



BORING LOG

NEW HAVEN
BRF 0183(1)
TH-2 BR-10

Boring No.: **B-101**
Page No.: 1 of 2
Pin No.: 10J070
Checked By: CCB

Boring Crew: PORTER, WELLS, STAAB
Date Started: 3/09/12 Date Finished: 3/30/12
VTSPG NAD83: N 569466.87 ft E 1469894.40 ft
Station: 502+96 Offset: -6.70
Ground Elevation: 262.4 ft

Casing Sampler
Type: WB SS
I.D.: 4 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 C. = 1.33

| Groundwater Observations | | |
|--------------------------|------------|--------------------|
| Date | Depth (ft) | Notes |
| 03/21/12 | 10.0 | Boring at 60 ft. |
| 03/23/12 | | 4.0' above ground. |
| 03/30/12 | | 3.6' above ground. |

| Depth (ft) | Strata (1) | CLASSIFICATION OF MATERIALS (Description) | Blows/6" (N Value) | Moisture Content % | Gravel % | Sand % | Fines % | LL % | PI % |
|------------|------------|--|--------------------|--------------------|----------|--------|---------|------|------|
| | | | | | | | | | |
| 10 | | A-1-b, SiSaGr, brn, Moist, Rec. = 1.0 ft | WH-6-3-2 (9) | 15.3 | 40.1 | 39.8 | 20.1 | | |
| | | A-2-4, GrSiSa, brn, Moist, Rec. = 0.5 ft | WH-WH-3-4 (3) | 14.9 | 20.8 | 57.2 | 22.0 | | |
| | | A-4, SiSa, brn, Moist, Rec. = 1.3 ft | 3-3-3-4 (6) | 20.5 | 6.3 | 55.9 | 37.8 | | |
| | | A-4, SiSa, brn, Moist, Rec. = 1.5 ft | 3-4-5-8 (9) | 19.8 | 1.8 | 60.3 | 37.9 | | |
| | | A-1-b, GrSa, brn, Moist, Rec. = 1.3 ft | 7-6-7-9 (13) | 14.1 | 35.0 | 50.7 | 14.3 | | |
| | | A-1-a, Gr, Lt/brn, Moist, Rec. = 0.5 ft, Broken rock was within sample. | 9-8-5-7 (13) | 8.6 | 80.1 | 16.4 | 3.5 | | |
| | | A-1-a, SaGr, Lt/brn, Moist, Rec. = 1.0 ft | 8-5-4-4 (9) | 14.7 | 50.3 | 45.4 | 4.3 | | |
| | | A-1-a, SaGr, Lt/brn, Moist, Rec. = 0.7 ft | 6-6-5-9 (11) | 9.6 | 70.1 | 26.1 | 3.8 | | |
| | | A-1-a, Gr, Lt/brn, Moist, Rec. = 0.5 ft | 13-2-2-2 (4) | 10.9 | 78.0 | 19.7 | 2.3 | 47 | 25 |
| | | A-7-6, Cl, gry, Moist, Rec. = 0.7 ft | | 51.1 | 3.9 | 12.1 | 84.0 | | |
| 20 | | Cl Shelby Tube, Rec. = 2.0 ft, 18.0 ft - 20.0 ft | | | | | | | |
| | | A-7-6, Cl, gry, Moist, Rec. = 2.0 ft | (WH) | 65.3 | | 0.3 | 99.7 | 61 | 36 |
| 30 | | Visual Description, Cl, gry, Moist, Rec. = 2.0 ft, Material similar as 23-25 ft. | (WH) | 78.7 | | | | | |
| | | A-7-6, Cl, gry, Moist, Rec. = 2.0 ft | (WR) | 65.8 | | 0.3 | 99.7 | 66 | 38 |
| 40 | | Visual Description, Cl, gry, Moist, Rec. = 2.0 ft, Material similar as 33-35 ft. | (WR) | 67.4 | | | | | |
| | | A-7-6, Cl, gry, Moist, Rec. = 2.0 ft | (WR) | 66.0 | | 0.3 | 99.7 | 59 | 34 |
| 50 | | A-7-6, Cl, Dk/gry, Moist, Rec. = 2.0 ft, Shelby Tube sample U2 | | 73.5 | | | | 77 | 51 |
| | | Visual Description, Cl, gry, Moist, Rec. = 2.0 ft, Material similar as 58-60 ft. | (WR) | 67.8 | | | | | |

