



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

BORING LOG

FLETCHER
STP 027-1(22)
VT-108 SLIDE

Boring No.: B-101

Page No.: 1 of 1

Pin No.: 11B064

Checked By: CCB

Boring Crew: WERNER, WELLS
Date Started: 6/06/11 Date Finished: 6/22/11
VTSPG NAD83: N 813990.50 ft E 1555155.90 ft
Station: MM 2.24 Offset: -48.30
Ground Elevation: 452.59 ft

Type: H.S.A. Sampler: SS & TUBE
I.D.: 3 in 2.5 in
Hammer Wt: N.A. 140 lb.
Hammer Fall: N.A. 30 in.
Hammer/Rod Type: Auto/AWJ
Rig: CME 45C TRACK CE = 1.34

Groundwater Observations

| Date | Depth (ft) | Notes |
|----------|------------|--------------|
| 06/07/11 | 2.2 | Overnight |
| 06/08/11 | | See Remarks. |
| 06/29/11 | | Top of Auger |

| Depth (ft) | Strata (1) | CLASSIFICATION OF MATERIALS (Description) | Well Diagram | Blows/6" (N Value) | Moisture Content % | Gravel % | Sand % | Fines % | LL % | PI % |
|------------|---------------------|---|----------------|--------------------|--------------------|----------|--------|---------|------|------|
| | | | | | | | | | | |
| 10 | [Diagonal Hatching] | A-6, SiCl, gry, Moist, Rec. = 0.8 ft | [Well Diagram] | WH-WH-1-1 | 31.5 | 8.2 | 8.9 | 82.9 | 37 | 11 |
| | | A-6, SiCl, gry, Moist, Rec. = 1.1 ft | | 2-2-3-3 | 28.5 | 1.5 | 15.7 | 82.8 | 34 | 12 |
| | | Shelby Tube, gry, Wet, Rec. = 1.7 ft, 4.0 ft - 6.0 ft | | (5) | | | | | | |
| 10 | [Diagonal Hatching] | A-6, SiCl, gry, Wet, Rec. = 2.0 ft | [Well Diagram] | 1-1-2-1 | 39.7 | 0.3 | 7.8 | 91.9 | 38 | 16 |
| | | A-6, SiCl, gry, Wet, Rec. = 1.6 ft, Material from Triaxial "A" sample. | | (3) | 34.1 | 0.5 | 2.5 | 97.5 | 37 | 15 |
| | | A-6, SiCl, Material from Triaxial "B" sample. | | | 44.6 | | 0.9 | 98.6 | 39 | 16 |
| | | A-6, SiCl, gry, Wet, Rec. = 1.7 ft | | (WH) | 41.5 | | 2.9 | 97.1 | 33 | 12 |
| | | A-4, Si, gry, Wet, Rec. = 1.8 ft, Material from Triaxial A & B | | | 30.2 | 8.1 | 91.9 | 26 | 3 | |
| | | Field Note:, No Sample. Auger filled with silt | | | | | | | | |
| 20 | [Diagonal Hatching] | A-4, Si, gry, Wet, Rec. = 1.7 ft | [Well Diagram] | 2-1-2-1 | 32.2 | | 1.9 | 98.1 | 26 | 4 |
| | | Field Note:, No Sample. Auger filled with silt | | (3) | | | | | | |
| | | A-4, Si, gry, Wet, Rec. = 2.0 ft | | 2-2-2-3 | 36.1 | | 2.6 | 97.4 | 27 | 6 |
| | | | | (4) | | | | | | |
| 30 | [Diagonal Hatching] | A-4, Si, gry, Wet, Rec. = 1.5 ft | [Well Diagram] | WH-WH- | 30.8 | 0.1 | 2.8 | 97.1 | | |
| | | A-4, Si, gry, MTW, Rec. = 0.5 ft | | WH-5 | 29.6 | | 1.9 | 98.1 | | |
| | | | | (WH) | | | | | | |
| 30 | [Diagonal Hatching] | A-4, ClSi, gry, MTW, Rec. = 2.0 ft | [Well Diagram] | 3-5-6-5 | 32.9 | | 3.1 | 96.9 | 30 | 7 |
| | | | | (11) | | | | | | |
| | | A-4, Si, gry, Wet, Rec. = 1.8 ft | | 3-4-5-7 | 30.2 | | 2.5 | 97.5 | 25 | 4 |
| 40 | [Diagonal Hatching] | A-4, ClSi, gry, MTW, Rec. = 1.7 ft | [Well Diagram] | WH-1-5- | 32.7 | 0.6 | 5.1 | 94.3 | 30 | 9 |
| | | | | 4 | | | | | | |
| | | | | (6) | | | | | | |
| 50 | [Diagonal Hatching] | A-4, Si, gry, MTW, Rec. = 1.8 ft | [Well Diagram] | WR-1-4- | 33.0 | | 2.2 | 97.8 | | |
| | | | | 4 | | | | | | |
| | | | | (5) | | | | | | |
| 50 | [Diagonal Hatching] | A-4, Si, brn, MTW, Rec. = 1.2 ft | [Well Diagram] | 3-4-4-4 | 29.3 | | 14.8 | 85.2 | | |
| | | | | (8) | | | | | | |
| | | | | | | | | | | |
| 60 | [Diagonal Hatching] | A-4, Si, brn, Wet, Rec. = 2.0 ft | [Well Diagram] | 2-4-7-8 | 33.1 | | 9.9 | 90.1 | | |
| | | | | (11) | | | | | | |
| | | A-4, SaSi, brn, Wet, Rec. = 1.6 ft | | 2-4-5-5 | 28.2 | | 9.9 | 90.1 | | |
| | | | | (9) | | | | | | |
| 60 | | Hole stopped @ 59.0 ft NLTD | | | | | | | | |
| | | Remarks: 1. Installed Inclinator Well to 56.5 ft. 2. Top of well is 2.5 feet above ground level. 3. On 06/08/11 water was coming out of the auger holes that were 2.0 feet above ground surface. | | | | | | | | |

