GZA GeoEnvironmental, Inc. *Engineers and Scientists*

Cornwall BRS 0172(6)S
Cornwall, Vermont

Boring No.: B-201(OW)
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File No.: 22721.3
Check: TAD

Contractor: NH Boring
Foreman: Bob Doherty
Logged by: Jay Hodkinson
Date Start/Finish: 9-18-01 / 9-21-01
Boring Location: Sta. 0+736.5, 4.1 mL
GS Elev.: 49.0+/- Datum: NAVD 88

	Auger/ Casing	Sampler
Type:	HW	SS
I.D.:	102mm	35mm
Hammer Wt.:	136.1kg	63.5kg
Hammer Fall:	0.76m	0.76m
Rig Type:	CME 45	

GROUNDWATER READINGS

Date	Time	Depth	Casing	Stab
9/21/01	1530	1.33m	deep well	15 min
9/21/01		2.20m	shallow	15 min
9/24/01	1430	1.25m	deep	3 days
9/24/01		2.25m	shallow	3 days

Depth (m)	Sample No.	Pen./ Rec. (m)	Depth (m)	Blows (/0.15m)	N Value	Sample Description & Classification	Stratum Desc.	Remarks
1	S-1	0.61/ 0.30	1.52- 2.13	5-5 6-8	11	Stiff, brown, Silty CLAY, mottled. (A-7-6)	SILTY CLAY	
2	S-2	0.61/ 0.20	2.13- 2.74	11-12 11-12	23	Very stiff, brown, Silty CLAY, with fine SAND and Silt seams, mottled. (A-7-5)		
3	S-3	0.61/ 0.56	2.74- 3.35	4-6 5-7	11	Stiff, brown, Silty CLAY, with Silt seams, mottled. (A-7-6)		
	S-4	0.61/ 0.61	3.35- 3.96	14-11 13-13	24	Very stiff, brown, Silty CLAY with Silt seams and lenses, mottled. (A-7-6)		
4	S-5	0.61/ 0.61	3.96- 4.57	5-6 5-6	11	Stiff, brown, Silty CLAY with Silt seams and lenses, mottled. (A-7-6)		
	S-6	0.61/ 0.61	4.57- 5.18	7-7 5-6	12	Stiff, brown, Silty CLAY with Silt seams and lenses, mottled. (A-7-6)		
6	S-7	0.61/ 0.51	6.10- 6.71	2-2 2-3	4	Soft, gray, SILT & CLAY, with 51mm (2 inch) seam of brown, SILT and fine SAND. (A-6)	6.10m CLAYEY SILT	
7	S-8	0.61/ 0.61	6.71- 7.32	3-3 2-3	5	Medium stiff, gray, Clayey SILT, trace fine Sand. (A-5)		
	U-1	0.61/ 0.56	7.32- 7.92	push		VS: 68.03 kPa, vane tip at 7.16m (23.5 feet). Gray, Silty CLAY. (A-7-6) Tv=24.90 kPa (520 psf) Pp=47.88 kPa (1,000 psf)		1 2
9								

Equipment Installed: FILTER SAND; 25mm SCH. 40 PVC RISERS; 3.96m; BENTONITE SEAL; 4.88m; FILTER SAND; 6.10m; 25mm SCH. 40 PVC 0.01 SLOTTED SCREEN; FILTER SAND; 9.14m

REMARKS
1. VS=Vane Shear Test. Split spoon sample was driven through soil disturbed by VS test.
2. Tv=Torvane, Pp= Pocket Penetrometer

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-9	0.61/ 0.61	9.14- 9.75	4-7 9-7	16	Very stiff, gray, Clayey SILT, trace fine Sand. (A-5)	CLAYEY SILT	
10							10.36m	3
11	S-10	0.61/ 0.51	10.67- 11.28	5-1 9-4	10	Loose, gray, fine SAND and Silt, trace Gravel. (A-4)	SILTY SAND	
12	S-11	0.61/ 0.43	12.19- 12.80	9-7 7-6	14	Medium dense, gray, fine SAND, some Silt, trace Gravel. (A-2-7)		
13								
14	S-12	0.61/ 0.28	13.72- 14.33	8-5 6-7	11	Medium dense, gray, fine SAND, some Silt. (A-2-7)		
15	S-13	0.61/ 0.25	15.24- 15.85	4-4 4-4	8	Loose, gray, fine SAND and Silt. (A-4)		
16								
17	S-14	0.61/ 0.23	16.76- 17.37	7-4 6-11	10	Loose, gray, fine SAND and Silt. (A-4)		
18	S-15	0.61/ 0.51	18.29- 18.90	5-4 3-1	7	Loose, gray, fine SAND, some Silt. (A-2-7)		
19								

Equipment Installed: 25mm SCH. 40 PVC RISER; FILTER SAND; 12.19m; BENTONITE SEAL; 13.72m; DRILL CUTTINGS; 25mm SCH. 40 PVC RISERS

REMARKS
3. Drilling change at 10.36m (34 feet) below ground surface.

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Depth (m)	Sample No.	Pen./ Rec. (m)	Depth (m)	Blows (/0.15m)	N Value	Sample Description & Classification	Stratum Desc.	Remarks
20	S-16	0.61/ 0.15	19.81- 20.42	2-2 2-5	4	Very loose, gray, SILT and fine Sand. (A-5)	SILTY SAND	
21	S-17	0.61/ 0.03	21.34- 21.95	18-17 12-10	29	Medium dense, gray, fine to coarse SAND, some Gravel, little Silt. (A-1-b)	21.03m GLACIAL TILL	4
22								
23	S-18	0.61/ 0.15	22.86- 23.47	13-12 20-28	32	Dense, gray, fine to coarse SAND, some Silt, little Gravel. (A-2-4)		
24								
	S-19	0.25/ 0.05	24.38- 24.64	14-43 100/ 152mm	143	Very dense, gray, fine to coarse SAND, some Gravel, little Silt. (A-1-b)		
25								
26	S-20	0.61/ 0.25	25.91- 26.52	16-9 12-13	21	Medium dense, gray, fine to medium SAND, some Silt, little Gravel. (A-2-4)		
						Bottom of boring at 26.52m (87 feet) below ground surface. No refusal.	26.52m	
27								
28								
29								
30								

Equipment Installed: DRILL CUTTINGS; 23.47m; FILTER SAND; 24.30m; 25mm SCH. 40 PVC 0.01 SLOTTED SCREEN; 25.91m

REMARKS
4. Drilling change at 21.03m (69 feet).

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