PARTIAL BORING LOG B-117 (OW) (CONT'D)

GZA GeoEnvironmental, Inc. Engineers and Scientists

BENNINGTON BYPASS NORTH
BENNINGTON, VERMONT

BORING NO.: B-117(OW)
PAGE: 2 OF 4
FILE NO.: 22724
CHECK: DGL

DEPTH (M)	SAMPLE INFORMATION NO.	PEN./REC. (M)	DEPTH (M)	BLOWS (/0.15M)	N VALUE	SAMPLE DESCRIPTION & CLASSIFICATION	STRATUM DESC.	REMARKS	EQUIPMENT INSTALLED
11	S-6	0.61/0.41	10.36-10.97	16-34 28-40	62	VERY DENSE, LIGHT BROWN, SILT, SOME FINE SAND WITH WHITE, CLAYEY SILT LENSES. (A-4)			
12	S-7	0.61/0.48	11.89-12.50	13-23 26-34	49	DENSE, LIGHT BROWN, SILT, SOME FINE SAND WITH WHITE, CLAYEY SILT LENSES. (A-4)			
13	S-8	0.61/0.36	13.41-14.02	12-25 34-35	59	HARD, WHITE, SILT & CLAY, TRACE FINE SAND WITH LIGHT BROWN, CLAYEY SILT LENSES. (A-4)			FILTER SAND
14									
15	S-9	0.61/0.36	14.94-15.54	15-41 86-89	127	VERY DENSE, LIGHT BROWN, SILT, LITTLE GRAVEL, TRACE FINE SAND WITH WHITE, CLAYEY SILT SEAMS. (A-4)			
16	S-10	0.61/0.41	16.46-17.07	32-52 58-70	110	VERY DENSE, LIGHT BROWN, SILT, LITTLE FINE SAND WITH WHITE, CLAYEY SILT LENSES. (A-4)	LACUSTRINE		
17									
18	S-11	0.61/0.48	17.98-18.59	25-45 50-27	95	VERY DENSE, LIGHT BROWN, SILT, LITTLE FINE SAND WITH WHITE, CLAYEY SILT LENSES. (A-4)			
19									
20	S-12	0.53/0.46	19.51-20.04	26-32 52-100/76MM	84	VERY DENSE, LIGHT BROWN, SILT, LITTLE FINE SAND WITH WHITE, CLAYEY SILT LENSES. (A-4)			
21	S-13	0.46/0.41	21.03-21.49	27-44 100/152MM	>100	VERY DENSE, LIGHT BROWN, SILT, LITTLE FINE SAND, TRACE GRAVEL WITH WHITE, CLAYEY SILT SEAMS. (A-4)			

REMARKS

SOIL BL WELL BBR2001.GPJ GZA_NH.GDT 8/12/02

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.

BORING NO.:B-117(OW)

PARTIAL BORING LOG B-117 (OW) (CONT'D)

GZA GeoEnvironmental, Inc. Engineers and Scientists

Bennington Bypass North
Bennington, Vermont

Boring No.: B-117(OW)
Page: 3 of 4
File No.: 22724
Check: DGL

Depth (m)	Sample Information No.	Pen./Rec. (m)	Depth (m)	Blows (/0.15m)	N Value	Sample Description & Classification	Stratum Desc.	Remarks	Equipment Installed
22	S-14	0.58/0.51	22.56-23.14	15-38 61-100/127mm	99	Very dense, light brown, SILT, little fine Sand with brown, fine Sand lenses and white, Clayey Silt seams. (A-4)			
24	S-15	0.61/0.33	24.08-24.69	35-55 57-100	112	Very dense, light brown, SILT, little fine Sand with brown, fine Sand and Silt lenses and white, Clayey Silt seams. (A-4)			
26	S-16	0.51/0.30	25.60-26.11	30-56 137 51mm	137	Very dense, light brown, SILT, some fine Sand with brown, Silt lenses and white, Clayey Silt lenses. (A-4)			
27	S-17	0.25/0.20	27.13-27.38	80-100/102mm	>100	Very dense, light brown, SILT, little fine Sand with white, Clayey Silt lenses and brown, fine Sand and Silt lenses. (A-4)	LACUSTRINE		Filter Sand
29	S-18	0.38/0.23	28.65-29.03	39-76 50/76mm	>100	Very dense, light brown, SILT, some fine Sand with white, Clayey Silt lenses and light brown, Silt lenses. (A-4)			
30	S-19	0.46/0.36	30.18-30.63	46-60 100/152mm	>100	Very dense, light brown, SILT, some fine Sand with white, Clayey Silt lenses. (A-4)			
33									

REMARKS

SOIL BL WELL BBR2001.GPJ GZA_NH.GDT 8/12/02

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.