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 FLETCHER STP 027-1(22).GPJ VERMONT AOT.GDT 12/20/11



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BORING LOG

FLETCHER
 STP 027-1(22)
 VT-108 SLIDE

Boring No.: B-102
 Page No.: 1 of 1
 Pin No.: 11B064
 Checked By: CCB

Boring Crew: WERNER, WELLS
 Date Started: 6/22/11 Date Finished: 6/24/11
 VTSPG NAD83: N 813976.20 ft E 1555198.80 ft
 Station: MM 2.24 Offset: -3.40
 Ground Elevation: 464.67 ft

Casing: H.S.A. Sampler: SS
 I.D.: 3.25 in 2 in
 Hammer Wt: N.A. 140 lb.
 Hammer Fall: N.A. 30 in.
 Hammer/Rod Type: Manual/AWJ
 Rig: CME 45C SKID CE = 1.15

Groundwater Observations

| Date | Depth (ft) | Notes |
|------|------------|-------|
| | | |
| | | |
| | | |

| Depth (ft) | Strata (1) | CLASSIFICATION OF MATERIALS (Description) | Blows/6" (N Value) | Moisture Content % | Gravel % | Sand % | Fines % | LL % | PI % |
|-----------------------------|------------|---|--------------------|--------------------|----------|--------|---------|------|------|
| 5 | | A-1-b, GrSa, brn, Dry, Rec. = 1.4 ft | 15-12-14-13 (26) | 4.6 | 43.3 | 44.1 | 12.6 | | |
| | | A-1-b, SaGr, brn, Dry, Rec. = 1.0 ft, Hit a boulder or cobbles. | 27-12-20-R (32) | 5.1 | 42.3 | 40.0 | 17.7 | | |
| | | A-1-b, SiGrSa, brn, Moist, Rec. = 1.1 ft | 5-12-22-21 (34) | 6.6 | 37.0 | 41.6 | 21.4 | | |
| 10 | | A-6, SiCl, gry, Moist, Rec. = 1.2 ft, Rusty mottling. SHWT. | 2-4-3-3 (7) | 24.3 | 1.6 | 11.3 | 87.1 | 34 | 14 |
| | | A-6, SiCl, gry, Moist, Rec. = 1.4 ft | 3-3-4-4 (7) | 27.2 | 0.6 | 7.3 | 92.1 | 40 | 18 |
| | | A-7-6, SiCl, gry, MTW, Rec. = 2.0 ft | 3-5-4-6 (9) | 32.9 | 4.7 | 9.1 | 86.2 | 41 | 18 |
| 15 | | A-6, SiCl, gry, Wet, Rec. = 1.9 ft, Possible water table. | 3-3-WH-WH (3) | 35.3 | 1.0 | 6.4 | 92.6 | 34 | 12 |
| | | A-6, SiCl, gry, Wet, Rec. = 1.8 ft | 1-WH-WH-1 (WH) | 39.8 | | 2.1 | 97.9 | 33 | 11 |
| | | A-4, ClSi, gry, Wet, Rec. = 2.0 ft | WH-WH-WH-WH | 36.1 | 0.7 | 5.1 | 94.2 | 31 | 10 |
| 25 | | | | | | | | | |
| | | A-4, ClSi, gry, Wet, Rec. = 1.6 ft | WH-WH-WH-WH | 37.8 | | 3.1 | 96.9 | 31 | 10 |
| Hole stopped @ 26.0 ft NLTD | | | | | | | | | |

