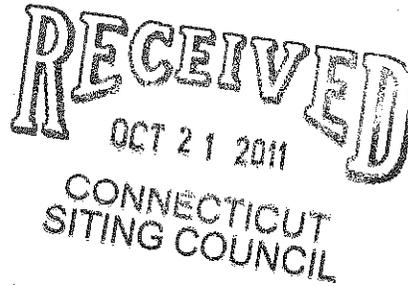


September 23, 2011
File No. 44818.02



Mr. Gregory Zupkus
BNE Energy Inc.
Town Center, Suite 200
29 South Main Street
West Hartford, CT 06107



Re: Geotechnical Engineering Report
Proposed Wind Renewable Generating Facility
Colebrook North
Rock Hall Road
Colebrook, Connecticut

655 Winding Brook Drive,
Suite 402
Glastonbury, CT 06033
860-286-8900 (phone)
860-652-8590 (fax)
www.gza.com

Dear Mr. Zupkus:

GZA GeoEnvironmental, Inc. (GZA) is pleased to provide you with our geotechnical engineering report for the subject project, in accordance with our proposal dated July 12, 2011. The subsurface investigation and findings of this report are subject to the Limitations that are included in Appendix A.

GZA appreciates the opportunity to have provided geotechnical engineering services for this project. Please contact the undersigned if you have questions or comments regarding this report or if we may be of further service to you.

Very truly yours
GZA GEOENVIRONMENTAL, INC.

A handwritten signature in black ink, appearing to read "DKinard", written over a horizontal line.

Dan Kinard, P.E.
Senior Project Manager

A handwritten signature in black ink, appearing to read "Mitchell Wurmbrand", written over a horizontal line.

Mitchell Wurmbrand
Associate Principal

A handwritten signature in black ink, appearing to read "Douglas Roy", written over a horizontal line.

Douglas Roy, P.E.
Associate Principal



**GEOTECHNICAL ENGINEERING REPORT
PROPOSED WIND RENEWABLE
GENERATING FACILITY
COLEBROOK NORTH
ROCK HALL ROAD
COLEBROOK, CONNECTICUT**

PREPARED FOR:

BNE Energy Inc.
Town Center, Suite 200
29 South Main Street
West Hartford, CT 06107

PREPARED BY:

GZA GeoEnvironmental, Inc.
655 Winding Brook Drive, Suite 402
Glastonbury, CT 06033

September 2011
File No. 44818.02

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---------	-----------------------------

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Appendix B	Boring Logs
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GEOTECHNICAL ENGINEERING REPORT
Proposed Wind Renewable Generating Facility
Colebrook North
Rock Hall Road
Colebrook, Connecticut

1.00 PROJECT LOCATION & DESCRIPTION



The project site is located east of Rock Hall Road in Colebrook, Connecticut. The proposed project includes installation of three 1.6 MW wind turbines. The undeveloped site is located on Figure 1, Locus Plan and the turbine locations are shown on Figure 2, Exploration Location Plan. The project includes constructing roads, assembly areas, crane pads, surface drainage controls, pads for electrical equipment, and turbine foundations. These major features are shown on Figure 2.

2.00 GEOTECHNICAL OBJECTIVE & SCOPE

The objective of this report is to summarize the results of the subsurface investigations performed to date and provide proposed turbine foundation recommendations based on this information. Laboratory testing on soil and rock samples is currently underway and geophysical testing at turbine locations is planned. The turbine foundation design has been prepared by GZA and is presented on Wind Colebrook North, Foundation Set, Drawings B-201, B-202 and B-203, dated September 23, 2011. The turbine foundation design will be refined and finalized based on the additional information referenced above.

This report provides the exploration locations, boring and test pit logs, an evaluation of the subsurface conditions for the project, and turbine foundation recommendations.

3.00 SUBSURFACE INVESTIGATIONS

A subsurface exploration program, that included five test borings (CNGZ-5 through CNGZ-9) and twenty-seven test pits (CNTP-2 through CNTP-4 and CNTP-6 through CNTP-29), was completed from July 25 through 27, 2011. Test pits CNTP-1 and CNTP-5 were not excavated. The borings were drilled by New Hampshire Borings and the test pits were dug by HTS Construction. A GZA Engineer observed the borings and test pits, classified the subsurface materials and prepared exploration logs.

The soils encountered were classified according to the modified Burmister classification system. Details of the modified Burmister classification system, as well as the boring and test pit logs are presented in Appendix B and C.

The as-built boring exploration locations were located in the field by survey performed by Riordan Land Surveying. The locations of the explorations are indicated on Figure 2. Summaries of the explorations and subsurface conditions encountered are presented on Table 1.

Borings

The borings were drilled to depths ranging from 12 to 32 feet below the existing ground surface. The following borings were drilled:

Boring	Location	Ground Surface Elevations, Feet
CNGZ-5	Turbine 3	1365
CNGZ-6	Turbine 2	1324
CNGZ-7	Turbine 2	1326
CNGZ-8	Turbine 1	1255
CNGZ-9	Turbine 1	1258

Bedrock was encountered in Borings CNGZ-5, CNGZ-6, and CNGZ-8 and about 5 to 10 feet of rock core was obtained in each of these borings. Borings CNGZ-7 and CNGZ-9 were performed as offsets to borings CNGZ-6 and CNGZ-8, and were extended until auger refusal was encountered, possibly indicating the top of bedrock.

Test borings in glacial till were advanced using either augers or steel casing and rotary wash techniques. Standard Penetration Test(s) (SPTs) were performed and split spoon soil samples collected at the ground surface and at five-foot intervals thereafter, in general accordance with ASTM D1586. SPT sampling consists of advancing a 1-3/8 inch inside diameter standard split spoon sampler at least 24 inches with a 140-pound safety hammer dropping from a height of 30 inches. The SPT value, often referred to as the "N" value, is the number of blows per foot of penetration required to drive the sampler from 6 to 18 inches of penetration.

When required, coring was performed using a diamond bit with an NX double tube, ridge-type core barrel in accordance with ASTM D-2113-83. The rock type description, the core recovery for each coring interval, and the rock quality designation (RQD) values expressed in percent for each run are recorded on the test boring logs. The RQD values reflect the quality and fracture spacing of the rock and are calculated as a summation of all unbroken core samples of four inches or more in length divided by the total length of each coring interval. The core recovery percentage and RQD values provide a qualitative understanding of the physical and engineering properties of bedrock.

Upon extraction of each core run, the rock was examined and classified according to rock type, color, weathering, hardness, fracture zones, solution cavities, foliation, and fracture inclination. The rock cores were boxed with the pertinent information transposed onto each core box.

The borings (except for CNGZ-7 and -9) were drilled using rotary wash drilling techniques. Water was introduced into the boring and therefore groundwater levels immediately after drilling are not reported. CNGZ-7 and -9 were drilled with hollow stem augers and no water was introduced. No groundwater was encountered in boring CNGZ-9. Groundwater observation wells were installed in borings CNGZ-7 and CNGZ-8.



Groundwater measurements were taken on August 23, 2011 at CNGZ-7, CNGZ-8 and the open boring at CNGZ-5. Groundwater measurements are presented on the boring logs and summarized in Table 1.

Test Pits

The test pits were generally located at the proposed turbine foundation locations, at crane pad areas, along the proposed access roads, assembly areas, and at surface drainage control areas. The exploration locations were surveyed by Riordan Land Surveying. The test pit locations are shown on Figure 2.

When encountered, depths to groundwater were measured in the excavated test pits. Groundwater measurements are presented on the test pit logs and summarized in Table 1.



4.00 GENERALIZED SUBSURFACE CONDITIONS

A generalized description of subsurface conditions is provided below. Refer to the boring and test pit logs in Appendices B and C for more specific information.

- Approximately three to twelve inches of **topsoil** and forest mat was encountered at the ground surface. In this report this layer is identified as topsoil.
- **Subsoil** was present directly below the topsoil and forest mat, and extended to depths between 1 and 4 feet. The subsoil generally consists of fine to coarse sand, some to little silt. Indications of cobbles and boulders embedded in the subsoil layer were noted during drilling and in test pits. SPT blow counts from borings indicate relative density of the subsoil is loose.
- **Glacial till** was encountered underlying the subsoil. Except in the locations of the proposed turbines, the glacial till typically extends to about 4 to 9 feet below grade. At the proposed turbine locations, the glacial till extends to about 12 to 25 feet below grade. The glacial till consists of generally medium dense to very dense, unsorted gravel and sand, some to little silt. Cobbles and boulders should also be anticipated within the glacial till.
- **Bedrock** is described as typically a hard, slightly weathered, slightly fractured to sound, fine to medium grained, high angle foliation, white and black gneiss. At Turbines 1, 2, and 3, the depth to bedrock is about 12, 15, and 25 feet below ground surface, respectively. Bedrock recovery expressed as a percentage (the length of core recovered divided by the length cored), generally varied between 82 and 100 percent.

Rock Quality Designation (RQD), also expressed as a percentage, is a measure of how fractured the rock is. It is defined as the sum of the lengths of core pieces that are greater than 4 inches in length, divided by the length of the core run. The RQD values are generally between 69 and 90 percent with one value as low as 35 percent



at CNGZ-5 from 26 to 32 feet below grade (top 6 feet of bedrock). Based on core times, recoveries, RQD, and observations of bedrock core, the upper 5 to 10 feet of bedrock is in generally more weathered and fractured.

- **Groundwater** was observed in Test Pits CNTP-4 and CNGZ-19 and measured in monitoring wells installed in Borings CNGZ-7 and CNGZ-8 and measured in the open boring at CNGZ-5. Groundwater in the test pits was observed from 4.5 to 5 feet below the existing ground surface. The test pits that encountered groundwater are located on the west part of the site near the Turbine 1 location and are at topographic lows which are adjacent to wetlands areas. Monitoring wells installed at Turbine 1 and Turbine 2 and the open hole at borehole CNGZ-5 adjacent to Turbine 3 were read approximately one month after installation. Groundwater was measured at 3.2 feet below ground surface at Turbine 1 (CNGZ-8), at 6.6 feet below ground surface at Turbine 2 (CNGZ-7), and at 4.8 feet below ground surface at Turbine 3 (CNGZ-5).

Perched groundwater may also be encountered in the glacial till or subsoil above the bedrock, especially in the spring due to the infiltration of snowmelt. The groundwater level in this area is likely controlled by watercourses and wetlands in the vicinity.

It is anticipated that groundwater levels will vary due to variations in rainfall and other factors different than those prevailing at the time the explorations were performed and the measurements were made. It should be noted that the seasonally lowest groundwater levels typically occur during the late summer and fall months.

5.00 TURBINE FOUNDATION DESIGN DISCUSSION

GZA has prepared the turbine foundation design based on the results of the subsurface explorations completed to date. Laboratory test results and geophysical testing will be provided when they become available and turbine foundation design will be refined and finalized. The current turbine foundation design shown on Drawings B-101, B-102 and B-103 is the largest foundation diameter we currently anticipate.

Our general conclusions are as follows:

- The subsurface conditions encountered at the site are suitable for support of a gravity spread footing foundation. Foundations for the Turbines will be supported on naturally-deposited glacial till. At Turbine 1, bedrock was encountered within three feet of the anticipated bottom of footing elevation. The bedrock surface is anticipated to undulate over short horizontal distance, and limited bedrock removal may therefore be required in some locations.
- Recommended foundations are planned to be octagonally shaped with a dimension of 54 feet between opposing sides. The bottom of foundation is planned to be approximately 9 feet below finished grade.



- Controlled blasting techniques should be used for bedrock removal for cuts in bedrock for foundations, access roads, crane pads and laydown areas.
- The glacial till soils at the site contain elevated percentages of silt. These soils can be disturbed by construction traffic when wet. Excavated surfaces will need subgrade protection that may consist of a concrete mud mat or compacted gravel over a layer of filter fabric.
- The glacial till and bedrock typically have a relatively low permeability and it is not anticipated that significant amounts of groundwater will be encountered during excavations for the foundations. If water is encountered (groundwater or precipitation within excavations), it should be removed from the excavation by pumping from sumps.

TABLES

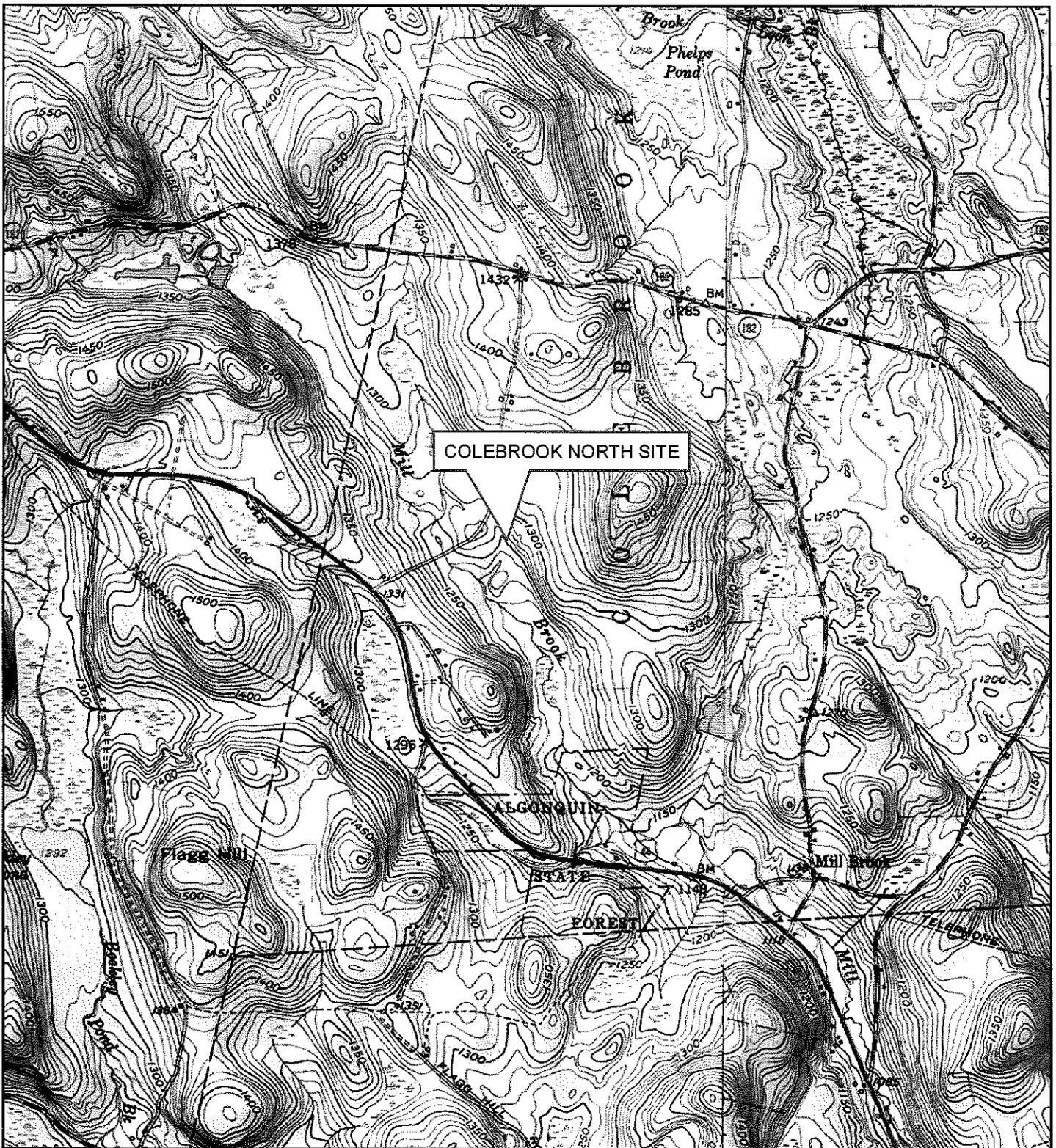
TABLE 1
SUMMARY OF EXPLORATION DATA
BNE WIND FARM - COLEBROOK NORTH
COLEBROOK, CONNECTICUT