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



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BRF 0183(1)
TH-2 BR-10

Boring No.: **B-101**
Page No.: 2 of 2
Pin No.: 10J070
Checked By: CCB

Boring Crew: PORTER, WELLS, STAAB
Date Started: 3/09/12 Date Finished: 3/30/12
VTSPG NAD83: N 569466.87 ft E 1469894.40 ft
Station: 502+96 Offset: -6.70
Ground Elevation: 262.4 ft

Casing Sampler
Type: WB SS
I.D.: 4 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 C. = 1.33

| Groundwater Observations | | |
|--------------------------|------------|--------------------|
| Date | Depth (ft) | Notes |
| 03/21/12 | 10.0 | Boring at 60 ft. |
| 03/23/12 | | 4.0' above ground. |
| 03/30/12 | | 3.6' above ground. |

| Depth (ft) | Strata (1) | CLASSIFICATION OF MATERIALS (Description) | Blows/6" (N Value) | Moisture Content % | Gravel % | Sand % | Fines % | LL % | PI % |
|------------|------------|---|--------------------|--------------------|----------|--------|---------|------|------|
| | | | | | | | | | |
| 60 | | A-7-6, Cl, gry, Moist, Rec. = 2.0 ft | (WR) | 53.8 | | 0.4 | 99.6 | 54 | 29 |
| | | A-6, SiCl, gry, Moist, Rec. = 1.0 ft | (WR) | 42.1 | | 1.9 | 98.1 | 36 | 17 |
| 70 | | A-4, SiSa, gry, Moist, Rec. = 1.9 ft | (WH) | 26.2 | 0.4 | 52.2 | 47.4 | | |
| | | A-4, SiSa, gry, Moist, Rec. = 2.0 ft | 6-8-1-1 (9) | 18.7 | 13.5 | 45.6 | 40.9 | | |
| 80 | | A-2-4, GrSiSa, gry, Moist, Rec. = 1.0 ft, Very hard drilling. | 21-18-16-15 (34) | 8.5 | 25.5 | 46.0 | 28.5 | | |
| | | Field Note: Boulders & Cobbles, Started mud drilling to advance casing. | | | | | | | |
| 90 | | A-1-a, SaGr, gry, Moist, Rec. = 1.5 ft, Very hard drilling. Lots of Broken Rock (Cobbles). | 60-74-78 (R) | 9.1 | 58.4 | 29.4 | 12.2 | | |
| | | Field Note: Sleaved down to 3.5" casing and continued mud drilling. Advanced casing and cleaned out. Appears to be cobbles with gravel. | | | | | | | |
| 40 | | Visual Description, SiGrSa with lots of broken rock pieces, gry, Moist, Rec. = 0.5 ft, Insufficient sample for testing. | R@3.5" | | | | | | |
| | | Field Note: Boulder | | | | | | | |
| 100 | | Field Note: SiGrSa with lots of broken rock pieces, gry, Moist, Rec. = 0.5 ft, Insufficient sample for testing. | R@6.0" | | | | | | |
| | | A-1-a, SaGr, gry, Moist, Rec. = 0.3 ft, Mostly Broken Rock (Cobbles). Hole stopped @ 102.3 ft | R@3.5" | 13.0 | 64.6 | 32.3 | 3.1 | | |

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BORING LOG 2 NEW HAVEN BRF 0183(1).GPJ VERMONT AOT.GDT 12/11/13

BORING LOG 2 NEW HAVEN BRF 0183(1).GPJ VERMONT AOT.GDT 12/11/13



Boring Crew: **PORTER, GARROW, CROWLER**
Date Started: **5/09/12** Date Finished: **5/11/12**
VTSPG NAD83: **N 569559.85 ft E 1469952.00 ft**
Station: **504+05** Offset: **5.70**
Ground Elevation: **250.3 ft**

