Metric

BORING LOG B-509

GZA GeoEnvironmental, Inc. *Engineers and Scientists*

Bennington Bypass North
Bennington, Vermont

Boring No.: B-509
Page: 1 of 3
File No.: 15634.16
Check: DGL

Contractor: Geologic-Earth Exploration
Foreman: Ray Eastwood
Logged by: L. Charest
Date Start/Finish: 7-12-06 / 7-13-06
Boring Location: NB 6+312.7, 19.2m L
GS Elev.: 252.03m Datum: NAVD88

	Auger/ Casing	Sampler
Type:	ODEX	SS
I.D.:	108 mm	35 mm
Hammer Wt.:	NA	63.5 kg
Hammer Fall:	NA	0.76 m
Rig Type:	CME750 ATV	

GROUNDWATER READINGS

Date	Time	Depth	Casing	Stab
7/13/06	0900	2.90m	4.57m	15 hours

Depth (m)	Sample Information: No.	Pen./ Rec. (m)	Depth (m)	Blows (/0.15m)	N Value	Sample Description & Classification	Stratum Desc.	Remarks	Equipment Installed
						Advanced borehole through nested cobbles and boulders from 0 to 2.74 meters (0 to 9 feet) below ground surface using an ODEX hammer.	FLUVIAL		No Equipment Installed
	S-1	0.61/ 0.43	2.74- 3.35	8-8 14-15	22	Very stiff, light brown, Clayey SILT, trace fine to coarse Sand, trace Gravel with white, Clayey Silt lenses. (A-4)	2.74m		
5	S-2	0.61/ 0.48	4.27- 4.88	4-8 12-16	20	Medium dense, light brown, SILT, trace fine to medium Sand with white, Clayey Silt lenses. (A-4)			
	S-3	0.61/ 0.41	5.79- 6.40	7-11 20-22	31	Dense, light brown, SILT, little fine Sand, trace Gravel with white, Clayey Silt lenses and seams. (A-4)	LACUSTRINE		
	S-4	0.61/ 0.48	7.32- 7.92	7-13 17-23	30	Dense, light brown, SILT, little fine Sand with white, Clayey Silt lenses. (A-4)			
	S-5	0.61/ 0.41	8.84- 9.45	4-8 17-24	25	Medium dense, light brown, SILT, little fine Sand with white, Clayey Silt lenses. (A-4)			

REMARKS

SOIL BL WELL SOIL SERIES.GPJ GZA_NH.GDT 12/4/08

All depth measurements are approximate. Stratification lines represent approximate boundary 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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	S-6	0.61/ 0.41	10.36- 10.97	15-13 19-23	32	Dense, light brown, SILT, little fine Sand with white, Clayey Silt lenses. (A-4)			
	S-7	0.61/ 0.43	11.89- 12.50	11-15 22-41	37	Dense, light brown, SILT, little fine Sand with white, Clayey Silt lenses. (A-4)			
	S-8	0.61/ 0.41	13.41- 14.02	12-17 23-56	40	Hard, light brown, Clayey SILT, little fine to medium Sand with white, Clayey Silt lenses. (A-4)			
15	S-9	0.61/ 0.43	14.94- 15.54	10-16 25-40	41	Hard, light brown, Clayey SILT, little fine Sand with white, Clayey Silt lenses. (A-4)	LACUSTRINE		
	S-10	0.61/ 0.36	16.46- 17.07	17-32 46-71	78	Hard, light brown, Clayey SILT, little fine Sand with white, Clayey Silt lenses. (A-4)			
	S-11	0.61/ 0.46	17.98- 18.59	9-17 28-38	45	Hard, light brown, Clayey SILT, little fine Sand with white, Clayey Silt lenses. (A-4)			
20	S-12	0.61/ 0.46	19.51- 20.12	11-21 29-41	50	Hard, light brown, Clayey SILT, trace fine Sand with white, Clayey Silt lenses. (A-4)			
	S-13	0.61/ 0.33	21.03- 21.64	16-24 48-76	72	Very dense, light brown, SILT, some fine Sand with white, Clayey Silt lenses. (A-4)			

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	S-14	0.61/ 0.41	22.56- 23.16	15-25 55-50	80	Very dense, light brown, SILT, trace fine Sand with white, Clayey Silt lenses. (A-4)			
	S-15	0.61	24.08- 24.69	19-27 50-61	77	Very dense, light brown, SILT, little fine Sand with white, Clayey Silt lenses. (A-4)	LACUSTRINE		
25	S-16	0.61/ 0.38	25.60- 26.21	41-38 52-86	90	Very dense, light brown, SILT, little fine Sand with white, Clayey Silt lenses. (A-4)			
	S-17	0.61/ 0.36	27.13- 27.74	27-43 62-92	105	Very dense, light brown, SILT, little fine Sand with white, Clayey Silt lenses. (A-4)			
						Bottom of boring at 27.74 meters (91 feet) below ground surface. No refusal.	27.74m		
30									

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TVGA CONSULTANTS

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON	Bridge No. BI5, BI5N, BI5S
Highway No. VT RTE 279	Log Sta. / Surv. Sta.
VT ROUTE 279 & RAMPS OVER ROARING BRANCH OF WALLOOMSAC RIVER	
BORING LOGS (SHEET 28 OF 33)	
Designed By GZA	Drawn By L.R. DELL
Checked By GZA Date 06/08	Bridge Design Supervisor K.M. WOJTKOWSKI Date 06/08
PROJECT BENNINGTON	PROJECT NO. AC NH 019-1(51)
TVGA CAD Drawing No. BL28.dgn	Date 02/02/2009
Bridge Sheet No. BR234	Sheet 221 of 367