

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

SHEET 1 OF 1

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PROJE	CT NO.	8.23	53001			ID.	B-345	50			COU	NTY	Durh	am			GEOLOG	SIST D	Goodnight		
SITE DI	ESCRIP	TION	Bridge	No. 12	22 Ove	er Saı	ndy Cr	eek o	n SR 1	1116	Garre	tt Roa	ad)						GROUN	D WATER	R (ft
BORING	G NO	B1-A					ATION		+08				T 19	ft LT		ALIG	NMENT -L-	·	0 HR.	2	.5
197			<u> </u>								- -			00773	A 70	1			1		.0
	R ELEV			NORT			3268.2			T		ASTIN						T	24 HR.		
TOTAL	DEPTH	51.0	ft	DRILL	MAC	HINE	Mol	bile B	-57	DR	ILL MI	ETHO	D 3	-7/8" 7	ricor	e Was	h/HQ Core	HAMI	MER TYPE	140 lb. N	Vlan
DATE S	TARTE	D 10	/8/02			CON	/IPLET	ED 1	10/8/0	2	S	URFA	CE W	ATER	DEP.	TH N	A		p*		
ELEV.	DEPTH	BLO	ow col	JNT	Π		BLO	WS P	ER FO	ОТ		. 8	SAMP.	V /	L						
(ft)	(ft)	0.5ft	0.5ft	0.5ft	ļ o	20) ·	40	60	8	0	100	NO.	MOI	O G		SOILA	ND ROC	CDESCRIPTION	ON.	
3			<u> </u>		╎	l								14101						***************************************	
249.5																249.5					
248.5	- 1.0														000	249.5	ALLUVIAL:	Soft to Me	dium Stiff Tan	Clayey	
Ť		2	2	2	. •4					• •		: : [SS-6	∇		•	Fine to Coars	se Sandy	SILT with Grav	vel and a	
245.0	4.5				l :/:							: : F	ST-1	V		•	Trace of Org	anic Matte	er (Rootlets an	a vvooa)	
243.5	- 6.0	WOH	WOH	1	I.							: : -	31-1	w		-	Natural Mois	ture = 16.	5%		
240.0	- 0.0	8	4	3						• •		::		w		•					
241.0	8.5				J . , Ţ	·									000	241.5	ALLIMAL	oose Gre	y Fine to Coa	CIAA2 am	
7	-	3	3	3	: 🌬	6						::		w	888	-	ALLUVIAL.	LUUSE GIE	y i inie io coal	OF OUND	
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236.0	13.5				:					• • •		::1			1	201.0			tiff Grey Silty F	ine	
		3	4	1								$\cdot \cdot \mid \vdash$	SS-7	27.8%		• •••	Sandy CLAY		•		
+	-				: T	• • •						: : =	OT 5	1	N	. •					
,	40.5				•							$\cdot \cdot \mid$	ST-2								
31.0	18.5	3	2	3	: ₋									w	N	•					
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t	-															227.0					
<u>26.0</u>	23.5	70	07/0.0		-					• • •		71			24	225.5			Grey and Bro	own	
* +	-	73	27/0.0								100/0	.5				-	Triassic Mud		ddish Brown;		<i></i>
4					l : :							::			曰		Moderately \	Veathered	i; Soft to Medi	um Hard;	
1																220.5	Indurated Tra		istone with Ve	ry Close	
Ţ	-				::							::			■	- 220.5			ddish Brown;	Slightly	
																217.8			y Hard; Indura n Moderately C		
• +											· · ·	: : L					Fracture Spa		i woderately C	,iuse	Γ
	_											· · _	RS-1		〓	•			nd Grey; Sligh		7
. +															〓	213.0			ard, Indurated; arse Grained;		
Ţ																	Sandstone w	rith Moder	ately Close to	Wide	Γ
	.														〓	·	Fracture Spa		Moderately to	Slightly	4.
+					: :							::				208.5	Weathered;	Moderatel	y Hard to Hard	1 ;	_
											• • •						Fine to Verv	Coarse G	o Indurated; M rained Triassio	3	1
+												: : ⁻				205.0	Sandstone w	ith Close	to Moderately	Close	
	.													:			Fracture Spa	cing and v	<u>with Pebbles</u> Slightly to Ven	y Slightly	٦٢
+																	Weathered: I	lard: Indu	rated Micaceo	us Fine to	1
, †											• • •	· ·			를	201.4	Very Coarse Wide Fractur	Grained 7	riassic Sands	tone with	
+	.				: :											- 199.6 198.5	Brown and G	reenish G	rev: Moderate	ly to	1
F												-			〓	196.5	 Slightly Weat 	hered: So	oft to Medium I stone with Ve	Hard:	-
†	·																to Close Frac	ture Space	ing and with li	ron Clasts	
Ţ																-	Greenish Gre	y and Bro	wn; Slightly W	/eathered;	
· +	.				,										-		Hard; Indurat Moderately C	ed Triassi	c Mudstone w	יונה	
1	.																Greenish Gre	v and Re	ddish Brown:		e I
4. +							•		•						-		Moderately V	<i>l</i> eathered	Medium Han	d; ov Close	
1	.			1								.				-	to Close Frac	ture Spac	ina	٠ .	i
+															 		Coring Termi	nated at E	levation 198.5	feet in	
Į												1					Non-Crystallin Triassic Mud		Moderately We	eatnered	
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N.C.D.O.T. GEOTECHNICAL UNIT CORE BORING REPORT

