

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

PROJECT NO 33356.1.1		ID B-3922		COUNTY WATAUGA		GEOLOGIST L. L. ACKER						
SITE DESCRIPTION BRIDGE NO. 316 ON SR 1149 OVER COVE CREEK							GND WATER					
BORING NO B1-B		NORTHING 0.00		EASTING 0.00		0 HR N/A						
ALIGNMENT -L-		BORING LOCATION 10+79.000		OFFSET 15.00ft RT		24 HR 3.00ft						
COLLAR ELEV 2634.20ft		TOTAL DEPTH 25.70ft		START DATE 4/19/04		COMPLETION DATE 04/19/04						
DRILL MACHINE CME 550			DRILL METHOD SPT CORE BORING			HAMMER TYPE AUTOMATIC						
SURFACE WATER DEPTH			DEPTH TO ROCK 9.20ft			Log B1-B, 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			
2634.20	0.00	0	0	0	1.0							
						Ground Surface						
2630.00	3.90	3	3	5	1.0	0	8			SS-1	M	ALLUVIUM: BROWN SANDY SILT
												ALLUVIUM: SILTY SAND, GRAVEL AND BOULDERS
	8.90	100			0.5				100			WEATHERED ROCK WITH HARD ROCK SEAMS
2620.00										CORE 1		HARD ROCK: NOT CORED
										CORE 2		HARD ROCK: HARD, FRESH, LAYERED BIOTITE GNEISS REC=94 RQD=87
										CORE 3		HARD ROCK: HARD, FRESH, MASSIVE BIOTITE GNEISS REC=98 RQD=96
2610.00										CORE 4		
2608.50						TERMINATED BORING IN HARD ROCK AT ELEVATION 2608.5 FEET.						

PROJECT NO: 33356.1.1 (B-3922)
WATAUGA COUNTY

CORE BORING REPORT
B1-B

CORE 1: 10.9 – 13.2 REC=91% RQD=70%
 CORE 2: 13.2 – 18.2 REC=94% RQD=87%
 CORE 3: 18.2 – 23.2 REC=100% RQD=100%
 CORE 4: 23.2 – 25.7 REC=96% RQD=92%

LAYER 1: 10.9 – 17.6 Hard, fresh, layered biotite gneiss with mylonitic texture. Layers are dark, biotite-rich and light, feldspar-rich 0.05 to 0.8 feet thick. 13 pieces, longest piece 1.3 feet. Well foliated. Layering and foliation are parallel, dipping 25 degrees. 8 joints on foliation, smooth to moderately rough, coated with mica. 2 joints at 10-20 degrees opposite to foliation, rough, clean. 2 joints at 60 degrees, rough, clean.
REC=94% RQD=87%

LAYER 2: 17.6 – 25.7 Hard, fresh, massive biotite gneiss with porphyroclastic mylonitic texture. 9 pieces, longest piece 2.0 feet. Foliated at 20 degrees. 6 joints on foliation, moderately rough, coated with a little mica. 1 joint at 40 degrees, rough, clean.
REC=98% RQD=96%