

NEW HAMPSHIRE BORING, INC. P.O. Box 165 Derry, NH 03038		Phone: (603)437-1610 Fax: (603) 437-0034 E Mail: nhb@nhboring.com		<b>Boring #</b> B-1 Scale 1" = 5'	
City/Town: Woodstock Taftsville Covered Bridge		Project File No: 94394		Contract No:	
Project: River Road		Date & Time Started: 7/28/10		Total Hours:	
Groundwater Depth:		Date & Time Completed: 8/29/10			
Coordinates: N E		Driller's Name: Peter LaBosiere		Helper's Name: Jack Lefebvre	
Ground Elevation:		Inspector's Name:		Inspector's Company:	
Sample Number	Depth Range (Feet)	Blow Counts per 6" Coring Times Minute Per Foot	Recovery (Inches)	Field Description	
S-1	0' - 2'	11 8 7 7	10"	3" Asphalt Dry, medium dense, brown, FINE SAND, some coarse sand.	
S-2	4' - 6'	6 7 17 20	10"	Wet, dense, brown, FINE SAND, some coarse sand, trace inorganic silt.	
S-3	9' - 11'	18 9 8 7	0"	No recovery.	
S-4	14' - 16'	12 12 13 9	8"	Wet, medium dense, brown, FINE SAND AND INORGANIC SILT, some coarse sand.	
S-5	19' - 19'1"	100/1"	1"	Wet, very dense, brown, FINE SAND. Looks like BEDROCK fragments. Rollerbit to 20", began coring. SCHIST with quartz veins, competent. Percent Recovery = 100%	
C-1	20'6" - 25'6"	4 4 5 5 4	60"	SCHIST with quartz veins, competent. Percent Recovery = 100%	
C-2	25'6" - 30'6"	4 6 5 4 4	60"	SCHIST with quartz veins, competent. Percent Recovery = 100%	
				Bottom of Exploration - 30'6"	
				30'6"	

Notes:

Protective Device - Stand: Box:	
Well Depth: Solid Pipe:	
Stick Up Pipe: Screen Pipe:	
Type of Drill Rig: CME 550x	
Casing Type: HW Size: 4	
Hammer Weight: 300kg	
Fall: 24	
Depth: 4'	
Sampler Type: S/S	
Size: 34.9mm	
Automatic Hammer Weight: 63.5kg	
Safety Hammer Weight:	
Donut Hammer Weight:	
Fall: 0.76m	
Core Barrel Type: Size:	

Penetration Resistance (N) Guide:			
Cohesionless Soils (Sands, Gravels)		Cohesive Soils (Silt, Clays)	
Relative Density	Penetration Resistance	Consistency	Penetration Resistance
Very Loose	0 - 4	Very Soft	0 - 2
Loose	4 - 10	Soft	2 - 4
Medium Dense	10 - 30	Medium Stiff	4 - 8
Dense	30 - 50	Stiff	8 - 15
Very Dense	Over 50	Very Stiff	15 - 30
N=Sum of Second and Third. 15 Blow Counts		Hard	Over 30
Terms Used for Second Entry of Descriptions: and = 40-50%, some = 10-40%, trace = 10% or less			

GZA GeoEnvironmental, Inc. Engineers and Scientists		Taftsville Covered Bridge Woodstock, Vermont		EXPLORATION NO.: B-102 SHEET: 1 of 2 PROJECT NO: 04.0029444.00 REVIEWED BY: DGL					
Logged By: Mike Devold Drilling Co.: New Hampshire Boring Foreman: Mike Misloszek		Type of Rig: Acker Rig Model: HMD 2350 Drilling Method: ODEX		Boring Location: See Plan Ground Surface Elev. (ft.): Final Boring Depth (ft.): 30.8 Date Start - Finish: 10/24/2011 - 10/25/2011					
Hammer Type: Donut Hammer Weight (lb.): 140 Hammer Fall (in.): 30 Auger or Casing O.D./I.D Dia (in.): 4		Sampler Type: SS Sampler O.D. (in.): 2.0 Sampler Length (in.): 24 Rock Core Size:		Groundwater Depth (ft.) Date Time Water Depth Stab. Time					
Depth (ft)	Casing No.	Sample			SPT Value	Sample Description and Identification (Modified Burmister Procedure)	Field Test Data	Stratum Description	Elev. (ft.)
		Depth (ft.)	Pen. (in)	Rec. (in)					
0.5-2.5	S-1	0.5-2.5	24	5	5 6 5 5	11	S-1: Medium dense, brown, fine to coarse SAND, little Gravel, trace Silt. Dry.	0.25	ASPHALT
5-7	S-2	5-7	24	5	2 4 5 5	9	S-2: Loose, brown, fine to coarse SAND, some Gravel, little Silt. Dry.	1	FILL
10-12	S-3	10-12	24	8	4 5 5 5	10	S-3: Medium dense, brown, fine to coarse SAND, some Gravel, little Silt. Dry.		
15-17	S-4	15-17	24	18	6 7 28 39	35	S-4: Top 8 inches: Very dense, brown, fine to medium SAND, little Silt. Damp. Bottom 10 inches: Very dense, gray, fine to coarse SAND, some Silt, little Gravel. Damp.	18	
20-22	S-5	20-22	24	20	24 32 38 38	70	S-5: Very dense, gray, fine to coarse SAND, some Silt, little Gravel. Damp.		GLACIAL TILL
25-25.5	S-6	25-25.5	6	3	107		S-6: Brown to brown-gray, highly weathered rock.	24.8	WEATHERED ROCK