Depth (ft) to:	Test Borings									Test Pits											
	CNGZ-5	CNGZ-6	CNGZ-7 (OW)	CNGZ-8 (OW)	CNGZ-9	CNTP-2	CNTP-3	CNTP-4	CNTP-6	CNTP-7	CNTP-8	CNTP-9	CNTP-10	CNTP-11	CNTP-12	CNTP-13					
Topsoil/Subsoil	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
Glacial Till	3.0	2.5	2.0	3.0	2.0	3.0	2.5	2.0	2.5	2.0	1.5	1.5	1.5	1.8	2.0	2.5					
Bedrock or Refusal	25.0	16.0	13.5	12.0	12.0	5.0	4.0	4.5	3.5	NE	NE	NE	NE	NE	NE	NE					
Groundwater ²	4.8	ND	6.6	3.2	NE	NE	NE	4.5	NE	NE	NE	NE	NE	NE	NE	NE					
Bottom of Exploration	32.0	21.0	13.5	23.5	12.0	5.0	4.0	4.5	3.5	6.0	6.0	6.0	6.0	7.0	6.0	6.0					
Thickness (ft) of:																					
Topsoil/Subsoil	3.0	2.5	2.0	3.0	2.0	3.0	2.5	2.0	2.5	2.0	1.5	1.5	1.5	1.8	2.0	2.5					
Glacial Till	22.0	13.5	11.5	9.0	10.0	2.0	1.5	2.5	1.0	ND	ND	ND	ND	ND	ND	ND					
Elev. of:																					
Approx. Ground Surface ³	1365.0	1324.0	1325.0	1258.0	1258.0	1265.0	1262.0	1248.0	1262.0	1281.0	1308.0	1328.0	1343.0	1356.0	1331.0	1329.0					
Top of Topsoil/Subsoil	1365.0	1324.0	1325.0	1258.0	1258.0	1265.0	1262.0	1248.0	1262.0	1281.0	1308.0	1328.0	1343.0	1356.0	1331.0	1329.0					
Top of Glacial Till	1362.0	1321.5	1324.0	1252.0	1262.0	1262.0	1259.5	1246.0	1259.5	1279.0	1306.5	1326.5	1341.5	1354.2	1329.0	1326.5					
Top of Bedrock/Refusal	1340.0	1308.0	1312.5	1243.0	1243.0	1260.0	1243.5	1243.5	1238.5	NE	NE	NE	NE	NE	NE	NE					
Bottom of Exploration	1333.0	1303.0	1312.5	1231.5	1246.0	1260.0	1258.0	1243.5	1258.5	1275.0	1302.0	1322.0	1337.0	1349.0	1325.0	1323.0					
Groundwater	1360.2	ND	1319.4	1251.8	NE	NE	NE	1243.5	NE	NE	NE	NE	NE	NE	NE	NE					

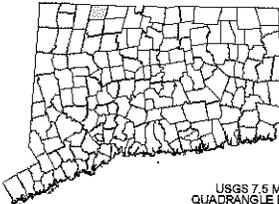
Depth (ft) to:	Test Pits															
	CNTP-14	CNTP-15	CNTP-16	CNTP-17	CNTP-18	CNTP-19	CNTP-20	CNTP-21	CNTP-22	CNTP-23	CNTP-24	CNTP-25	CNTP-26	CNTP-27	CNTP-28	CNTP-29
Topsoil/Subsoil	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Glacial Till	3.0	2.5	2.5	3.0	2.5	2.5	2.5	1.8	2.0	2.0	2.5	2.5	3.0	3.0	1.5	2.0
Bedrock or Refusal	4.0	5.0	4.5	5.0	4.5	NE	NE	NE	6.3	NE	NE	4.0	5.0	8.5	6.0	NE
Groundwater ²	NE	NE	NE	NE	NE	4.9	NE									
Bottom of Exploration	4.0	5.0	4.5	5.0	4.5	6.0	6.0	5.0	6.3	6.0	6.0	4.0	5.0	8.5	6.0	6.0
Thickness (ft) of:																
Topsoil/Subsoil	3.0	2.5	2.5	3.0	2.5	2.5	2.5	1.8	2.0	2.5	1.5	2.5	3.0	3.0	1.5	2.0
Glacial Till	1.0	2.5	2.0	2.0	2.0	ND	ND	ND	4.3	ND	ND	1.5	2.0	5.5	4.5	ND
Elev. of:																
Approx. Ground Surface ³	1270.0	1263.0	1262.0	1241.0	1273.0	1250.0	1258.0	1246.0	1266.0	1333.0	1365.0	1379.0	1260.0	1315.0	1351.0	1375.0
Top of Topsoil/Subsoil	1270.0	1263.0	1262.0	1241.0	1273.0	1250.0	1258.0	1246.0	1266.0	1333.0	1365.0	1379.0	1260.0	1315.0	1351.0	1375.0
Top of Glacial Till	1267.0	1260.5	1259.5	1238.0	1270.5	1247.5	1255.5	1244.2	1324.0	1330.5	1363.5	1376.5	1257.0	1312.0	1349.5	1373.0
Top of Bedrock/Refusal	1266.0	1256.0	1257.5	1236.0	1268.5	NE	NE	NE	1319.7	NE	NE	1375.0	1295.0	1306.5	1345.0	NE
Bottom of Exploration	1265.0	1255.0	1257.5	1236.0	1268.5	1244.0	1252.0	1241.0	1319.7	1327.0	1369.0	1375.0	1255.0	1306.5	1345.0	1369.0
Groundwater	NE	NE	NE	NE	NE	1245.1	NE									

Notes:
1. NE = Not Encountered, ND = Not Determined/Measured
2. Groundwater readings were taken during conditions stated on the boring and test pit logs.
3. Ground surface elevations were interpolated by GZA from a plan provided by the Civil1.
4. Groundwater observation wells were installed in borings CNGZ-7 and CNGZ-8 and represent stabilized water level readings.
All other groundwater measurements were made under the conditions stated on the exploration logs.

FIGURES



GZA GeoEnvironmental, Inc.
Engineers and Scientists
 655 Winding Brook Drive Suite 402
 Glastonbury, Connecticut 06033
 (860) 288-8900



USGS 7.5 MINUTE
 QUADRANGLE BASE MAP,
 NORFOLK, CONNECTICUT
 1997

SITE LOCUS

**WIND COLEBROOK NORTH
 COLEBROOK, CONNECTICUT**

PROJ MGR: DTK	REVIEWED BY: DTK	PROJECT NO. 05.0044818.02
DESIGNED BY: JER	DRAWN BY: MJS	DATE: 08-15-11

THIS MAP HAS BEEN COMPILED FROM OTHER MAPS AND/OR SOURCES OF INFORMATION.
 THIS MAP SHOULD NOT BE CONSTRUED AS A PROPERTY SURVEY, NOR USED FOR CONSTRUCTION PURPOSES.

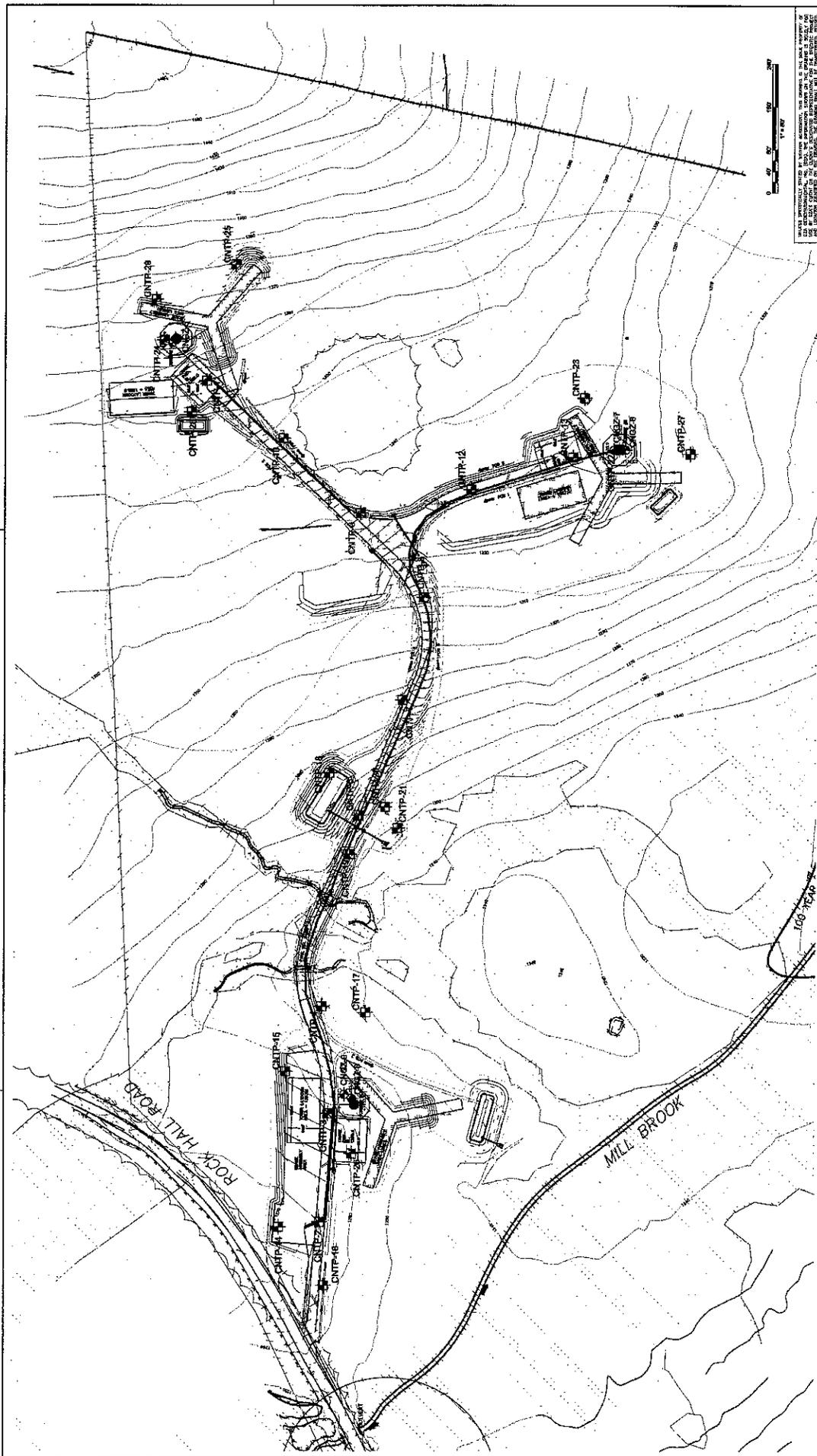
0 1,000 2,000 4,000 6,000 8,000

Scale in Feet



FIGURE

1



LEGEND
 ○ CNTP-1 LOCATION OF BOUNDARY PERFORMED BY GEA
 ○ CNTP-1 LOCATION OF TEST PIT PERFORMED BY GEA
 ○ MOUNTAIN
 1. BASE MAP TAKEN FROM AN ELECTRONIC FILE FILED
 WITH THE STATE OF MARYLAND FOR RECORDATION
 4/27/2011 BY GEA



BINE WIND FARM - COLEROCK NORTH
 EXPLORATION LOCATION PLAN
 PREPARED BY: GEA
 PROJECT: BINE WIND FARM - COLEROCK NORTH
 DATE: 04/27/2011
 DRAWN BY: JAC
 CHECKED BY: JAC
 SCALE: AS SHOWN
 SHEET NO. 1
 SHEET TOTAL 1/2

THIS PLAN AND THE INFORMATION CONTAINED HEREIN IS THE PROPERTY OF GEA AND IS NOT TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF GEA. THE INFORMATION CONTAINED HEREIN IS FOR THE EXCLUSIVE USE OF THE CLIENT AND IS NOT TO BE USED FOR ANY OTHER PURPOSE. THE CLIENT ACCEPTS FULL RESPONSIBILITY FOR THE ACCURACY AND COMPLETENESS OF THE INFORMATION PROVIDED. GEA MAKES NO WARRANTY, REPRESENTATION, OR GUARANTEE OF ANY KIND, EXPRESS OR IMPLIED, REGARDING THE ACCURACY, COMPLETENESS, OR SUITABILITY OF THE INFORMATION PROVIDED. THE CLIENT SHALL INDEMNIFY AND HOLD GEA HARMLESS FROM AND AGAINST ALL CLAIMS, DAMAGES, LOSSES, AND EXPENSES, INCLUDING REASONABLE ATTORNEY'S FEES, ARISING OUT OF OR RESULTING FROM THE USE OF THE INFORMATION PROVIDED.

**APPENDIX A
LIMITATIONS**

LIMITATIONS

Explorations

1. The analyses and recommendations submitted in this report are based in part upon the data obtained from subsurface explorations. The nature and extent of variations between these explorations may not become evident until construction. If variations then appear evident, it will be necessary to reevaluate the recommendations of this report.
2. The generalized soil profile described in the text is intended to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized and have been developed by interpretations of widely spaced explorations and samples; actual soil transitions are probably more erratic. For specific information, refer to the exploration logs.
3. Water level readings have been made in the explorations at times and under conditions stated on the exploration logs. These data have been reviewed and interpretations have been made in the text of this report. However, it must be noted that fluctuations in the level of the groundwater may occur due to variations in rainfall, temperature, and other factors occurring since the time measurements were made.

Review

4. In the event that any changes in the nature, design or location of the proposed wind turbines are planned, the conclusions and recommendations contained in this report shall not be considered valid unless the changes are reviewed and conclusions of this report modified or verified in writing by GZA. It is recommended that this firm be provided the opportunity for a general review of final design and specifications in order that earthwork and foundation recommendations may be properly interpreted and implemented in the design and specifications.

Construction

5. It is recommended that this firm be retained to provide soil engineering services during construction of the excavation and foundation phases of the work. This is to observe compliance with the design concepts, specifications, and recommendations and to allow design changes in the event that subsurface conditions differ from those anticipated prior to start of construction.