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BORING LOG

FLETCHER
STP 027-1(22)
VT-108 SLIDE

Boring No.: B-103
Page No.: 1 of 1
Pin No.: 11B064
Checked By: CCB

Boring Crew: WERNER, WELLS, SALISBURY
Date Started: 6/27/11 Date Finished: 6/29/11
VTSPG NAD83: N 813972.50 ft E 1555197.40 ft
Station: MM 2.24 Offset: -4.50
Ground Elevation: 464.67 ft

Type: H.S.A. SS & TUBE
I.D.: 3 in 2.5 in
Hammer Wt: N.A. 140 lb.
Hammer Fall: N.A. 30 in.
Hammer/Rod Type: Auto/AWJ
Rig: CME 45C SKID CE = 1.15

Groundwater Observations

| Date | Depth (ft) | Notes |
|----------|------------|-------|
| 06/28/11 | 15.8 | |
| | | |
| | | |

| Depth (ft) | Strata (1) | CLASSIFICATION OF MATERIALS (Description) | Blows/6" (N Value) | Moisture Content % | Gravel % | Sand % | Fines % | LL % | PI % |
|------------|------------|--|--------------------|--------------------|----------|--------|---------|------|------|
| | | Field Note:, Asphalt Pavement | | | | | | | |
| 5 | | Field Note:, Attempted Shelby tube sample. Had refusal. | | | | | | | |
| | | A-6, SiCl, gry-brn, Moist, Rec. = 0.9 ft | 2-2-4-3 (6) | 25.0 | 2.4 | 10.7 | 86.9 | 37 | 17 |
| 10 | | Shelby Tube, gry, Moist, Rec. = 1.3 ft, 9.0 ft - 11.0 ft | | | | | | | |
| | | A-6, SiCl, gry-brn, Wet, Rec. = 2.0 ft | 4-3-8-8 (11) | 31.0 | 4.3 | 17.2 | 78.5 | 36 | 17 |
| | | A-6, SiCl, gry, Wet, Rec. = 1.8 ft, Material from Triaxial "A" sample. | | 32.7 | 0.1 | 0.7 | 99.2 | 34 | 14 |
| 15 | | A-6, SiCl, gry, Wet, Rec. = 2.0 ft | WH-WH-WH-1 (WH) | 40.5 | 0.5 | 1.2 | 98.3 | 35 | 15 |
| | | A-6, SiCl, gry, Wet, Rec. = 2.0 ft, Material from Triaxial "B" sample. | | 32.2 | 1.6 | 12.4 | 86.0 | 40 | 17 |
| | | A-7-6, Cl, Material from Triaxial "C" sample. | | 39.9 | 0.3 | 0.8 | 98.9 | 49 | 24 |
| | | A-7-6, Cl, Material from Triaxial "D" sample. | | 41.3 | 0.1 | 1.2 | 98.7 | 49 | 23 |
| 20 | | A-7-6, Cl, gry, Wet, Rec. = 2.0 ft | WH-WH-WH-WH (WH) | 40.5 | | 0.6 | 99.4 | 43 | 21 |
| | | A-7-6, Cl, gry, Wet, Rec. = 1.8 ft | WH-WH-3-1 (3) | 35.7 | 0.4 | 2.4 | 97.2 | 43 | 22 |
| 25 | | | | | | | | | |
| 30 | | A-6, SiCl, gry, Wet, Rec. = 1.7 ft | WH-WH-1-3 (1) | 33.7 | 0.7 | 2.7 | 96.6 | 31 | 11 |
| | | A-4, Si, gry, Wet, Rec. = 2.0 ft | WR-WR-1-3 (1) | 33.1 | | 3.0 | 97.0 | 26 | 4 |
| 35 | | Hole stopped @ 35.0 ft NLTD | | | | | | | |

Notes: 1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
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