



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

WBS ELEMENT NO.34209.1.1		ID No.	I-4025A		COUNTY	Yadkin/Surry		GEOLOGIST		D. Goodnight/P. Weaver			
SITE DESCRIPTION								GROUND WATER (ft)					
Bridge No. 13 on I-77 SBL Over Yadkin River, Yadkin Valley RR, and NC 268								0 HR. 17.2					
BORING NO.		B3-A SS/B5-A C		BORING LOCATION		30+83		OFFSET		31ft LT			
COLLAR ELEV.		882.6 ft		NORTHING		915255.79		EASTING		1462916.21			
TOTAL DEPTH		46.7 ft		DRILL MACHINE		CME 850		DRILL METHOD		Wash Rotary/HQ Core			
DATE STARTED		4/5/04		COMPLETED		4/8/04		SURFACE WATER DEPTH		NA			
ELEV.	DEPTH	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	
(ft)	(ft)	0.5ft	0.5ft	0.5ft	0	20	40	60	80	100	NO.	MOI	
882.6													882.6 0.00
881.6	1.0	4	4	5								M	ALLUVIAL: Stiff to Medium Stiff, Red-Brown, Silty, Fine Sandy CLAY with a Trace of Mica
879.1	3.5	2	2	3								SS-15 33.8%	
876.6	6.0	3	4	5								M	ALLUVIAL: Stiff to Medium Stiff, Brown, Clayey, Fine Sandy SILT with a Trace of Mica
874.1	8.5	2	3	3								SS-16 27.3%	
869.1	13.5	8	33	41								M	RESIDUAL: Very Dense, Brown, Saprolitic, Silty, Coarse to Fine SAND with a Little Mica
864.1	18.5	100/0.4											WEATHERED ROCK: Brown, Severely Weathered, Very Soft to Soft, Mica Schist with Very Close Fracture Spacing
860.9	21.7	100/0.4											
855.9	26.7	100/0.5											
850.9	31.7	100/0.5											
													854.1 28.5
													CRYSTALLINE ROCK: Tan, Moderately Severely Weathered, Medium Hard, Mica Schist with Very Close Fracture Spacing
													851.9 30.7
													WEATHERED ROCK: Core Loss in Severely Weathered Mica Schist
													848.9 33.7
													CRYSTALLINE ROCK: Tan, Moderately Severely to Moderately Weathered, Moderately Hard to Hard, Mica Schist with Close to Very Close Fracture Spacing
													843.7 38.9
													CRYSTALLINE ROCK: White and Grey, Slightly to Very Slightly Weathered, Very Hard, Metamorphosed Granite with Close to Very Close Fracture Spacing
													838.9 43.7
													CRYSTALLINE ROCK: Grey, Moderately to Slightly Weathered, Moderately Hard, Fine-Grained Biotite Gneiss with Close to Very Close Fracture Spacing
													835.9 46.7
													CRYSTALLINE ROCK: White and Grey, Slightly to Very Slightly Weathered, Moderately Hard, Fine-Grained Biotite Gneiss with Close to Very Close Fracture Spacing
													Coring Terminated at Elevation 835.9 feet in Crystalline Rock: Biotite Gneiss
													Note: Bentonite slurry used as drilling fluid; Density = 63.0 lbs./cu. ft.

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



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								GROUND WATER (ft)			
Bridge No. 13 on I-77 SBL Over Yadkin River, Yadkin Valley RR, and NC 268								0 HR. 17.2			
BORING NO.		B3-A SS/B5-A C		BORING LOCATION		30+83		OFFSET		31ft LT	
COLLAR ELEV.		882.6 ft		NORTHING		915255.79		EASTING		1462916.21	
TOTAL DEPTH		46.7 ft		DRILL MACHINE		CME 850		DRILL METHOD		Wash Rotary/HQ Core	
DATE STARTED		4/5/04		COMPLETED		4/8/04		SURFACE WATER DEPTH		NA	
ELEV.	DEPTH	RUN	DRILL RATE	REC.	ROD	SAMP. NO.	REC.	ROD	LOG	DESCRIPTION AND REMARKS	
(ft)	(ft)	(ft)	(Min/ft)	(ft) %	(ft) %		(ft) %	(ft) %			
										Begin Coring @ 18.9 ft	
863.7	18.9	2.8	7:07	(1.3)	(NA)		(2.2)	(NA)		WEATHERED ROCK: Brown, Severely Weathered, Very Soft to Soft, Mica Schist with Very Close Fracture Spacing	
860.9	21.7		7:04	46%			25%				
860.5	22.1	4.6	6:07/0.8							Very broken throughout; jts are iron stained	
855.9	26.7		N=100/0.5	(0.9)	(NA)					Core loss at 18.9 feet to 20.4 feet; 23.0 feet to 26.7 feet; and 27.2 feet to 28.5 feet	
855.4	27.2	4.5	7:11/0.6	20%							
854.1	28.5		18:31							CRYSTALLINE ROCK: Tan, Moderately Severely Weathered, Medium Hard, Mica Schist with Very Close Fracture Spacing	
850.9	31.7		5:40				(2.0)	(0.0)			
850.4	32.2	4.5	7:21	44%	(0.0)		91%	0%		851.9 30.7	
845.9	36.7		N=100/0.5				(0.0)	(NA)		Very broken throughout; jts are iron stained	
848.9	33.7		3:11/0.5				(3.6)	(0.4)		Core loss at 29.7 feet to 29.9 feet	
845.9	36.7		6:05				69%	8%		WEATHERED ROCK: Core Loss in Severely Weathered Mica Schist	
843.7	38.9		7:04				(4.2)	(1.8)		Very broken throughout; jts are iron stained	
840.9	41.7		11:45				88%	38%		CRYSTALLINE ROCK: Tan, Moderately Severely to Moderately Weathered, Moderately Hard to Hard Mica Schist with Close to Very Close Fracture Spacing	
838.9	43.7		6:34				(2.3)	(0.0)		Majority of jts @ 30° to 40° with iron staining	
835.9	46.7		7:47				77%	0%		CRYSTALLINE ROCK: White and Grey, Slightly to Very Slightly Weathered, Very Hard, Metamorphosed Granite with Close to Very Close Fracture Spacing	
			8:12							CRYSTALLINE ROCK: Tan, Moderately Severely to Moderately Weathered, Moderately Hard, Fine-Grained Biotite Gneiss with Close to Very Close Fracture Spacing	
			6:28							1 jt @ 60°	
			7:31							7 jts @ 5° to 10°	
			6:43							4 jts @ 30° to 40°	
			5:17							CRYSTALLINE ROCK: Grey, Moderately to Slightly Weathered, Moderately Hard, Fine-Grained Biotite Gneiss with Close to Very Close Fracture Spacing	
			4:53							1 jt @ 10°	
			9:07							6 jts @ 30° to 40°	
			15:10							Coring Terminated at Elevation 835.9 feet in Crystalline Rock: Biotite Gneiss	
			22:04							Note: Bentonite slurry used as drilling fluid; Density = 63.0 lbs./cu. ft.	
			29:35								
			20:13								
			7:42								
			14:15								

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