GEODESIGN INCORPORATED
Geotechnical Engineers/Environmental Consultants/Construction Engineers
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1233 Shelburne Rd., Suite 360, So. Burlington, VT 05403, Phone: 802-652-5140

BORING LOG

Project Name: Route 125 Bridge, RS 0174 (8), Middlebury, VT

Boring No.: B-5
Page No.: 1 of 2
File No.: 750-04.1
Checked By: JEL

Boring Company: M & W Soils Engineering, Inc.
Foreman: Myron Domingue
GeoDesign Rep.: Jason Gaudette
Date Started: July 3, 2003 Date Finished: July 11, 2003
N. Coordinate: E. Coordinate:
Ground Surface Elevation (feet): 532.7
Station: 14+50.00 Offset: 27 ft LT

	Casing:	Sampler:
Type:	FJ	SS
I.D.:	3.0 in.	1.38 in.
Hammer Wt.:	300 lbs	140 lbs
Hammer Fall:	30 in.	30 in.
Rig Type:	B-47 Mobile Drill Track	
Other:	BX-size Core Barrel	

Groundwater Observations

Date	Depth (ft)	Elev. (ft)	Notes
▼ 7/11/03, 14:25			None
▼			
▼			
▼			

Depth (ft)	Casing Blows/ft	Sample Info: Number	Type	Penetration (inches)	Recovery (inches)	Depth (ft)	Blows / 6 inch Interval: 0 - 6	6 - 12	12 - 18	18 - 24	Coring Time (min./ft)	Moisture Content (%)	Strata Description: Depth & Elevation(feet)	Symbol	Sample Description: Classification System: Burmister
		S1	SS	18	12	0	6	8	3	25/0"			TOPSOIL		S1) Medium dense, dark brown, fine SAND and SILT, trace Gravel, with roots and root fibers, moist.
													1.5		
		S2	SS	13	8	2	4	2	18/0.8"				Silty SAND (with Cobbles and Boulders) 531.2		S2) Refusal. Similar to S1, except fine to medium SAND, with organic litter.
													4.5		
5		C1	C	60	54	3.8					6		BEDROCK (Quartzite) 528.2		C1): Very hard, light to dark gray, slightly weathered orange-red along fracture surfaces, closely jointed, poor quality QUARTZITE (RQD=38%). Fractures typically <15 and 45 degrees from horizontal.
											16				
											36				
											48				
											14				
10		C2	C	22	22	8.8					15				C2): Similar rock type to above (RQD=25%).
											30				
		C3	C	37	37	10.7					42				C3): Similar rock type to above
											16				
15		C4	C	60	60	13.8									C4): Similar rock type to above (RQD=23%). Fractures typically <10 and >70 degrees from horizontal.
20		C5	C	60	60	18.8									C5): Similar rock type to above, except close to very closely jointed (RQD=32%). Two 3/4" thick dark gray to black SLATE beds noted near bottom of run.
25		C6	C	48	48	23.8									C6): Similar rock type to above, except closely jointed, very poor quality (RQD=19%). One 0.5" thick black SLATE bed noted.
		C7	C	58	58	27.8									C7): Similar rock type to above, except close to very closely jointed (RQD=18%). Fractures typically <10 and 70-85 degrees from
30															

Remarks:
1) Ground surface elevation estimated in the field by GeoDesign using a hand level.
2) Split spoon refusal on possible tree root, cobble, boulder at 3' deep. Large Quartzite boulders (18" to 24" diameter) observed approximately 1' below ground surface during solid stem auger advance.
3) 3" I.D. casing set to 3.8' deep. Used 2.9" O.D. diameter roller bit to flush hole prior to coring.
4) Bedrock seam noted at 8.9' deep (<3/4" thick). Observed temporary change in wash water color to darker gray.

Notes:
1) Stratification Lines Represent Approximate Boundary Between Material Types, Transitions May Be Gradual.
2) 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. A.C. = After coring; N.R. = Not Recorded.
3) Sample Type Codings: A=Auger; C=Core; D=Driven; G=Grab; PS=Piston Sampler; SS=Split Barrel/Split Spoon; ST=Shelby Tube; Geo=GeoProbe; V=Vane; WOR/WH=Weight of Rod/Hammer
4) Proportions Used: Trace = 1-10%; Little = 10-20%; Some = 20-35%; And = 35-50%
5) Stratification lines represent approximate boundary between material types, transitions may be gradual.

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													BEDROCK (Quartzite) (Continued)		horizontal.
													32.6		
													Bottom of Exploration at 32.6 ft 500.1		
35															
40															
45															
50															
55															
60															

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RTE. 125 BRIDGE CONVERSION 750-03.10 (EDITED TO IMPERICAL).GPJ GEODESIGN STANDARD .GDT 12/17/09