250' west north west of boring.
 (10'): Depth of strata change based on observed higher drilling resistance.
 (20.3'): Observed SS sampler and auger refusal on possible boulder or bedrock. Groundwater was not observed during drilling. Borehole was left open for groundwater observations for the remainder of the drilling day.

NOTES: 1) Soil Samples screened in the field using a thermal Environmental Systems Model 5805 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-211

GEO DESIGN INCORPORATED		BORING LOG		Boring No.: B-212									
P.O. Box 899 Windsor, VT 05089 Tel: (802) 674-2033		1233 Shelburne Road, Suite E-1 South Burlington, VT 05403 Tel: (802) 652-5140		Project Name									
		Shelburne-South Burlington NH EGC 019-4(19)		Page No.: 1 of 1									
				File No.: 750-03.8									
				Checked By: RSA									
Boring Company: M&W Soils Engineering		Casing: H.S.A. SS		Groundwater Observations									
Foreman: Mike Hitchcock		Type: H.S.A. SS		Date and Time									
GeoDesign Rep.: Aaron Humphrey		I.D./O.D.: 3.25 in. 2.0 in.		Depth (ft)									
Date Started: September 11, 2002		Date Finished: September 11, 2002		Elevation (ft)									
N. Coordinate:		E. Coordinate:		Notes									
Ground Surface Elevation (feet): 174.8		Rig Type: Acker Soil Max		9/11/02 12:00 PM 8.5 166.3 open hole									
Station: 42441		Other: Truck mounted											
Offset: 44.0 ft R													
Depth (ft)	Sample Information								Sample Description	Strata Description			
	Casing Blows/ft	Number	Type	Penetration (inches)	Recovery (inches)	Blows / 6 inch Interval					Coring Time (min./ft)	PID Result	
						0-6	6-12	12-18					18-24
1	1	SS	24.0	12.0	0.0	2	4	6	10	-	-	S-1) Top 1" - TOPSOIL. Bottom 11" - Medium dense, brown fine to coarse SAND, little Silt, little fine Gravel, dry.	SILT and SAND (Fill)
2	2	SS	24.0	12.0	2.0	4	4	5	4	-	-	S-2) Loose, brown-black fine to coarse SAND, little Silt, little fine Gravel, little wood, dry.	
5	3	SS	24.0	18.0	4.0	7	7	5	8	-	-	S-3) Medium stiff, brown Silty CLAY, moist.	170.8 4.0 CLAY and SILT (Possible Fill)
10	4	SS	24.0	20.0	6.0	8	10	12	11	-	-	S-4) Similar to S-3, except very stiff.	161.8 13.0 SILT and SAND
15	6	SS	24.0	13.0	14.0	8	11	10	15	-	-	S-6) Medium dense, gray SILT and fine SAND, wet.	155.8 168.8 GLACIAL TILL
20	7	SS	10.0	10.0	19.0	35	50/4"			-	-	S-7) Very dense, fine to coarse GRAVEL, little Silt, little fine to coarse Sand, wet.	19.8 Bottom of Borehole at 19.8 ft

(0'): Groundsurface elevation based on hand level survey from proposed VAOT staked boring location. Location is estimated from site plan based on locations taped from proposed VAOT staked boring location and plotted by GeoDesign.
 (13'): Depth of strata change based on observed higher drilling resistance.
 (19.8'): Observed SS sampler and auger refusal on possible boulder or bedrock.
 (19.9'): Borehole was left open for groundwater observations during the remainder of the drilling day.

NOTES: 1) Soil Samples screened in the field using a thermal Environmental Systems Model 5805 Photoionization Detector. The meter was calibrated relative to a benzene-in-air standard. ND = None Detected, - = Sample Not Screened
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Boring No.: B-212

DATUM
VERTICAL NCVD 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. 4
 SHEET NO. 228 OF 283