



STATE OF VERMONT  
AGENCY OF TRANSPORTATION  
MATERIALS & RESEARCH SECTION  
SUBSURFACE INFORMATION

BORING LOG

NEW HAVEN  
HES 032-1(8)  
VT-17 TH-18, TH-19, TH-22

Boring No.: B-105  
Page No.: 1 of 1  
Pin No.: 04B210  
Checked By: MLM

Boring Crew: GARROW, DAIGNEAULT, WHITLOCK  
Date Started: 12/19/12 Date Finished: 1/28/13  
VTSPG NAD83: N 593596.23 ft E 1477120.91 ft  
Station: 116+65 Offset: -29.00  
Ground Elevation: 403.6 ft

Casing Sampler  
Type: H.S.A. & WB SS  
I.D.: 3.25 in 1.5 in  
Hammer Wt: N.A. 140 lb.  
Hammer Fall: N.A. 30 in.  
Hammer/Rod Type: Auto/AWJ  
Rig: CME 45C SKID CE = 1.33

Groundwater Observations

| Date     | Depth (ft) | Notes                 |
|----------|------------|-----------------------|
| 12/19/12 | 4.0        | Right after drilling. |
|          |            |                       |
|          |            |                       |

| Depth (ft) | Strata (1) | CLASSIFICATION OF MATERIALS (Description)  | Run (Dip deg.) | Core Rec. % (ROD %) | Drill Rate minutes/ft | Blows/6" (N Value) | Moisture Content % | Gravel % | Sand % | Fines % |
|------------|------------|--|----------------|---------------------|-----------------------|--------------------|--------------------|----------|--------|---------|
|            |            | A-1-b, GrSa, brn, Moist, Rec. = 1.1 ft   |                |                     |                       | 1-2-3-3 (5)        | 14.2               | 34.0     | 49.8   | 16.2    |
| 2.5        |            | A-2-4, SiSa, brn, Moist, Rec. = 1.5 ft   |                |                     |                       | 2-3-1-2 (4)        | 23.4               | 19.3     | 47.4   | 33.3    |
| 5.0        |            | A-2-4, GrSiSa, brn, Moist, Rec. = 0.5 ft, Broken Rock was within sample.   |                |                     |                       | 9-9-13-6 (22)      | 15.8               | 26.4     | 41.3   | 32.3    |
| 7.5        |            | A-1-b, SiSaGr, brn, Moist, Rec. = 0.6 ft, Lots of Broken Rock was within sample.   |                |                     |                       | 16-9-9-7 (18)      | 12.0               | 48.9     | 30.0   | 21.1    |
| 10.0       |            | A-1-b, SiSaGr, brn, Moist, Rec. = 0.5 ft, Lots of Broken Rock was within sample.   |                |                     |                       | 20-20-16-12 (36)   | 11.2               | 43.7     | 31.0   | 25.3    |
| 10.0       |            | A-1-b, SiSaGr, brn, MTW, Rec. = 1.1 ft, Lots of Broken Rock was within sample.   |                |                     |                       | 17-16-19-31 (35)   | 10.6               | 41.7     | 36.7   | 21.6    |
|            |            | Note:., Returned 01/28/13 to determine bedrock using wash bore drilling with the CME55 Track Rig.  |                |                     |                       |                    |                    |          |        |         |
| 12.5       |            | 12.0 ft - 14.0 ft, Buff, Light gray and pink-mottled Dolomite, Moderately hard, Zones of moderate weathering, Poor rock, NXMDC, RMR = 33 | 1 (50)         | 100 (0)             | 4                     |                    |                    |          |        |         |
|            |            |  |                |                     | 8                     |                    |                    |          |        |         |
| 15.0       |            | 14.0 ft - 17.0 ft, Buff, Light gray and pink-mottled Dolomite, Moderately hard, Zones of moderate weathering, Poor rock, NXMDC, RMR = 38 | 2 (50)         | 100 (33)            | 16                    |                    |                    |          |        |         |
|            |            |  |                |                     | 7                     |                    |                    |          |        |         |
|            |            |  |                |                     | 9                     |                    |                    |          |        |         |
| 17.5       |            | Hole stopped @ 17.0 ft   |                |                     |                       |                    |                    |          |        |         |

Notes: 1. Stratification lines represent approximate boundary between material types. Transition may be gradual.  
2. N Values have not been corrected for hammer energy. CE is the hammer energy correction factor.  
3. 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 LOG 2 NEW HAVEN HES 032-1(8).GPJ VERMONT AOT.GDT 2/14/13