

**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 B1-C		NORTHING 0.00		EASTING 0.00		0 HR N/A								
ALIGNMENT -L-		BORING LOCATION 20+15.000		OFFSET 0.00ft		24 HR N/A								
COLLAR ELEV 2757.30ft		TOTAL DEPTH 36.00ft		START DATE 8/27/03		COMPLETION DATE 08/27/03								
DRILL MACHINE CME 550			DRILL METHOD CORE BORING			HAMMER TYPE AUTOMATIC								
SURFACE WATER DEPTH 0.80ft			DEPTH TO ROCK 0.00ft			Log B1-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-8 RS-9			HARD ROCK: MODERATELY HARD, FRESH MICA SCHIST REC=100 RQD=91
											RS-10			HARD ROCK: MODERATELY HARD, FRESH, MICA GNEISS REC=100 RQD=95
2740.00											RS-11			
2730.00														HARD ROCK: MEDIUM HARD, MOD. WEATHERED SEAM
														HARD ROCK: MODERATELY HARD, FRESH MICA GNEISS REC=100 RQD=100
2721.30											RS-12			
														TERMINATED BORING IN HARD ROCK AT ELEVATION 2721.3 FEET

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

B1-C  
-L- 20+15, CL

CORE 1: 0.0 – 4.5	REC=100% RQD=87%
CORE 2: 4.5 – 9.3	REC=100% RQD=88%
CORE 3: 9.3 – 13.9	REC=100% RQD=94%
CORE 4: 13.9 – 18.5	REC=100% RQD=100%
CORE 5: 18.5 – 23.1	REC=98% RQD=89%
CORE 6: 23.1 – 23.9	REC=100% RQD=100%
CORE 7: 23.9 – 28.7	REC=100% RQD=100%
CORE 8: 28.7 – 33.3	REC=100% RQD=100%
CORE 9: 33.3 – 36.0	REC=100% RQD=100%

LAYER 1: 0.0 – 7.1 Moderately hard, fresh mica schist. Close fractured, 14 pieces, longest piece 1.1 feet. Massive, with a few quartz veins 0.1 feet or less in thickness. Well foliated at 35 degrees. 13 joints on foliation, smooth, clean, many may be machine breaks. REC=100% RQD=91%

LAYER 2: 7.1 – 36.0 Moderately hard, fresh mica gneiss (meta-greywacke). Wide spaced fractures, 18 pieces, longest piece 7.3 feet. Massive, well foliated at 30 – 40 degrees. 17 joints on foliation. Smooth, clean, many may be machine breaks. 1 joint at 70 degrees, rough, clean. A few other, unopened, hairline fractures at 70 degrees. Moderately weathered, medium hard seam at 22.8 – 23.1 feet depth. REC=100% RQD=96%