

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

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	CT NO.		4209.1			ID No					<b>/</b> Yadk				GEOLOG	IST D.	Goodnight	/P. Weaver	r
SITE D	ESCRIP	TION	Bridge	No. 13	on I-	77 SB	L Over	Yadkin F	liver, Ya	dkin Va	lley RR,	and N	IC 26	88			GROUN	ID WATER	(ft)
BORIN	G NO.	B2-A S	SS	ВС	RING	LOCA	TION	28+95		OFFS	SET 31	ft LT		ALIGNM	ENT -SB	L-	0 HR.	15.4	4
COLLAR ELEV. 881.0 ft NORTHING					HING	915071.16					<b>EASTING</b> 1462950.99							<b>24 HR.</b> 15.3	
TOTAL DEPTH 61.6 ft DRILL MAC				HINE CME 850 DRILL				L METH	OD V	Vash F	Rotan	y/HQ Core	/HQ Core HAMM			140 lb./At	utoma		
ATE S	TARTE	D 3/	24/04			COM	PLETE	D 3/26/	04	SUR	FACE W	ATER	DEP	TH NA					
ELEV.	DEPTH	BL	OW COL	JNT		L	BLOW	S PER FO	OOT		SAMP.	V	1 [						
(ft)	(ft)	0.5ft	0.5ft	0.5ft	o o	20	40	60	80	10	1	МО	0   G		SOIL AN	ID ROCK	DESCRIPT	ION	
								L				VIVIO			***************************************				
881.0														881.0					0.0
880.0	1.0	WOH	WOH	WOH	•wc	 					SS-9	М		_ A	LLUVIAL: V	ery Loos	e, Brown, Va with a Trace	riably Silty,	
877.5 -	- 3.5		<u> </u>		1							1		-		071111	mara mace	or whoa	
875.0	6.0	2	1	2	•3							M		- - 875.5					5.8
	-	1	1	2		· · ·						w		- A	LLUVIAL: S ILT with a Tr	oft, Brow	n, Clayey, Fi	ne Sandy	
872.5 - -	- 8.5 -	1	2	1	: <u> </u> :							w.		-	willia 11	acc or ivi	ica		
_	-		_		3							**		_					
- 867.5	- - 13.5													-					
-	- 10.0	2	1	2	•3									-					
_	-				: :									_					
862.5 -	- - 18.5				] : إ	· · ·							000	- 863.5 - R	ESIDUAL: 1	Medium I	Dense, Grey-	Green	17.
-		18	11	9	] : :	•2					SS-10	w	0000	- s	aprolitic, Silt	y, Fine to	Coarse SAN	ND and	
-					1::								0000		lock Fragme	nts			
857.5 -	- 23.5	L.,_			]								0000	<del>-</del>					
_	Ē	18	30	70/0.4	: :	: : <u>L</u>	<del></del>	· · · ·		100/0.9			500	- 856.5 - V	VEATHERE	ROCK:	Tan to Brow		24.
854.2	26.8	70	30/0.2	-	: :									– s	everely Wea	thered. S	Soft to Mediur	n Hard	
_	Ŀ	/ / /	30/0.2		: :					100/0.7	1		5	- to	Close Fract	ed Grani ture Spac	tic Rock with	very Close	
-	<u>.</u>												5	-					
849.2	31.8	60/0.1	-		: :					60/0:1				849.2 	RVSTALLIN	E BUCK	: Grey, Mode	oratalu ta	31.8
-	-				::									S	lightly Weath	nered, Me	edium to Mod	lerately	
-	_												K/Y	_ H _ F	iard, Biotite S racture Spac	Schist wit sing	h Very Close	to Close	
-					1::									-	·	•			
-	-												KV	-					
	_				: :									_					
	-				1::									_					
-					: :									_					
-					1::								17/						
	-													-					
	F				: :								1/1	-	,		•		
-	-				: :								<b>  </b>	829.4 829.4 C	RYSTALLIK	IE POCI	C: Grey, Sligi	htly	51.6
	ţ				: :								1		Veathered, N	/loderate	ly Hard, Bioti	te Schist /	52.9
-	L												1	Г С	RYSTALLIN	IE ROCK	Fracture Sp Grey, Mod	lerately to	
-	F				: :								[//	S	lightly Weat	hered. M	edium to Mor	derately	
-	-				: :									_ H	racture Spa	ocnist wi cing	th Very Close	e to Close	
-	L				: :								(//	-	-	•	•		
	<u> </u>				ļ						-	<del>                                     </del>	+	<u>819.4</u> C	oring Termin	nated at	Elevation 819	9.4 feet in	61.6
	-													_ 0	rystalline Ro	ock: Biot	ite Schist		
_	<u> </u>													_ N			used as drill		
	F													- -	Mud d	ensity =	63.5 lbs./cu.	π.	
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	L												F				٠		
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## CORE BORING REPORT