Use of Report

6. This report has been prepared for the exclusive use of Civill and their design consultants for specific application to the proposed BNE Wind Farm Development at Colebrook North, in Colebrook, Connecticut in accordance with generally accepted soil and foundation engineering practices. No warranty, express or implied, is made.

7. This soil and foundation engineering report has been prepared for this project by GZA. This report is for design purposes only and is not sufficient to prepare an accurate bid. Contractors wishing a copy of the report may secure it with the understanding that its scope is limited to design considerations only.

8. This report may contain comparative cost estimates for the purpose of evaluating alternative foundation schemes. These estimates may also involve approximate quantity evaluations. It should be noted that quantity estimates may not be accurate enough for construction bids. Since GZA has no control over labor and materials cost and design, the estimates of construction costs have been made on the basis of experience. GZA does not guarantee the accuracy of cost estimates as compared to contractor's bids for construction costs.

**APPENDIX B
BORING LOGS**

TEST BORING LOG



**BNE WIND FARM NORTH
COLEBROOK, CONNECTICUT**

EXPLORATION NO.: CNGZ-5
SHEET: 1 of 2
PROJECT NO: 44818.02
REVIEWED BY: JER

Logged By: T. Bjartmarz
Drilling Co.: New Hampshire Borings
Foreman: Richard Lenard

Type of Rig: ATV
Rig Model: Wildcat
Drilling Method: Casing/Rotary Wash

Boring Location: Turbine 3 North, See Plan
Ground Surface Elev. (ft.): 1365
Final Boring Depth (ft.): 32
Date Start - Finish: 7/27/2011 - 7/27/2011

H. Datum: Project
V. Datum: Project

Hammer Type: Safety Hammer
Hammer Weight (lb.): 140
Hammer Fall (in.): 30
Auger or Casing O.D./I.D Dia (in.): 4" O.D.

Sampler Type: Split Spoon
Sampler O.D. (in.): 2
Sampler Length (in.): 24
Rock Core Size: NX

Groundwater Depth (ft.)			
Date	Time	Water Depth	Stab. Time
7/27/11	1800	10'	5 min.
8/23/11	1100	4.8' See Note 2	26 days

Depth (ft)	Casing Blows/ Core Rate	Sample					SPT Value	Sample Description Modified Burmister	Remark	Field Test Data	Stratum Description	Elev. (ft.)	No Equipment Installed				
		No.	Depth (ft.)	Pen. (in)	Rec. (in)	Blows per 6"											
5		S-1	0-2	24	13	1 1 1 2	2	Loose, brown, fine to coarse SAND and ORGANIC MATTER, some Silt	1		0.5	TOPSOIL	1364.5				
											3	SUBSOIL			1362.0		
		S-2	5-7	24	17	6 13 14 16	27				Medium dense, gray, fine to coarse SAND, little fine Gravel, little Silt	2					
		S-3	10-12	24	13	2 12 6 9	18				Medium dense, gray, fine to coarse SAND, little fine to coarse Gravel, little Silt						
		S-4	15-17	24	18	11 15 24 32	39				Dense, gray, fine to coarse SAND, some Silt, little fine Gravel						
		S-5	20-21.5	18	16	29 53 100/6"	R				Gray, fine to coarse SAND, some fine to coarse Gravel, little Silt						
S-6	25-25	0	0	100/0"	R	Spoon Refusal											
2		C-1	26-32	72	59		Top 12": Hard, fresh to slightly weathered, slightly fractured, fine to medium grained, high angle, black and white, GNEISS Bottom 47": Soft to moderately			25	1340.0						
1																	
1																	
1																	
30																	

REMARKS
1 - Exploration advanced from ground surface to 10 feet below grade using 4" solid stem augers. Exploration advanced from 10 feet below grade to end of exploration using casing and rotary wash techniques.
2 - On August 23, 2011, borehole measured to be open to about 7.5 feet below grade. Groundwater level measured in open hole.

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.:
CNGZ-5

GZA TEMPLATE TEST BORING W/ EQUIP.; 8/25/2011; 9:10:31 AM

TEST BORING LOG



GZA
GeoEnvironmental, Inc.
Engineers and Scientists

**BNE WIND FARM NORTH
 COLEBROOK, CONNECTICUT**

EXPLORATION NO.: CNGZ-5
SHEET: 2 of 2
PROJECT NO: 44818.02
REVIEWED BY: JER

Logged By: T. Bjartmarz
Drilling Co.: New Hampshire Borings
Foreman: Richard Lenard

Type of Rig: ATV
Rig Model: Wildcat
Drilling Method: Casing/Rotary Wash

Boring Location: Turbine 3 North, See Plan
Ground Surface Elev. (ft.): 1365
Final Boring Depth (ft.): 32
Date Start - Finish: 7/27/2011 - 7/27/2011

H. Datum:
Project
V. Datum:
Project

Hammer Type: Safety Hammer
Hammer Weight (lb.): 140
Hammer Fall (in.): 30
Auger or Casing O.D./I.D Dia (in.): 4" O.D.

Sampler Type: Split Spoon
Sampler O.D. (in.): 2
Sampler Length (in.): 24
Rock Core Size: NX

Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time
7/27/11	1800	10'	5 min.
8/23/11	1100	4.8' See Note 2	26 days

Depth (ft)	Casing Blows/ Core Rate	Sample						Sample Description Modified Burmister	Remark	Field Test Data	Stratum	
		No.	Depth (ft.)	Pen. (in)	Rec. (in)	Blows per 6"	SPT Value				Depth (ft)	Description Elev. (ft.)
1								hard, slightly weathered, moderately fractured, high angle, black and white, GNEISS			32	1333.0
35								End of exploration at 32 feet.				
40												
45												
50												
55												
60												

REMARKS

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.:
CNGZ-5

TEST BORING LOG



**BNE WIND FARM NORTH
COLEBROOK, CONNECTICUT**

EXPLORATION NO.: CNGZ-6
SHEET: 1 of 1
PROJECT NO.: 44818.02
REVIEWED BY: JER

Logged By: T. Bjartmarz
Drilling Co.: New Hampshire Borings
Foreman: Richard Lenard

Type of Rig: ATV
Rig Model: Wildcat
Drilling Method: Casing/Rotary Wash

Boring Location: Turbine 2 North, See Plan
Ground Surface Elev. (ft.): 1324
Final Boring Depth (ft.): 21
Date Start - Finish: 7/28/2011 - 7/28/2011

H. Datum: Project
V. Datum: Project

Hammer Type: Safety Hammer
Hammer Weight (lb.): 140
Hammer Fall (in.): 30
Auger or Casing O.D./I.D Dia (in.): 4" O.D.

Sampler Type: Split Spoon
Sampler O.D. (in.): 2
Sampler Length (in.): 24
Rock Core Size: NX

Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time
		See Note	

Depth (ft)	Casing Blows/ Core Rate	Sample					SPT Value	Sample Description Modified Burmister	Remark	Field Test Data	Stratum		No. Equipment Installed
		No.	Depth (ft.)	Pen. (in)	Rec. (in)	Blows per 6"					Depth (ft.)	Description Elev. (ft.)	
5		S-1	0-2	24	17	1 1	Loose, brown, fine to coarse SAND, some Organic Matter, little fine Gravel, little Silt	1		0.25	TOPSOIL	No Equipment Installed	
						1 3					2		1323.5
10		S-2	5-7	24	14	20 21	Dense, gray, fine to coarse SAND, some fine to coarse Gravel, little Silt	42		2.5	SUBSOIL		
						21 21					47		1321.5
15	3	S-3	10-12	24	13	9 11	Dense, gray, fine to coarse SAND and fine to coarse GRAVEL, little Silt (wet)	47		16	GLACIAL TILL		
						36 31					R		1308.0
20	2	C-1	15-16-21	60	60	100/2"	Gray, fine to coarse GRAVEL and fine to coarse SAND, little Silt	R		21	BEDROCK		
						3							1303.0
25	5						Hard, slightly weathered, slightly fractured to sound, fine to medium grained, high angle, white and black, GNEISS RQD = 83%, Recovery = 100%						
													5
30							End of exploration at 21 feet.						

REMARKS
1 - Groundwater not encountered prior to introduction of drilling fluid at 2 feet below grade.

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.:
CNGZ-6

GZA TEMPLATE TEST BORING W/ EQUIP., 8/25/2011, 9:10:31 AM

TEST BORING LOG



**BNE WIND FARM NORTH
COLEBROOK, CONNECTICUT**

EXPLORATION NO.: CNGZ-7
SHEET: 1 of 1
PROJECT NO: 44818.02
REVIEWED BY: JER

Logged By: T. Bjartmarz
Drilling Co.: New Hampshire Borings
Foreman: Richard Lenard

Type of Rig: ATV
Rig Model: Wildcat
Drilling Method: HSA

Boring Location: 30' Northeast of Turbine 2
Ground Surface Elev. (ft.): 1326
Final Boring Depth (ft.): 13.5
Date Start - Finish: 7/28/2011 - 7/28/2011

North Arrow: Plan
V. Datum: Project

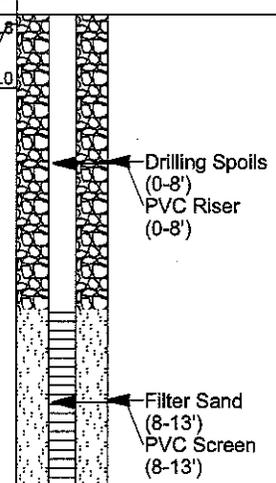
Hammer Type: Safety Hammer
Hammer Weight (lb.): 140
Hammer Fall (in.): 30
Auger or Casing O.D./I.D Dia (in.): 4-1/4" I.D.

Sampler Type: Split Spoon
Sampler O.D. (in.): 2
Sampler Length (in.): 24
Rock Core Size: NX

Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time
7/29/11	715	8.53	1 day
8/23/11	1100	6.6'	25 days

Depth (ft)	Casing Blows/ Core Rate	Sample					SPT Value	Sample Description Modified Burmister	Remark	Field Test Data	Stratum	
		No.	Depth (ft.)	Pen. (in)	Rec. (in)	Blows per 6"					Depth (ft)	Description Elev. (ft.)
0.25									1		TOPSOIL 1325.5	
2									2		SUBSOIL 1324.0	
5		S-1	5-7	24	18.5	13 20 19 13	39	Dense, gray, fine to coarse SAND and fine to coarse GRAVEL, little Silt				
10											GLACIAL TILL	
13.5								End of exploration at 13.5 feet.	2			
									3			



REMARKS

1 - Stratum descriptions and depths of Forest Mat and Subsoil are based on visual observations of borehole following removal of casing.
 2 - Auger refusal at 13.5 feet below ground surface.
 3 - 5 feet of 2 inch diameter, Schedule 40, threaded, flush joint, 10-slot PVC well screen set at approximately 13 feet below grade. Well completed to ground surface with a 2 inch diameter, Schedule 40, threaded, flush joint, PVC riser. Filter sand placed in annulus around well from 8 to 13 feet below grade. Remaining annulus filled with drill cuttings from 0 to 8 feet below grade.

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.:
CNGZ-7

GZA TEMPLATE TEST BORING W/ EQUIP., 8/25/2011; 9:10:32 AM

TEST BORING LOG



**BNE WIND FARM NORTH
COLEBROOK, CONNECTICUT**

EXPLORATION NO.: CNGZ-8
SHEET: 1 of 1
PROJECT NO.: 44818.02
REVIEWED BY: JER

Logged By: T. Bjartmarz
Drilling Co.: New Hampshire Borings
Foreman: Richard Lenard

Type of Rig: ATV
Rig Model: Wildcat
Drilling Method: Casing/Rotary Wash

Boring Location: Turbine 1 North, See Plan
Ground Surface Elev. (ft.): 1255
Final Boring Depth (ft.): 23.5
Date Start - Finish: 7/28/2011 - 7/28/2011

H. Datum: Project
V. Datum: Project

Hammer Type: Safety Hammer
Hammer Weight (lb.): 140
Hammer Fall (in.): 30
Auger or Casing O.D./I.D Dia (in.): 4" O.D.

Sampler Type: Split Spoon
Sampler O.D. (in.): 2
Sampler Length (in.): 24
Rock Core Size: NX

Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time
7/29/11	730	4.28	16 hours
8/23/11	1100	3.2'	25 days

Depth (ft)	Casing Blows/ Core Rate	Sample					SPT Value	Sample Description Modified Burmister	Remark	Field Test Data	Stratum Description	Elev. (ft.)
		No.	Depth (ft.)	Pen. (in)	Rec. (in)	Blows per 6"						
0-2		S-1	0-2	24	15	1 3 5 1	8	Loose, brown, fine to coarse SAND and ORGANIC MATTER, little Silt, trace fine Gravel	1	0.25	1254.8	TOPSOIL
6-8		S-2	6-8	24	13	12 32 50 48	82	Very dense, brown, fine to coarse SAND and fine to coarse GRAVEL, little Silt (wet)	2	3	1252.0	SUBSOIL
10-12		S-3	10-12	10	10	22 100/4"	R	Brown, fine to coarse SAND and fine to coarse GRAVEL, little Silt (wet)		12	1243.0	GLACIAL TILL
13.5-18.5		C-1	13.5-18.5	60	58.5			Hard, slightly weathered, slightly fractured, fine to medium grained, high angle, white and black, GNEISS RQD = 69%, Recovery = 98%				BEDROCK
18.5-23.5		C-2	18.5-23.5	60	58			Hard, slightly weathered, sound to slightly fractured, fine to medium grained, white and black, GNEISS RQD = 90%, Recovery = 97%				
23.5								End of exploration at 23.5 feet.	3	23.5	1231.5	

REMARKS
 1 - Borehole advanced from 0 to 10 feet below grade using 4" solid stem augers. Borehole advanced from 10 feet below grade to end of exploration using casing and rotary wash techniques.
 2 - Difficulty drilling may indicate rock or cobble from 5 to 6 feet below grade.
 3 - 5 feet of 2 inch diameter, Schedule 40, threaded, flush joint, 10-slot PVC well screen set at approximately 12 feet below grade. Well completed to ground surface with a 2 inch diameter, Schedule 40, threaded, flush joint, PVC riser. Filter sand placed below well and in annulus around well from 6 to 23.5 feet below grade. Remaining annulus filled with spoils from 0 to 6 feet below grade.

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.:
CNGZ-8

GZA TEMPLATE TEST BORING W/ EQUIP.; 8/25/2011; 9:10:32 AM

TEST BORING LOG



**BNE WIND FARM NORTH
COLEBROOK, CONNECTICUT**

EXPLORATION NO.: CNGZ-9
SHEET: 1 of 1
PROJECT NO: 44818.02
REVIEWED BY: JER

Logged By: T. Bjartmarz
Drilling Co.: New Hampshire Borings
Foreman: Richard Lenard

Type of Rig: ATV
Rig Model: Wildcat
Drilling Method: HSA

Boring Location: See Plan
Ground Surface Elev. (ft.): 1258
Final Boring Depth (ft.): 12
Date Start - Finish: 7/28/2011 - 7/28/2011

H. Datum:
Project
V. Datum:
Project

Hammer Type: Safety Hammer
Hammer Weight (lb.): 140
Hammer Fall (in.): 30
Auger or Casing O.D./I.D Dia (in.): 4-1/4" I.D.