Type: **WB SS & TUBE**
I.D.: **4 In 1.5 In**
Hammer Wt: **N.A. 140 lb.**
Hammer Fall: **N.A. 30 in.**
Hammer/Rod Type: **Auto/AWJ**
Rlg: **CME 55 TRACK C = 1.46**

| 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 % |
|------------|------------|---|--------------------|--------------------|----------|--------|---------|------|------|
| | | | | | | | | | |
| | | Asphalt Pavement, 0.0 ft - 0.2 ft, On the Bridge deck. Concrete, 0.2 ft - 0.8 ft, On the Bridge deck. | | | | | | | |
| | | River Water, measured from top of deck pavement, 8.0 ft - 15.5 ft | | | | | | | |
| | | Field Note: NXDC, Gr Sa | | | | | | | |
| | | A-7-6, Cl, gry, Moist, Rec. = 0.7 ft, Roller Coned ahead. | 16-6-2-1 (8) | 71.4 | 1.4 | 3.2 | 95.4 | 78 | 50 |
| | | Visual Description: Cl, gry, Moist, Rec. = 1.7 ft, Material similar as 37'-39'. Roller Coned ahead. | WH-WH-WH-WH | 69.9 | | | | | |
| | | A-7-6, Cl, gry, Moist, Rec. = 1.3 ft, Roller Coned ahead. | WH-WH-WH-WH | 54.5 | | 0.7 | 99.3 | 50 | 30 |
| | | A-7-6, Cl, gry, Moist, Rec. = 2.0 ft, Weight of Rod from 42.0-43.5 feet. Material from Triaxial "A" sample. | | 57.8 | | 0.4 | 99.6 | 54 | 32 |
| | | A-7-6, Cl, gry, MTW, Material from Triaxial "C" sample. | | 77.1 | | 0.4 | 99.6 | 73 | 44 |
| | | Visual Description: Cl, gry, Wet, Rec. = 1.5 ft, Material similar as 37'-39'. Roller Coned ahead. Very sloppy sample. | WR-WR-WR-WR | 32.4 | | | | | |

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VTSPG NAD83: **N 569559.85 ft E 1469952.00 ft**
Station: **504+05** Offset: **5.70**
Ground Elevation: **250.3 ft**

Type: **WB SS & TUBE**
I.D.: **4 In 1.5 In**
Hammer Wt: **N.A. 140 lb.**
Hammer Fall: **N.A. 30 in.**
Hammer/Rod Type: **Auto/AWJ**
Rlg: **CME 55 TRACK C = 1.46**

| 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 % |
|------------|------------|--|--------------------|--------------------|----------|--------|---------|------|------|
| | | | | | | | | | |
| | | Visual Description: Cl, gry, Wet, Rec. = 1.7 ft, Material similar as 67'-69'. Roller Coned ahead. Very sloppy sample. | WR-WR-WR-WR | 29.6 | | | | | |
| | | A-6, SiCl, gry, Wet, Rec. = 1.5 ft, Very sloppy sample. | WR-WR-WR-WR | 39.1 | | 5.6 | 94.4 | 36 | 19 |
| | | Field Note: NXDC, Material changed. (HP) | | | | | | | |
| | | A-4, SaGrSi (HP), gry, Moist, Rec. = 0.5 ft, Lab Note: Sample had low Limits, if any. Insufficient sample for other testing. | 6-R@3.5" | 9.0 | 30.3 | 26.9 | 42.8 | | |
| | | A-4, GrSaSi (HP), gry, Moist, Rec. = 0.9 ft | 35-52 (R) | 7.9 | 20.3 | 29.4 | 50.3 | | |
| | | Field Note: NXDC | | | | | | | |
| | | Field Note: No Recovery | 42-51 (R) | | | | | | |
| | | Hole stopped @ 98.0 ft | | | | | | | |

