

PROJECT NO. 112.1044010		ID.	COUNTY Haywood	GEOLOGIST B. Parks/B. Deobald									
SITE DESCRIPTION I-40 Slide at Mile Marker 1; Site 4					GROUND WATER (ft)								
BORING NO. MB-7	BORING LOCATION 20+87	OFFSET 7 ft RT	ALIGNMENT -EL4-	0 HR. ND									
COLLAR ELEV. 1,547.6 ft	NORTHING 759,973 US ft	EASTING 789,492 US ft		24 HR. ND									
TOTAL DEPTH 49.8 ft	DRILL MACHINE CME-45C / D-50 ATV	DRILL METHOD Rotary Wash/Core	HAMMER TYPE 140-lb. Manual										
DATE STARTED 12/14/04	COMPLETED 12/16/04	SURFACE WATER DEPTH N/A											
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	
		0.5ft	0.5ft	0.5ft	0	20	40	60	80				100
1,547.6	0.0	16	84	0.3									1,547.6 0.0 Asphalt
1,543.7	3.9	25	70	21									1,543.7 3.9 Roadway Embankment Fill: Gray and tan, silty, f. to cse. SAND (A-2-4) w/ sli. weathered to fresh, mod. hard to hard METAGRAYWACKE gravel, cobbles, and boulders
1,538.7	8.9	6	17	57									1,538.7 8.9 Roadway Embankment Fill: Gray and tan, silty, f. to cse. SAND (A-2-4) w/ sli. weathered to fresh, mod. hard to hard METAGRAYWACKE gravel, cobbles, and boulders
1,533.7	13.9	17	50	17									1,533.7 13.9 Roadway Embankment Fill: Gray and tan, silty, f. to cse. SAND (A-2-4) w/ sli. weathered to fresh, mod. hard to hard METAGRAYWACKE gravel, cobbles, and boulders
1,528.7	18.9	17	35	25									1,528.7 18.9 Roadway Embankment Fill: Gray and brown, f. to cse. SAND and GRAVEL (A-1-b) (sli. weathered to fresh, mod. hard to hard METAGRAYWACKE gravel, cobbles, and boulders)
1,523.7	23.9	28	16	28									1,523.7 23.9 Roadway Embankment Fill: Gray and brown, f. to cse. SAND and GRAVEL (A-1-b) (sli. weathered to fresh, mod. hard to hard METAGRAYWACKE gravel, cobbles, and boulders)
1,518.9	28.7	25	23	32									1,518.9 28.7 Roadway Embankment Fill: Tan, clayey, f. to cse. sandy, SILT (A-4) w/ sli. weathered to fresh, mod. hard to hard METAGRAYWACKE gravel, cobbles, and boulders
1,513.9	33.7	17	11	18									1,513.9 33.7 Roadway Embankment Fill: Tan, clayey, f. to cse. sandy, SILT (A-4) w/ sli. weathered to fresh, mod. hard to hard METAGRAYWACKE gravel, cobbles, and boulders Roller Cone Refusal at 36.4 ft
													1,511.2 36.4 Crystalline Rock: Dark gray, mod. weathered to fresh, closely to mod. closely fractured, hard to very hard METAGRAYWACKE (19 joints at 45-55° w/ trace quartz; 10 joints at 80-90°)
													1,497.8 49.8 Boring and coring terminated at 49.8 ft (Elev. 1497.8 ft) in Crystalline Rock: Slightly weathered to fresh, mod. closely fractured, hard to very hard METAGRAYWACKE Bits Used: Series 2 casing bit w/ advancer; series 2 NQ core bit; roller cone Drill Fluid: Water SPT Values obtained from an offset boring located approximately 1.0 ft upstation of MB-7 core boring location.

NCDOT BORE SINGLE 0900.GPJ NC DOT.GDT 1/24/05

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COLLAR ELEV. 1,547.6 ft	NORTHING 759,973 US ft	EASTING 789,492 US ft		24 HR. ND							
TOTAL DEPTH 49.8 ft	DRILL MACHINE CME-45C / D-50 ATV	DRILL METHOD Rotary Wash/Core	HAMMER TYPE 140-lb. Manual								
DATE STARTED 12/14/04	COMPLETED 12/16/04	SURFACE WATER DEPTH N/A									
CORE SIZE NQ		TOTAL RUN 49.4 ft		DRILLER F. Cox							
ELEV. (ft)	DEPTH (ft)	RUN (ft)	DRILL RATE (Min/ft)	RUN		SAMP. NO.	STRATA		LOG	DESCRIPTION AND REMARKS	
				REC. (%)	RQD (%)		REC. (%)	RQD (%)			
											Begin Coring @ 0.4 ft
1,547.2	0.4	4.4	4:00 2:35 5:00	(N/A)	(N/A)		(N/A)	(N/A)			1,547.2 0.4 Roadway Embankment Fill: Gray and tan, silty, f. to cse. SAND (A-2-4) w/ sli. weathered to fresh, mod. hard to hard METAGRAYWACKE gravel, cobbles, and boulders
1,542.8	4.8	5.0	2:35 N=91 0:25/0.4	(N/A)	(N/A)						
1,537.8	9.8	5.0	3:30 2:00 2:45 1:30 1:52 N=74	(N/A)	(N/A)						
1,532.8	14.8	5.0	2:30 1:30 2:45 3:45 2:30 N=67	(N/A)	(N/A)						
1,527.8	19.8	5.0	4:00 1:30 1:35 1:42 1:25 N=60	(N/A)	(N/A)		(N/A)	(N/A)			1,527.8 19.8 Roadway Embankment Fill: Gray and brown, f. to cse. SAND and GRAVEL (A-1-b) (sli. weathered to fresh, mod. hard to hard METAGRAYWACKE gravel, cobbles, and boulders)
1,522.8	24.8	5.0	2:45 1:30 1:25 2:15 2:00 N=44	(N/A)	(N/A)						
1,517.8	29.8	5.0	2:45 2:25 2:35 3:05 3:00 N=55	(N/A)	(N/A)		(N/A)	(N/A)			1,517.8 29.8 Roadway Embankment Fill: Tan, clayey, f. to cse. sandy, SILT (A-4) w/ sli. weathered to fresh, mod. hard to hard METAGRAYWACKE gravel, cobbles, and boulders Roller Cone Refusal at 36.4 ft
1,512.8	34.8	1.7	1:56 1:56 1:45 3:30 3:03 N=29	(N/A)	(N/A)						
1,511.1	36.5	3.3	3:15 1:45/0.7	(3.3) 100%	(3.3) 100%		(12.8) 96%	(12.7) 95%			1,511.1 36.5 Crystalline Rock: Dark gray, mod. weathered to fresh, closely to mod. closely fractured, hard to very hard METAGRAYWACKE (19 joints at 45-55° w/ trace quartz; 10 joints at 80-90°)
1,507.8	39.8	5.0	1:30/0.3 2:20 2:30 3:40	(5.0) 100%	(4.9) 98%						
1,502.8	44.8	5.0	2:05 2:10 2:40 2:00 2:27	(4.5) 90%	(4.5) 90%						
1,497.8	49.8		2:05 2:25 3:12 2:45 2:35								1,497.8 49.8 Coring terminated at 49.8 ft (Elev. 1497.8 ft) in Crystalline Rock: Slightly weathered to fresh, closely to mod. closely fractured, hard to very hard METAGRAYWACKE

NCDOT CORE SINGLE 0900.GPJ NC DOT.GDT 1/24/05