



**PARTIAL BORING LOG B-14**

**PARTIAL BORING LOG B-14 (CONT'D)**

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<b>GZA</b> GeoEnvironmental, Inc. Engineers and Scientists		Bennington Bypass North Bennington, Vermont		Boring No.: B-14 Page: 1 of 5 File No.: 15634 Check: TAD						
Contractor: New Hampshire Boring		Auger/Casing Sampler		GROUNDWATER READINGS						
Foreman: M. Misiaszek		Type: PW/HW SS	Date: 8-12-99	Time: 0700						
Logged by: J. Gaudreau		I.D. (mm): 127/102	Depth: 1.68m	Casing: 3.05m						
Date Start/Finish: 8-11-99 / 8-11-99		Hammer Wt.: 136.1kg	63.5kg	Stab: 14 hrs.						
Boring Location: 6+252, 22m		Hammer Fall: 0.61m	0.76m							
GS Elev.: 251.75m		Datum: NGVD								
Rig Type: CME 750 ATV										
Sample Information										
Depth (feet)	Depth (meters)	No.	Rec. (m)	Depth (m)	Blows/0.15m	N Value	Sample Description & Classification	Stratum Desc.	Remarks	Equipment Installed
		S-1	0.20	0-0.37	8-31	131	Very dense, brown, fine to medium SAND, some Silt, little Gravel with roots, wood, and leaves. (A-1-b)	0.37m		NO EQUIPMENT INSTALLED
5'	1.5						Advanced borehole through nested cobbles and boulders from 0.37 to 3.05 meters using roller bit and air hammer.	FLUVIAL		
		S-2	0.41	4.27-	13-15	34	Dense, light brown, fine to medium SAND and Silt with white and reddish brown Clayey Silt lenses in bottom 4 inches of sample. (A-4)			
15'	4.6			4.88	19-17					
		S-3	0.46	5.79-	12-17	41	Dense, light brown and gray, SILT and fine Sand, trace Gravel with white and dark gray Clayey Silt lenses. (A-4)		LACUSTRINE	
20'	6.1			6.40	24-25					
		S-4	0.61	7.32-	8-9	27	Very stiff, light brown, Clayey SILT and fine to medium Sand, trace Gravel with white and reddish brown Clayey Silt lenses. (A-4)			
25'	7.6			7.92	18-24					
		S-5	0.51	8.84-	10-15	35	Hard, light brown, Clayey SILT, some fine			
REMARKS										
Stratification lines represent approximate boundaries between soil types, transitions may be gradual. 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.										

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				9.45	20-40		Sand with white, gray and brown Clay lenses. (A-4)			NO EQUIPMENT INSTALLED
35'	10.7	S-6	0.03	10.36-	100/	100	Very dense, GRAVEL and light brown Clayey Silt, some fine to coarse Sand (possible wash recovery). (A-2-4)			
				10.45	102mm		Encountered cobbles and coarse Gravel from 10.97 to 11.58 meters.			
40'	12.2	S-7	0	11.89-	100/	100	No recovery. Rock fragment in tip of spoon.			
				12.04	152mm					
45'	13.7	S-8	0.36	13.41-	17-45	109	Very dense, light brown, SILT and fine Sand, trace Gravel with white Clayey Silt seams and reddish brown fine to medium Sand seams. (A-4)	LACUSTRINE		
				13.96	64-					
					100/					
					76mm					
50'	15.2	S-9	0.41	14.94-	20-38	118	Very dense, light brown and gray SILT, some fine Sand, trace Gravel with reddish brown fine to medium Sand seams and gray to white Clayey Silt seams. Sample contained iron oxide staining. (A-4)			
				15.48	80-					
					100/					
					51mm					
55'	16.8	S-10	0	16.46-	14-29	63	No recovery; spoon damaged during driving.			
				17.07	34-59					
		S-11	0.56	17.98-	11-19	56	Very dense, light brown, SILT, some fine			
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				18.59	37-63		Sand with 6-inch layer of gray, SILT and white and gray Clayey Silt lenses. (A-4)			NO EQUIPMENT INSTALLED
65'	19.9	S-12	0.36	19.51-	12-25	85	Very dense, dark gray, SILT, trace fine Sand with brown Silt seams, and white Clayey Silt lenses. Sample contained iron oxide staining. (A-4)			
				20.12	60-87					
70'	21.3	S-13	0.18	21.03-	16-43	121	Very dense, gray, SILT, little light brown fine Sand with light brown Silt seams, white Clayey Silt lenses. Sample contained iron oxide staining. (A-4)			
				21.58	78-					
					100/					
					102mm					
75'	22.9	S-14	0.03	22.56-	100/	100	Very dense, light brown, SILT and fine Sand, trace Gravel with dark brown Silt lenses and white Clayey Silt lenses. (A-4)	LACUSTRINE		
				22.65	76mm					
80'	24.4	S-15	0.20	24.08-	40-	100	Very dense, light brown, SILT, some fine Sand, trace Gravel with white Clayey Silt lenses. Sample contained iron oxide staining. (A-4)			
				24.38	100/					
					152mm					
85'	25.9	S-16	0.20	25.60-	18-75	175	Very dense, light brown, SILT, some fine Sand with white Clayey Silt lenses and light brown Silt lenses. (A-4)			
				26.00	100/					
					76mm					
		S-17	0.05	27.13-	29-57	157	Very dense, light brown, SILT, little fine			
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\* BOTTOM OF DRILLED SHAFT, RAMP D, PIER 1 - EL. 225.250

<b>STATE OF VERMONT AGENCY OF TRANSPORTATION</b>	
Town Of <b>BENNINGTON</b>	Bridge No. <b>BI5, BI5N, BI5S</b>
Highway No. <b>VT RTE 279</b>	Log Sta. Surv. Sta.
<b>VT ROUTE 279 &amp; RAMPS OVER ROARING BRANCH OF WALLOOMSAC RIVER</b>	
<b>BORING LOGS (SHEET 2 OF 33)</b>	
Designed By <b>GZA</b>	Drawn By <b>L.D. DELL</b>
Checked By <b>GZA</b>	Date <b>04/06</b>
Bridge Design Supervisor <b>K.M. WOJTKOWSKI</b> Date <b>04/06</b>	
PROJECT <b>BENNINGTON</b>	PROJECT NO. <b>AC NH 019-(I51)</b>
TVGA CAD Drawing No. <b>BL02.dgn</b>	Date <b>02/02/2009</b>
Bridge Sheet No. <b>BR208</b>	Sheet <b>195</b> of <b>367</b>