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BORING LOG

NEW HAVEN
BRF 0183(1)
TH-2 BR-10

Boring No.: **B-103**
Page No.: **1 of 2**
Pln No.: **10J070**
Checked By: **CCB**

Boring Crew: **PORTER, DAVISON**
Date Started: **4/30/12** Date Finished: **5/04/12**
VTSPG NAD83: **N 569670.33 ft E 1470011.41 ft**
Station: **505+25** Offset: **31.80**
Ground Elevation: **259.7 ft**

Casing Sampler
Type: **WB SS**
I.D.: **4 in 1.5 in**
Hammer Wt: **N.A. 140 lb.**
Hammer Fall: **N.A. 30 In.**
Hammer/Rod Type: **Auto/AWJ**
Rig: **CME 55 TRACK C = 1.46**

Groundwater Observations
Date Depth Notes
05/04/12 5.1 Above Ground Level

| Depth (ft) | Strata (1) | CLASSIFICATION OF MATERIALS (Description) | Blows/ft* (N Value) | Moisture Content % | Gravel % | Sand % | Fines % | LL % | PI % |
|------------|------------|---|---------------------|--------------------|----------|--------|---------|------|------|
| 0-0.4 | | A-2-4, SiSa, brn, Moist, Rec. = 0.4 ft | WH-WH-WH-1 | 24.6 | 0.8 | 64.3 | 34.9 | | |
| 0.4-1.3 | | A-4, SiSa, brn, Moist, Rec. = 1.3 ft | WH-1-1-2 | 17.9 | 4.8 | 57.4 | 37.8 | | |
| 1.3-2.0 | | A-4, SiSa, brn, Moist, Rec. = 2.0 ft | 2 | 27.6 | | 53.4 | 46.6 | | |
| 2.0-1.8 | | A-4, SaSi with small pieces of Wood, brn-gry, Moist, Rec. = 1.8 ft | 2-2-2-3 | 40.4 | | 38.9 | 61.1 | | |
| 1.8-0.9 | | A-2-4, SiSa with lots of small pieces of Wood, brn-gry, Moist, Rec. = 0.9 ft | 1-1-2-1 | 45.9 | 0.8 | 77.6 | 21.6 | | |
| 0.9-1.1 | | Visual Description: Wood, Rec. = 1.1 ft | 1-5-6-7 | 43.3 | 29.9 | 58.0 | 12.1 | | |
| 1.1-0.7 | | A-1-b, GrSa with chunks of Wood, gry, Moist, Rec. = 0.7 ft | 1-1-1-3 | 18.5 | 39.6 | 53.2 | 7.2 | | |
| 0.7-0.6 | | A-1-b, GrSa, brn, Moist, Rec. = 0.6 ft | 1-1-1-1 | 58.7 | 0.1 | 1.3 | 98.6 | 63 | 38 |
| 0.6-2.0 | | A-7-6, Cl, gry, Moist | | | | | | | |
| 2.0-29' | | Visual Description: Cl, gry, Moist, Rec. = 2.0 ft, Material similar as 27'-29'. | WH-WH-WH-WH | 70.2 | | | | | |
| 29'-30' | | A-7-6, Cl, gry, Wet, Rec. = 2.0 ft, Very wet & sloppy sample. | WR-WR-WR-WR | 79.6 | | 0.5 | 99.5 | 69 | 42 |
| 30'-40' | | Visual Description: Cl, gry, Moist, Rec. = 1.5 ft, Material similar as 47'-49'. | WR-WR-WR-WR | 74.0 | | | | | |
| 40'-50' | | A-7-6, Cl, gry, Moist, Rec. = 2.0 ft | WR-WR-WR-WR | 69.4 | | 0.3 | 99.7 | 67 | 41 |
| 50'-119' | | Visual Description: Cl, gry, Moist, Rec. = 2.0 ft, Material similar as 47'-49'. | WR-WR-WR-WR | 50.9 | | | | | |