Sampler Type: Split Spoon
Sampler O.D. (in.): 2
Sampler Length (in.): 24
Rock Core Size: NX

Groundwater Depth (ft.)

Date	Time	Water Depth	Stab. Time
		See Note	

Depth (ft)	Casing Blows/ Core Rate	Sample					SPT Value	Sample Description Modified Burmister	Remark	Field Test Data	Stratum		No Equipment Installed
		No.	Depth (ft.)	Pen. (in)	Rec. (in)	Blows per 6"					Depth (ft)	Description Elev. (ft.)	
5		S-1	5-7	24	13	27 37 40 42	77	Very dense, gray, fine to coarse SAND and fine to coarse GRAVEL, little Silt (wet)			0.25	TOPSOIL 1257.8	
											2	SUBSOIL 1256.0	
10		S-2	10-12	8	4	58 100/2"	R	Gray, fine to coarse SAND and fine to coarse GRAVEL, little Silt (wet)			12	1246.0	
15								End of exploration at 12 feet.	2				
20									3				
25													
30													

REMARKS

- 1 - Stratum descriptions and depths of Forest Mat and Subsoil are based on visual observations of borehole following removal of casing.
- 2 - Auger refusal at 12 feet below grade.
- 3 - Groundwater not encountered.

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.:
CNGZ-9

APPENDIX C
TEST PIT LOGS

TEST PIT FIELD LOG

GZA GeoEnvironmental, Inc. Engineers and Scientists	PROJECT <i>BNE Wind Turbine Project</i> <i>Colebrook, CT</i>	Test Pit No. <u>CNTP-2</u> File No. <u>44818.02</u> Date <u>7/25/2011</u>
GZA Engineer <u>T. Bjartmarz</u> Weather <u>70s overcast</u>	EXCAVATION EQUIPMENT Contractor <u>HTS Construction</u> Operator <u>Bruce Remillard</u> Make <u>Volvo</u> Model <u>EC35</u> Capacity <u>0.25 cu.yd.</u> Reach <u>15 ft.</u>	Ground Elevation <u>1265±</u> Time Started <u>809</u> Time Completed <u>815</u>

Depth	SOIL DESCRIPTION	Excav. Effort	Boulder Count Qty. Class.	Remark No.
--- 1' ---	0.5' Dark brown, fine to coarse SAND and ORGANIC MATTER, little fine to coarse Gravel, trace Silt Topsoil)	D	3A	
--- 2' ---	Brown, fine to coarse SAND and fine to coarse GRAVEL, little Roots, little Silt (Subsoil)	D	4A, 2B	
--- 3' ---	3' Gray, fine to coarse SAND and fine to coarse GRAVEL, some Silt (Glacial Till)	D	8A, 2B	
--- 4' ---		D		
--- 5' ---	5' Excavator Refusal at 5'	D		1, 2
--- 6' ---				
--- 7' ---				
--- 8' ---				
--- 9' ---				
--- 10' ---				
--- 11' ---				
--- 12' ---				
--- 13' ---				
--- 14' ---				

REMARKS:

- Excavator refusal on bedrock at 5 feet below grade.
- Groundwater not encountered in test pit.

TEST PIT PLAN	LEGEND			
<p style="text-align: center;">North</p> <p>Depth = <u>5</u> ft. Volume = <u>3</u> cu.yd.</p>	BOULDER COUNT	PROPORTIONS USED	ABBREVIATIONS	EXCAVATION EFFORT
	Size Range Letter Classification Designation	TRACE (TR) 0-10% LITTLE (L) 10-20% SOME (SO) 20-35% AND 35-50%	F - Fine M - Medium C - Coarse F/M - Fine to Medium F/C - Fine to Coarse V - Very GR - Gray BN - Brown YEL - Yellow	E - Easy M - Moderate D - Difficult
	6" - 18" A 18" - 36" B 36" and Larger C		V - Very GR - Gray BN - Brown YEL - Yellow	GROUNDWATER
				Elapsed Time to Reading (hours) G.W.L.

TEST PIT FIELD LOG

GZA GeoEnvironmental, Inc. Engineers and Scientists	PROJECT <i>BNE Wind Turbine Project Colebrook, CT</i>	Test Pit No. <u>CNTP-3</u> File No. <u>44818.02</u> Date <u>7/25/2011</u>
GZA Engineer <u>T. Bjartmarz</u> Weather <u>70s overcast</u>	EXCAVATION EQUIPMENT Contractor <u>HTS Construction</u> Operator <u>Bruce Remillard</u> Make <u>Volvo</u> Model <u>EC35</u> Capacity <u>0.25</u> cu.yd. Reach <u>15</u> ft.	Ground Elevation <u>1262±</u> Time Started <u>930</u> Time Completed <u>945</u>

Depth	SOIL DESCRIPTION	Excav. Effort	Boulder Count Qty. Class.	Remark No.
--- 1' ---	1' Dark brown, fine to coarse SAND and ORGANIC MATTER, little fine to coarse Gravel, trace Silt (Topsoil)	D	5A, 1B	
--- 2' ---	2.5' Brown, fine to coarse SAND and fine to coarse GRAVEL, little Roots, little Silt (Subsoil)	D	5A, 1B	
--- 3' ---	4' Gray, fine to coarse SAND and fine to coarse GRAVEL, some Silt (Glacial Till)	D	3A	
--- 4' ---		D		1. 2
--- 5' ---	Excavator Refusal at 4'			
--- 6' ---				
--- 7' ---				
--- 8' ---				
--- 9' ---				
--- 10' ---				
--- 11' ---				
--- 12' ---				
--- 13' ---				
--- 14' ---				

REMARKS:

- Excavator refusal on bedrock at 4 feet below grade.
- Groundwater not encountered in test pit.

TEST PIT PLAN	LEGEND																																																				
<p style="text-align: center;">North</p> <p>Depth = <u>4</u> ft. Volume = <u>2.5</u> cu.yd.</p>	BOULDER COUNT	PROPORTIONS USED	ABBREVIATIONS	EXCAVATION EFFORT																																																	
	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">Size Range</td> <td style="text-align: center;">Letter</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">Classification</td> <td style="text-align: center;">Designation</td> <td style="text-align: center;">TRACE (TR)</td> <td style="text-align: center;">0-10%</td> <td style="text-align: center;">F - Fine</td> </tr> <tr> <td style="text-align: center;">6" - 18"</td> <td style="text-align: center;">A</td> <td style="text-align: center;">LITTLE (LI)</td> <td style="text-align: center;">10-20%</td> <td style="text-align: center;">M - Medium</td> </tr> <tr> <td style="text-align: center;">18" - 36"</td> <td style="text-align: center;">B</td> <td style="text-align: center;">SOME (SO)</td> <td style="text-align: center;">20-35%</td> <td style="text-align: center;">C - Coarse</td> </tr> <tr> <td style="text-align: center;">36" and Larger</td> <td style="text-align: center;">C</td> <td style="text-align: center;">AND</td> <td style="text-align: center;">35-50%</td> <td style="text-align: center;">F/M - Fine to Medium</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td style="text-align: center;">F/C - Fine to Coarse</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td style="text-align: center;">V - Very</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td style="text-align: center;">GR - Gray</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td style="text-align: center;">BN - Brown</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td style="text-align: center;">YEL - Yellow</td> </tr> </table>	Size Range	Letter				Classification	Designation	TRACE (TR)	0-10%	F - Fine	6" - 18"	A	LITTLE (LI)	10-20%	M - Medium	18" - 36"	B	SOME (SO)	20-35%	C - Coarse	36" and Larger	C	AND	35-50%	F/M - Fine to Medium					F/C - Fine to Coarse					V - Very					GR - Gray					BN - Brown					YEL - Yellow		
Size Range	Letter																																																				
Classification	Designation	TRACE (TR)	0-10%	F - Fine																																																	
6" - 18"	A	LITTLE (LI)	10-20%	M - Medium																																																	
18" - 36"	B	SOME (SO)	20-35%	C - Coarse																																																	
36" and Larger	C	AND	35-50%	F/M - Fine to Medium																																																	
				F/C - Fine to Coarse																																																	
				V - Very																																																	
				GR - Gray																																																	
				BN - Brown																																																	
				YEL - Yellow																																																	
				GROUNDWATER Elapsed Time to Reading (hours) G.W.L.																																																	

TEST PIT FIELD LOG

GZA GeoEnvironmental, Inc. Engineers and Scientists	PROJECT <i>BNE Wind Turbine Project Colebrook, CT</i>	Test Pit No. <u>CNTP-4</u> File No. <u>44818.02</u> Date <u>7/25/2011</u>
GZA Engineer <u>T. Bjartmarz</u> Weather <u>70s overcast</u>	EXCAVATION EQUIPMENT Contractor <u>HTS Construction</u> Operator <u>Bruce Remillard</u> Make <u>Volvo</u> Model <u>EC35</u> Capacity <u>0.25</u> cu.yd. Reach <u>15</u> ft.	Ground Elevation <u>1248±</u> Time Started <u>1010</u> Time Completed <u>1022</u>

Depth	SOIL DESCRIPTION	Excav. Effort	Boulder Count Qty. Class.	Remark No.
--- 1' ---	Dark brown, fine to coarse SAND and ORGANIC MATTER, little fine to coarse Gravel, trace Silt (Topsoil)	M	3A	
--- 2' ---	Brown, fine to coarse SAND and fine to coarse GRAVEL, little Roots, little Silt (Subsoil)	D	3A	
--- 3' ---	Gray, fine to coarse SAND and fine to coarse GRAVEL, some Silt (Glacial Till)	D	4A	
--- 4' ---		D		
--- 5' ---		D		1, 2
--- 6' ---		D		
--- 7' ---	Excavator Refusal at 4.5'			
--- 8' ---				
--- 9' ---				
--- 10' ---				
--- 11' ---				
--- 12' ---				
--- 13' ---				
--- 14' ---				

REMARKS:

- Excavator refusal on bedrock at 4.5 feet below grade.
- Groundwater observed at approximately 4.5 feet below grade.

TEST PIT PLAN	LEGEND			
	BOULDER COUNT	PROPORTIONS USED	ABBREVIATIONS	EXCAVATION EFFORT
	Size Range Letter Classification Designation 6" - 18" A 18" - 36" B 36" and Larger C	TRACE (TR) 0-10% LITTLE (LI) 10-20% SOME (SO) 20-35% AND 35-50%	F - Fine M - Medium C - Coarse F/M - Fine to Medium F/C - Fine to Coarse V - Very GR - Gray BN - Brown YEL - Yellow	E - Easy M - Moderate D - Difficult GROUNDWATER Elapsed Time to Reading (hours) G.W.L.

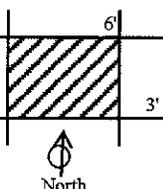
TEST PIT FIELD LOG

GZA GeoEnvironmental, Inc. Engineers and Scientists	<u>PROJECT</u> <i>BNE Wind Turbine Project</i> <i>Colebrook, CT</i>	Test Pit No. <u>CNTP-6</u> File No. <u>44818.02</u> Date <u>7/25/2011</u>
GZA Engineer <u>J. Davis</u> Weather <u>70s rain</u>	<u>EXCAVATION EQUIPMENT</u> Contractor <u>HTS Construction</u> Operator <u>Bruce Remillard</u> Make <u>Volvo</u> Model <u>EC35</u> Capacity <u>0.25</u> cu.yd. Reach <u>15</u> ft.	Ground Elevation <u>1262±</u> Time Started <u>1240</u> Time Completed <u>1245</u>

Depth	SOIL DESCRIPTION	Excav. Effort	Boulder Count Qty. Class.	Remark No.
--- 1' ---	Dark brown, fine to coarse SAND and SILT, little Organics (Topsoil)	D	3A, 1B	
--- 2' ---	Light brown, fine to coarse SAND, some fine to coarse Gravel, little Silt, trace Roots (Subsoil)	D	6A, 2B	
--- 3' ---	Light brown, fine to coarse SAND and fine to coarse GRAVEL, some Silt (Glacial Till)	D	6A	
--- 4' ---	Excavator Refusal at 3.5'	D	3A	1, 2
--- 5' ---				
--- 6' ---				
--- 7' ---				
--- 8' ---				
--- 9' ---				
--- 10' ---				
--- 11' ---				
--- 12' ---				
--- 13' ---				
--- 14' ---				

REMARKS:

- Excavator refusal on bedrock at 3.5 feet below grade.
- Groundwater not encountered in test pit.

TEST PIT PLAN	LEGEND				
	BOULDER COUNT	PROPORTIONS USED	ABBREVIATIONS	EXCAVATION EFFORT	
	Size Range Classification	Letter Designation	TRACE (TR) 0-10% LITTLE (LI) 10-20% SOME (SO) 20-35% AND 35-50%	F - Fine M - Medium C - Coarse F/M - Fine to Medium F/C - Fine to Coarse V - Very GR - Gray BN - Brown YEL - Yellow	E - Easy M - Moderate D - Difficult
	6" - 18" A 18" - 36" B 36" and Larger C				GROUNDWATER
					Elapsed Time to Reading (hours)  G.W.L.

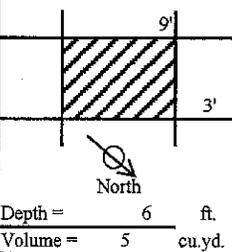
TEST PIT FIELD LOG

GZA GeoEnvironmental, Inc. Engineers and Scientists	PROJECT <i>BNE Wind Turbine Project</i> <i>Colebrook, CT</i>	Test Pit No. <u>CNTP-7</u> File No. <u>44818.02</u> Date <u>7/25/2011</u>
GZA Engineer <u>J. Davis</u> Weather <u>70s rain</u>	EXCAVATION EQUIPMENT Contractor <u>HTS Construction</u> Operator <u>Bruce Remillard</u> Make <u>Volvo</u> Model <u>EC35</u> Capacity <u>0.25</u> cu.yd. Reach <u>15</u> ft.	Ground Elevation <u>1281±</u> Time Started <u>1305</u> Time Completed <u>1315</u>

Depth	SOIL DESCRIPTION	Excav. Effort	Boulder Count Qty. Class.	Remark No.
--- 1' ---	Dark brown, fine to coarse SAND and SILT, some Roots, little fine to coarse Gravel (Topsoil)	M	3A, 2B	
--- 2' ---	Light brown, fine to coarse SAND and fine to coarse GRAVEL, some Silt, trace Roots (Subsoil)	M	1A	
--- 3' ---	Light brown, fine to coarse SAND and fine to coarse GRAVEL, some Silt, (Glacial Till)	M	2A	
--- 4' ---		M		
--- 5' ---		M	1A	
--- 6' ---		M	1A	1, 2
--- 7' ---	End of Exploration at 6'			
--- 8' ---				
--- 9' ---				
--- 10' ---				
--- 11' ---				
--- 12' ---				
--- 13' ---				
--- 14' ---				

REMARKS:

1. Exploration terminated within glacial till.
2. Groundwater not encountered in test pit.

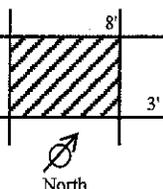
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	GROUNDWATER																																
	Elapsed Time to Reading (hours)		G.W.L.																														

