

VTTrans		STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH SECTION SUBSURFACE INFORMATION		BORING LOG		Boring No.: B-301				
		ROYALTON BRS 0147(13) VT-14 BR-28				Page No.: 1 of 1				
						Pin No.: 86E055				
						Checked By: CEE				
Boring Crew: GARROW, WERNER, PORTER		Type: WB SS		Casing Sampler		Groundwater Observations				
Date Started: 8/24/10 Date Finished: 8/24/10		L.D.: 2.5 in 1.25 in		Date		Depth (ft)				
VTSPG NAD83: N 491733.36 ft E 1617282.29 ft		Hammer Wt: N.A. 140 lb.		Date		Notes				
Station: 417+50.00 Offset: 8.00		Hammer Fall: N.A. 30 in.		08/24/10		None taken. (Road)				
Ground Elevation: 523.3 ft		Hammer/Rod Type: Auto/AWJ								
		Rig: CME 45C SKID CE = 1.33								
Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. (ft)	Drill Rate (min/ft)	Blows/ft (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Asphalt pavement, Rec. = 1.5 ft, 0.0 ft - 1.5 ft								
		A-4, SaSi, brn, Wet, Rec. = 0.5 ft				14-9-6-8 (15)	22.5	19.4	29.7	50.9
5		Field Note: No Recovery, Advanced with rollercone to 6 feet.				13-8-4-5 (12)				
		A-4, SaSi, brn, Wet, Rec. = 1.4 ft				2-1-1-1 (2)	29.6	5.7	38.7	55.6
		A-2-4, SiSa, brn, Wet, Rec. = 0.6 ft				WH-WH (3)	22.4	15.8	51.3	32.9
10		A-4, SiSa, brn, Wet, Rec. = 1.0 ft				9-12-6-6 (18)	23.3	8.5	47.6	43.9
		A-4, SaSi, brn, Wet, Rec. = 0.8 ft				7-4-5-2 (9)	28.5	8.7	20.0	71.3
15		A-4, Si, brn, Wet, Rec. = 1.2 ft, A small amount of wood was within sample.				WH-WH (2)	40.1	1.6	17.2	81.2
		A-4, Si, brn, Wet, Rec. = 1.4 ft				WH-WH (2)	38.5	0.4	11.1	88.5
		A-4, SaSi, brn, Wet, Rec. = 1.4 ft				1-1-1-1 (2)	33.0	1.9	36.3	61.8
20		Visual Classification, Wood with some sand, brn, Wet, Rec. = 0.9 ft, Rollerconed ahead and advanced casing to 24 feet.				4-13-3-18 (16)				
		Field Note: No Recovery, Wood pieces in sampler. Rollerconed to 26 feet.				5-4-3-3 (7)				
		A-4, SaSi, gry, Wet, Rec. = 1.3 ft				5-3-5-5 (8)	27.6	1.3	33.0	65.7
		A-4, Si, gry, Wet, Rec. = 0.3 ft				2-16-R (8)	31.5	2.1	11.6	86.3
30		28.6 ft - 29.0 ft, Gray, Meta-Limestone, with quartz veins. Hard, Unweathered, Fair rock, BXMD	1 (20)	40 (10)	18 (14)					
		29.0 ft - 34.0 ft, Gray, Meta-Limestone, with quartz veins. Hard, Unweathered, Fair rock, BXMD	2 (20)	100 (35)	8 (7)					
35		Hole stopped @ 34.0 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.