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Station: **505+25** Offset: **31.80**
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Casing Sampler
Type: **WB SS**
I.D.: **4 in 1.5 in**
Hammer Wt: **N.A. 140 lb.**
Hammer Fall: **N.A. 30 In.**
Hammer/Rod Type: **Auto/AWJ**
Rig: **CME 55 TRACK C = 1.46**

Groundwater Observations
Date Depth Notes
05/04/12 5.1 Above Ground Level

| Depth (ft) | Strata (1) | CLASSIFICATION OF MATERIALS (Description) | Blows/ft* (N Value) | Moisture Content % | Gravel % | Sand % | Fines % | LL % | PI % |
|------------|------------|---|---------------------|--------------------|----------|--------|---------|------|------|
| 0-2.0 | | A-4, ClSi, gry, Moist, Rec. = 2.0 ft | WR-WR-WR-WR | 29.6 | | 5.7 | 94.3 | 23 | 8 |
| 2.0-70' | | Field Note: This area drills like small layers of sand | | | | | | | |
| 70'-80' | | A-2-4, SiGrSa, gry, Moist, Rec. = 0.4 ft, Lab Note: (HP) | 51 (R) | 12.8 | 30.2 | 40.9 | 28.9 | | |
| 80'-90' | | Field Note: Very hard drilling. Drills like rock., Water started flowing out of casing at 82.0 feet. Inserted 3 inch casing to advance. Some Cobbles were noticed during clean out. | | | | | | | |
| 90'-92' | | A-4, SaSi, gry, Moist, Rec. = 1.5 ft, Lab Note: (HP) | 21-41-50 (R) | 8.8 | 19.8 | 30.2 | 50.0 | | |
| 92'-94' | | A-4, SaGrSi, grn-brn, Moist, Rec. = 1.8 ft, Lab Note: (HP) | 24-37-37-50 (74) | 7.7 | 29.7 | 26.6 | 43.7 | 17 | 5 |
| 94'-117' | | Visual Description: SaGrSi, brn-gry, Moist, Rec. = 1.5 ft, Material similar as 92'-94'. Lab Note: (HP) | 42-42-50 (R) | 8.3 | | | | | |
| 117'-119' | | Visual Description: GrSaSi, gry, Moist, Rec. = 1.8 ft, Material similar as 117'-119'. Lab Note: (HP) | 13-20-31-36 (51) | 8.7 | | | | | |
| 119'-119' | | A-4, GrSaSi, gry, Moist, Rec. = 2.0 ft | 23-21-30-42 (51) | 7.6 | 25.7 | 36.8 | 37.5 | | |
| 119'-119' | | Hole stopped @ 119.0 ft | | | | | | | |

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TH-2 BR-10

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Page No.: **1 of 2**
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Checked By: **CEE**

Boring Crew: **JUDKINS, DAIGNEAULT, GARROW**
Date Started: **9/24/13** Date Finished: **9/30/13**
VTSPG NAD83: **N 569535.07 ft E 1469941.15 ft**
Station: **503+78** Offset: **5.00**
Ground Elevation: **249.0 ft**

Casing Sampler
Type: **WB SS & TUBE**
I.D.: **4 in 1.5 in**
Hammer Wt: **N.A. 140 lb.**
Hammer Fall: **N.A. 30 in.**
Hammer/Rod Type: **Auto/AWJ**
Rig: **CME 55 TRACK C = 1.46**