TEST PIT FIELD LOG

GZA GeoEnvironmental, Inc. Engineers and Scientists	PROJECT <i>BNE Wind Turbine Project Colebrook, CT</i>	Test Pit No. <u>CNTP-8</u> File No. <u>44818.02</u> Date <u>7/25/2011</u>
GZA Engineer <u>J. Davis</u> Weather <u>70s rain</u>	EXCAVATION EQUIPMENT Contractor <u>HTS Construction</u> Operator <u>Bruce Remillard</u> Make <u>Volvo</u> Model <u>EC35</u> Capacity <u>0.25 cu.yd.</u> Reach <u>15 ft.</u>	Ground Elevation <u>1308±</u> Time Started <u>1315</u> Time Completed <u>1330</u>

Depth	SOIL DESCRIPTION	Excav. Effort	Boulder Count Qty. Class.	Remark No.
--- 1' ---	0.5' Dark brown, fine to coarse SAND and SILT, trace Roots (Topsoil)			
--- 2' ---	1.5' Tan-brown, fine to coarse SAND, some fine to coarse Gravel, some Silt, trace Roots (Subsoil)	E	1A	
--- 3' ---	Gray-brown, fine to coarse SAND, some fine to coarse Gravel, little Silt, (Glacial Till)	M	3A	
--- 4' ---		D	2A	
--- 5' ---		D	1A	
--- 6' ---		D	2A	
--- 7' ---		D	2A	
--- 8' ---		D	2A	1, 2
--- 9' ---	End of Exploration at 6'			
--- 10' ---				
--- 11' ---				
--- 12' ---				
--- 13' ---				
--- 14' ---				

REMARKS:
 1. Exploration terminated within glacial till.
 2. Groundwater not encountered in test pit.

TEST PIT PLAN	LEGEND			
 <p style="text-align: center;">North</p> <p>Depth = <u>6</u> ft. Volume = <u>4</u> cu.yd.</p>	BOULDER COUNT	PROPORTIONS USED	ABBREVIATIONS	EXCAVATION EFFORT
	Size Range Letter Classification Designation	TRACE (TR) 0-10% LITTLE (LI) 10-20% SOME (SO) 20-35% AND 35-50%	F - Fine M - Medium C - Coarse F/M - Fine to Medium F/C - Fine to Coarse V - Very GR - Gray BN - Brown YEL - Yellow	E - Easy M - Moderate D - Difficult
	6" - 18" A 18" - 36" B 36" and Larger C			GROUNDWATER
				Elapsed Time to Reading (hours)  G.W.L.

TEST PIT FIELD LOG

GZA GeoEnvironmental, Inc. Engineers and Scientists	PROJECT <i>BNE Wind Turbine Project</i> <i>Colebrook, CT</i>	Test Pit No. <u>CNTP-9</u> File No. <u>44818.02</u> Date <u>7/25/2011</u>
GZA Engineer <u>J. Davis</u> Weather <u>70s Rain</u>	EXCAVATION EQUIPMENT Contractor <u>HTS Construction</u> Operator <u>Bruce Remillard</u> Make <u>Volvo</u> Model <u>EC35</u> Capacity <u>0.25 cu.yd.</u> Reach <u>15 ft.</u>	Ground Elevation <u>1328±</u> Time Started <u>1335</u> Time Completed <u>1350</u>

Depth	SOIL DESCRIPTION	Excav. Effort	Boulder Count Qty. Class.	Remark No.
--- 1' ---	0.5' Dark brown, fine to coarse SAND and SILT, some Organics (Topsoil)			
--- 2' ---	1.5' Brown, fine to coarse SAND, some Silt, little fine to coarse Gravel, trace Roots (Subsoil)	E		
--- 3' ---	Gray-brown, fine to coarse SAND, some Silt, some fine to coarse Gravel (Glacial Till)	M	2A	
--- 4' ---		D	1A	
--- 5' ---		D	2A	
--- 6' ---		D	1A	
--- 6' ---		D	2A	1, 2
--- 7' ---	End of Exploration at 6'			
--- 8' ---				
--- 9' ---				
--- 10' ---				
--- 11' ---				
--- 12' ---				
--- 13' ---				
--- 14' ---				

REMARKS:

- End of exploration at 6±. Exploration terminated within glacial till.
- Groundwater not encountered in test pit.

TEST PIT PLAN	LEGEND																																						
<p style="text-align: center;">North</p> <p>Depth = <u>6</u> ft. Volume = <u>4</u> cu.yd.</p>	BOULDER COUNT	PROPORTIONS USED	ABBREVIATIONS	EXCAVATION EFFORT																																			
	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Size Range</td> <td style="width: 50%;">Letter</td> </tr> <tr> <td>Classification</td> <td>Designation</td> </tr> <tr> <td>6" - 18"</td> <td>A</td> </tr> <tr> <td>18" - 36"</td> <td>B</td> </tr> <tr> <td>36" and Larger</td> <td>C</td> </tr> </table>	Size Range	Letter	Classification	Designation	6" - 18"	A	18" - 36"	B	36" and Larger	C	<table style="width: 100%; border-collapse: collapse;"> <tr> <td>TRACE (TR)</td> <td>0-10%</td> </tr> <tr> <td>LITTLE (L)</td> <td>10-20%</td> </tr> <tr> <td>SOME (SO)</td> <td>20-35%</td> </tr> <tr> <td>AND</td> <td>35-50%</td> </tr> </table>	TRACE (TR)	0-10%	LITTLE (L)	10-20%	SOME (SO)	20-35%	AND	35-50%	<table style="width: 100%; border-collapse: collapse;"> <tr><td>F - Fine</td></tr> <tr><td>M - Medium</td></tr> <tr><td>C - Coarse</td></tr> <tr><td>F/M - Fine to Medium</td></tr> <tr><td>F/C - Fine to Coarse</td></tr> <tr><td>V - Very</td></tr> <tr><td>GR - Gray</td></tr> <tr><td>BN - Brown</td></tr> <tr><td>YEL - Yellow</td></tr> </table>	F - Fine	M - Medium	C - Coarse	F/M - Fine to Medium	F/C - Fine to Coarse	V - Very	GR - Gray	BN - Brown	YEL - Yellow	<table style="width: 100%; border-collapse: collapse;"> <tr><td>E - Easy</td></tr> <tr><td>M - Moderate</td></tr> <tr><td>D - Difficult</td></tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">GROUNDWATER</td> <td></td> </tr> <tr> <td>Elapsed Time to Reading (hours)</td> <td style="text-align: center;"> </td> </tr> <tr> <td></td> <td style="text-align: center;">G.W.L.</td> </tr> </table>	E - Easy	M - Moderate	D - Difficult	GROUNDWATER		Elapsed Time to Reading (hours)		
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TEST PIT FIELD LOG

GZA GeoEnvironmental, Inc. Engineers and Scientists	PROJECT <i>BNE Wind Turbine Project Colebrook, CT</i>	Test Pit No. <u>CNTP-10</u> File No. <u>44818.02</u> Date <u>7/25/2011</u>
GZA Engineer <u>J. Davis</u> Weather <u>70s rain</u>	EXCAVATION EQUIPMENT Contractor <u>HTS Construction</u> Operator <u>Bruce Remillard</u> Make <u>Volvo</u> Model <u>EC35</u> Capacity <u>0.25</u> cu.yd. Reach <u>15</u> ft.	Ground Elevation <u>1343'±</u> Time Started <u>1400</u> Time Completed <u>1420</u>

Depth	SOIL DESCRIPTION	Excav. Effort	Boulder Count Qty. Class.	Remark No.
--- 1' ---	0.5' Dark brown, fine to coarse SAND and SILT, little fine Gravel, little Organics (Topsoil)	E	1A	
--- 2' ---	1.5' Brown, fine to coarse SAND, some Silt, trace fine to coarse Gravel, trace Roots (Subsoil)	M	1B	
--- 3' ---	Light brown-gray, fine to coarse SAND, some Silt, little fine to coarse Gravel (Glacial Till)	D	1A	
--- 4' ---		D		
--- 5' ---		D	1A	
--- 6' ---		D		1, 2
--- 7' ---	End of Exploration at 6'			
--- 8' ---				
--- 9' ---				
--- 10' ---				
--- 11' ---				
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--- 13' ---				
--- 14' ---				

REMARKS:

1. Exploration terminated within glacial till.
2. Groundwater not encountered in test pit.

TEST PIT PLAN	LEGEND																																					
<p style="text-align: center;">North</p> <p>Depth = <u>6</u> ft. Volume = <u>4</u> cu.yd.</p>	BOULDER COUNT	PROPORTIONS USED	ABBREVIATIONS	EXCAVATION EFFORT																																		
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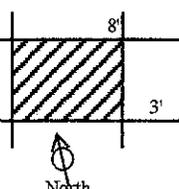
TEST PIT FIELD LOG

GZA GeoEnvironmental, Inc. Engineers and Scientists	<u>PROJECT</u> <i>BNE Wind Turbine Project</i> <i>Colebrook, CT</i>	Test Pit No. <u>CNTP-11</u> File No. <u>44818.02</u> Date <u>7/25/2011</u>
GZA Engineer <u>J. Davis</u> Weather <u>70s rain</u>	<u>EXCAVATION EQUIPMENT</u> Contractor <u>HTS Construction</u> Operator <u>Bruce Remillard</u> Make <u>Volvo</u> Model <u>EC35</u> Capacity <u>0.25 cu.yd.</u> Reach <u>15 ft.</u>	Ground Elevation <u>1356±</u> Time Started <u>1500</u> Time Completed <u>1505</u>

Depth	SOIL DESCRIPTION	Excav. Effort	Boulder Count Qty. Class.	Remark No.
--- 1' ---	0.6' Dark brown, fine to coarse SAND and SILT, little Organics (Topsoil)			
--- 2' ---	1.8' Orange-brown, fine to coarse SAND and SILT, little fine to coarse Gravel, trace Roots (Subsoil)	E		
--- 3' ---	Light brown-gray, fine to coarse SAND, some Silt, little fine to coarse Gravel (Glacial Till)	M	1A	
--- 4' ---		M		
--- 5' ---		D	2A	
--- 6' ---		D		
--- 7' ---		D	1A	
--- 8' ---		D		1, 2
--- 9' ---		D		
--- 10' ---	D			
--- 11' ---	D			
--- 12' ---	D			
--- 13' ---	D			
--- 14' ---	D			

REMARKS:

1. Exploration terminated within glacial till.
2. Groundwater not encountered in test pit.

TEST PIT PLAN	LEGEND																																	
 <p style="text-align: center;">North</p> <p>Depth = <u>7</u> ft. Volume = <u>4</u> cu.yd.</p>	BOULDER COUNT	PROPORTIONS USED	ABBREVIATIONS	EXCAVATION EFFORT																														
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TEST PIT FIELD LOG

GZA GeoEnvironmental, Inc. Engineers and Scientists	PROJECT <i>BNE Wind Turbine Project</i> <i>Colebrook, CT</i>	Test Pit No. <u>CNTP-12</u> File No. <u>44818.02</u> Date <u>7/25/2011</u>
GZA Engineer <u>J. Davis</u> Weather <u>70s rain</u>	EXCAVATION EQUIPMENT Contractor <u>HTS Construction</u> Operator <u>Bruce Remillard</u> Make <u>Volvo</u> Model <u>EC35</u> Capacity <u>0.25</u> cu.yd. Reach <u>15</u> ft.	Ground Elevation <u>1331±</u> Time Started <u>1505</u> Time Completed <u>1510</u>

Depth	SOIL DESCRIPTION	Excav. Effort	Boulder Count Qty. Class.	Remark No.
--- 1' ---	0.7' Dark brown, fine to coarse SAND and SILT, little Organics (Topsoil)			
--- 2' ---	Orange-brown, fine to coarse SAND and SILT, trace fine to coarse Gravel, trace Roots (Subsoil)	E		
--- 3' ---	2' Light brown, fine to coarse SAND, some Silt, little fine to coarse Gravel (Glacial Till)	M	2A	
--- 4' ---		D	6A	
--- 5' ---		D	1A	
--- 6' ---		D	3A	
--- 6' ---	6' End of Exploration at 6'	D	2A, 1B	1, 2
--- 7' ---				
--- 8' ---				
--- 9' ---				
--- 10' ---				
--- 11' ---				
--- 12' ---				
--- 13' ---				
--- 14' ---				

REMARKS:

1. Exploration terminated within glacial till.
2. Groundwater not encountered in test pit.

TEST PIT PLAN	LEGEND			
<p style="text-align: center;">North</p> <p>Depth = <u>6</u> ft. Volume = <u>4</u> cu.yd.</p>	BOULDER COUNT	PROPORTIONS USED	ABBREVIATIONS	EXCAVATION EFFORT
	Size Range Letter Classification Designation 6" - 18" A 18" - 36" B 36" and Larger C	TRACE (TR) 0-10% LITTLE (LI) 10-20% SOME (SO) 20-35% AND 35-50%	F - Fine M - Medium C - Coarse F/M - Fine to Medium F/C - Fine to Coarse V - Very GR - Gray BN - Brown YEL - Yellow	E - Easy M - Moderate D - Difficult GROUNDWATER Elapsed Time to Reading (hours) G.W.L.

