

STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH SECTION SUBSURFACE INFORMATION		BORING NUMBER: B-4 SHEET 1 of 1 DATE STARTED: 8/26/04 DATE COMPLETED: 9/02/04					
PROJECT NAME: MORETOWN-MIDDLESEX SITE NAME: US Rt.2 STATION: 270+36 OFFSET: 22.00		PROJECT NUMBER: BRS 0284(14) SITE NUMBER: BR-50 GROUND ELEVATION: 427.53 ft GROUNDWATER DEPTH: N/A					
BORING CREW CREW CHIEF: RUSSELL DRILLER: RUSSELL LOGGER: TALLMAN		BORING RIG: LARGE SKID RIG ON RAFT BORING TYPE: WASH BORE SAMPLE TYPE: SPLIT BARREL CHECKED BY: DLG					
DEPTH (ft)	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. (%)	GRAVEL (%)	SAND (%)	FINES (%)
			RUN	REC (%)	ROD (%)	Dip (deg)	Drill Rate (ft/min)
5		A-1-b, Sa, brn, Sat, Rec. = 1.0 ft	1	24.6	1.3	95.4	3.3
		A-1-b, GrSa, gry, Sat, Rec. = 0.81 ft	2	17.6	37.1	59.1	3.8
		A-1-a, SaGr, gry, Sat, Rec. = 0.4 ft	14	12.8	54.5	38.9	6.6
		Visual Classification: A-1-a, Sa Gr, gry, Sat, Rec. = 0.3 ft, 6.0 ft - 8.0 ft, Insufficient sample for testing.	12				
		No Recovery, 8.0 ft - 10.0 ft	13				
10		Visual Classification: A-1-b, Gr Sa, brn, Sat, Rec. = 0.2 ft, 10.0 ft - 12.0 ft, Insufficient sample for testing.	13				
		A-1-b, GrSa, brn, Sat, Rec. = 1.2 ft	40	11.6	42.2	48.7	9.1
15		A-3, Sa, brn, Moist, Rec. = 1.3 ft	16	17.1	19.4	72.7	7.9
20		A-3, Sa, gry, Moist, Rec. = 0.9 ft	10	18.2	16.8	75.2	8.0
25		A-2-4, Sa, gry, Moist, Rec. = 0.7 ft	2	22.5	5.8	80.6	13.6
30		A-2-4, SiSa, gry, Moist, Rec. = 1.3 ft	5	24.9	0.0	74.5	25.5
35		A-2-4, SiSa, gry, Wet, Rec. = 0.4 ft	R	30.1	3.9	68.1	28.0
		Green, Greenstone, with laminated quartz veins, Competent, Moderately hard, Unweathered, NXMDC, 35.4 ft - 40.4 ft, Rec. = 4.8 ft	1	96	86	80	
40		Green, Greenstone, with laminated quartz veins, Competent, Moderately hard, Unweathered, NXMDC, 40.4 ft - 45.4 ft, Rec. = 5.0 ft	2	100	80	80	
45		Hole stopped @ 45.4 ft					

STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH SECTION SUBSURFACE INFORMATION		BORING NUMBER: B-5 SHEET 1 of 2 DATE STARTED: 9/18/03 DATE COMPLETED: 9/26/03					
PROJECT NAME: MORETOWN-MIDDLESEX SITE NAME: US Rt.2 STATION: 271+82.00 OFFSET: -28.00		PROJECT NUMBER: BRS 0284(14) SITE NUMBER: BR-50 GROUND ELEVATION: 453.45 GROUNDWATER DEPTH: 22.0 ft 9/26/03					
BORING CREW CREW CHIEF: TALLMAN DRILLER: TALLMAN LOGGER: RUSSELL		BORING RIG: LARGE SKID RIG BORING TYPE: WASH BORE SAMPLE TYPE: SPLIT BARREL CHECKED BY:					
DEPTH (ft)	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. (%)	GRAVEL (%)	SAND (%)	FINES (%)
			RUN	REC (%)	ROD (%)	Dip (deg)	Drill Rate (ft/min)
5		A-1-b, GrSa, gry, Moist, Rec. = 0.6 ft	5	9.8	30.9	53.6	15.5
10		A-1-b, GrSa, gry, Moist, Rec. = 0.8 ft	6	13.6	38.7	51.3	10.0
		A-4, Si, gry, Moist, Rec. = 0.3 ft	8	40.4	3.6	6.1	90.3
		A-1-b, GrSa, gry, Moist, Rec. = 0.8 ft	8	8.8	39.9	48.5	11.6
20		BXDC, Cleaned out casing, 19.25 ft - 20.0 ft	16	15.5	0.6	83.9	15.5
		A-2-4, Sa, gry-brn, Moist, Rec. = 1.0 ft	16	15.5	0.6	83.9	15.5
		A-1-b, SaGr, brn-gry, Moist, Rec. = 0.6 ft, Started using drillers mud	38	12.6	52.7	30.4	16.9
30		A-1-a, SaGr, brn, Moist, Rec. = 1.1 ft, Sample appears to be more orange in color	18	11.9	58.7	28.0	13.3
		A-4, SaSi, gry, Moist, Rec. = 0.7 ft	17	23.7	6.8	38.2	55.0
40		BXDC, Cleaned out casing, 39.5 ft - 40.0 ft	9	9.0	73.6	20.3	6.1
		A-1-a, SaGr, gry, Moist, Rec. = 0.4 ft	15	21.0	0.1	89.1	10.8
		A-2-4, Sa, gry, Moist, Rec. = 1.0 ft	15	21.0	0.1	89.1	10.8
50		A-2-4, SiSa, gry, Moist, Rec. = 0.5 ft, Couldn't advance casing, Pulled casing and noticed bit was bad, Replaced with a sawtooth bit and went back down	21	26.1	0.0	73.7	26.3

STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH SECTION SUBSURFACE INFORMATION		BORING NUMBER: B-5 SHEET 2 of 2 DATE STARTED: 9/18/03 DATE COMPLETED: 9/26/03					
PROJECT NAME: MORETOWN-MIDDLESEX SITE NAME: US Rt.2 STATION: 271+82.00 OFFSET: -28.00		PROJECT NUMBER: BRS 0284(14) SITE NUMBER: BR-50 GROUND ELEVATION: 453.45 GROUNDWATER DEPTH: 22.0 ft 9/26/03					
BORING CREW CREW CHIEF: TALLMAN DRILLER: TALLMAN LOGGER: RUSSELL		BORING RIG: LARGE SKID RIG BORING TYPE: WASH BORE SAMPLE TYPE: SPLIT BARREL CHECKED BY:					
DEPTH (ft)	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. (%)	GRAVEL (%)	SAND (%)	FINES (%)
			RUN	REC (%)	ROD (%)	Dip (deg)	Drill Rate (ft/min)
57.0		No Sample, Into flowing sand, Difficult drilling, Plugged up, 55.0 ft - 57.0 ft					
60		A-1-b, GrSa, gry, Moist, Rec. = 1.1 ft	25	10.6	41.6	46.1	12.3
		BXDC, Boulder, No sample, 63.0 ft - 64.0 ft, Will sample in ten foot intervals because of difficulty drilling					
70		A-2-4, Sa, gry, Moist, Rec. = 0.3 ft	17	18.0	11.1	73.9	15.0
80		A-1-b, GrSa, gry, Moist, Rec. = 0.8 ft	21	13.2	43.5	47.0	9.5
90		A-3, Sa, gry, Moist, Rec. = 1.2 ft, Tried to advance casing, but could not, Plugged up, Had to pull 15.0 feet back off to unplug	25	17.0	9.0	82.0	9.0
		Top of Bedrock @ 94.0 ft					
94.0		Green, Chlorite schist Greenstone, with laminated quartz veins, Competent, Moderately hard, Unweathered, BXDC, 94.0 ft - 99.0 ft, Rec. = 4.8 ft	1	96	85	87	
100		Green, Chlorite schist Greenstone, with laminated quartz veins, Competent, Moderately hard, Unweathered, BXDC, 99.0 ft - 104.0 ft, Rec. = 5.0 ft	2	100	90	87	
104.0		Hole stopped @ 104.0 ft					

BORING LOG SHEET 2

PROJECT NAME: MORETOWN - MIDDLESEX
PROJECT NUMBER: BRS0284(14)

FILE NAME: 78f219\str\s7f219bor1.dgn PLOT DATE: 15-JUN-2009
PROJECT LEADER: M. Evans-Mongeon DRAWN BY: L. Russell
DESIGNED BY: W. Farley CHECKED BY: L. Russell
IPAR: s78f219bor3.1 SHEET 41 OF 103