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 % |
|------------|------------|--|--------------------|--------------------|----------|--------|---------|------|------|
| | | | | | | | | | |
| | | Visual Description: SaGr, brn, MTW, Rec. = 0.2 ft, Insufficient sample for testing. | 8-2-2-1 (4) | 10.0 | | | | | |
| 10 | | A-7-6, Cl, gry, Wet, Rec. = 2.0 ft | 1-2-WH-WH (2) | 67.3 | | 1.0 | 99.0 | 61 | 36 |
| | | Cl, gry, Wet, Rec. = 2.0 ft, 14.5 ft - 16.5 ft, Shelby Tube | | | | | | | |
| | | Cl, gry, Wet, Rec. = 2.0 ft, 16.5 ft - 18.5 ft, Shelby Tube | | | | | | | |
| 20 | | A-7-6, Cl, gry, MTW, Rec. = 2.0 ft | WR-WR-WR-WH (WR) | 67.9 | | 0.1 | 99.9 | 65 | 37 |
| 30 | | A-6, SiCl, gry, Wet, Rec. = 2.0 ft | WR-WR-WR-WR (WR) | 33.1 | | 1.1 | 98.9 | 32 | 15 |
| 40 | | A-7-6, Cl, gry, MTW, Rec. = 2.0 ft | WR-WR-WR-WR (WR) | 57.6 | | 0.2 | 99.8 | 61 | 35 |
| 50 | | SiCl, gry, MTW, Rec. = 2.0 ft, 48.5 ft - 50.5 ft, Shelby Tube | | | | | | | |
| | | A-6, SiCl, gry, Wet, Rec. = 0.3 ft, Lost sample in hole. Bagged what remained in tube. | | 34.3 | | 4.6 | 95.4 | 32 | 13 |
| 60 | | Field Note: No Recovery, 10 blows with no movement. | 19-R@5.0" | | | | | | |

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Hammer Fall: **N.A. 30 in.**
Hammer/Rod Type: **Auto/AWJ**
Rig: **CME 55 TRACK C = 1.46**

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 % |
|------------|------------|---|---------------------|--------------------|----------|--------|---------|------|------|
| | | | | | | | | | |
| 70 | | Field Note: No Recovery, Extremely hard drilling. Field Note: Pulled casing & replaced bit., Re-drilled same hole | R@3.5" | | | | | | |
| 80 | | Field Note: Cobbles Field Note: No Recovery | 18-42-R@3.5" (R) | | | | | | |
| 90 | | A-4, SaSi, gry, Moist, Rec. = 1.6 ft | 8-28-34-R@3.5" (62) | 8.8 | 16.8 | 29.0 | 54.2 | 17 | 4 |
| 100 | | A-4, GrSaSi, gry, Molst, Rec. = 0.6 ft | 27-47-R@5.0" (R) | 8.7 | 21.3 | 30.9 | 47.8 | 18 | 5 |
| 110 | | A-2-4, GrSiSa, gry, Molst, Rec. = 0.3 ft | 26-R@6.0" (R) | 11.1 | 21.2 | 43.4 | 35.4 | | |
| 120 | | Field Note: No Recovery, Bit worn out. Attempted to pull casing again. Hole stopped @ 121.5 ft Casing broke off. | 10-34-R@6.0" (R) | | | | | | |
| 130 | | Remarks: 1. Bit was worn out at 74.0 feet, so the driller's pulled the casing and replaced the bit. 2. Bit was worn out again at 121.5 feet, so the driller's attempted to pull the casing again. 3. Casing broke off at 100 feet below ground surface. 20 feet of casing remains in the ground. 4. Top of ground surface was 16.5 feet below the top of the bridge deck. | | | | | | | |

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 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.

BORING LOG 2 NEW HAVEN BRF 0183(1) GP1 VERMONT AOT-GDT 12/11/13

BORING LOG 2 NEW HAVEN BRF 0183(1) GP1 VERMONT AOT-GDT 12/11/13



BORING LOG

NEW HAVEN
BRF 0183(1)
TH-2 BR-10

Boring No.: **B-104A**
Page No.: 1 of 2
Pin No.: 10J070
Checked By: CEE

Boring Crew: DAIGNEAULT, GARROW
Date Started: 10/01/13 Date Finished: 10/07/13
VTSPG NAD83: N 569539.09 ft E 1469943.07 ft
Station: 503+82 Offset: 5.00
Ground Elevation: 249.0 ft

Casing Sampler
Type: WB SS
I.D.: 4 in 1.5 in
Hammer Wt: N.A. 140 lb.
Hammer Fall: N.A. 30 in.
Hammer/Rod Type: Auto/AWJ
Rig: CME 55 TRACK C = 1.46