TEST PIT FIELD LOG

GZA GeoEnvironmental, Inc. Engineers and Scientists	PROJECT <i>BNE Wind Turbine Project</i> <i>Colebrook, CT</i>	Test Pit No. <u>CNTP-13</u> File No. <u>44818.02</u> Date <u>7/25/2011</u>
GZA Engineer <u>J. Davis</u> Weather <u>70s rain</u>	EXCAVATION EQUIPMENT Contractor <u>HTS Construction</u> Operator <u>Bruce Remillard</u> Make <u>Volvo</u> Model <u>EC35</u> Capacity <u>0.25</u> cu.yd. Reach <u>15</u> ft.	Ground Elevation <u>1329±</u> Time Started <u>1520</u> Time Completed <u>1525</u>

Depth	SOIL DESCRIPTION	Excav. Effort	Boulder Count Qty. Class.	Remark No.
--- 1' ---	0.7' Dark brown, fine to coarse SAND and SILT, little Roots (Topsoil)			
--- 2' ---	Orange-brown, fine to coarse SAND and SILT, trace fine Gravel, trace Roots (Subsoil)	E	1A	
--- 3' ---	2.5' Light brown, fine to coarse SAND, some Silt, little fine to coarse Gravel (Glacial Till)	M	4A	
--- 4' ---		D	2A	
--- 5' ---		D	2A	
--- 6' ---	6' End of Exploration at 6'	D	5A, 2B 2A, 2B, 1C	1, 2
--- 7' ---				
--- 8' ---				
--- 9' ---				
--- 10' ---				
--- 11' ---				
--- 12' ---				
--- 13' ---				
--- 14' ---				

REMARKS:

1. Exploration terminated within glacial till.
2. Groundwater not encountered in test pit.

TEST PIT PLAN	LEGEND			
<p style="text-align: center;">North</p> <p>Depth = <u>6</u> ft. Volume = <u>4</u> cu.yd.</p>	BOULDER COUNT	PROPORTIONS USED	ABBREVIATIONS	EXCAVATION EFFORT
	Size Range Letter Classification Designation	TRACE (TR) 0-10% LITTLE (LI) 10-20% SOME (SO) 20-35% AND 35-50%	F - Fine M - Medium C - Coarse F/M - Fine to Medium F/C - Fine to Coarse V - Very GR - Gray BN - Brown YEL - Yellow	E - Easy M - Moderate D - Difficult
	6" - 18" A 18" - 36" B 36" and Larger C			GROUNDWATER
				Elapsed Time to Reading G.W.L. (hours)

TEST PIT FIELD LOG

GZA GeoEnvironmental, Inc. Engineers and Scientists	PROJECT <i>BNE Wind Turbine Project Colebrook, CT</i>	Test Pit No. <u>CNTP-14</u> File No. <u>44818.02</u> Date <u>7/25/2011</u>
GZA Engineer <u>T. Bjartmarz</u> Weather <u>80s Sunny</u>	EXCAVATION EQUIPMENT Contractor <u>HTS Construction</u> Operator <u>Bruce Remillard</u> Make <u>Volvo</u> Model <u>EC35</u> Capacity <u>0.25 cu.yd.</u> Reach <u>15 ft.</u>	Ground Elevation <u>1270±</u> Time Started <u>1010</u> Time Completed <u>1022</u>

Depth	SOIL DESCRIPTION	Excav. Effort	Boulder Count Qty. Class.	Remark No.
--- 1' ---	0.5' Dark brown, fine to coarse SAND and ORGANIC MATTER, little fine to coarse Gravel, little Silt (Topsoil)	D	5A, 2B	1
--- 2' ---	Brown, fine to coarse SAND and fine to coarse GRAVEL, little Roots, little Silt (Subsoil)	D	3A	
--- 3' ---	3'	D		
--- 4' ---	4' Gray, fine to coarse SAND and fine to coarse GRAVEL, some Silt (Glacial Till)	D		2, 3
--- 5' ---	Excavator Refusal at 4'			
--- 6' ---				
--- 7' ---				
--- 8' ---				
--- 9' ---				
--- 10' ---				
--- 11' ---				
--- 12' ---				
--- 13' ---				
--- 14' ---				

REMARKS:

- Test pit relocated approximately 6 feet south of originally planned location.
- Excavator refusal on bedrock at 4 feet below grade.
- Groundwater not encountered in test pit.

TEST PIT PLAN	LEGEND			
	BOULDER COUNT Size Range Letter Classification Designation 6" - 18" A 18" - 36" B 36" and Larger C	PROPORTIONS USED TRACE (TR) 0-10% LITTLE (LI) 10-20% SOME (SO) 20-35% AND 35-50%	ABBREVIATIONS F - Fine M - Medium C - Coarse F/M - Fine to Medium F/C - Fine to Coarse V - Very GR - Gray BN - Brown YEL - Yellow	EXCAVATION EFFORT E - Easy M - Moderate D - Difficult GROUNDWATER Elapsed Time to Reading (hours) G.W.L.

TEST PIT FIELD LOG

GZA GeoEnvironmental, Inc. Engineers and Scientists	PROJECT <i>BNE Wind Turbine Project Colebrook, CT</i>	Test Pit No. <u>CNTP-15</u> File No. <u>44818.02</u> Date <u>7/25/2011</u>
GZA Engineer <u>T. Bjartmarz</u> Weather <u>80s Sunny</u>	EXCAVATION EQUIPMENT Contractor <u>HTS Construction</u> Operator <u>Bruce Remillard</u> Make <u>Volvo</u> Model <u>EC35</u> Capacity <u>0.25 cu.yd.</u> Reach <u>15 ft.</u>	Ground Elevation <u>1263±</u> Time Started <u>1010</u> Time Completed <u>1022</u>

Depth		SOIL DESCRIPTION	Excav. Effort	Boulder Count Qty. Class.	Remark No.
--- 1' ---	1'	Dark brown, fine to coarse SAND and ORGANIC MATTER, little fine to coarse Gravel, little Silt (Topsoil)	D	4A, 2B, 1C	
--- 2' ---	2.5'	Brown, fine to coarse SAND and fine to coarse GRAVEL, some Silt, little Roots (Subsoil)	D	3A, 1B, 1C	
--- 3' ---	5'	Gray, fine to coarse SAND and fine to coarse GRAVEL, some Silt (Glacial Till)	D	2A, 1B	
--- 4' ---			D		
--- 5' ---			D		1, 2
--- 6' ---			Excavator Refusal at 5'		
--- 7' ---					
--- 8' ---					
--- 9' ---					
--- 10' ---					
--- 11' ---					
--- 12' ---					
--- 13' ---					
--- 14' ---					

REMARKS:

1. Excavator refusal on bedrock at 5 feet below grade.
2. Groundwater not encountered in test pit.

TEST PIT PLAN	LEGEND																																						
<p style="text-align: center;">North</p> <p>Depth = <u>5</u> ft. Volume = <u>3</u> cu.yd.</p>	BOULDER COUNT	PROPORTIONS USED	ABBREVIATIONS	EXCAVATION EFFORT																																			
	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Size Range</td> <td style="width: 50%;">Letter</td> </tr> <tr> <td>Classification</td> <td>Designation</td> </tr> <tr> <td>6" - 18"</td> <td>A</td> </tr> <tr> <td>18" - 36"</td> <td>B</td> </tr> <tr> <td>36" and Larger</td> <td>C</td> </tr> </table>	Size Range	Letter	Classification	Designation	6" - 18"	A	18" - 36"	B	36" and Larger	C	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">TRACE (TR)</td> <td style="width: 50%;">0-10%</td> </tr> <tr> <td>LITTLE (L)</td> <td>10-20%</td> </tr> <tr> <td>SOME (SO)</td> <td>20-35%</td> </tr> <tr> <td>AND</td> <td>35-50%</td> </tr> </table>	TRACE (TR)	0-10%	LITTLE (L)	10-20%	SOME (SO)	20-35%	AND	35-50%	<table style="width: 100%; border-collapse: collapse;"> <tr><td>F - Fine</td></tr> <tr><td>M - Medium</td></tr> <tr><td>C - Coarse</td></tr> <tr><td>F/M - Fine to Medium</td></tr> <tr><td>F/C - Fine to Coarse</td></tr> <tr><td>V - Very</td></tr> <tr><td>GR - Gray</td></tr> <tr><td>BN - Brown</td></tr> <tr><td>YEL - Yellow</td></tr> </table>	F - Fine	M - Medium	C - Coarse	F/M - Fine to Medium	F/C - Fine to Coarse	V - Very	GR - Gray	BN - Brown	YEL - Yellow	<table style="width: 100%; border-collapse: collapse;"> <tr><td>E - Easy</td></tr> <tr><td>M - Moderate</td></tr> <tr><td>D - Difficult</td></tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">GROUNDWATER</td> <td style="width: 50%;"></td> </tr> <tr> <td>Elapsed Time to Reading (hours)</td> <td style="text-align: center;"> </td> </tr> <tr> <td></td> <td style="text-align: center;">G.W.L.</td> </tr> </table>	E - Easy	M - Moderate	D - Difficult	GROUNDWATER		Elapsed Time to Reading (hours)		
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TEST PIT FIELD LOG

GZA GeoEnvironmental, Inc. Engineers and Scientists	PROJECT <i>BNE Wind Turbine Project Colebrook, CT</i>	Test Pit No. <u>CNTP-16</u> File No. <u>44818.02</u> Date <u>7/25/2011</u>
GZA Engineer <u>T. Bjartmarz</u> Weather <u>80s Sunny</u>	EXCAVATION EQUIPMENT Contractor <u>HTS Construction</u> Operator <u>Bruce Remillard</u> Make <u>Volvo</u> Model <u>EC35</u> Capacity <u>0.25 cu.yd.</u> Reach <u>15 ft.</u>	Ground Elevation <u>1262±</u> Time Started <u>750</u> Time Completed <u>804</u>

Depth	SOIL DESCRIPTION	Excav. Effort	Boulder Count Qty. Class.	Remark No.
--- 1' ---	0.5' Dark brown, fine to coarse SAND and ORGANIC MATTER, little fine to coarse Gravel, little Silt (Topsoil)	M	4A	
--- 2' ---	2.5' Brown, fine to coarse SAND and fine to coarse GRAVEL, little Roots, little Silt (Subsoil)	D	4A	
--- 3' ---	4.5' Gray, fine to coarse SAND and fine to coarse GRAVEL, some Silt (Glacial Till)	D	6A, 2B	
--- 4' ---		D	8A	
--- 5' ---		D		1, 2
--- 6' ---	Excavator Refusal at 4.5'			
--- 7' ---				
--- 8' ---				
--- 9' ---				
--- 10' ---				
--- 11' ---				
--- 12' ---				
--- 13' ---				
--- 14' ---				

REMARKS:

- Excavator refusal on bedrock at 4.5 feet below grade.
- Groundwater not encountered in test pit.

TEST PIT PLAN	LEGEND																										
<p style="text-align: center;">North</p> <p>Depth = <u>4.5</u> ft. Volume = <u>3</u> cu.yd.</p>	BOULDER COUNT	PROPORTIONS USED	ABBREVIATIONS	EXCAVATION EFFORT																							
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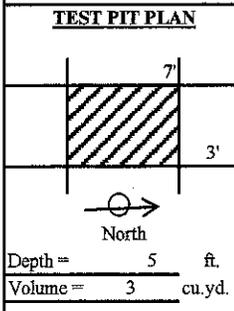
TEST PIT FIELD LOG

GZA GeoEnvironmental, Inc. Engineers and Scientists	PROJECT <i>BNE Wind Turbine Project</i> <i>Colebrook, CT</i>	Test Pit No. <u>CNTP-17</u> File No. <u>44818.02</u> Date <u>7/25/2011</u>
GZA Engineer <u>T. Bjartmarz</u> Weather <u>80s Sunny</u>	EXCAVATION EQUIPMENT Contractor <u>HTS Construction</u> Operator <u>Bruce Remillard</u> Make <u>Volvo</u> Model <u>EC35</u> Capacity <u>0.25</u> cu.yd. Reach <u>15</u> ft.	Ground Elevation <u>1241±</u> Time Started <u>1033</u> Time Completed <u>1044</u>

Depth	SOIL DESCRIPTION	Excav. Effort	Boulder Count Qty. Class.	Remark No.
--- 1' ---	Dark brown, fine to coarse SAND and ORGANIC MATTER, little fine to coarse Gravel, little Silt (Topsoil)	D	4A, 1B	
--- 2' ---	Brown, fine to coarse SAND and fine to coarse GRAVEL, little Roots, little Silt (Subsoil)	M	5A, 1B	
--- 3' ---		D	3A	
--- 4' ---	Gray, fine to coarse SAND and fine to coarse GRAVEL, little Silt (Glacial Till)	D	4A	
--- 5' ---	Excavator Refusal at 5'	D	5A	1, 2
--- 6' ---				
--- 7' ---				
--- 8' ---				
--- 9' ---				
--- 10' ---				
--- 11' ---				
--- 12' ---				
--- 13' ---				
--- 14' ---				

REMARKS:

1. Excavator refusal on bedrock at 5 feet below grade.
2. Groundwater not encountered in test pit.

TEST PIT PLAN	LEGEND																																				
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TEST PIT FIELD LOG

GZA GeoEnvironmental, Inc. Engineers and Scientists	PROJECT <i>BNE Wind Turbine Project</i> <i>Colebrook, CT</i>	Test Pit No. <u>CNTP-18</u> File No. <u>44818.02</u> Date <u>7/25/2011</u>
GZA Engineer <u>J. Davis</u> Weather <u>70s rain</u>	EXCAVATION EQUIPMENT Contractor <u>HTS Construction</u> Operator <u>Bruce Remillard</u> Make <u>Volvo</u> Model <u>EC35</u> Capacity <u>0.25 cu.yd.</u> Reach <u>1.5 ft.</u>	Ground Elevation <u>1273±</u> Time Started <u>1250</u> Time Completed <u>1300</u>

Depth	SOIL DESCRIPTION	Excav. Effort	Boulder Count Qty. Class.	Remark No.
--- 1' ---	0.8' Dark brown, fine to coarse SAND and SILT, little Organics, little fine to coarse Gravel (Topsoil)	M		
--- 2' ---	2.5' Brown, fine to coarse SAND, some fine to coarse Gravel, some Silt, trace Roots (Subsoil)	M	2A	
--- 3' ---	4' Light brown, fine to coarse SAND and fine to coarse GRAVEL, little Silt (Glacial Till)	D	3A	
--- 4' ---		D	5A	
--- 5' ---		D		1, 2
--- 6' ---	Excavator Refusal at 4.5'			
--- 7' ---				
--- 8' ---				
--- 9' ---				
--- 10' ---				
--- 11' ---				
--- 12' ---				
--- 13' ---				
--- 14' ---				

REMARKS:

- Excavator refusal on bedrock at about 4 to 4.5 feet below grade.
- Groundwater not encountered in test pit.

TEST PIT PLAN	LEGEND			
<p style="text-align: center;">North</p> <p>Depth = <u>8.5</u> ft. Volume = <u>3</u> cu.yd.</p>	BOULDER COUNT	PROPORTIONS USED	ABBREVIATIONS	EXCAVATION EFFORT
	Size Range Letter Classification Designation	TRACE (TR) 0-10% LITTLE (LI) 10-20% SOME (SO) 20-35% AND 35-50%	F - Fine M - Medium C - Coarse F/M - Fine to Medium F/C - Fine to Coarse V - Very GR - Gray BN - Brown YEL - Yellow	E - Easy M - Moderate D - Difficult
	6" - 18" A 18" - 36" B 36" and Larger C		GROUNDWATER	
			Elapsed Time to Reading (hours)	 G.W.L.