REMARKS: 1 - Cobbles and boulders encountered throughout Fill and Glacial Till deposits.

See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil and bedrock types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

Exploration No.: B-102

LOG KEY (1 OF 4)	
UNIFIED SOIL CLASSIFICATION SYSTEM (USCS) (ASTM D 2487)	
MAJOR DIVISIONS	Group Symbols
Coarse Grained Soils More than 50% material larger than No. 200 sieve	Gravel More than 50% larger than No. 4 sieve Clean Gravels (Little or no fines) Gravels with Fines (Appreciable amount of fines)
Sand More than 50% smaller than No. 4 sieve	Clean Sands (Little or no fines) Sands with Fines (Appreciable amount of fines)
Fine Grained Soils More than 50% material smaller than No. 200 sieve	Silt and Clays Liquid Limit <50 Silt and Clays Liquid Limit >50
	Highly Organic Soils

GZA GeoEnvironmental, Inc. Engineers and Scientists		Taftsville Covered Bridge Woodstock, Vermont		EXPLORATION NO.: B-102 SHEET: 2 of 2 PROJECT NO: 04.0029444.00 REVIEWED BY: DGL					
Logged By: Mike Devold Drilling Co.: New Hampshire Boring Foreman: Mike Misloszek		Type of Rig: Acker Rig Model: HMD 2350 Drilling Method: ODEX		Boring Location: See Plan Ground Surface Elev. (ft.): Final Boring Depth (ft.): 30.8 Date Start - Finish: 10/24/2011 - 10/25/2011					
Hammer Type: Donut Hammer Weight (lb.): 140 Hammer Fall (in.): 30 Auger or Casing O.D./I.D Dia (in.): 4		Sampler Type: SS Sampler O.D. (in.): 2.0 Sampler Length (in.): 24 Rock Core Size:		Groundwater Depth (ft.) Date Time Water Depth Stab. Time					
Depth (ft)	Casing No.	Sample			SPT Value	Sample Description and Identification (Modified Burmister Procedure)	Field Test Data	Stratum Description	Elev. (ft.)
		Depth (ft.)	Pen. (in)	Rec. (in)					
30-30.2	S-7	30-30.2	2	2	100/2"	R	S-7: Gray, weathered rock. End of exploration at 30.8 feet.	2	30.8

REMARKS: 2 - Possibly fractured/weathered rock (small <1-inch seams/fractures) at 24.8 feet to 30.3 feet below ground surface. Hard drilling at 30.3 feet below ground surface.

See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil and bedrock types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.

Exploration No.: B-102

LOG KEY (2 OF 4)	
ABBREVIATIONS	
MR = Mud Rotary HSA = Hollow Stem Auger SSA = Solid Stem Auger SS = Split Spoon Sampler U = Undisturbed Sample (Shelby Tube) MC = Modified California Sampler V = Vibrocore M = Macrocure R = Refusal USCS = Unified Soil Classification System (ASTM D2487) NYCBC = New York City Building Code WOR = Weight of Rods WOH = Weight of Hammer SPT = Standard Penetration Test (ASTM D1586) N-Value = Cumulative number of uncorrected blows for the middle two 6-inch intervals (blows/foot).	Tv = Field Vane Shear Test (Torvane) PP = Pocket Penetrometer PI = Plasticity Index MC = Moisture Content CO = Consolidation UC = Unconfined Compression Test SI = Sieve Analysis DS = Direct Shear PID = Photoionization Detector ppm = Parts Per Million REC = Recovery ROD = Rock Quality Designation = Measured Water Level

PROJECT NAME: WOODSTOCK	WOODSTOCK
PROJECT NUMBER: BHO 1444(52)	ST 1444(58)
FILE NAME: z96j262log.dgn	PLOT DATE: 29-JUN-2012
PROJECT LEADER: M. Sargent	DRAWN BY: P. Dustin
DESIGNED BY: S. Della	CHECKED BY: R. Joy
BORING LOGS (1 OF 2)	SHEET 20 OF 68