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

| Depth (ft) | Strata (1) | CLASSIFICATION OF MATERIALS (Description) | Blows/6" (N Value) | Moisture Content % | Gravel % | Sand % | Fines % |
|------------|------------|--|--------------------|--------------------|----------|--------|---------|
| | | | | | | | |
| | | Field Note:, Advanced casing to 60 ft., Appears to be Silty Clay. | | | | | |
| 10 | | | | | | | |
| 20 | | | | | | | |
| 30 | | | | | | | |
| 40 | | | | | | | |
| 50 | | | | | | | |
| 60 | | | | | | | |
| 70 | | Field Note:, Advanced & cleaned out casing., Appears to be Gravely Silty Sand. | | | | | |
| | | Field Note:, Advanced & cleaned out casing., Appears to be Gravely Silty Sand. | | | | | |
| | | Field Note:, Advanced & cleaned out casing., Appears to be Cobbles. | | | | | |
| | | Field Note:, Advanced & cleaned out casing., Appears to be Gravely Silty Sand. | | | | | |
| | | Field Note:, Advanced & cleaned out casing., Appears to be Gravel & Cobbles. | | | | | |

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

NEW HAVEN
BRF 0183(1)
TH-2 BR-10

Boring No.: **B-104A**
Page No.: 2 of 2
Pin No.: 10J070
Checked By: CEE

Boring Crew: DAIGNEAULT, GARROW
Date Started: 10/01/13 Date Finished: 10/07/13
VTSPG NAD83: N 569539.09 ft E 1469943.07 ft
Station: 503+82 Offset: 5.00
Ground Elevation: 249.0 ft

Casing Sampler
Type: WB SS
I.D.: 4 in 1.5 in
Hammer Wt: N.A. 140 lb.
Hammer Fall: N.A. 30 in.
Hammer/Rod Type: Auto/AWJ
Rig: CME 55 TRACK C = 1.46

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

| Depth (ft) | Strata (1) | CLASSIFICATION OF MATERIALS (Description) | Blows/6" (N Value) | Moisture Content % | Gravel % | Sand % | Fines % |
|------------|------------|--|----------------------------|--------------------|----------|--------|---------|
| | | | | | | | |
| | | Field Note:, Advanced & cleaned out casing., Appears to be Gravely Silty Sand. | | | | | |
| | | Field Note:, Advanced & cleaned out casing., Appears to be Cobbles. Field Note:, Bit wore out. Sleaved down to a 3 inch casing | | | | | |
| 100 | | | | | | | |
| 110 | | | | | | | |
| 120 | | | | | | | |
| 130 | | Field Note:, Advanced & cleaned out casing., Appears to be Gravely Silty Sand. Field Note:, Advanced & cleaned out casing., Appears to be Gravel. Changed 3 Inch casing bit at 126.0 feet. Material was very hard drilling. | | | | | |
| | | A-2-4, SiSaGr, gry, Molst, Rec. = 0.5 ft | 23-28-36 R@2.5" (64) | 10.5 | 45.8 | 28.4 | 25.8 |
| 140 | | A-4, SaSi, gry, Moist, Rec. = 0.5 ft | 7-16-16-16 (32) | 9.7 | 19.4 | 38.2 | 42.4 |
| 150 | | A-4, SaSi, gry, Moist, Rec. = 2.0 ft | 8-10-18-36 (28) | 10.5 | 2.9 | 36.4 | 60.7 |
| 160 | | A-4, SaSi, gry, Moist, Rec. = 1.0 ft | 6-18-35- R@3.5" (53) | 14.5 | 5.4 | 42.9 | 51.7 |
| | | Hole stopped @ 161.8 ft | | | | | |
| 170 | | | | | | | |

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BORING LOG 2 NEW HAVEN BRF 0183(1).GPI VERMONT AOT.GDT 12/11/13

BORING LOG 2 NEW HAVEN BRF 0183(1).GPI VERMONT AOT.GDT 12/11/13