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

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WBS ELEMENT NO. 34209.1.1	**ID No.** I-4025A	**COUNTY** Yadkin/Surry	**GEOLOGIST** D. Goodnight
SITE DESCRIPTION Bridge No. 13 on I-77 SBL Over Yadkin River, Yadkin Valley RR, and NC 268			**GROUND WATER (ft)**
BORING NO. B3-B CS	**BORING LOCATION** 28+50	**OFFSET** 31ft RT	**ALIGNMENT** -SBL- / **0 HR.** NA
COLLAR ELEV. 862.0 ft	**NORTHING** 915038.26	**EASTING** 1463020.57	**24 HR.** NA
TOTAL DEPTH 33.2 ft	**DRILL MACHINE** CME 45 Skid	**DRILL METHOD** Wash Rotary/NQ Core	**HAMMER TYPE** 140 lb./Manual
DATE STARTED 4/29/04	**COMPLETED** 4/29/04	**SURFACE WATER DEPTH** 3.6 ft.	

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
862.0									
862.0	0.0	2	1	3	4	ST-2	W		ALLUVIAL: Very Loose, Tan, Coarse to Fine SAND with Gravel
858.5	3.5								858.0 — 4.0
856.0	6.0	15	15	85	100/0.5				WEATHERED ROCK: Brown with Grey and White, Severely Weathered, Soft, Biotite Schist with Very Close Fracture Spacing
		60/0.2			60/0.2				
848.8	13.2								
		60/0.2			60/0.2				
									845.8 — 16.2
									CRYSTALLINE ROCK: Grey with White and Tan, Slightly to Very Slightly Weathered, Moderately Hard to Hard, Biotite Schist with Very Close to Close Fracture Spacing
									828.8 — 33.2
									Coring Terminated at Elevation 828.8 feet in Crystalline Rock: Biotite Schist Note: River water alone used as drilling fluid

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

N.C.D.O.T. GEOTECHNICAL UNIT
CORE BORING REPORT
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WBS ELEMENT NO. 34209.1.1	**ID No.** I-4025A	**COUNTY** Yadkin/Surry	**GEOLOGIST** D. Goodnight
SITE DESCRIPTION Bridge No. 13 on I-77 SBL Over Yadkin River, Yadkin Valley RR, and NC 268			**GROUND WATER (ft)**
BORING NO. B3-B CS	**BORING LOCATION** 28+50	**OFFSET** 31ft RT	**ALIGNMENT** -SBL- / **0 HR.** NA
COLLAR ELEV. 862.0 ft	**NORTHING** 915038.26	**EASTING** 1463020.57	**24 HR.** NA
TOTAL DEPTH 33.2 ft	**DRILL MACHINE** CME 45 Skid	**DRILL METHOD** Wash Rotary/NQ Core	**HAMMER TYPE** 140 lb./Manual
DATE STARTED 4/29/04	**COMPLETED** 4/29/04	**SURFACE WATER DEPTH** 3.6 ft.	
CORE SIZE NQ	**TOTAL RUN** 26.8 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 @ 6.2 ft
855.8	6.2	2.0	3:11	(1.0)	(NA)		(2.3)	(NA)		WEATHERED ROCK: Brown with Grey and White, Severely Weathered, Soft, Biotite Schist with Very Close Fracture Spacing
853.8	8.2		6:19	50%			23%			
		5.0	2:11	(0.8)	(NA)					Majority of material recovered consists of fragments of moderately hard to hard crystalline rock: biotite schist
			2:52	16%						Heavy iron staining of fabric and jts in recovered rock
			3:14							
			3:01							
848.8	13.2		3:56							
848.6	13.4	4.8	N=60/0.2	(2.4)	(1.3)					
			2:15/0.8	50%	27%					
			4:24							
			6:59							
843.8	18.2									845.8 — 16.2
							(16.0)	(4.5)		CRYSTALLINE ROCK: Grey with White and Tan, Slightly to Very Slightly Weathered, Moderately Hard to Hard, Biotite Schist with Very Close to Close Fracture Spacing
		5.0	5:40	(4.6)	(0.8)		94%	26%		
			9:09	92%	16%					Majority of jts @ 10° to 20°
			5:02							8 jts @ 30° to 40°
			4:59							2 jts @ 80° to 90°
838.8	23.2		7:15							1 jt @ 45°
		5.0	6:41	(4.8)	(1.3)					Numerous partially healed low to high angle fractures
			8:35	96%	26%					Feldspar porphyroblasts are common
			2:28							Granitic 16.6 feet to 17.3 feet
			4:00							Isolated pyrite
833.8	28.2		3:26							
		5.0	3:33	(4.7)	(1.1)					
			4:55	94%	22%					
			2:23							
			3:40							
828.8	33.2		3:37							828.8 — 33.2
			3:28							Coring Terminated at Elevation 828.8 feet in Crystalline Rock: Biotite Schist
			7:07							Note: River water alone used as drilling fluid

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