



STATE OF VERMONT  
 AGENCY OF TRANSPORTATION  
 CONSTRUCTION AND  
 MATERIALS BUREAU  
 CENTRAL LABORATORY

**BORING LOG**

**Plymouth  
 BF 013-3(13)  
 VT-100 Culv. 115**

Boring No.: **B-103**

Page No.: **1 of 1**

Pin No.: **12b596**

Checked By: **END**

Boring Crew: Gomes, Judkins, Emerson  
 Date Started: 10/07/16 Date Finished: 10/18/16  
 VTSPG NAD83: N 394452.04 ft E 1572018.82 ft  
 Station: 508+01 Offset: 20.00  
 Ground Elevation: 1249.9 ft

Casing WB Sampler SS  
 Type: 3 in I.D.: 1.5 in  
 Hammer Wt: N.A. 140 lb.  
 Hammer Fall: N.A. 30 in.  
 Hammer/Rod Type: Auto/AWJ  
 Rig: Diedrich 25 C<sub>s</sub> = Unknwn

| Groundwater Observations |            |                      |
|--------------------------|------------|----------------------|
| Date                     | Depth (ft) | Notes                |
| 10/18/16                 | 11.7       | W.T. before drilling |
|                          |            |                      |
|                          |            |                      |

| Depth (ft) | Strata (1) | CLASSIFICATION OF MATERIALS (Description)   | Run (Dip deg.) | Core Rec. % (RQD %) | Drill Rate minutes/ft | Blows/6" (N Value) | Moisture Content % | Gravel % | Sand % | Fines % |
|------------|------------|---|----------------|---------------------|-----------------------|--------------------|--------------------|----------|--------|---------|
| 5          |            | A-1-b, GrSa, brn, Dry, Rec. = 0.8 ft, Lab Note: Plant material was within sample  |                |                     |                       | 2-3-3-4 (6)        | 8.7                | 40.1     | 43.3   | 16.6    |
|            |            | A-2-4, GrSa, brn, Dry, Rec. = 1.0 ft  |                |                     |                       | 5-5-5-4 (10)       | 7.3                | 31.9     | 51.8   | 16.3    |
|            |            | A-1-b, GrSa, brn, Dry, Rec. = 0.8 ft  |                |                     |                       | 5-4-5-8 (9)        | 6.4                | 42.7     | 44.0   | 13.3    |
|            |            | A-2-4, SiGrSa, brn, Dry, Rec. = 0.2 ft, Lab Note: Broken rock was within sample   |                |                     |                       | 9-6-5-7 (11)       | 7.2                | 33.7     | 42.2   | 24.1    |
| 10         |            | A-1-b, GrSa, brn, Dry, Rec. = 1.5 ft  |                |                     |                       | 4-7-9-6 (16)       | 10.4               | 39.3     | 42.1   | 18.6    |
|            |            | Field Note:, No Recovery  |                |                     |                       | 11-5-2-4 (7)       |                    |          |        |         |
|            |            | A-1-b, GrSa, brn, Moist, Rec. = 0.4 ft, Lab Note: Large pieces of wood were within sample<br>Field Note:, NXDC, Cleaned out casing  |                |                     |                       | 21-R@3.5" (R)      | 53.4               | 36.6     | 49.5   | 13.9    |
| 15         |            | A-2-4, GrSiSa, blk-brn, Moist, Rec. = 0.4 ft, Lab Note: Broken and weathered rock was within sample   |                |                     |                       | 18-R@3.5" (R)      | 15.7               | 25.1     | 43.0   | 31.9    |
|            |            | 14.8 ft - 19.8 ft, Silvery-gray, Carbonaceous muscovite-biotite-quartz-pyrite PHYLLITE, with dolomitic lenses/laminae. Yellow and rust staining along joints. Moderately hard, Unweathered, Poor rock, BX, RMR=36 Low RQD could be due to mechanical breakage                       | 1 (50)         | 56 (0)              | 7                     |                    |                    |          |        |         |
| 20         |            | 19.8 ft - 23.8 ft, Silvery-gray, Carbonaceous muscovite-biotite-quartz-pyrite PHYLLITE, with dolomitic lenses/laminae. Rust and orange staining along joints. Medium to moderately hard, Very slightly weathered, Poor rock, BX, RMR=36 Low RQD could be due to mechanical breakage | 2 (40-50)      | 58 (0)              | 6                     |                    |                    |          |        |         |
|            |            | 23.8 ft - 28.8 ft, Silvery-gray, Carbonaceous muscovite-biotite-quartz-pyrite PHYLLITE, with few dolomitic lenses/laminae. Faint brown and rust staining along joints. Moderately hard, Very slightly weathered, Poor rock, BX, RMR=39 Low RQD could be due to mechanical breakage  | 3 (40-50)      | 40 (0)              | 5                     |                    |                    |          |        |         |
| 25         |            |   |                |                     | 6                     |                    |                    |          |        |         |
|            |            |   |                |                     | 6                     |                    |                    |          |        |         |
|            |            |   |                |                     | 5                     |                    |                    |          |        |         |
|            |            |   |                |                     | 15                    |                    |                    |          |        |         |
| 30         |            |   |                |                     | 4                     |                    |                    |          |        |         |
|            |            |   |                |                     | 4                     |                    |                    |          |        |         |
|            |            |   |                |                     | 10                    |                    |                    |          |        |         |
|            |            |   |                |                     | 6                     |                    |                    |          |        |         |
|            |            | Hole stopped @ 28.8 ft  |                |                     |                       |                    |                    |          |        |         |
|            |            | Remarks:<br>Hole collapsed at 10.6 feet.<br><br>1. Top of Bedrock 14.8 feet.  |                |                     |                       |                    |                    |          |        |         |

Notes: 1. Stratification lines represent approximate boundary between material types. Transition may be gradual.  
 2. N Values have not been corrected for hammer energy. C<sub>s</sub> is the hammer energy correction factor.  
 3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.