

GZA GeoEnvironmental, Inc. Cornwall, Vermont		Cornwall BRS 0172(6)		Boring No.: B-305	
Contractor: New Hampshire Boring, Inc.		Auger/Casing Sampler		Page: 1 of 3	
Foreman: Steve Garside		Type: HW SS		File No.: 04.0023600.01	
Logged by: Curtis George		I.D.: 102 mm 35 mm		Check: JH	
Date Start/Finish: 7-20-04 / 7-22-04		Date Time: 7/23/04 0800		GROUNDWATER READINGS	
Boring Location: Sta. 1+165.3, 14.2 mR		Depth Casing Slab: 0.40m 2.59m 1 day			
GS Elev.: 42.67m Datum: NAVD 88		Hammer Wt.: 136.1 kg 63.5 kg			
		Hammer Fall: 0.76 m 0.76 m			
		Rig Type: CME 550 ATV			
Sample Information					
Depth (m)	No.	Pen./Rec. (m)	Depth (m)	Blows (/0.15m)	N Value
0.00-0.61	S-1	0.61/0.08	0.00-0.61	2-2 1-2	3
1.22-1.83	S-2	0.61/0.08	1.22-1.83	2-1 1-1	2
2.13-2.74	S-3	0.61/0.08	2.13-2.74	WOH	
3.05-3.66	U-1	0.61/0.53	3.05-3.66	PUSH	
3.66-4.27	S-4	0.61/0.46	3.66-4.27	WOH	
4.57-5.18	S-5	0.61/0.61	4.57-5.18	WOH	
6.10-6.71	S-6	0.61/0.00	6.10-6.71	1-1 3-4	4
7.62-8.23	S-7	0.61/0.61	7.62-8.23	9-10 11-11	21
9.14-9.75	S-8	0.61/0.30	9.14-9.75	2-1 2-2	3
Description & Classification: Soft, brown, Clayey ORGANIC SILT. (A-8) VS = 9.0 kPa, vane tip at 2.4 meters. Very soft, gray, SILT & CLAY, trace Organics. (A-4) VS = 7 kPa, vane tip at 4.0 meters. Very soft, gray, Clayey ORGANIC SILT, trace Wood Chips. (22.5% organics) (A-8) Very soft, gray, Clayey ORGANIC SILT, trace Wood Chips. (A-8) Very soft, gray, Clayey ORGANIC SILT, trace Wood Chips. (A-8) No recovery. Medium dense, gray, fine SAND, some SILT. (A-2-4) Soft, gray, Clayey SILT, trace Gravel. (A-4)					
Strat. Desc.: ORGANIC SILT, SAND & SILT, SILT Equipment Installed: Filter Sand, Drill Cuttings, 38-mm ID Solid Sch 40 PVC Well Riser					

1. WOH = Weight of Hammer, WOR = Weight of Rod  
 2. VS = Vane shear test. Spill spoon was driven through soil disturbed by VS test.

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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Sample Information					
Depth (m)	No.	Pen./Rec. (m)	Depth (m)	Blows (/0.15m)	N Value
10.67-11.28	S-9	0.61/0.46	10.67-11.28	WOH-3 3-3	6
12.19-12.80	S-10	0.61/0.25	12.19-12.80	1-2 6-9	8
13.72-14.33	S-11	0.61/0.51	13.72-14.33	WOH- WOH 5-8	
15.24-15.85	S-12	0.61/0.61	15.24-15.85	WOR WOH	
16.76-17.37	S-13	0.61/0.00	16.76-17.37	WOR 2-2	
18.29-18.90	S-14	0.61/0.15	18.29-18.90	12-16 14-12	30
19.81-20.42	S-15	0.61/0.15	19.81-20.42	2-4 9-13	13
21.34-21.95	S-16	0.61/0.15	21.34-21.95	16-18	39
Description & Classification: Loose, gray, fine SAND and SILT, trace Gravel. (A-4) Loose, gray, fine SAND and SILT, trace Gravel with a seam of Clayey SILT. (A-4) Medium stiff, gray, Clayey SILT, trace fine Sand, trace Gravel. (A-4) Loose, gray, Clayey SILT, little fine Sand. (A-4) No recovery. Medium dense, gray, fine to coarse SAND and Gravel, trace SILT. (A-1-a) Medium dense, gray, fine to coarse SAND and Gravel, trace SILT. (A-1-a) Dense, gray, fine to coarse SAND, little					
Strat. Desc.: SAND & SILT, SAND WITH GRAVEL, SILT & SAND Equipment Installed: 38-mm ID Slotted Sch 40 PVC Well Screen					

3. At 18.29 meters, Artesian conditions were encountered.  
 4. Pieces of Gravel stuck in the tip of the spoon.

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Depth (m)	No.	Pen./Rec. (m)	Depth (m)	Blows (/0.15m)	N Value
21.95-22.56	S-17	0.38/0.25	21.95-22.56	31-63 37-76	100
24.38-24.99	S-18	0.61/0.10	24.38-24.99	5-75 54-32	129
Description & Classification: Gravel, trace SILT. (A-1-a) Very dense, gray, fine to coarse SAND and Gravel, trace SILT. (A-1-a) Very dense, gray, fine to coarse SAND, some Gravel, trace SILT. (A-1-a)					
Strat. Desc.: SAND WITH GRAVEL Equipment Installed:					

Bottom of boring at 24.99 m below ground surface. Casing broke in borehole. Unable to advance further.

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**DATUM**  
 VERTICAL NAVD 88  
 HORIZONTAL NAD 83(92)

## BORING LOG SHEET 14

PROJECT: CORNWALL	PROJECT NO.: BRS 0172(6)
DESIGN FILE NAME: z85e042borlogs.dgn	PLOT DATE: 2/5/2010
IPARM FILE NAME:	SURVEYED BY:
SQUAD LEADER: C.C. BENDA	DRAWN BY: C. GEORGE
03/97	SHEET: 82 OF 144