



BORING LOG B-512

BORING LOG B-512 (CONT'D)

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**GZA** GeoEnvironmental, Inc. Bennington Bypass North Bennington, Vermont Boring No.: B-512  
 Page: 1 of 3  
 File No.: 15634.16  
 Check: DGL

Contractor: Geologic-Earth Exploration Auger/Casing Sampler  
 Foreman: Charlie O'Donnell Type: ODEX SS  
 Logged by: L. Charest I.D.: 108 mm 35 mm  
 Date Start/Finish: 7-17-06 / 7-19-06 Date Time Depth Casing Stab  
 Boring Location: NB 6+308.1, 3.0m R Hammer Wt.: NA 63.5 kg  
 GS Elev.: 251.76m Datum: NAVD88 Hammer Fall: NA 0.76 m  
 Rig Type: CME750 ATV

| Sample Information   |               |           |                |         | Sample Description & Classification   | Stratum Desc. | Remarks | Equipment Installed    |
|--|---------------|-----------|----------------|---------|---|---------------|---------|------------------------|
| No.  | Pen./Rec. (m) | Depth (m) | Blows (/0.15m) | N Value |   |               |         |                        |
| Advanced borehole through nested cobbles and boulders from 0 to 2.74 meters (0 to 9 feet) below ground surface using an ODEX hammer. |               |           |                |         |   |               |         |                        |
| S-1  | 0.61/0.53     | 2.74-3.35 | 5-10<br>13-20  | 23      | Very stiff, light brown, Clayey SILT, little fine Sand, trace Gravel with white, Clayey Silt lenses. (A-4)      | FLUVIAL       |         | No Equipment Installed |
| S-2  | 0.61/0.58     | 4.27-4.88 | 5-9<br>14-16   | 23      | Very stiff, light brown, Clayey SILT, little fine Sand with white, Clayey Silt lenses. (A-4)                    |               |         |                        |
| S-3  | 0.61/0.56     | 5.79-6.40 | 10-10<br>14-15 | 24      | Medium dense, light brown, SILT, little fine to medium Sand, trace Gravel with white, Clayey Silt lenses. (A-4) | LACUSTRINE    |         |                        |
| S-4  | 0.61/0.51     | 7.32-7.92 | 7-15<br>21-23  | 36      | Hard, light brown, Clayey SILT, little fine Sand, trace Gravel with white, Clayey Silt lenses. (A-4)            |               |         |                        |
| S-5  | 0.61/0.13     | 8.84-9.45 | 17-32<br>26-33 | 58      | Very dense, light brown, GRAVEL, little fine to coarse Sand, trace Silt. (Rock lodged in tip of spoon.) (A-4)   | GRAVEL        |         |                        |

REMARKS: 274m, 836m

All depth measurements are approximate. Stratification lines represent approximate boundary between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made. Boring No.: B-512

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| Sample Information |               |             |                 |         | Sample Description & Classification  | Stratum Desc. | Remarks | Equipment Installed |
|--------------------|---------------|-------------|-----------------|---------|--|---------------|---------|---------------------|
| No.                | Pen./Rec. (m) | Depth (m)   | Blows (/0.15m)  | N Value |  |               |         |                     |
| S-6                | 0.61/0.46     | 10.36-10.97 | 8-16<br>32-36   | 48      | Hard, light brown, Clayey SILT, little Gravel, little fine Sand with white, Clayey Silt lenses. (A-4)                | LACUSTRINE    |         |                     |
| S-7                | 0.61/0.56     | 11.89-12.50 | 8-14<br>22-28   | 36      | Dense, light brown, SILT, little fine Sand, trace Gravel with white, Clayey Silt lenses and seams. (A-4)             |               |         |                     |
| S-8                | 0.61/0.56     | 13.41-14.02 | 17-18<br>32-34  | 50      | Hard, light brown, Clayey SILT, little fine Sand, trace Gravel with white, Clayey Silt lenses and seams. (A-4)       |               |         |                     |
| S-9                | 0.61/0.53     | 14.94-15.54 | 10-18<br>33-39  | 51      | Very dense, light brown, SILT, little fine Sand with a brown, Clayey Silt layer and white, Clayey Silt lenses. (A-4) | LACUSTRINE    |         |                     |
| S-10               | 0.61/0.53     | 16.46-17.07 | 20-27<br>37-52  | 64      | Very dense, light brown, SILT, some fine Sand, little Gravel with white, Clayey Silt lenses. (A-4)                   |               |         |                     |
| S-11               | 0.61/0.46     | 17.98-18.59 | 13-16<br>33-46  | 49      | Dense, light brown, SILT, little fine Sand, little Gravel with white, Clayey Silt lenses. (A-4)                      |               |         |                     |
| S-12               | 0.61/0.46     | 19.51-20.12 | 21-32<br>54-64  | 86      | Very dense, light brown, SILT, little fine Sand, little Gravel with white, Clayey Silt lenses. (A-4)                 |               |         |                     |
| S-13               | 0.61/0.46     | 21.03-21.64 | 31-77<br>50-100 | 127     | Very dense, light brown, SILT, little fine Sand, trace Gravel with white, Clayey Silt lenses and seams. (A-4)        |               |         |                     |

REMARKS: 27.71m

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|--------------------|---------------|-------------|-----------------------|---------|--|---------------|---------|---------------------|
| No.                | Pen./Rec. (m) | Depth (m)   | Blows (/0.15m)        | N Value |  |               |         |                     |
| S-14               | 0.61/0.56     | 22.56-23.16 | 23-30<br>35-45        | 65      | Very dense, light brown, SILT, little fine Sand, trace Gravel with white, Clayey Silt lenses. (A-4)          |               |         |                     |
| S-15               | 0.53/0.43     | 24.08-24.61 | 23-38<br>74-100/76mm  | 112     | Very dense, light brown, SILT, trace fine Sand with white, Clayey Silt lenses. (A-4)                         | LACUSTRINE    |         |                     |
| S-16               | 0.61/0.46     | 25.60-26.21 | 25-46<br>58-86        | 104     | Very dense, light brown, SILT, trace fine Sand, trace Gravel with white, Clayey Silt lenses. (A-4)           |               |         |                     |
| S-17               | 0.58/0.53     | 27.13-27.71 | 18-27<br>40-100/127mm | 67      | Very dense, light brown, SILT, trace Gravel, trace fine Sand with white, Clayey Silt lenses and seams. (A-4) |               |         |                     |

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BOTTOM OF DRILLED SHAFT, FUTURE NB VT ROUTE 279, PIER 4 - EL. 221.950

STATE OF VERMONT AGENCY OF TRANSPORTATION

Town Of BENNINGTON Bridge No. B15, B15N, B15S  
 Highway No. VT RTE 279 Log Sta. / Surv. Sta.  
 VT ROUTE 279 & RAMPS OVER ROARING BRANCH OF WALLOOMSAC RIVER  
**BORING LOGS (SHEET 31 OF 33)**  
 Designed By GZA Drawn By L.R. DELL  
 Checked By GZA Date 06/08 Bridge Design Supervisor K.M. WOJKOWSKI Date 06/08  
 PROJECT BENNINGTON PROJECT NO. AC NH 019-(15)  
 TVGA CAD Drawing No. BL31.dgn Date 02/02/2009  
 Bridge Sheet No. BR237 Sheet 224 of 367

