



BORING LOG B-20 (OW)

PARTIAL BORING LOG B-20(OW) (CONT'D)

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GZA GeoEnvironmental, Inc. Bennington Bypass North Bennington, Vermont
 Contractor: New Hampshire Boring Foreman: T. Garside
 Logged by: J. Gaudreau Date: 9-16-99 Time: 0800
 Date Start/Finish: 9-14-99 / 9-16-99 Boring Location: 6+367, 18m R
 GS Elev.: 277.86m Datum: NGVD

Boring No.: B-20(OW) Page: 1 of 4 File No.: 15634 Check: TAD

Auger/Casing Sampler Type: ODEX SS
 I.D. (mm): 102 35
 Hammer Wt.: NA 63.5 kg
 Hammer Fall: NA 0.76 m
 Rig Type: CME 550 ATV

GROUNDWATER READINGS					
Date	Time	Depth	Casing	Stab	
9-16-99	0800	20.42m	28.96m	16 hrs.	

Sample Information						Stratum Desc.	Remarks	Equipment Installed	
Depth (feet)	Depth (meters)	No.	Rec. (m)	Blows/0.15m	N Value				
5'	1.5	S-1	0.15	0-0.61	3-3	12	Medium dense, light brown, fine to medium SAND, some Silt, trace Gravel with roots and wood. (A-1-b)	TOPSOIL 0.61m	PROTECTIVE CASING CONCRETE SEAL 0.30m
				9-21					
	1.5	S-2	0.23	1.52-2.13	9-10	30	Medium dense, light brown, fine to medium SAND, little Gravel, trace Silt. (A-1-b)		
				20-13					
10'	3.0	S-3	0.13	3.05-3.66	7-12	25	Medium dense, brown, fine to medium SAND, some Gravel, trace Silt. (A-1-b)	ABLATION TILL	FILTER SAND
				13-10					
15'	4.6	S-4	0.15	4.57-5.18	5-6	19	Medium dense, grayish brown, fine to coarse SAND, some Gravel, trace Silt. Rock fragment in tip of spoon. (A-1-b)		19mm SOLID SCH. 40 PVC RISER
				13-16					
20'	6.1	S-5	0.30	6.10-6.71	50-25	46	Dense, grayish brown, fine to coarse SAND, some Gravel, trace Silt. (A-1-a)		
				21-32					
25'	7.6	S-6	0.15	7.62-8.23	29-17	39	Dense, grayish brown, SILT and fine to coarse Sand, trace Gravel. (A-4)	7.62m	
				22-21					
		S-7a	0.41	8.84-	12-31	89	S-7a: Hard, gray, Clayey SILT, some fine	LOGGEMENT TILL	

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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Depth (feet)	Depth (meters)	No.	Rec. (m)	Blows/0.15m	N Value				
				9.14-	68-80		Sand, trace Gravel.		
		S-7b		9.14-			S-7b: Very dense, brown, fine to medium SAND, little Gravel, trace Silt. Rock fragment in tip of spoon.		FILTER SAND
				9.45					
35'	10.7	S-8	0.61	10.67-11.28	19-30	59	Very dense, brown, fine to medium SAND, some Gravel, little Silt. (A-1-b)		19mm ID SCH. 40 PVC WELL CASING
				29-31					
40'	12.2	S-9	0.05	12.19-	100/	100	Very dense, grayish brown, fine to medium SAND and Clayey Silt, trace Gravel. (A-4)	LOGGEMENT TILL	BENTONITE SEAL
				12.29	76mm				
45'	13.7	S-10a	0.25	13.72-	86-	100	S-10a: Hard, gray, SILT and CLAY, little Gravel, trace fine Sand with iron oxide staining. (A-4)		13.72m
				13.82-	100/		S-10b: Very dense, light brown, fine to coarse SAND, some Gravel, trace Silt. (A-2-4)		
		S-10b		13.82-	120mm				
				13.97					
50'	15.2	S-11	0.08	15.24-	100/	100	Very dense, grayish brown, fine to coarse SAND, some Silt, trace Gravel. (A-2-4)		FILTER SAND
				15.39	152mm				
55'	16.8	S-12	0.05	16.76-	100/	100	Very dense, grayish brown, GRAVEL, some fine to coarse Sand, little Silt. (A-1-b)		19mm ID SCH. 40 PVC SCREEN (0.01" SLOT)
				16.87	76mm				

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Depth (feet)	Depth (meters)	No.	Rec. (m)	Blows/0.15m	N Value				
		S-13	0.08	18.29-	100/	100	Very dense, gray, fine to medium SAND, some Gravel, trace Silt. (A-1-b)		
				18.44	152mm				
65'	19.8	S-14	0.20	19.81-	55-	100	Very dense, grayish, fine to coarse SAND, some Gravel, trace Silt. (A-1-b)		
				20.12	100/				
				152mm					
70'	21.3	S-15	0.30	21.34-	26-76	143	Very dense, reddish brown, fine to coarse SAND, some Gravel, little Silt. (A-1-b)		FILTER SAND
				21.95	67-82				
75'	22.9	S-16	0.78	22.86-	54-	100	Very dense, reddish brown and gray, fine to medium SAND, some Silt, trace Gravel with iron oxide staining. (A-2-4)	LOGGEMENT TILL	
				23.06	100/				
				25mm					
80'	24.4	S-17	0.18	24.88-	36-	100	Very dense, reddish brown and gray, fine to medium SAND and Silt, trace Gravel with Clayey Silt lenses. (A-4)		19mm ID SCH. 40 PVC SCREEN (0.01" SLOT)
				24.34	100/				
				76mm					
85'	25.9	S-18	0	25.91-	100/	100	No recovery.		
				25.96	13mm				

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* BOTTOM OF FOOTING, ABUT. 2, EL. 264.000

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of BENNINGTON Bridge No. B15, B15N, B15S
 Highway No. VT RTE 279 Log Sta. Surv. Sta.
 VT ROUTE 279 & RAMPS OVER ROARING BRANCH OF WALLOOMSAC RIVER

BORING LOGS (SHEET 7 OF 33)

Designed By GZA Drawn By L.R. DELL
 Checked By GZA Date 04/06 Bridge Design Supervisor K.M. WOJTKOWSKI Date 04/06

PROJECT BENNINGTON PROJECT NO. AC NH 019-I(51)
 TVGA CAD Drawing No. BL07.dgn Date 02/02/2009
 Bridge Sheet No. BR213 Sheet 200 of 367

