



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-B SS		BORING LOCATION 28+99		OFFSET 31ft RT		ALIGNMENT -SBL-							
COLLAR ELEV. 878.3 ft		NORTHING 915086.54		EASTING 1463011.23		0 HR. 13.7							
TOTAL DEPTH 66.8 ft		DRILL MACHINE CME 850		DRILL METHOD Wash Rotary/HQ Core		HAMMER TYPE 140 lb./Automatic							
DATE STARTED 3/22/04		COMPLETED 3/23/04		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
878.3													878.3 0.00
877.3	1.0	2	1	4								M	ALLUVIAL: Loose to Very Loose, Brown, Silty, Fine SAND with a Trace of Mica
874.8	3.5	3	3	3								M	
872.3	6.0	2	2	1								M	
869.8	8.5	WOH	WOH	2								SS-11	ALLUVIAL: Soft, Brown to Grey, Clayey, Fine Sandy SILT with a Trace of Mica
864.8	13.5	2	1	1								W	
859.8	18.5	9	15	25								M	RESIDUAL: Dense to Very Dense, Grey-Green, Saprolitic, Silty, Coarse to Fine SAND
854.8	23.5	17	18	73								M	
849.8	28.5	40	57	43/0.3									WEATHERED ROCK: Brown, Severely Weathered, Soft to Medium Hard, Biotite Schist with Very Close to Close Fracture Spacing
846.5	31.8	75	25/0.1										
841.5	36.8	100/0.5										RS-4	CRYSTALLINE ROCK: Grey, Moderately to Slightly Weathered, Moderately Hard to Hard, Biotite Schist with Very Close to Close Fracture Spacing
													836.5 41.8
													833.3 45.0
													811.5 66.8

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



CORE BORING REPORT
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TOTAL DEPTH 66.8 ft		DRILL MACHINE CME 850		DRILL METHOD Wash Rotary/HQ Core		HAMMER TYPE 140 lb./Automatic				
DATE STARTED 3/22/04		COMPLETED 3/23/04		SURFACE WATER DEPTH NA						
ELEV. (ft)	DEPTH (ft)	RUN (ft)	DRILL RATE (Min/ft)	RUN		SAMP. NO.	STRATA		LOG	DESCRIPTION AND REMARKS
				REC. (%)	ROD (%)		REC. (%)	ROD (%)		
										Begin Coring @ 29.8 ft
848.5	29.8	2.0	8:10	(0.8)	(NA)		(3.7)	(NA)		WEATHERED ROCK: Brown, Severely Weathered, Soft to Medium Hard, Biotite Schist with Very Close to Close Fracture Spacing
846.5	31.8		9:45	40%			58%			
845.9	32.4	4.4	N=100/0.5 4:13/0.4 9:27 6:27 5:14	(2.9)	(NA)					Core loss at various intervals throughout Very broken throughout Majority of jts @ 30° to 40° 1 jt @ 80°
841.5	36.8		5:41	(4.4)	(1.6)		(4.4)	(1.6)		CRYSTALLINE ROCK: Grey, Moderately to Slightly Weathered, Moderately Hard to Hard, Biotite Schist with Very Close to Close Fracture Spacing
841.0	37.3	4.5	N=100/0.5 2:02/0.5	98%	36%	RS-4	98%	36%		
836.5	41.8		4:16 6:18 6:53 6:11	(5.0)	(4.8)		(3.2)	(3.2)		Zone of fresh, metamorphosed granitic rock from 38.6 feet to 39.3 feet Core loss at 37.3 feet to 37.4 feet Very broken 37.3 feet to 38.1 feet and 39.4 feet to 40.4 feet
		5.0	5:42 3:27 3:34 3:32 3:26	100%	96%		100%	100%		Majority of jts @ 0° to 10° 1 jt @ 30° to 40° and 1 jt @ 60° to 70°
831.5	46.8		3:47 3:34 3:32 3:26	(5.0)	(2.8)		98%	43%		CRYSTALLINE ROCK: Grey, Slightly Weathered, Moderately Hard to Hard, Biotite Schist with Moderately Close Fracture Spacing
826.5	51.8		3:25 2:39 3:01 3:03 3:20	(4.8)	(0.4)					2 jts @ 10° to 20° CRYSTALLINE ROCK: Grey, Moderately to Slightly Weathered, Moderately Hard to Hard, Biotite Schist with Very Close to Close Fracture Spacing
821.5	56.8		3:16 3:47 3:30 3:45 4:01	(4.8)	(1.0)					Very broken 55.4 feet to 56.0 feet; 56.8 feet to 57.2 feet; and 59.1 feet to 59.3 feet Core loss at 55.4 feet to 55.6 feet; 56.8 feet and 57.0 feet; and 66.5 feet to 66.8 feet Majority of jts @ 0° to 10° 1 jt @ 60° to 70° 11 jts @ 30° to 40° Note: 0.3 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.
816.5	61.8		4:10 4:17 4:20 3:58 4:04	(5.0)	(3.5)					
811.5	66.8		4:23 5:17 5:01 4:55 5:00	100%	70%					Coring Terminated at Elevation 811.5 feet in Crystalline Rock: Biotite Schist

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Note: Bentonite slurry used as drilling fluid;
Mud density = 64.0 lbs./cu. ft.

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