



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. B2-A SS		BORING LOCATION 28+95		OFFSET 31ft LT		ALIGNMENT -SBL-							
COLLAR ELEV. 881.0 ft		NORTHING 915071.16		EASTING 1462950.99		0 HR. 15.4							
TOTAL DEPTH 61.6 ft		DRILL MACHINE CME 850		DRILL METHOD Wash Rotary/HQ Core		HAMMER TYPE 140 lb./Automatic							
DATE STARTED 3/24/04		COMPLETED 3/26/04		SURFACE WATER DEPTH NA									
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	
		0.5ft	0.5ft	0.5ft	0	20	40	60	80				100
881.0													881.0 0.00
880.0	1.0	WOH	WOH	WOH							SS-9	M	ALLUVIAL: Very Loose, Brown, Variably Silty, Coarse to Fine SAND with a Trace of Mica
877.5	3.5											M	
875.0	6.0	2	1	2								W	ALLUVIAL: Soft, Brown, Clayey, Fine Sandy SILT with a Trace of Mica
872.5	8.5	1	1	2								W	
867.5	13.5												
862.5	18.5	2	1	2									
857.5	23.5	18	11	9							SS-10	W	RESIDUAL: Medium Dense, Grey-Green, Saprolitic, Silty, Fine to Coarse SAND and Rock Fragments
854.2	26.8	70	30/0.2										WEATHERED ROCK: Tan to Brown, Severely Weathered, Soft to Medium Hard, Metamorphosed Granitic Rock with Very Close to Close Fracture Spacing
849.2	31.8	60/0.1											CRYSTALLINE ROCK: Grey, Moderately to Slightly Weathered, Medium to Moderately Hard, Biotite Schist with Very Close to Close Fracture Spacing
													829.4 51.6
													828.1 52.9
													819.4 61.6
													Coring Terminated at Elevation 819.4 feet in Crystalline Rock: Biotite Schist
													Note: Bentonite slurry used as drilling fluid; Mud density = 63.5 lbs./cu. ft.

NCDOT BORE SINGLE 07104006.GPJ NC_DOT.GDT 7/13/04



CORE BORING REPORT
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BORING NO. B2-A SS		BORING LOCATION 28+95		OFFSET 31ft LT		ALIGNMENT -SBL-				
COLLAR ELEV. 881.0 ft		NORTHING 915071.16		EASTING 1462950.99		0 HR. 15.4				
TOTAL DEPTH 61.6 ft		DRILL MACHINE CME 850		DRILL METHOD Wash Rotary/HQ Core		HAMMER TYPE 140 lb./Automatic				
DATE STARTED 3/24/04		COMPLETED 3/26/04		SURFACE WATER DEPTH NA						
CORE SIZE HQ				TOTAL RUN 35.9 ft		DRILLER R. Toothman				
ELEV. (ft)	DEPTH (ft)	RUN (ft)	DRILL RATE (Min/ft)	RUN		SAMP. NO.	STRATA		LOG	DESCRIPTION AND REMARKS
				REC. (%)	RQD (%)		REC. (%)	RQD (%)		
										Begin Coring @ 24.9 ft
856.1	24.9	1.9	4:57/0.9	(1.0)	(NA)		(1.7)	(NA)		WEATHERED ROCK: Tan to Brown, Severely Weathered, Soft to Medium Hard, Metamorphosed Granitic Rock with Very Close to Close Fracture Spacing
854.2	26.8		6:14	53%			27%			
853.5	27.5	4.3	N=100/0.7 1:48/0.3 3:19	(0.7)	(NA)					Core loss at various intervals throughout Very broken throughout
849.2	31.8		3:16							
849.1	31.9	4.9	4:42 11:55 N=60/0.1 2:01/0.9	(4.3)	(0.8)		(18.0)	(5.3)		CRYSTALLINE ROCK: Grey, Moderately to Slightly Weathered, Medium to Moderately Hard, Biotite Schist with Very Close to Close Fracture Spacing
844.2	36.8	4.8	7:32 16:19 3:53 4:20	(4.5)	(1.2)					Zones of metamorphosed granitic rock 32.9 feet to 33.1 feet and 33.5 feet to 33.8 feet Very broken 31.9 feet to 34.2 feet; 36.0 feet to 36.8 feet; 37.2 feet to 38.2 feet; 40.1 feet to 40.8 feet; 42.8 feet to 43.3 feet; 44.6 feet to 45.1 feet; and 46.6 feet to 48.2 feet Core loss at 31.9 feet to 32.5 feet; 37.2 feet to 37.5 feet; 44.6 feet to 44.9 feet; and 46.6 feet to 47.1 feet Majority of jts @ 0° to 10° Isolated medium (30° to 40°) and high (70° to 80°) jts Numerous healed fractures at various angles throughout
839.4	41.6	5.0	4:31 9:18 6:18 7:11 6:12/0.8	(4.7)	(1.3)		94%	26%		
834.4	46.6	5.0	6:59 4:59 5:19 5:48 5:06	(4.5)	(2.0)		90%	40%		
829.4	51.6	5.0	5:55 8:52 9:52 5:14 15:59	(5.0)	(3.4)		100%	68%	(1.3)	(1.3)
829.4	51.6						100%	100%	(8.7)	(4.7)
824.4	56.6	5.0	5:03 5:21 4:38 5:11	(5.0)	(2.6)		100%	52%		1 jt @ 10°
819.4	61.6		12:00 6:20 5:26 7:27 7:08 21:21							Note: Core block at 41.6 feet CRYSTALLINE ROCK: Grey, Moderately to Slightly Weathered, Medium to Moderately Hard, Biotite Schist with Very Close to Close Fracture Spacing
										Zone of metamorphosed granitic rock 55.7 feet to 56.2 feet Very broken 60.2 feet to 60.8 feet Core loss 61.4 feet to 61.6 feet Majority of jts @ 0° to 10° Isolated medium (30° to 40°) and high (70° to 80°) jts Numerous healed fractures at various angles
										Note: 0.2 feet of core from Run No. 8 could not be retrieved from hole; REC based on assumption that unretrieved rock is the same as retrieved rock Coring Terminated at Elevation 819.4 feet in Crystalline Rock: Biotite Schist
										Note: Bentonite slurry used as drilling fluid; Mud density = 63.5 lbs./cu. ft.

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