TEST PIT FIELD LOG

GZA GeoEnvironmental, Inc. Engineers and Scientists	<u>PROJECT</u> <i>BNE Wind Turbine Project</i> <i>Colebrook, CT</i>	Test Pit No. <u>CNTP-19</u> File No. <u>44818.02</u> Date <u>7/25/2011</u>
GZA Engineer <u>J. Davis</u> Weather <u>70s overcast</u>	<u>EXCAVATION EQUIPMENT</u> Contractor <u>HTS Construction</u> Operator <u>Bruce Remillard</u> Make <u>Volvo</u> Model <u>EC35</u> Capacity <u>0.25 cu.yd.</u> Reach <u>15 ft.</u>	Ground Elevation <u>1250±</u> Time Started <u>1033</u> Time Completed <u>1044</u>

Depth		SOIL DESCRIPTION	Excav. Effort	Boulder Count Qty. Class.	Remark No.
--- 1' ---	0.5'	Dark brown, fine to coarse SAND and ORGANIC MATTER, little fine to coarse Gravel, little Silt (Topsoil)	M	1A	
--- 2' ---	2.5'	Brown, fine to coarse SAND and fine to coarse GRAVEL, little Roots, little Silt (Subsoil)	D	3A	
--- 3' ---		Gray, fine to coarse SAND and fine to coarse GRAVEL, little Silt (Glacial Till)	D	6A, 1B	
--- 4' ---			D	5A, 2B	1
--- 5' ---			D	6A, 1B	
--- 6' ---	6'		D	4A	2
--- 7' ---		End of Exploration at 6'			
--- 8' ---					
--- 9' ---					
--- 10' ---					
--- 11' ---					
--- 12' ---					
--- 13' ---					
--- 14' ---					

REMARKS:

1. Groundwater observed at approximately 4.9 feet below grade.
2. Exploration terminated in glacial till.

<p>TEST PIT PLAN</p> <p style="font-size: small;">Depth = 6 ft. Volume = 4 cu.yd.</p>	<p style="text-align: center;">LEGEND</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">BOULDER COUNT</th> <th style="width: 25%;">PROPORTIONS USED</th> <th style="width: 25%;">ABBREVIATIONS</th> <th style="width: 25%;">EXCAVATION EFFORT</th> </tr> </thead> <tbody> <tr> <td>Size Range . Letter Classification Designation</td> <td>TRACE (TR) 0-10% LITTLE (LJ) 10-20% SOME (SO) 20-35% AND 35-50%</td> <td>F - Fine M - Medium C - Coarse F/M - Fine to Medium F/C - Fine to Coarse V - Very GR - Gray BN - Brown YEL - Yellow</td> <td>E - Easy M - Moderate D - Difficult</td> </tr> <tr> <td>6" - 18" A 18" - 36" B 36" and Larger C</td> <td></td> <td></td> <td style="text-align: center;">GROUNDWATER</td> </tr> <tr> <td></td> <td></td> <td></td> <td>Elapsed Time to Reading (hours) G.W.L.</td> </tr> </tbody> </table>	BOULDER COUNT	PROPORTIONS USED	ABBREVIATIONS	EXCAVATION EFFORT	Size Range . Letter Classification Designation	TRACE (TR) 0-10% LITTLE (LJ) 10-20% SOME (SO) 20-35% AND 35-50%	F - Fine M - Medium C - Coarse F/M - Fine to Medium F/C - Fine to Coarse V - Very GR - Gray BN - Brown YEL - Yellow	E - Easy M - Moderate D - Difficult	6" - 18" A 18" - 36" B 36" and Larger C			GROUNDWATER				Elapsed Time to Reading (hours) G.W.L.
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Size Range . Letter Classification Designation	TRACE (TR) 0-10% LITTLE (LJ) 10-20% SOME (SO) 20-35% AND 35-50%	F - Fine M - Medium C - Coarse F/M - Fine to Medium F/C - Fine to Coarse V - Very GR - Gray BN - Brown YEL - Yellow	E - Easy M - Moderate D - Difficult														
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			Elapsed Time to Reading (hours) G.W.L.														

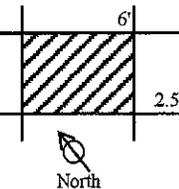
TEST PIT FIELD LOG

GZA GeoEnvironmental, Inc. Engineers and Scientists	PROJECT <i>BNE Wind Turbine Project</i> <i>Colebrook, CT</i>	Test Pit No. <u>CNTP-20</u> File No. <u>44818.02</u> Date <u>7/25/2011</u>
GZA Engineer <u>J. Davis</u> Weather <u>70s rain</u>	EXCAVATION EQUIPMENT Contractor <u>HTS Construction</u> Operator <u>Bruce Remillard</u> Make <u>Volvo</u> Model <u>EC35</u> Capacity <u>0.25 cu.yd.</u> Reach <u>15 ft.</u>	Ground Elevation <u>1258±</u> Time Started <u>1230</u> Time Completed <u>1240</u>

Depth		SOIL DESCRIPTION	Excav. Effort	Boulder Count Qty. Class.	Remark No.
--- 1' ---	1'	Dark brown, fine to coarse SAND and SILT, little Organics (Topsoil)	M	4A	
--- 2' ---	2.5'	Brown, fine to coarse SAND and fine to coarse GRAVEL, some Silt, trace Roots (Subsoil)	D	2A, 1B	
--- 3' ---		Light brown, fine to coarse SAND and fine to coarse GRAVEL, little Silt (Glacial Till)	D	4A, 1B	
--- 4' ---			D	5A	
--- 5' ---			D	6A	
--- 6' ---	6'		D	4A	1, 2
--- 7' ---		End of Exploration at 6'			
--- 8' ---					
--- 9' ---					
--- 10' ---					
--- 11' ---					
--- 12' ---					
--- 13' ---					
--- 14' ---					

REMARKS:

1. Exploration terminated within glacial till.
2. Groundwater not encountered in test pit.

TEST PIT PLAN	LEGEND																										
 <p style="text-align: center;">North</p> <p>Depth = <u>6</u> ft. Volume = <u>3</u> cu.yd.</p>	BOULDER COUNT	PROPORTIONS USED	ABBREVIATIONS	EXCAVATION EFFORT																							
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D - Difficult																											
	GROUNDWATER																										
	Elapsed Time to Reading (hours)		G.W.L.																								

TEST PIT FIELD LOG

GZA GeoEnvironmental, Inc. Engineers and Scientists	PROJECT <i>BNE Wind Turbine Project Colebrook, CT</i>	Test Pit No. <u>CNTP-21</u>	File No. <u>44818.02</u>
		Date <u>7/25/2011</u>	
GZA Engineer <u>J. Davis</u>	EXCAVATION EQUIPMENT		Ground Elevation <u>1246±</u>
Weather <u>70s rain</u>	Contractor <u>HTS Construction</u>	Operator <u>Bruce Remillard</u>	Time Started <u>1215</u>
	Make <u>Volvo</u> Model <u>EC35</u>	Capacity <u>0.25 cu.yd.</u> Reach <u>15 ft.</u>	Time Completed <u>1230</u>

Depth	SOIL DESCRIPTION	Excav. Effort	Boulder Count Qty. Class.	Remark No.
--- 1' ---	1' Dark brown, fine to coarse SAND and SILT, some Organics (Topsoil)	M		
--- 2' ---	1.8' Brown, fine to coarse SAND and fine to coarse GRAVEL, little Silt, trace Roots (Subsoil)	D	4A, 4B	
--- 3' ---	Light brown, fine to coarse SAND and fine to coarse GRAVEL, little Silt (Glacial Till)	D	4A, 2B, 1C	
--- 4' ---		D	6A, 1B	
--- 5' ---		D	5A	1, 2
--- 6' ---		End of Exploration at 5'		
--- 7' ---				
--- 8' ---				
--- 9' ---				
--- 10' ---				
--- 11' ---				
--- 12' ---				
--- 13' ---				
--- 14' ---				

REMARKS:

1. Exploration terminated within glacial till.
2. Groundwater not encountered in test pit.

TEST PIT PLAN	LEGEND																																																										
<p style="text-align: center;">North</p> <p>Depth = <u>6</u> ft.</p> <p>Volume = <u>4</u> cu.yd.</p>	BOULDER COUNT	PROPORTIONS USED	ABBREVIATIONS	EXCAVATION EFFORT																																																							
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TEST PIT FIELD LOG

GZA GeoEnvironmental, Inc. Engineers and Scientists	PROJECT <i>BNE Wind Turbine Project</i> <i>Colebrook, CT</i>	Test Pit No. <u>CNTP-22</u> File No. <u>44818.02</u> Date <u>7/25/2011</u>
GZA Engineer <u>J. Davis</u> Weather <u>70s rain</u>	EXCAVATION EQUIPMENT Contractor <u>HTS Construction</u> Operator <u>Bruce Remillard</u> Make <u>Volvo</u> Model <u>EC35</u> Capacity <u>0.25 cu.yd.</u> Reach <u>15 ft.</u>	Ground Elevation <u>1326[±]</u> Time Started <u>1525</u> Time Completed <u>1530</u>

Depth		SOIL DESCRIPTION	Excav. Effort	Boulder Count Qty. Class.	Remark No.
---	1'	0.5'			
		Dark brown, fine to coarse SAND and SILT, little Roots (Topsoil)			
		Orange-brown, fine to coarse SAND and SILT, trace Roots (Subsoil)	E		
---	2'	2'			
		Light brown, fine to coarse SAND, some Silt, trace fine to coarse Gravel (Glacial Till)	M	1A	
---	3'		D	5A	
---	4'		D	2A	
---	5'		D	6A	
---	6'	6.3'			
		Excavator Refusal at 6.3'	D	2A, 2B	1, 2
---	7'				
---	8'				
---	9'				
---	10'				
---	11'				
---	12'				
---	13'				
---	14'				

REMARKS:

- Excavator refusal on bedrock or very large boulder at 6.3 feet below grade.
- Groundwater not encountered in test pit.

TEST PIT PLAN	LEGEND																																						
<p style="text-align: center;">North</p> <p>Depth = <u>6.3</u> ft. Volume = <u>4</u> cu.yd.</p>	BOULDER COUNT	PROPORTIONS USED	ABBREVIATIONS	EXCAVATION EFFORT																																			
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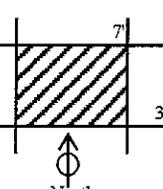
TEST PIT FIELD LOG

GZA GeoEnvironmental, Inc. Engineers and Scientists	PROJECT <i>BNE Wind Turbine Project</i> <i>Colebrook, CT</i>	Test Pit No. <u>CNTP-23</u> File No. <u>44818.02</u> Date <u>7/25/2011</u>
GZA Engineer <u>J. Davis</u> Weather <u>70s rain</u>	EXCAVATION EQUIPMENT Contractor <u>HTS Construction</u> Operator <u>Bruce Remillard</u> Make <u>Volvo</u> Model <u>EC35</u> Capacity <u>0.25 cu.yd.</u> Reach <u>15 ft.</u>	Ground Elevation <u>1333'±</u> Time Started <u>1535</u> Time Completed <u>1540</u>

Depth	SOIL DESCRIPTION	Excav. Effort	Boulder Count Qty. Class.	Remark No.
--- 1' ---	0.5' Dark brown, fine to coarse SAND and SILT, little Roots (Topsoil)			
--- 2' ---	Orange-brown, fine to coarse SAND and SILT, trace fine to coarse Gravel, trace Roots (Subsoil)	E		
--- 3' ---	2.5' Light brown, fine to coarse SAND, some Silt, little fine to coarse Gravel (Glacial Till)	M	2A	
--- 4' ---		M	1A	
--- 5' ---		D	3A	
--- 6' ---		D	3A, 1C	
--- 7' ---	6' End of Exploration at 6'	D	3A, 1B, 1C	1, 2
--- 8' ---				
--- 9' ---				
--- 10' ---				
--- 11' ---				
--- 12' ---				
--- 13' ---				
--- 14' ---				

REMARKS:

1. Exploration terminated within glacial till.
2. Groundwater not encountered in test pit.

TEST PIT PLAN  <p style="font-size: small;">Depth = <u>6</u> ft. Volume = <u>4</u> cu.yd.</p>	LEGEND <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 25%;">BOULDER COUNT</th> <th style="width: 25%;">PROPORTIONS USED</th> <th style="width: 25%;">ABBREVIATIONS</th> <th style="width: 25%;">EXCAVATION EFFORT</th> </tr> <tr> <td style="font-size: x-small;"> Size Range Letter Classification Designation </td> <td style="font-size: x-small;"> TRACE (TR) 0-10% LITTLE (LI) 10-20% SOME (SO) 20-35% AND 35-50% </td> <td style="font-size: x-small;"> F - Fine M - Medium C - Coarse F/M - Fine to Medium F/C - Fine to Coarse V - Very GR - Gray BN - Brown YEL - Yellow </td> <td style="font-size: x-small;"> E - Easy M - Moderate D - Difficult </td> </tr> <tr> <td colspan="3" style="text-align: center; font-weight: bold; font-size: small;">GROUNDWATER</td> <td style="font-size: x-small;"> Elapsed Time to Reading (hours) </td> </tr> <tr> <td colspan="3"></td> <td style="text-align: center;">  G.W.L. </td> </tr> </table>	BOULDER COUNT	PROPORTIONS USED	ABBREVIATIONS	EXCAVATION EFFORT	Size Range Letter Classification Designation	TRACE (TR) 0-10% LITTLE (LI) 10-20% SOME (SO) 20-35% AND 35-50%	F - Fine M - Medium C - Coarse F/M - Fine to Medium F/C - Fine to Coarse V - Very GR - Gray BN - Brown YEL - Yellow	E - Easy M - Moderate D - Difficult	GROUNDWATER			Elapsed Time to Reading (hours)				 G.W.L.
BOULDER COUNT	PROPORTIONS USED	ABBREVIATIONS	EXCAVATION EFFORT														
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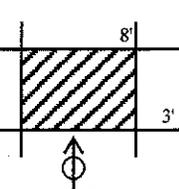
TEST PIT FIELD LOG

GZA GeoEnvironmental, Inc. Engineers and Scientists	<u>PROJECT</u> <i>BNE Wind Turbine Project</i> <i>Colebrook, CT</i>	Test Pit No. <u>CNTP-24</u> File No. <u>44818.02</u> Date <u>7/25/2011</u>
GZA Engineer <u>J. Davis</u> Weather <u>70s rain</u>	<u>EXCAVATION EQUIPMENT</u> Contractor <u>HTS Construction</u> Operator <u>Bruce Remillard</u> Make <u>Volvo</u> Model <u>EC35</u> Capacity <u>0.25 cu.yd.</u> Reach <u>15 ft.</u>	Ground Elevation <u>1365±</u> Time Started <u>1445</u> Time Completed <u>1450</u>

Depth	SOIL DESCRIPTION	Excav. Effort	Boulder Count Qty. Class.	Remark No.
--- 1' ---	0.5' Dark brown, fine to coarse SAND and SILT, little Organics (Topsoil)			
--- 2' ---	1.5' Orange-brown, fine to coarse SAND and SILT, trace fine to coarse Gravel, trace Roots (Subsoil)	E		
--- 3' ---	Light brown-gray, fine to coarse SAND, some Silt, trace fine to coarse Gravel (Glacial Till)	M	3A	
--- 4' ---		D	1A	
--- 5' ---		D		
--- 6' ---		D	2A	
--- 7' ---		D		1, 2
--- 8' ---	End of Exploration at 6'			
--- 9' ---				
--- 10' ---				
--- 11' ---				
--- 12' ---				
--- 13' ---				
--- 14' ---				

REMARKS:

1. Exploration terminated within glacial till.
2. Groundwater not encountered in test pit.

TEST PIT PLAN	LEGEND					
 <p style="text-align: center;">North</p> <p>Depth = <u>6</u> ft. Volume = <u>4</u> cu.yd.</p>	BOULDER COUNT		PROPORTIONS USED		ABBREVIATIONS	EXCAVATION EFFORT
	Size Range Classification	Letter Designation			F - Fine M - Medium C - Coarse F/M - Fine to Medium F/C - Fine to Coarse V - Very GR - Gray BN - Brown YEL - Yellow	E - Easy M - Moderate D - Difficult
	6" - 18" 18" - 36" 36" and Larger	A B C	TRACE (TR) LITTLE (L) SOME (SO) AND	0-10% 10-20% 20-35% 35-50%		GROUNDWATER Elapsed Time to Reading (hours)  G.W.L.