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<b>PROJECT NO.</b> 34209.1.1 ID No. I-4025A										COUNTY Yadkin/Surry GEOLOGIST D. Goodnight/P. Weaver						
SITE D	ESCRIP	TION	Bridge					dkin Ri	ver, Y	Yadkin Valley RR, and NC 268 GROUND WATER (ft)						
BORIN		B2-A		ВО	RING	LOCATIO	N 28	3+95		OFFSET 31ft LT ALIGNMENT -SBL- 0 HR. 15.4						
<b> </b>	<b>COLLAR ELEV.</b> 881.0 ft <b>NORTHING</b> 915071.16									<b>EASTING</b> 1462950.99 <b>24 HR.</b> 15.3						
TOTAL	DEPTH	61.6	3 ft	DRILL	MAC	HINE C	ME 850	0	DR	RILL METHOD Wash Rotary/HQ Core HAMMER TYPE 140 lb./Automa						
DATES	/24/04			COMPLE	TED	3/26/0	4	SURFACE WATER DEPTH NA								
CORE	SIZE H	Q				TOTAL R				DRILLER R. Toothman						
ELEV. (ft)	DEPTH (ft)	RUN (ft)	DRILL RATE (Min/ft)	REC. (ft) %	UN RQD (ft) %	SAMP. NO.	REC. (ft)	RATA RQD (ft) %	LOG	DESCRIPTION AND REMARKS						
										Begin Coring @ 24.9 ft						
856.1 854.2	24.9 26.8	1.9	4:57/0.9 6:14	(1.0)	(NA)		(1.7)	(NA)	2	WEATHERED ROCK: Tan to Brown, Severely Weathered, Soft to Medium						
853.5	27.5	4.3	N=100/0.	7 (0.7)	(NA)		27%			Hard, Metamorphosed Granitic Rock with Very Close to Close Fracture Spacing						
			1:48/0.3 3:19	16%						Core loss at various intervals throughout Very broken throughout						
849.2 849.1	31.8 31.9	4.9	3:16 4:42	(4.3)	(0.0)		(19.0)	(E 2)		849.2 : 31.8						
049.1	31.9	4.9	11:55 N=60/0.1		(0.8) 16%		(18.0) 91%	(5.3) 27%		CRYSTALLINE ROCK: Grey, Moderately to Slightly Weathered, Medium to Moderately Hard, Biotite Schist with Very Close to Close Fracture Spacing						
844.2	36.8		2:01/0.9 7:32	1					1/4	Zones of metamorphosed granitic rock 32.9 feet to 33.1 feet and 33.5 feet to						
		4.8	16:19 3:53	(4.5) 94%	(1.2) 25%					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;						
			4:20 4:31	4 0470	2070	` <b>]</b>			<b>[</b> //t	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						
839.4	41.6	5.0	9:18 6:18	(4.7)	(1.3)	.	-			<ul> <li>Core loss at 31.9 feet to 32.5 feet; 37.2 feet to 37.5 feet; 44.6 feet to 44.9 feet;</li> <li>and 46.6 feet to 47.1 feet</li> </ul>						
			7:11	94%	26%				1/2	- Majority of jts @ 0° to 10° - Isolated medium (30° to 40°) and high (70° to 80°) jts						
834.4	46.6		6:12/0.8 6:59	1						Numerous healed fractures at various angles throughout						
		5.0	4:59 5:19	(4.5)	(2.0)				$\Gamma'$	<u>.</u>						
			5:48 5:06	90%	40%	1				-						
829.4	51.6	F 0	5:55 8:52	1 (5.0)	(0.4)		(4.0)		<u> </u>	<del></del>						
		5.0	9:52	(5.0) 100%	(3.4) 68%		(1.3) \ <u>100%</u> /	(1.3) 100%	<del> </del>	828.1 CRYSTALLINE ROCK: Grey, Slightly Weathered, Moderately Hard, Biotite Schist with Moderately Close Fracture Spacing						
			5:14 15:59				(8.7) 100%	(4.7)	1	1 jt @ 10°						
824.4	56.6	5.0	5:03 5:21	(5.0)	(2.6)				1/1							
			4:38 5:11	100%						Note: Core block at 41.6 feet CRYSTALLINE ROCK: Grey, Moderately to Slightly Weathered, Medium to						
819.4	61.6		12:00	]		. ]			[/	Moderately Hard, Biotite Schist with Very Close to Close Fracture Spacing  819.4						
			6:20 5:26													
			7:27 7:08	1						Core loss 61.4 feet to 61.6 feet Majority of jts @ 0° to 10°						
			21:21	4					lE	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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