

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

PROJECT NO 8.2761001		ID B-3266		COUNTY WILKES		GEOLOGIST L.LACKER						
SITE DESCRIPTION BR. 264 ON SR-1567 OVER N. FORK REDDIES RIVER							GND WATER					
BORING NO B3-A		NORTHING 0.00		EASTING 0.00		0 HR 1.20m						
ALIGNMENT -L-		BORING LOCATION 12+66.100		OFFSET 3.60m LT		24 HR 1.45m						
COLLAR ELEV 389.11m		TOTAL DEPTH 16.15m		START DATE 10/28/03		COMPLETION DATE 10/29/03						
DRILL MACHINE CME 550			DRILL METHOD SPT CORE BORING			HAMMER TYPE AUTOMATIC						
SURFACE WATER DEPTH N/A			DEPTH TO ROCK 7.50m			Log B3-A, Page 1 of 1						
ELEV	DEPTH	BLOW CT			PEN (m)	BLOWS PER 30cm				SAMPLE NO	LOG	SOIL AND ROCK DESCRIPTION
		15cm	15cm	15cm		0	25	50	75			
389.11												
388.00	1.45	8	11	18	0.30							ALLUVIUM: COARSE SAND AND GRAVEL
386.00	2.97	17	18	17	0.30							SAPROLITE: RED-BROWN, MICACEOUS, SILTY SAND
384.00	4.50				0.13							WEATHERED ROCK: RED-BROWN WEATHERED BIOTITE GNEISS AND GRANITE
382.00	6.02	44	56		0.15							HARD ROCK: MOD. TO SEV. WEATHERED (NOT CORED)
380.00	7.55	60			0.03							HARD ROCK: SLI. TO MOD. WEATHERED GRANITE AND BIOTITE GNEISS REC=83 RQD=44
378.00	9.07	60			0.02							HARD ROCK: SLI. WEATHERED GRANITE REC=98 RQD=57
376.00												HARD ROCK: SLI. WEATHERED GRANITE REC=90 RQD=26
374.00												
372.96												
TERMINATED BORING IN HARD ROCK AT ELEVATION 372.96 METERS.												

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WILKES COUNTY

CORE BORING REPORT

B3-A

CORE 1: 9.93 – 11.64 REC=94% RQD=55%
 CORE 2: 11.64 – 13.16 REC=80% RQD=24%
 CORE 3: 13.16 – 14.63 REC=98% RQD=70%
 CORE 4: 14.63 – 16.15 REC=95% RQD=45%

LAYER 1: 9.93 – 12.37 Moderately hard, moderately weathered biotite gneiss with severely weathered seams up to 10 cm. thick; interlayered with hard, slightly weathered granite sills. Layers are about 0.5 meters thick. Very close to close fractured, 31 pieces, longest piece 27 cm. At least 10 very close spaced joints in biotite gneiss on foliation at 10 degrees, smooth, coated with a little Fe-oxide. 5 joints at 10-30 degrees in granite, moderately rough, clean. 4 joints at 10 degrees in granite, weathered rough. 1 joint at 60 degrees in granite, smooth, clean. REC=83% RQD=44%

LAYER 2: 12.37 – 15.29 Hard to very hard, slightly to very slightly weathered granite. Close fractured, 21 pieces, longest piece 35 cm. 16 joints at 10-20 degrees, moderately rough. 5 joints at 30-40 degrees, smooth to moderately rough. 4 joints at 65 degrees, smooth. Joints thinly coated with Fe- and Mn-oxides, alum, and/or mica. REC=98% RQD=57%

LAYER 3: 15.29 – 16.15 Hard, slightly weathered granite, with a few seams of biotite gneiss up to 30 cm thick. Close fractured, 12 pieces, longest piece 12 cm. 10 joints at 10-20 degrees, smooth to moderately rough. 3 joints at 30 degrees, smooth. 2 joints at 65 degrees, smooth. Joints coated with Fe- and Mn-oxides, alum, and/or mica. REC=90% RQD=26% (low REC due to mechanical failure).