VTTrans		STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH SECTION SUBSURFACE INFORMATION		BORING LOG		Boring No.: B-302				
		ROYALTON BRS 0147(13) VT-14 BR-28				Page No.: 1 of 1				
						Pin No.: 86E055				
						Checked By: CEE				
Boring Crew: GARROW, WERNER, PORTER		Type: WB SS		Casing Sampler		Groundwater Observations				
Date Started: 8/26/10 Date Finished: 8/26/10		L.D.: 3.5 in 1.5 in		Date		Depth (ft)				
VTSPG NAD83: N 491760.57 ft E 1617322.62 ft		Hammer Wt: N.A. 140 lb.		Date		Notes				
Station: 418+00.00 Offset: 8.00		Hammer Fall: N.A. 30 in.		08/26/10		None taken				
Ground Elevation: 523.5 ft		Hammer/Rod Type: Auto/AWJ								
		Rig: CME 45C SKID CE = 1.33								
Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. (ft)	Drill Rate (min/ft)	Blows/ft (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Asphalt Pavement, 0.0 ft - 1.5 ft								
		A-1-b, GrSa, brn, Moist, Rec. = 0.6 ft				8-6-5-5 (11)	10.1	38.5	47.0	14.5
5		A-4, Si, brn, Moist, Rec. = 0.6 ft				2-2-4-2 (6)	26.8	1.7	17.6	80.7
		A-4, Si, brn, Moist, Rec. = 1.2 ft				2-2-2-3 (4)	30.2	6.0	5.2	88.8
		A-4, Si, brn, Wet, Rec. = 1.4 ft				2-2-2-3 (4)	35.2	7.9	2.8	89.3
		A-4, Si, brn, Wet, Rec. = 1.0 ft				WH-1-2-1 (3)	33.9	2.0	7.5	90.5
10		A-4, SaSi, brn, Wet, Rec. = 0.8 ft				WH-WH (3)	26.2	2.0	31.8	66.2
		A-4, Si, brn, MTW, Rec. = 1.1 ft				2-2-2-2 (10)	28.6	13.8	14.7	71.5
15		A-4, Si, brn, Wet, Rec. = 1.5 ft, Small concretions were within sample.				4-4-4-3 (8)	30.1	11.4	10.7	77.9
		A-4, SaSi, brn, Wet, Rec. = 1.5 ft, Small concretions were within sample.				3-3-4-2 (7)	24.6	7.5	38.8	53.7
		A-4, SaSi, brn, Wet, Rec. = 1.0 ft, Small concretions were within sample.				5-7-7-10 (14)	22.6	10.1	42.5	47.4
20		A-2-4, SiSa, brn, Wet, Rec. = 1.0 ft				1-2-1-2 (3)	29.7	0.1	78.2	21.7
		A-2-4, Sa, gry, Wet, Rec. = 1.3 ft				4-3-5-6 (8)	27.1	0.2	82.7	17.1
25		A-2-4, Sa, gry, Wet, Rec. = 1.2 ft				4-5-5-7 (10)	25.1		83.2	16.8
		A-3, Sa, gry, Wet, Rec. = 1.6 ft				8-8-7-7 (15)	23.8		90.1	9.9
		A-3, Sa, gry, Wet, Rec. = 2.0 ft				5-7-R-7 (15)	25.0		93.1	6.9
30		A-3, Sa, gry, Wet, Rec. = 2.0 ft				1-2-1-2 (3)	22.8		90.0	10.0
		A-3, Sa, gry, Wet, Rec. = 2.0 ft				3-3-6-9 (9)	22.8	0.1	89.9	10.0
35		A-2-4, SiSa, gry, Wet, Rec. = 1.0 ft				3-4-4-4 (8)	24.2	0.5	75.5	24.0
		A-4, Si, gry, Wet, Rec. = 2.0 ft				5-5-5-5 (10)	31.3	0.2	17.5	82.3
		A-4, Si, gry, Wet, Rec. = 1.6 ft				2-2-1-2 (3)	33.3	0.4	3.2	96.4
40		A-4, Si, gry, Wet, Rec. = 0.3 ft, Advanced casing to 40.8 ft.				39-R (10)	30.1		2.7	97.3
		40.8 ft - 45.8 ft, Gray, Meta-Limestone, with 0.85 ft thick phyllite zone at 42.11 feet. Hard, Unweathered, Fair rock, BXMD								
45		Hole stopped @ 45.8 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.

PROJECT NAME: ROYALTON
PROJECT NUMBER: BRS 0147 (13)
FILE NAME: \BR 28\86e055bor_28.dgn PLOT DATE: 08-OCT-2013
PROJECT LEADER: C. CARLSON DRAWN BY: C. MOONEY
DESIGNED BY: D. PETERSON CHECKED BY: G. ROY
BRIDGE 28 BORING LOGS (4) SHEET 107 OF 186