



PARTIAL BORING LOG B-18 (OW)

PARTIAL BORING LOG B-18 (OW) (CONT'D)

PARTIAL BORING LOG B-18(OW) (CONT'D)

**GZA** GeoEnvironmental, Inc. Bennington Bypass North Bennington, Vermont Boring No.: B-18(OW)  
 Page: 1 of 5  
 File No.: 15634  
 Check: TAD

Contractor: New Hampshire Boring Auger/Casing Sampler  
 Foreman: J. Michaud  
 Logged by: S. Raymond  
 Date Start/Finish: 8-17-99 / 8-19-99  
 Boring Location: 6+305, 11ft R  
 GS Elev.: 251.79m Datum: NGVD

Type: HW SS  
 I.D. (mm): 102 35  
 Hammer Wt.: 136.1kg 63.5kg  
 Hammer Fall: 0.61 0.76m  
 Rig Type: Muskeg B-53 Bomb

GROUNDWATER READINGS					
Date	Time	Depth	Casing	Stab	
					NO MEASUREMENTS TAKEN

Sample Information						Stratum Desc.	Equipment Installed	
Depth (feet)	Depth (meters)	No.	Rec. (m)	Blows/0.15m	N Value			
5'	1.5	S-1	0.25	0-0.43	10-15	115	Very dense, light brown, fine to coarse SAND and Gravel, little Silt, trace Organics. (A-1-a)	CONCRETE SEAL 0.30m FILTER SAND 1.52m BENTONITE SEAL 3.05m 19mm ID SCH. 40 PVC WELL CASING 19mm ID SCH. 40 PVC WELL SCREEN
							No sample taken due to boulder at 1.52 meters.	
							No sample taken due to boulder at 3.05 meters.	
15'	4.6	S-2	0.46	4.57- 5.18	14-13	33	Hard, light brown, Clayey SILT, little fine Sand with white Clayey Silt seams and reddish brown Silt lenses. (A-4)	LACUSTRINE 1 FILTER SAND
20'	6.1	S-3	0.46	6.10- 6.71	22-33	83	Hard, light brown, Clayey SILT, little fine Sand with white Clayey Silt seams and lenses, reddish brown fine Sand seams and light brown Silt lenses. (A-4)	
25'	7.6	S-4	0.56	7.62- 8.23	16-30	71	Hard, light brown, Clayey SILT, some fine Sand with white Clayey Silt seams and lenses, light brown Sand seam, reddish brown Silt lenses and gray Clayey Silt lenses. (A-4)	

REMARKS  
 1. Laboratory AASHTO classification performed on S-2 and S-3.

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. Boring No.: B-18

**GZA** GeoEnvironmental, Inc. Bennington Bypass North Bennington, Vermont Boring No.: B-18  
 Page: 2 of 5  
 File No.: 15634  
 Check: TAD

Contractor: New Hampshire Boring Auger/Casing Sampler  
 Foreman: J. Michaud  
 Logged by: S. Raymond  
 Date Start/Finish: 8-17-99 / 8-19-99  
 Boring Location: 6+305, 11m  
 GS Elev.: 251.79m Datum: NGVD

Type: HW SS  
 I.D. (mm): 102 35  
 Hammer Wt.: 136.1kg 63.5kg  
 Hammer Fall: 0.61 0.76m  
 Rig Type: Muskeg B-53 Bomb

GROUNDWATER READINGS					
Date	Time	Depth	Casing	Stab	
					NO MEASUREMENTS TAKEN

Sample Information						Stratum Desc.	Equipment Installed	
Depth (feet)	Depth (meters)	No.	Rec. (m)	Blows/0.15m	N Value			
35'	10.7	S-5	0.51	9.14- 9.75	17-21	59	Very dense, grayish brown, fine SAND and SILT with light brown Silt seams, grayish brown Clayey Silt seams and reddish brown Silt lenses. (A-4)	
		S-6	0.41	10.67- 11.28	27-35	90	Hard, light brown, Clayey SILT, some Gravel, little fine to coarse Sand with white Clayey Silt lenses. (A-4)	FILTER SAND
40'	12.2	S-7	0.26	12.19- 12.80	62-66	126	Very dense, light brown and white, SILT, some fine to coarse Sand with reddish brown Sand seams and gray Clayey Silt lenses. (A-4)	LACUSTRINE
45'	13.7	S-8	0.41	13.72- 14.33	25-58	139	Very dense, light brown and gray, SILT, little fine to coarse Sand, trace Silt with gray and white Clayey Silt lenses. (A-4)	
50'	15.2	S-9	0.36	15.24- 15.76	22-64	154	Very dense, light brown, SILT, trace fine to coarse Sand with gray Clayey Silt seams and lenses and white Clayey Silt lenses. (A-4)	
55'	16.8	S-10	0.25	16.76- 17.13	21-48	98	Very dense, light brown, SILT, little fine Sand with white Clayey Silt lenses and reddish brown Silt lenses. (A-4)	

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. Boring No.: B-18

**GZA** GeoEnvironmental, Inc. Bennington Bypass North Bennington, Vermont Boring No.: B-18(OW)  
 Page: 3 of 5  
 File No.: 15634  
 Check: TAD

Contractor: New Hampshire Boring Auger/Casing Sampler  
 Foreman: J. Michaud  
 Logged by: S. Raymond  
 Date Start/Finish: 8-17-99 / 8-19-99  
 Boring Location: 6+305, 11m R  
 GS Elev.: 251.79m Datum: NGVD

Type: HW SS  
 I.D. (mm): 102 35  
 Hammer Wt.: 136.1kg 63.5kg  
 Hammer Fall: 0.61 0.76m  
 Rig Type: Muskeg B-53 Bomb

GROUNDWATER READINGS					
Date	Time	Depth	Casing	Stab	
					NO MEASUREMENTS TAKEN

Sample Information						Stratum Desc.	Equipment Installed	
Depth (feet)	Depth (meters)	No.	Rec. (m)	Blows/0.15m	N Value			
65'	19.8	S-11	0.20	18.29- 18.64	32-67	117	Very dense, light brown, SILT, little fine to coarse Sand, trace Gravel with white Clayey Silt lenses. (A-4)	
								FILTER SAND
65'	19.8	S-12	0.36	19.81- 20.27	33-42	142	Very dense, light brown, SILT, trace fine Sand with light brown Clayey Silt seams, reddish brown Silt lenses, white Clayey Silt lenses. (A-4)	
70'	21.3	S-13	0.18	21.34- 21.62	46-	100	Very dense, light brown, SILT, little fine Sand with white Clayey Silt seams and lenses, reddish brown Silt lenses. (A-4)	LACUSTRINE
75'	22.9	S-14	0.25	22.86- 23.24	42-57	107	Very dense, light brown, SILT, little fine Sand, trace Gravel with white Clayey Silt lenses and iron oxide deposits. (A-4)	
80'	24.4	S-15	0.30	24.38- 24.74	44-73	123	Very dense, light brown, SILT, trace fine Sand with white and red Clayey Silt lenses and light brown Clayey Silt lenses. (A-4)	
85'	25.9	S-16	0.18	25.91- 26.17	62-	100	Very dense, light brown, SILT, little fine to coarse Sand, trace Gravel with gray Clayey Silt lenses. (A-4)	

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. Boring No.: B-18(OW)

\* BOTTOM OF DRILLED SHAFT, FUTURE NB VT ROUTE 279, PIER 4 - EL. 221.950

**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 5 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-(151)  
 TVGA CAD Drawing No. BL05.dgn Date 02/02/2009  
 Bridge Sheet No. BR211 Sheet 198 of 367

