

**PARTIAL BORING LOG B-1**

**PARTIAL BORING LOG B-1 (CONT'D)**

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BOTTOM OF ABUTMENT / FOOTING (3N)  
EL. 398.0

<b>GZA</b> GeoEnvironmental, Inc. Engineers and Scientists		Guilford Bridge Widening Guilford, Vermont		Boring No.: B-1 Page: 1 of 3 File No.: 22718	
Contractor: New Hampshire Boring		Auger/Casing Sampler		Check: TAD	
Foreman: S. Clavette		Type: HW SS		GROUNDWATER READINGS	
Logged by: S. Currier		Date: _____		Time: _____	
Date Start/Finish: 11-28-00 / 11-28-00		O.D. / I.D.: 4" / 2"		Date: _____	
Boring Location: See Exploration Location Plan		Hammer Wt.: 300# 140#		Date: _____	
GS Elev.: 413 Datum: NGVD		Hammer Fall: 24" 30"		Date: _____	
Other: Diaphragm D50 Bombadier					

Depth Casing Blows	Sample Information		Field Test Data (ppm)	Sample Description & Classification	Stratum Desc.	Remarks	Equipment Installed
	No.	Pen/ Rec. (In.)					
5'	S-1	24/4	0-2	5-12 10-21	FILL	1	NO EQUIPMENT INSTALLED
				Medium dense, dark brown, fine to coarse SAND, little Gravel, little Silt. (A-1)			
10'	S-2	24/13	5-7	8-8 10-25	FILL	1	NO EQUIPMENT INSTALLED
				Medium dense, brown, fine SAND, little Gravel, little Silt. (A-1)			
15'	S-3	24/8	10-12	9-6 9-9	FILL	1	NO EQUIPMENT INSTALLED
				Medium dense, brown, fine SAND, trace Gravel, little Silt. (A-1)			
20'	S-4	24/10	15-17	15-19 28-29	FILL	1	NO EQUIPMENT INSTALLED
				Dense, brown, fine to medium SAND, trace Gravel, little Silt. (A-1)			
25'	S-5	24/9	20-22	21-30 31-29	FILL	1	NO EQUIPMENT INSTALLED
				Very dense, brown, fine to medium SAND, trace Gravel, little Silt. (A-1)			
30'	S-6	24/7	25-27	24-24 20-23	FILL	1	NO EQUIPMENT INSTALLED
				Dense, brown, fine to medium SAND, trace Gravel, little Silt. (A-1)			

REMARKS  
1. Spoon gravel jammed in tip.

Classification 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-1

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Contractor: New Hampshire Boring		Auger/Casing Sampler		Check: TAD	
Foreman: S. Clavette		Type: HW SS		GROUNDWATER READINGS	
Logged by: S. Currier		Date: _____		Time: _____	
Date Start/Finish: 11-28-00 / 11-28-00		O.D. / I.D.: 4" / 2"		Date: _____	
Boring Location: See Exploration Location Plan		Hammer Wt.: 300# 140#		Date: _____	
GS Elev.: 413 Datum: NGVD		Hammer Fall: 24" 30"		Date: _____	
Other: Diaphragm D50 Bombadier					

Depth Casing Blows	Sample Information		Field Test Data (ppm)	Sample Description & Classification	Stratum Desc.	Remarks	Equipment Installed
	No.	Pen/ Rec. (In.)					
35'	S-7	24/6	30-32	40-46 93-100	FILL	2	NO EQUIPMENT INSTALLED
				Very dense, brown, fine to medium SAND, little Gravel, little Silt. (A-1)			
40'	S-8	24/10	35-37	23-60 76-81	FILL	4	NO EQUIPMENT INSTALLED
				Very dense, brown, fine to coarse SAND, some Gravel, trace Silt. (A-1B)			
45'	S-9	24/12	40-42	44-62 50-38	FILL	1	NO EQUIPMENT INSTALLED
				Very dense, brown, fine to medium SAND, trace Gravel, little Silt. (A-1)			
50'	S-10	24/6	45-47	19-42 100/4"	FILL	1	NO EQUIPMENT INSTALLED
				Very dense, brown, fine SAND, some Silt, trace Gravel. (A-2)			
55'	S-11	24/8	50-52	36-46 60-46	FILL	1	NO EQUIPMENT INSTALLED
				Very dense, brown, fine to medium SAND, some Silt, trace Gravel. (A-2)			
60'	S-12	24/9	55-57	30-33 43-33	FILL	1	NO EQUIPMENT INSTALLED
				Very dense, gray, SILT & SAND, little Gravel. (A-4)			

REMARKS  
2. Layers of cobble and sand from 27 to 32 feet below ground surface.  
3. Advanced rollerbit through a 10-inch-diameter boulder from 32 to 32.8 feet below ground surface.  
4. Sieve analysis performed on S-8.

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Boring No.: B-1

EST. NEW PILE PENETRATION  
(FROM BOTTOM OF FOOTING + 60')

<b>GZA</b> GeoEnvironmental, Inc. Engineers and Scientists		Guilford Bridge Widening Guilford, Vermont		Boring No.: B-1 Page: 3 of 3 File No.: 22718	
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Foreman: S. Clavette		Type: HW SS		GROUNDWATER READINGS	
Logged by: S. Currier		Date: _____		Time: _____	
Date Start/Finish: 11-28-00 / 11-28-00		O.D. / I.D.: 4" / 2"		Date: _____	
Boring Location: See Exploration Location Plan		Hammer Wt.: 300# 140#		Date: _____	
GS Elev.: 413 Datum: NGVD		Hammer Fall: 24" 30"		Date: _____	
Other: Diaphragm D50 Bombadier					

Depth Casing Blows	Sample Information		Field Test Data (ppm)	Sample Description & Classification	Stratum Desc.	Remarks	Equipment Installed
	No.	Pen/ Rec. (In.)					
65'	S-13	24/7	60-62	21-10 8-12	FILL	1	NO EQUIPMENT INSTALLED
				Medium dense, brown, fine SAND, some Gravel, trace Silt. (A-3)			
70'	S-14	24/3	66-69	23-17 25-30	FILL	1	NO EQUIPMENT INSTALLED
				Dense, gray, SILT, little Gravel, trace fine Sand. (A-4)			
75'	S-15	10/6	72-72.8	114 100/4"	FILL	1	NO EQUIPMENT INSTALLED
				Very dense, gray, SILT, trace Gravel. (A-4)			
80'	S-16	6/6	80-80.6	150/6"	FILL	1	NO EQUIPMENT INSTALLED
				Very dense, gray, SILT. (A-4) Bottom of boring at 80.5 feet below ground surface. No refusal.			

REMARKS

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**STATE OF VERMONT  
AGENCY OF TRANSPORTATION**

Town Of	GUILFORD	Bridge No.	3N
Highway No.	I-91	Log Sta.	
I-91NB OVER BROAD BROOK & BROAD BROOK ROAD			
<b>BORING LOGS (1 OF 4)</b>			
Designed By	GZA	Drawn By	GZA
Checked By	Date	Bridge Design Supervisor	Date
GZA	01/03	J.P. HALSTEAD	Date 01/03
PROJECT	GUILFORD	PROJECT NO.	IM 091-(133)
TVGA CAD Drawing No.	B-1dgn	Date	06/06/08
Bridge Sheet No.	BRI05	Sheet	31 of 114

