

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

PROJECT NO. 8.2407701		ID. B-3530		COUNTY WAKE		GEOLOGIST J.L. LOVE/C.D. CZAJKA							
SITE DESCRIPTION BRIDGE NO. 174 ON -L- (SR 2320, RILEY HILL RD.) OVER BUFFALO CREEK							GROUND WATER						
BORING NO. B2-A		BORING LOCATION 16+08		OFFSET 16' LT		ALIGNMENT -L-							
COLLAR ELEVATION 318.9'		NORTHING 768808		EASTING 2169700		0 HR. N/A							
TOTAL DEPTH 30.7'		DRILL MACHINE CME-550		DRILL METHOD SPT CORE BORING		HAMMER TYPE MANUAL							
START DATE 9/30/03		COMPLETION DATE 9/30/03		SURFACE WATER DEPTH N/A		DEPTH TO ROCK 10.7'							
ELEV. (FT.)	DEPTH (FT.)	BLOW COUNT			PEN. (FT.)	BLOWS PER FOOT				SAMPLE NUMBER	LOG MOI.	LOG	SOIL AND ROCK DESCRIPTION
		0.5'	0.5'	0.5'		0	25	50	75				
318.9													ROADWAY EMBANKMENT, ORANGE-BROWN, SILTY CLAY
315.0	3.8	2	3	3	1.0	X 6							
	6.3	2	2	3	1.0	X 5							
310.0	8.8	4	96	0.9				100+					ALLUVIAL, GRAY-BROWN, SILTY SAND WEATHERED ROCK (GRANITE)
305.0													RS-I
300.0													CRYSTALLINE ROCK (GRANITE) BLACK AND WHITE, SLIGHTLY WEATHERED TO FRESH, HARD, CLOSELY TO WIDELY FRACTURED, GRANITE
295.0													
290.0													RS-2
													REC=95% ROD=88%
285.0						CORING TERMINATED AT ELEVATION 288.2 FEET IN CRYSTALLINE ROCK (GRANITE)							
280.0													
275.0													
270.0													
265.0													
260.0													
255.0													
250.0													
245.0													
240.0													

**CORE BORING REPORT**

PROJECT: 8.2407701 ID: B-3530 COUNTY: Wake BORING NO: B2-A  
 DESCRIPTION: Bridge No. 174 on -L- (SR 2320, Riley Hill Rd.) over Buffalo Creek  
 LOCATION OF BORING: -L- Sta. 16+08, 16' LT COMPLETION DATE: 9/30/03  
 COLLAR or GROUND ELEVATION: 318.9 ft CORE SIZE: NQ GEOLOGIST: C. D. Czajka  
 CORE EQUIPMENT: CME-550, H-Casing, NQ, HSA DRILLER: W. D. Fletcher

ELEV (ft)	DEPTH (ft)	DRILL RATE (min/ft)	RUN (ft)	REC (%)	RQD (%)	SAMPLE NUMBER	FIELD CLASSIFICATION and REMARKS
308.2	10.7	1:41	5.0	4.1	2.7	RS-1	Black and white, slightly to very slightly weathered, hard, moderately closely to closely fractured, granite (thin weathered seams throughout run)
		1:35					
		1:12					
		1:21					
303.2	15.7	1:51					
303.2	15.7	1:16	5.0	4.8	4.8		Black and white, fresh, hard, widely fractured, granite
		1:12					
		1:17					
		1:24		(96%)	(96%)		
298.2	20.7	1:19					
298.2	20.7	1:50	5.0	5.0	5.0		Black and white, fresh, hard, moderately close fractured, granite
		1:41					
		1:32					
		1:46		(100%)	(100%)		
293.2	25.7	1:37					
293.2	25.7	1:43	5.0	5.0	5.0	RS-2	Black and white, fresh, hard, widely fractured, granite
		1:36					
		1:44					
		1:46					
288.2	30.7	2:38					
							BOREHOLE TERMINATED AT ELEVATION OF 288.2 FEET, IN GRANITE.