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. B6-A CS	BORING LOCATION 32+09	OFFSET 31ft LT	ALIGNMENT -SBL-	0 HR. 32.5
COLLAR ELEV. 902.7 ft	NORTHING 915379.44	EASTING 1462892.73	24 HR. 33.0
TOTAL DEPTH 65.9 ft	DRILL MACHINE CME 850	DRILL METHOD Wash Rotary/HQ Core	HAMMER TYPE 140 lb./Automatic
DATE STARTED 4/9/04	COMPLETED 4/15/04	SURFACE WATER DEPTH NA	

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
902.7									902.7 0.00
901.7	1.0								RESIDUAL: Medium Stiff to Stiff, Red-Brown, Silty, Coarse to Fine Sandy, CLAY with Rock Fragments
899.2	3.5	3	3	4	7	SS-19	18.0% M		
896.7	6.0	2	4	6	10				897.2 5.5
894.2	8.5	3	7	11	18				RESIDUAL: Very Stiff to Hard, Red-Brown to Orange-Tan, Silty, Coarse to Fine Sandy, CLAY with a Trace of Mica
889.2	13.5	3	7	11	18	SS-20	25.7% M		
884.2	18.5	4	8	10	18				
879.2	23.5	6	10	11	21				
874.2	28.5	15	17	20	37				876.2 26.5
869.2	33.5	12	13	17	30				Medium Dense to Dense, Orange-Tan, Saprolitic, Silty, Coarse to Fine SAND with a Trace of Mica
864.2	38.5	4	12	24	36				865.7 37.0
856.8	45.9	100/0.5			100/0.5				WEATHERED ROCK: Brown, Severely Weathered, Soft to Medium Hard, Biotite Schist with Very Close to Close Fracture Spacing
851.8	50.9	60	40/0.2		100/0.7				
846.8	55.9	100/0.3			100/0.3				845.3 57.4
		100/0.4			100/0.4	RS-6			CRYSTALLINE ROCK: Grey, Moderately Weathered, Medium to Moderately Hard, Biotite Schist with Very Close to Close Fracture Spacing
									836.8 65.9
									Coring Terminated at Elevation 836.8 feet in Crystalline Rock: Biotite Schist

Note: Bentonite slurry used as drilling fluid; Density = 63.0 lbs./cu. ft.

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

N.C.D.O.T. GEOTECHNICAL UNIT
CORE BORING REPORT

WBS ELEMENT 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. B6-A CS	BORING LOCATION 32+09	OFFSET 31ft LT	ALIGNMENT -SBL-	0 HR. 32.5
COLLAR ELEV. 902.7 ft	NORTHING 915379.44	EASTING 1462892.73	24 HR. 33.0
TOTAL DEPTH 65.9 ft	DRILL MACHINE CME 850	DRILL METHOD Wash Rotary/HQ Core	HAMMER TYPE 140 lb./Automatic
DATE STARTED 4/9/04	COMPLETED 4/15/04	SURFACE WATER DEPTH NA	
CORE SIZE	TOTAL RUN 25.5 ft	DRILLER R. Toothman	

ELEV. (ft)	DEPTH (ft)	RUN (ft)	DRILL RATE (Min/ft)	RUN REC. (ft) %	RUN RQD (ft) %	SAMP. NO.	STRATA REC. (ft) %	STRATA RQD (ft) %	LOG	DESCRIPTION AND REMARKS
										Begin Coring @ 39.0 ft
863.7	39.0	1.9	6:15	(1.2) 63%	(NA)		(11.6) 68%	(NA)		WEATHERED ROCK: Brown, Severely Weathered, Soft to Medium Hard, Biotite Schist with Very Close to Close Fracture Spacing
861.8	40.9	5.0	8:36/0.9 6:43	(3.2) 64%	(NA)					
856.8	45.9		6:09 5:19 9:23 9:00							Minor zones of crystalline rock (biotite schist) 40.6 feet to 40.9 feet, 43.9 feet to 44.1 feet, and 45.3 feet to 45.6 feet Near vertical fracture 49.4 feet to 50.0 feet Majority of jts @ 30° to 40° Isolated jts @ 5° to 10°
856.1	46.6	4.3	N=100/0.7 1:06/0.3 4:52 3:53	(3.0) 70%	(NA)					
851.8	50.9		5:28 5:05							
851.5	51.2	4.7	N=100/0.3 4:56/0.7 7:02	(3.2) 68%	(NA)					
846.8	55.9									845.3 57.4
846.4	56.3	4.6	7:19 16:32 11:05	(4.5) 98%	(2.5) 54%	RS-6	(8.5) 100%	(6.1) 72%		CRYSTALLINE ROCK: Grey, Moderately Weathered, Medium to Moderately Hard, Biotite Schist with Very Close to Close Fracture Spacing
841.8	60.9	5.0	N=100/0.4 2:54/0.6 9:59 7:11 12:15 11:01	(5.0) 100%	(3.6) 72%					Zone of metamorphosed granite 57.4 feet to 57.9 feet Very broken 60.5 feet to 60.8 feet 16 jts @ 30° to 40° 4 jts @ 5° to 10° 1 jt @ 60°
836.8	65.9		4:28 5:08 4:41 5:07 5:06							836.8 65.9
										Coring Terminated at Elevation 836.8 feet in Crystalline Rock: Biotite Schist

Note: Bentonite slurry used as drilling fluid; Density = 63.0 lbs./cu. ft.

NCDOT CORE SINGLE 07104006.GPJ NC_DOT.GDT 5/26/04