



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

BORING LOG

Winhall
STP SCR(14)
Culvert VT-30

Boring No.: **B-101**

Page No.: 1 of 1

Pin No.: 16d011

Checked By: **END**

Boring Crew: Olden, Garrow, Judkins
Date Started: 3/02/17 Date Finished: 3/02/17
VTSPG NAD83: N 235263.57 ft E 1541202.18 ft
Station: 14+4.80 Offset: 27.90
Ground Elevation: 1279.1 ft

Type: WB Casing SS Sampler
I.D.: 3 in 1.5 in
Hammer Wt: N.A. 140 lb.
Hammer Fall: N.A. 30 in.
Hammer/Rod Type: Auto/AWJ
Rig: Diedrich D25 CE = Unknown

Groundwater Observations		
Date	Depth (ft)	Notes
03/02/17	6.1	W.T. after drilling

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
5		A-2-4, Sa, blk, Moist, Rec. = 0.4 ft, Lab Note: Plant material and roots were within sample. Insufficient sample size for organic testing	1-2-2-1 (4)	43.7	19.6	60.8	19.6
		A-2-4, SiSa, Dk/blk, Moist, Rec. = 0.9 ft, Lab Note: Plant roots were within sample	2-5-2-2 (7)	30.8	8.0	61.5	30.5
		A-2-4, GrSiSa, Dk/brn, Moist, Rec. = 1.0 ft	3-1-3-4 (4)	23.5	23.8	51.5	24.7
		Field Note:, No Recovery	32-39-R@5" (R)				
10		Field Note:, BXDC, Cleaned out casing	9-12-15-17 (27)	19.0	7.7	21.1	71.2
		A-4, SaSi, gry, Moist, Rec. = 1.6 ft					
		A-4, SaSi, gry, Moist, Rec. = 1.4 ft	8-17-24-28 (41)	10.1	18.9	30.7	50.4
		Field Note:, BXDC, Cleaned out casing					
15		A-4, SaSi, gry, Moist, Rec. = 1.5 ft	17-29-37-R@2.5" (66)	9.6	18.6	32.5	48.9
		Field Note:, BXDC, Cleaned out casing					
		A-4, SaSi, gry, Moist, Rec. = 1.2 ft	21-32-44-R@0" (76)	9.1	19.9	30.2	49.9
		Field Note:, BXDC, Cleaned out casing					
20		A-4, GrSaSi, gry, Moist, Rec. = 1.2 ft, Lab Note: Broken rock was within sample	36-33-R@5" (R)	10.5	25.3	30.6	44.1
		Field Note:, BXDC, Cleaned out casing					
		A-4, SaSi, gry, Moist, Rec. = 1.0 ft	26-44-R@5" (R)	9.8	14.5	32.9	52.6
		Field Note:, BXDC, Cleaned out casing					
25		A-4, GrSaSi, gry, Moist, Rec. = 1.3 ft	17-31-35-R@2.5" (66)	8.9	21.6	34.2	44.2
		Field Note:, BXDC, Cleaned out casing					
		A-4, SaSi, gry, Moist, Rec. = 1.3 ft	18-23-30-R@0" (53)	9.6	19.0	31.3	49.7
		Field Note:, BXDC, Cleaned out casing					
30		A-1-b, SiSaGr, gry, Moist, Rec. = 0.3 ft, Lab Note: Broken and weathered rock was within sample	R@5"	6.5	56.0	22.9	21.1
		Hole stopped @ 30.4 ft					
Remarks: Hole collapsed at 10.5 feet.							

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

BORING LOG 2 WINHALL STP SCR(14) VERMONT AGENCY OF TRANSPORTATION 4/17/17



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BORING LOG

Boring No.: **B-102**
Page No.: 1 of 1
Pin No.: 16d011
Checked By: **END**

**Winhall
STP SCRP(14)
Culvert VT-30**

Boring Crew: Garrow, Judkins, Emerson
Date Started: 3/01/17 Date Finished: 3/01/17
VTSPG NAD83: N 235246.32 ft E 1541222.22 ft
Station: 13+85.51 Offset: 10.60
Ground Elevation: 1283.2 ft

Casing: WB Sampler: SS
Type: WB 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 CE = 1.42

Groundwater Observations		
Date	Depth (ft)	Notes
03/01/17	2.6	W.T. during drilling

