

**NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
GEOTECHNICAL UNIT BORING LOG**

PROJECT NO 8.1711401		ID B-4010		COUNTY ASHE		GEOLOGIST L. L. ACKER								
SITE DESCRIPTION BR. 7 ON NC 163 OVER S. FORK NEW RIVER							GND WATER							
BORING NO B2-C		NORTHING 0.00		EASTING 0.00		0 HR N/A								
ALIGNMENT -L-		BORING LOCATION 21+50.000		OFFSET 0.00ft		24 HR N/A								
COLLAR ELEV 2756.70ft		TOTAL DEPTH 36.70ft		START DATE 8/27/03		COMPLETION DATE 08/27/03								
DRILL MACHINE CME 550			DRILL METHOD CORE BORING			HAMMER TYPE AUTOMATIC								
SURFACE WATER DEPTH 1.40ft			DEPTH TO ROCK 1.70ft			Log B2-C, Page 1 of 1								
ELEV	DEPTH	BLOW CT			PEN (ft)	BLOWS PER FOOT					SAMPLE NO	LOG	SOIL AND ROCK DESCRIPTION	
		6in	6in	6in		0	25	50	75	100				
2758.10														
														Surface Water Ground Surface
2750.00											RS-1 RS-2			ALLUVIUM: GRAVEL, COBBLES AND BOULDERS
											RS-3			HARD ROCK: MODERATELY HARD, FRESH MICA GNEISS REC=99 RQD=98
2740.00											RS-4			
											RS-5 RS-6 RS-7			HARD ROCK: MODERATELY HARD, FRESH MICA GNEISS REC=99 RQD=96
2730.00														
2720.00														
														TERMINATED BORING IN HARD ROCK AT ELEVATION 2720.0 FEET

PROJECT NO: 8.1711401 (B-4010)
COUNTY: Ashe

B2-C
21+50, CL

- CORE 1: 1.7 – 4.5 REC=98% RQD=89%
- CORE 2: 4.5 – 9.3 REC=98% RQD=98%
- CORE 3: 9.3 – 14.0 REC=98% RQD=98%
- CORE 4: 14.0 – 18.6 REC=100% RQD=100%
- CORE 5: 18.6 – 22.9 REC=100% RQD=96%
- CORE 6: 22.9 – 27.7 REC=98% RQD=93%
- CORE 7: 27.7 – 28.7 REC=100% RQD=100%
- CORE 8: 28.7 – 33.5 REC=98% RQD=63%
- CORE 9: 33.5 – 36.7 REC=100% RQD=100%

LAYER 1: 1.7 – 20.6 Moderately hard, fresh mica gneiss, (meta-greywacke). Wide spaced fractures, 4 pieces, longest piece 10.0 feet. Massive, well foliated at 40 degrees. 1 joint on foliation, smooth, clean. 1 joint at 50 degrees, rough, on quartz vein. 1 joint at 70 degrees, moderately rough, clean. REC=99% RQD=98%

LAYER 2: 20.6 – 29.1 Moderately hard, fresh mica gneiss (meta-greywacke). Close to moderately close fractured, 15 pieces, longest piece 1.8 feet. Massive, well foliated at 40 degrees. 14 joints on foliation, smooth, clean. 2 joints at 70 degrees, rough, clean. REC=99% RQD=96%

LAYER 3: 29.1 – 36.7 Moderately hard, fresh mica gneiss (meta-greywacke). Close to moderately close fractured, 21 pieces, longest piece 1.5 feet. Massive, well foliated at 40 degrees. Quartz vein at 34.5 – 35.1 feet. 11 joints on foliation, smooth, clean. 2 joints at 10 degrees, 0.2 ft. apart, moderately rough, coated with chlorite and pyrite. 2 joints at 40-50 degrees, moderately rough, coated with chlorite. 3 joints at 60-70 degrees, smooth to moderately rough, clean or coated with chlorite. REC=97% RQD=72%