TEST PIT FIELD LOG

GZA GeoEnvironmental, Inc. Engineers and Scientists	<u>PROJECT</u> <i>BNE Wind Turbine Project</i> <i>Colebrook, CT</i>	Test Pit No. <u>CNTP-25</u> File No. <u>44818.02</u> Date <u>7/25/2011</u>
GZA Engineer <u>J. Davis</u> Weather <u>70s rain</u>	<u>EXCAVATION EQUIPMENT</u> Contractor <u>HTS Construction</u> Operator <u>Bruce Remillard</u> Make <u>Volvo</u> Model <u>EC35</u> Capacity <u>0.25 cu.yd.</u> Reach <u>15 ft.</u>	Ground Elevation <u>1379±</u> Time Started <u>1510</u> Time Completed <u>1520</u>

Depth	SOIL DESCRIPTION	Excav. Effort	Boulder Count Qty. Class.	Remark No.
--- 1' ---	0.5' Dark brown, fine to coarse SAND and SILT, little Organics (Topsoil)	E		
--- 2' ---	Brown, fine to coarse SAND, some Silt, trace fine to coarse Gravel, trace Roots (Subsoil)	M	3A, 1B	
--- 3' ---	2.5' Light brown, fine to coarse SAND, some Silt, little fine to coarse Gravel (Glacial Till)	D	4A, 1B, 1C	
--- 4' ---	4' Excavator Refusal at 4' 3.5'	D	3A, 1B, 1C	1, 2
--- 5' ---				
--- 6' ---				
--- 7' ---				
--- 8' ---				
--- 9' ---				
--- 10' ---				
--- 11' ---				
--- 12' ---				
--- 13' ---				
--- 14' ---				

REMARKS:

1. Excavator refusal on bedrock at about 3.5 to 4 feet below grade.
2. Groundwater not encountered in test pit.

TEST PIT PLAN	LEGEND			
	BOULDER COUNT	PROPORTIONS USED	ABBREVIATIONS	EXCAVATION EFFORT
	Size Range Letter Classification Designation 6" - 18" A 18" - 36" B 36" and Larger C	TRACE (TR) 0-10% LITTLE (L) 10-20% SOME (SO) 20-35% AND 35-50%	F - Fine M - Medium C - Coarse F/M - Fine to Medium F/C - Fine to Coarse V - Very GR - Gray BN - Brown YEL - Yellow	E - Easy M - Moderate D - Difficult GROUNDWATER Elapsed Time to Reading (hours) G.W.L.

TEST PIT FIELD LOG

GZA GeoEnvironmental, Inc. Engineers and Scientists	PROJECT <i>BNE Wind Turbine Project</i> <i>Colebrook, CT</i>	Test Pit No. <u>CNTP-26</u> File No. <u>44818.02</u> Date <u>7/25/2011</u>
GZA Engineer <u>T. Bjartmarz</u> Weather <u>70s overcast</u>	EXCAVATION EQUIPMENT Contractor <u>HTS Construction</u> Operator <u>Bruce Remillard</u> Make <u>Volvo</u> Model <u>EC35</u> Capacity <u>0.25 cu.yd.</u> Reach <u>15 ft.</u>	Ground Elevation <u>1260±</u> Time Started <u>911</u> Time Completed <u>920</u>

Depth	SOIL DESCRIPTION	Excav. Effort	Boulder Count Qty. Class.	Remark No.
--- 1' ---	Dark brown, fine to coarse SAND and ORGANIC MATTER, little fine to coarse Gravel, little Silt (Topsoil)	D	3A, 2B	
--- 2' ---	Brown, fine to coarse SAND and fine to coarse GRAVEL, little Roots, little Silt (Subsoil)	D	5A, 1B	
--- 3' ---		D	3A	1
--- 4' ---	Gray, fine to coarse SAND and fine to coarse GRAVEL, little Silt (Glacial Till)	D	3A	
--- 5' ---		D	3A	2
--- 6' ---	Excavator Refusal at 5'			
--- 7' ---				
--- 8' ---				
--- 9' ---				
--- 10' ---				
--- 11' ---				
--- 12' ---				
--- 13' ---				
--- 14' ---				

REMARKS:

- Mottled soil observed at approximately 3 feet below grade. Groundwater not encountered.
- Excavator refusal on bedrock at 5 feet below grade.

TEST PIT PLAN	LEGEND			
<p style="text-align: center;">North</p> <p>Depth = <u>5</u> ft Volume = <u>3</u> cu.yd.</p>	BOULDER COUNT	PROPORTIONS USED	ABBREVIATIONS	EXCAVATION EFFORT
	Size Range Classification Letter Designation	TRACE (TR) 0-10% LITTLE (L) 10-20% SOME (SO) 20-35% AND 35-50%	F - Fine M - Medium C - Coarse F/M - Fine to Medium F/C - Fine to Coarse V - Very GR - Gray BN - Brown YEL - Yellow	E - Easy M - Moderate D - Difficult
	6" - 18" A 18" - 36" B 36" and Larger C			GROUNDWATER
				Elapsed Time to Reading (hours) G.W.L.

TEST PIT FIELD LOG

GZA GeoEnvironmental, Inc. Engineers and Scientists	<u>PROJECT</u> <i>BNE Wind Turbine Project</i> <i>Colebrook, CT</i>	Test Pit No. <u>CNTP-27</u> File No. <u>44818.02</u> Date <u>7/25/2011</u>
GZA Engineer <u>J. Davis</u> Weather <u>70s rain</u>	<u>EXCAVATION EQUIPMENT</u> Contractor <u>HTS Construction</u> Operator <u>Bruce Remillard</u> Make <u>Volvo</u> Model <u>EC35</u> Capacity <u>0.25</u> cu.yd. Reach <u>15</u> ft.	Ground Elevation <u>1315'±</u> Time Started <u>1535</u> Time Completed <u>1545</u>

Depth		SOIL DESCRIPTION	Excav. Effort	Boulder Count Qty. Class.	Remark No.
--- 1' ---	1'	Dark brown, fine to coarse SAND and SILT, little Roots (Topsoil)	E		
--- 2' ---		Orange-brown, fine to coarse SAND and SILT, trace fine to coarse Gravel, trace Roots (Subsoil)	E	1A	
--- 3' ---	3'		E		
--- 4' ---		Light brown, fine to coarse SAND, some Silt, little fine to coarse Gravel (Glacial Till)	M	2A	
--- 5' ---			D	2A	
--- 6' ---			D		
--- 7' ---			D		
--- 8' ---			D	1B, 2C	
--- 9' ---	8.5'	Excavator Refusal at 8.5'	D		1, 2
--- 10' ---					
--- 11' ---					
--- 12' ---					
--- 13' ---					
--- 14' ---					

REMARKS:

- Excavator refusal on bedrock at 8.5 feet below grade.
- Groundwater not encountered in test pit.

TEST PIT PLAN	LEGEND																																		
<p style="text-align: center;">North</p> <p>Depth = <u>8.5</u> ft. Volume = <u>4</u> cu.yd.</p>	BOULDER COUNT	PROPORTIONS USED	ABBREVIATIONS	EXCAVATION EFFORT																															
	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Size Range</td> <td style="width: 50%;">Letter</td> </tr> <tr> <td>Classification</td> <td>Designation</td> </tr> <tr> <td>6" - 18"</td> <td style="text-align: center;">A</td> </tr> <tr> <td>18" - 36"</td> <td style="text-align: center;">B</td> </tr> <tr> <td>36" and Larger</td> <td style="text-align: center;">C</td> </tr> </table>	Size Range	Letter	Classification	Designation	6" - 18"	A	18" - 36"	B	36" and Larger	C	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">TRACE (TR)</td> <td style="width: 50%;">0-10%</td> </tr> <tr> <td>LITTLE (LI)</td> <td>10-20%</td> </tr> <tr> <td>SOME (SO)</td> <td>20-35%</td> </tr> <tr> <td>AND</td> <td>35-50%</td> </tr> </table>	TRACE (TR)	0-10%	LITTLE (LI)	10-20%	SOME (SO)	20-35%	AND	35-50%	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">F - Fine</td> <td style="width: 50%;">M - Medium</td> </tr> <tr> <td>C - Coarse</td> <td>F/M - Fine to Medium</td> </tr> <tr> <td>F/C - Fine to Coarse</td> <td>V - Very</td> </tr> <tr> <td>GR - Gray</td> <td>BN - Brown</td> </tr> <tr> <td>YEL - Yellow</td> <td></td> </tr> </table>	F - Fine	M - Medium	C - Coarse	F/M - Fine to Medium	F/C - Fine to Coarse	V - Very	GR - Gray	BN - Brown	YEL - Yellow		<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">E - Easy</td> <td style="width: 50%;">M - Moderate</td> </tr> <tr> <td>D - Difficult</td> <td></td> </tr> </table>	E - Easy	M - Moderate	D - Difficult
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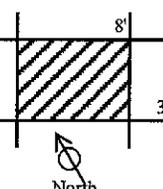
TEST PIT FIELD LOG

GZA GeoEnvironmental, Inc. Engineers and Scientists	<u>PROJECT</u> <i>BNE Wind Turbine Project</i> <i>Colebrook, CT</i>	Test Pit No. <u>CNTP-28</u> File No. <u>44818.02</u> Date <u>7/25/2011</u>
GZA Engineer <u>J. Davis</u> Weather <u>70s rain</u>	<u>EXCAVATION EQUIPMENT</u> Contractor <u>HTS Construction</u> Operator <u>Bruce Remillard</u> Make <u>Volvo</u> Model <u>EC35</u> Capacity <u>0.25</u> cu.yd. Reach <u>15</u> ft.	Ground Elevation <u>1351±</u> Time Started <u>1430</u> Time Completed <u>1445</u>

Depth	SOIL DESCRIPTION	Excav. Effort	Boulder Count Qty. Class.	Remark No.
--- 1' ---	0.5' Dark brown, fine to coarse SAND and SILT, little Organics (Topsoil)			
	1.5' Brown, fine to coarse SAND, some Silt, trace fine to coarse Gravel, trace Roots (Subsoil)	E	1A	
--- 2' ---	Light brown, fine to coarse SAND, some Silt, little fine to coarse Gravel (Glacial Till)	M	1A, 1B	
--- 3' ---		D	2A	
--- 4' ---		D	1B	
--- 5' ---		D		
--- 6' ---		D	3A	1, 2
--- 7' ---		Excavator Refusal at 6'		
--- 8' ---				
--- 9' ---				
--- 10' ---				
--- 11' ---				
--- 12' ---				
--- 13' ---				
--- 14' ---				

REMARKS:

- Excavator refusal on bedrock at 6 feet below grade.
- Groundwater not encountered in test pit.

TEST PIT PLAN	LEGEND			
 <p style="font-size: small;">Depth = 6 ft. Volume = 4 cu.yd.</p>	BOULDER COUNT	PROPORTIONS USED	ABBREVIATIONS	EXCAVATION EFFORT
	Size Range Letter Classification Designation	TRACE (TR) 0-10% LITTLE (LI) 10-20% SOME (SO) 20-35% AND 35-50%	F - Fine M - Medium C - Coarse F/M - Fine to Medium F/C - Fine to Coarse V - Very GR - Gray BN - Brown YEL - Yellow	E - Easy M - Moderate D - Difficult
	6" - 18" A 18" - 36" B 36" and Larger C			 G.W.L.

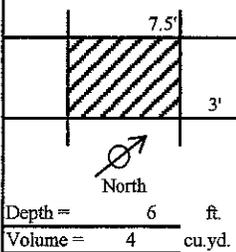
TEST PIT FIELD LOG

GZA GeoEnvironmental, Inc. Engineers and Scientists	<u>PROJECT</u> <i>BNE Wind Turbine Project</i> <i>Colebrook, CT</i>	Test Pit No. <u>CNTP-29</u> File No. <u>44818.02</u> Date <u>7/25/2011</u>
GZA Engineer <u>J. Davis</u> Weather <u>70s rain</u>	<u>EXCAVATION EQUIPMENT</u> Contractor _____ Operator <u>Bruce Remillard</u> Make <u>Volvo</u> Model <u>EC35</u> Capacity <u>0.25 cu.yd.</u> Reach <u>15 ft.</u>	Ground Elevation <u>1375±</u> Time Started <u>1450</u> Time Completed <u>1452</u>

Depth	SOIL DESCRIPTION	Excav. Effort	Boulder Count Qty. Class.	Remark No.
--- 1' ---	0.5' Dark brown, fine to coarse SAND and SILT, little Organics (Topsoil)			
--- 2' ---	Orange-brown, fine to coarse SAND, some Silt, trace fine Gravel, trace Roots (Subsoil)	E	1A	
--- 3' ---	2' Light brown-gray, fine to coarse SAND, some Silt, trace fine to coarse Gravel (Glacial Till)	M	1A	
--- 4' ---		D	1A	
--- 5' ---		D	2A	1, 2
--- 6' ---	6' End of Exploration at 6'	D		
--- 7' ---				
--- 8' ---				
--- 9' ---				
--- 10' ---				
--- 11' ---				
--- 12' ---				
--- 13' ---				
--- 14' ---				

REMARKS:

1. Exploration terminated within glacial till.
2. Groundwater not encountered in test pit.

TEST PIT PLAN	LEGEND			
	BOULDER COUNT	PROPORTIONS USED	ABBREVIATIONS	EXCAVATION EFFORT
	Size Range Letter Classification Designation 6" - 18" A 18" - 36" B 36" and Larger C	TRACE (TR) 0-10% LITTLE (LI) 10-20% SOME (SO) 20-35% AND 35-50%	F - Fine M - Medium C - Coarse F/M - Fine to Medium F/C - Fine to Coarse V - Very GR - Gray BN - Brown YEL - Yellow	E - Easy M - Moderate D - Difficult GROUNDWATER Elapsed Time to Reading  G.W.L. (hours)