



N.C.D.O.T. GEOTECHNICAL UNIT
BORING LOG

PROJECT NO. 34209.1.1		ID No. I-4025A		COUNTY Yadkin/Surry		GEOLOGIST D. Goodnight/P. Weaver							
SITE DESCRIPTION Bridge No. 13 on I-77 SBL Over Yadkin River, Yadkin Valley RR, and NC 268							GROUND WATER (ft)						
BORING NO. B1-A SS		BORING LOCATION 27+08		OFFSET 29ft LT		ALIGNMENT -SBL							
COLLAR ELEV. 861.1 ft		NORTHING 914887.55		EASTING 1462987.59		0 HR. NA							
TOTAL DEPTH 42.5 ft		DRILL MACHINE CME 45 Skid		DRILL METHOD Wash Rotary/NQ Core		HAMMER TYPE 140 lb./Manual							
DATE STARTED 5/6/04		COMPLETED 5/7/04		SURFACE WATER DEPTH 4.3 ft.									
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	L O G	SOIL AND ROCK DESCRIPTION	
		0.5ft	0.5ft	0.5ft	0	20	40	60	80				100
861.1	0.0	1	1	2								W	861.1 0.00
857.6	3.5	13	50	50/0.2								W	858.1 3.0 ALLUVIAL: Very Loose, Tan, Fine to Coarse SAND with Some Organics (Decayed Leaves) with a Little Gravel WEATHERED ROCK: Brown, with White Severely Weathered, Soft to Medium Hard, Biotite-Mica Schist with Close to Very Close Fracture Spacing
853.6	7.5	60	40/0.1									W	850.6 10.5 SOIL: Medium Dense, Tan, Saprolitic, Silty, Coarse to Fine SAND with Rock Fragments
848.6	12.5	9	6	22								W	845.6 15.5 WEATHERED ROCK: Brown with Grey and White, Severely Weathered, Soft to Medium Hard, Mica-Biotite Schist with Very Close Fracture Spacing
												RS-1	842.6 18.5 CRYSTALLINE ROCK: Grey with Black, White, and Tan; Slightly Weathered; Moderately Hard to Hard; Biotite-Mica Schist with Very Close to Close Fracture Spacing
												RS-1	836.9 24.2 CRYSTALLINE ROCK: Grey with White, Slightly to Very Slightly Weathered, Hard to Very Hard, Biotite Schist with Close to Moderately Close Fracture Spacing
												RS-1	832.2 28.9 CRYSTALLINE ROCK: Grey with White, Slightly to Very Slightly Weathered, Moderately Hard to Hard, Biotite Schist with Very Close to Close Fracture Spacing
												RS-1	818.6 42.5 Coring Terminated at 818.6 feet in Crystalline Rock: Biotite Schist Note: River water alone used as drilling fluid

NCDOT BORE SINGLE 07104006.GPJ NC_DOT_GDT 7/13/04



CORE BORING REPORT

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BORING NO. B1-A SS		BORING LOCATION 27+08		OFFSET 29ft LT		ALIGNMENT -SBL				
COLLAR ELEV. 861.1 ft		NORTHING 914887.55		EASTING 1462987.59		0 HR. NA				
TOTAL DEPTH 42.5 ft		DRILL MACHINE CME 45 Skid		DRILL METHOD Wash Rotary/NQ Core		HAMMER TYPE 140 lb./Manual				
DATE STARTED 5/6/04		COMPLETED 5/7/04		SURFACE WATER DEPTH 4.3 ft.						
CORE SIZE HQ				TOTAL RUN 35.7 ft				DRILLER R. Toothman		
ELEV. (ft)	DEPTH (ft)	RUN (ft)	DRILL RATE (Min/ft)	RUN		SAMP. NO.	STRATA		L O G	DESCRIPTION AND REMARKS
				REC. (%)	RQD (%)		REC. (%)	RQD (%)		
										Begin Coring @ 4.7 ft
856.4	4.7	2.8	2:02	(0.0)	(NA)		(1.2)	(NA)		WEATHERED ROCK: Brown, with White Severely Weathered, Soft to Medium Hard, Biotite-Mica Schist with Close to Very Close Fracture Spacing
853.6	7.5		2:14	0%			23%			
			1:09/0.8							
853.0	8.1	4.4	N=100/0.6 0:57/0.4	(1.2)	(NA)					Majority of fabric and joints are iron stained Feldspar porphyroblasts are common Majority of jts @ 10° to 20°
848.6	12.5		2:31 2:15 2:08 2:21				(0.0)	(NA)		SOIL: Medium Dense, Tan, Saprolitic, Silty, Coarse to Fine SAND with Rock Fragments
			N=28	(1.4)	(NA)					
847.1	14.0	3.5	1:06/0.5	40%			(1.7)	(NA)		WEATHERED ROCK: Brown with Grey and White, Severely Weathered, Soft to Medium Hard, Mica-Biotite Schist with Very Close Fracture Spacing
843.6	17.5		2:04 2:24	(3.8)	(0.8)		(5.2)	(0.8)		
		5.0	2:35 3:47	76%	16%		91%	14%		Majority of fabric and jts are iron stained Feldspar porphyroblasts are common Majority of jts @ 10° to 20°
838.6	22.5		3:01 5:16			RS-1				CRYSTALLINE ROCK: Grey with Black, White, and Tan; Slightly Weathered; Moderately Hard to Hard; Biotite-Mica Schist with Very Close to Close Fracture Spacing
		5.0	9:03 27:54	(4.7)	(2.5)		(4.7)	(4.0)		12 jts @ 10° to 20° and 6 jts @ 30° to 40° Abundant feldspar porphyroblasts Numerous partially healed low to high angle fractures
833.6	27.5		5:23 4:49	94%	50%		100%	85%		CRYSTALLINE ROCK: Grey with White, Slightly to Very Slightly Weathered, Hard to Very Hard, Biotite Schist with Close to Moderately Close Fracture Spacing
		5.0	8:17 9:27	(4.8)	(2.7)		(11.4)	(2.6)		
828.6	32.5		9:21 6:33				84%	19%		Very close fracture spacing (very broken) 25.6 feet to 25.9 feet 5 jts @ 20° to 30° 4 jts @ 0° to 10° Isolated feldspar porphyroblasts
		5.0	6:07 4:00 4:25	(4.1)	(0.3)					CRYSTALLINE ROCK: Grey with White, Slightly to Very Slightly Weathered, Moderately Hard to Hard, Biotite Schist with Very Close to Close Fracture Spacing
823.6	37.5		5:56 4:23	82%	6%					
		5.0	5:10 4:10 6:41	(4.2)	(1.1)					
818.6	42.5		4:28 4:41 3:54 5:51 5:12							Feldspar porphyroblasts are common Majority of jts @ 10° to 20° 6 jts @ 30° to 40° 3 jts @ 60° 1 jt @ 90° Very broken 31.3 feet to 32.0 feet, 32.8 feet to 33.2 feet, and 37.1 feet to 37.3 feet Coring Terminated at 818.6 feet in Crystalline Rock: Biotite Schist Note: River water alone used as drilling fluid

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