

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

PROJECT NO 34357.1.1		ID R-0977A		COUNTY CHEROKEE		GEOLOGIST TB DANIEL						
SITE DESCRIPTION US 64 EBL OVER -Y2- HARSHAW ROAD							GND WATER					
BORING NO EB2-A		NORTHING 0.00		EASTING 0.00		0 HR N/A						
ALIGNMENT -LC1B2-		BORING LOCATION 18+54.190		OFFSET 1.95m LT		24 HR 0.76m						
COLLAR ELEV 467.87m		TOTAL DEPTH 9.77m		START DATE 12/15/03		COMPLETION DATE 12/15/03						
DRILL MACHINE CME-550			DRILL METHOD CORE BORING			HAMMER TYPE AUTOMATIC						
SURFACE WATER DEPTH			DEPTH TO ROCK N/A			Log EB2-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			
467.87												Ground Surface
467.00												RESIDUUM: RED SILTY CLAY GRADES TO SANDY SILT WITH ROCK FRAGMENTS. WEATHERED ROCK TOTAL CORE RUN =8.64 TOTAL REC = 98% TOTAL RQD=34% PHYLLITE
465.00												
463.00												
461.00												
459.00												
458.10												BORING TERMINATED IN SLIGHTLY WEATHERED, MEDIUM HARD PHYLLITE AT A DEPTH OF 9.77 METERS.

SHEET 10 OF 17  
DATE 12/15/03

**CORE BORING REPORT**

PROJECT:	8.1910203	I. D. NO:	R-0977A	BORING NO:	EB2-A	GEOLOGIST:	TB DANIEL
DESCRIPTION:	BRIDGE ON -LC1B2- (US 64) OVER -Y2- (HARSHAW RD.) 18+54.19 1.95 LT. -LC1B2-						
COUNTY:	CHEROKEE	COLLAR ELEVATION:	467.87 m	TOTAL DEPTH:	9.77 m		
ELEV. (m)	DEPTH (m)	DRILL RATE MIN./3 m	RUN (m)	REC. METERS %	RQD. METERS %	SAMP. #	FIELD CLASSIFICATION AND REMARKS
466.74	1.13		1.50	1.43 95	0.50 33		ROCK CRUMBLES AND GENERALLY FALLS APART. NO LONG PIECES.  60% MODERATELY SEVERELY WEATHERED WITH 40% MODERATELY WEATHERED. VERY SOFT TO MEDIUM HARD PHYLLITE.
465.24	2.63						LESS WEATHERED PIECES OLIVE GREY, MORE WEATHERED PIECES ARE TAN. BEDDING AND FOLIATION DIP 40 TO 65 DEGREES.
465.24	2.63		1.52	1.46 96	0.43 28		IRON AND MANGANESE OXIDE STAINS ON BREAKS ON FOLIATION. 2 FRACTURES AT 20 DEGREES ONE IS HORIZONTAL (0 DEGREES). FRACTURES ALSO HAVE OXIDE STAINS.
463.72	4.15						
463.72	4.15		1.45	1.43 99	0.23 16		PHYLLITE  80% MODERATELY TO SLIGHTLY WEATHERED WITH 20% SEVERELY TO MODERATELY SEVERELY WEATHERED. VERY SOFT TO MEDIUM HARD.
462.27	5.60						LESS WEATHERED PIECES OLIVE GREY, MORE WEATHERED PIECES ARE TAN. BEDDING AND FOLIATION DIP 40 TO 65 DEGREES.
462.27	5.60		1.56	1.52 97	0.94 60		IRON AND MANGANESE OXIDE STAINS ON BREAKS ON FOLIATION. FRACTURES: 2@20 DEGREES, 1@45 DEGREES. 1 NEARLY VERTICAL. FRACTURES ALSO HAVE OXIDE STAINS.
460.71	7.16						
460.71	7.16		1.46	1.46 100	0.31 21		7.16-8.20 PHYLLITE, 8.20-9.77 METASANDSTONE  85% MODERATELY TO SLIGHTLY WEATHERED WITH 15% SEVERELY TO MODERATELY SEVERELY WEATHERED. VERY SOFT TO MEDIUM HARD.
459.25	8.62						BEDDING AND FOLIATION DIP 40 TO 65 DEGREES.
459.25	8.62		1.15	1.15 100	0.45 39		IRON AND MANGANESE OXIDE STAINS ON BREAKS ON FOLIATION. SOIL FILLED FRACTURE @ 8.97-8.98 RUST IN BREAKS, MOST BREAKS ALONG FOLIATION AT 40-70 DEGREES. 1 SET OF FRACTURES @ 45 DEGREES, 2 BREAKS @ 20 DEGREES.
458.10	9.77						
CORING TERMINATED AT ELEVATION 458.10 m							
DRILLER: JT WILLIAMS		CORE SIZE: NWD-4		EQUIPMENT: CME-550			