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Field Note:, Asphalt Pavement					
		A-1-b, GrSa, brn, Moist, Rec. = 1.2 ft	10-14-14 (28)	7.5	29.6	55.1	15.3
		A-2-4, SiGrSa, brn, Moist, Rec. = 1.3 ft, Lab Note: Broken rock was within sample	14-14-13-12 (27)	10.2	34.4	39.9	25.7
		Field Note:, NXDC, Cleaned out casing					
5		A-2-4, GrSiSa, blk, Moist, Rec. = 0.8 ft, Lab Note: Sample contained trace (7.09%) organics (AASHTO T-267)	2-1-1-2 (2)	41.0	26.9	44.9	28.2
		A-2-4, SiGrSa, blk, Moist, Rec. = 1.1 ft, Lab Note: Sample contained trace (4.02%) organics (AASHTO T-267)	1-1-1-4 (2)	32.3	31.4	41.9	26.7
		A-1-b, GrSa, Lt/gry, Moist, Rec. = 1.4 ft, Lab Note: Broken rock was within sample	5-10-18-24 (28)	16.6	36.3	47.4	16.3
10		Field Note:, NXDC, Cleaned out casing					
		A-4, SaSi, Lt/gry, Moist, Rec. = 1.1 ft	15-14-17-19 (31)	18.2	10.8	27.2	62.0
		A-4, SaSi, Lt/gry, Moist, Rec. = 1.6 ft	18-17-25-31 (42)	14.8	14.6	28.1	57.3
		Field Note:, NXDC, Cleaned out casing					
15		A-4, SaSi, Lt/gry, Moist, Rec. = 1.3 ft, Lab Note: Broken rock was within sample	17-30-38-R@2.5" (68)	11.6	17.7	35.3	47.0
		A-4, SaSi, Lt/gry, Moist, Rec. = 1.3 ft	21-34-R@6" (R)	10.9	11.9	37.0	51.1
		Field Note:, Rollercone, Cleaned out casing					
		A-4, SaSi, Lt/gry, Moist, Rec. = 1.6 ft	13-19-33-R@5" (52)	11.1	14.1	37.9	48.0
20		A-4, SaSi, Lt/gry, Moist, Rec. = 1.2 ft, Lab Note: Broken rock was within sample	30-38-R@5" (R)	9.5	18.8	32.1	49.1
		Field Note:, Rollercone, Cleaned out casing					
25		A-4, SaSi, Lt/gry, Moist, Rec. = 0.7 ft	8-R@3.5" (R)	9.8	16.0	36.3	47.7
		Field Note:, Rollercone, Cleaned out casing					
30		A-4, SaSi, Lt/gry, Moist, Rec. = 1.2 ft, Lab Note: Broken rock was within sample	16-25-36-33 (61)	10.0	19.7	39.7	40.6
		Hole stopped @ 32.0 ft					
35		Remarks: Hole collapsed at 6.2 feet.					

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Culvert VT-30

Boring No.: **B-103**

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Pin No.: 16d011

Checked By: **END**

Boring Crew: Garrow, Judkins, Emerson
Date Started: 2/28/17 Date Finished: 2/28/17
VTSPG NAD83: N 235217.72 ft E 1541172.75 ft
Station: 14+35.88 Offset: -16.90
Ground Elevation: 1281.3 ft

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 CE = 1.42

Groundwater Observations		
Date	Depth (ft)	Notes
02/28/17	3.8	W.T. during drilling

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
5		A-2-4, Sa, blk, Moist, Rec. = 1.0 ft, Lab Note: Grass and grass roots were within sample	1-1-1-2 (2)	13.5	15.8	68.0	16.2
		A-1-b, SiSaGr, brn, Moist, Rec. = 0.7 ft	5-2-4-2 (6)	9.9	40.0	39.0	21.0
		A-4, SiSa, blk, Moist, Rec. = 1.3 ft, Lab Note: Sample contained trace (6.7%) organics (AASHTO T-267)	3-6-2-2 (8)	37.8	17.9	43.9	38.2
		A-1-b, SaGr, blk-brn, Moist, Rec. = 1.2 ft, Lab Note: Broken rock and pieces of decomposing wood were within sample	5-12-15-20 (27)	28.3	49.7	32.3	18.0
10		A-2-4, SiSaGr, gry, Moist, Rec. = 1.3 ft, Lab Note: Broken rock was within sample	38-15-20-21 (35)	11.3	35.4	34.4	30.2
		A-4, GrSaSi, gry, Moist, Rec. = 1.3 ft	17-23-27-23 (50)	14.2	21.1	32.0	46.9
		A-4, SaSi, gry, Moist, Rec. = 1.3 ft	17-26-43-R@1" (69)	10.1	17.3	34.2	48.5
15		A-4, GrSaSi, gry, Moist, Rec. = 1.2 ft	33-47-R@2.5" (R)	10.0	20.9	33.4	45.7
		A-4, SaGrSi, gry, Moist, Rec. = 0.7 ft	36-R@3.5" (R)	8.5	35.5	26.9	37.6
		A-4, SaSi, gry, Moist, Rec. = 1.1 ft	26-44-R@2.5" (R)	10.4	18.1	31.7	50.2
20		A-4, GrSaSi, gry, Moist, Rec. = 0.8 ft	34-R@3.5" (R)	9.1	26.8	32.1	41.1
25		A-4, SaSi, gry, Moist, Rec. = 0.4 ft	R@5" (R)	9.4	13.1	33.8	53.1
30		A-4, GrSaSi, gry, Moist, Rec. = 1.1 ft	21-27-R@3.5" (R)	9.5	22.0	29.1	48.9
		Hole stopped @ 31.3 ft					
		Remarks: Hole collapsed at 7.3 feet.					

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