Boring No.: B-117(OW)

16.09 m

* BOTTOM OF DRILLED SHAFT RAMP A, PIER 7 - EL. 224.250

BORING LOG B-118

GZA GeoEnvironmental, Inc. Engineers and Scientists

BENNINGTON BYPASS NORTH
BENNINGTON, VERMONT

BORING NO.: B-118
PAGE: 1 OF 1
FILE NO.: 22724
CHECK: DGL

CONTRACTOR: NEW HAMPSHIRE BORING
FOREMAN: MATT MARSTON
LOGGED BY: JADE GAUDREAU
DATE START/FINISH: 7-23-01 / 7-24-01
BORING LOCATION: NB 6+259.4, 26.4M L
GS ELEV.: 249.33M DATUM: NAVD88

	AUGER/CASING	SAMPLER
TYPE:	ODEX	S.S.
I.D.:	108MM	35MM
HAMMER WT.:	NA	63.5KG
HAMMER FALL:	NA	0.76M
RIG TYPE:	DIEDRICH D-50 BOMBARDIER	

GROUNDWATER READINGS

DATE	TIME	DEPTH	CASING	STAB
7/24/01	0800	2.59M	2.74M	15 HRS.

DEPTH (M)	SAMPLE INFORMATION NO.	PEN./REC. (M)	DEPTH (M)	BLOWS (/0.15M)	N VALUE	SAMPLE DESCRIPTION & CLASSIFICATION	STRATUM DESC.	REMARKS	EQUIPMENT INSTALLED
1						ADVANCED BOREHOLE THROUGH NESTED COBBLES AND BOULDERS FROM 0 TO 2.74 METERS (0 TO 9 FEET) BELOW GROUND SURFACE THE USING AN ODEX DRILL.	FLUVIAL		NO EQUIPMENT INSTALLED
3	S-1	0.61/0.61	2.74-3.35	7-13 13-18	26	VERY STIFF, LIGHT BROWN, CLAYEY SILT, LITTLE FINE SAND WITH GRAY AND WHITE, SILT & CLAY LENSES. (A-4)	2.74M LACUSTRINE		
5	S-2	0.61/0.48	4.42-5.03	23-23 26-50	49	HARD, LIGHT BROWN, CLAYEY SILT, SOME FINE SAND WITH GRAY, CLAYEY SILT LENSES AND BROWN, SILT LENSES. (A-4)	4.27M BOULDER 4.51M	1	
6	S-3	0.61/0.36	5.94-6.55	27-23 36-52	59	HARD, LIGHT BROWN, CLAYEY SILT, SOME FINE SAND WITH WHITE, CLAYEY SILT LENSES AND BROWN, SILT LENSES. (A-4)	LACUSTRINE		
8	S-4	0.61/0.41	7.47-8.08	26-24 37-70	61	HARD, LIGHT BROWN, CLAYEY SILT, SOME FINE TO MEDIUM SAND WITH WHITE, CLAYEY SILT LENSES. (A-4)		2	
9						BOTTOM OF BORING AT 8.08 METERS (26.5 FEET) BELOW GROUND SURFACE. ROLLER BIT REFUSAL.	8.08M		

REMARKS

1. COBBLE/BOULDER ENCOUNTERED AT APPROXIMATELY 4.27 TO 4.51 METERS (14 TO 14.8 FEET).
2. COBBLES COLLAPSED INTO HOLE AT 4.27 METERS (14 FEET) BELOW GROUND SURFACE. COULD NOT ADVANCE ROLLER BIT THROUGH BOULDER. ABANDONED HOLE. MOVED TO APPROXIMATE STATION NB 6+260, 28M L. SEE BORING LOG FOR B-118A.

SOIL BL WELL BBR2001.GPJ GZA_NH.GDT 8/12/02

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.

BORING NO.:B-118

* BOTTOM OF DRILLED SHAFT, RAMP A, PIER 7 - EL. 224.250

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 13 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 019-1(51)
TVGA CAD Drawing No. BL13.dgn	Date 02/02/2009
Bridge Sheet No. BR219	Sheet 206 of 367

TVGA CONSULTANTS