SHEET 1 OF 1

Inc. Book Section Inc. Book Section Sectio	<u> </u>											SHEET 1 OF 1
SORING NO. B1-A BORING LOCATION 22+08 OPFSET 19 ft.LT ALIGNMENT -L- 0 NR. 2.5	PROJE	CT NO.	8.23	353001			ID. B-3	450			CO	UNTY Durham GEOLOGIST D. Goodnight
SORING NO. B1-A BORING LOCATION 22+08 OFFSET 19 ft.T ALIGNMENT -L. 0 HR. 2.5	SITE D	ESCRIP	TION	Bridge	No. 12	2 Ove	er Sandy C	reek o	n SR	1116	(Gar	rett Road) GROUND WATER (fft)
Contail DePth 51.0 ft DRILL MACHINE Mobile B-57 DRILL METHOD 3-7/8" Tricone Wash/HQ Core HAMMER TYPE 140 lb. Manual Materials Mobile B-57 DRILL METHOD 3-7/8" Tricone Wash/HQ Core HAMMER TYPE 140 lb. Manual Materials Mobile B-57 DRILL METHOD 3-7/8" Tricone Wash/HQ Core HAMMER TYPE 140 lb. Manual Materials Mobile B-57 DRILL METHOD 3-7/8" Tricone Wash/HQ Core HAMMER TYPE 140 lb. Manual Materials Mobile B-57 DRILLER B. Shull DRILLER DRILLER B. Shull DRI	POPIN	G NO	R1_A								`	The second secon
OTAL DEPTH 51.0 ft DRILL MACHINE Mobile B-57 DRILL METHOD 3-7/8" Tricone Wash/HQ Core HAMMER TYPE 140 lb. Manus Marte STARTED 10/8/02 COMPLETED 10/8/02 SURFACE WATER DEPTH NA DRILLER S. Shull DRILLER B. S									2+00		-+	
COMPLETED 10/8/02 COMPLETED 10/8/02 SURFACE WATER DEPTH NA	COLLA	R ELEV	. 249	9.5 ft	NORT	HING	803268	3.21				EASTING 2007734.78 24 HR. 4.0
COMPLETED 10/8/02 COMPLETED 10/8/02 SURFACE WATER DEPTH NA	TOTAL	DEPTH	51.0) ft	DRILL	MAC	HINE M	obile E	3-57	DR	ILL I	METHOD 3-7/8" Tricone Wash/HQ Core HAMMER TYPE 140 lb. Manus
DRILLER DEPTH RUN	DATE S	STARTE	D 1	0/8/02	·	: 1	COMPLE	TED	10/8/0		T	
ELEV DEPTH RUN R												
Part RUN RIN RATE REC ROD NO. REC ROD NO. REC ROD ROD RO	CURE	SIZE F	1 U				TOTALR			T . T		DRILLER B. Shull
223.5 24.0 2.0 4.06 (80% (0% 56% 0% 56% 0% 5.0 2.8 0.0 0.0 5.1 1.3 2.0 5.0 5.1 1.3 2.0 5.0 5.1 1.3 2.0 5.0 5.1 1.3 2.0 5.0 5.1 1.3 2.0 5.0 5.1 1.3 2.0 5.0 5.1 1.3 2.0 5.0 5.1 1.3 2.0 5.0 5.1 1.3 2.0 5.0 5.1 1.3 2.0 5.0 5.1 1.3 2.0 5.0 5.1 1.3 2.0 2.0 5.0 5.1 1.3 2.0 2.0 5.0 5.1 1.3 2.0 2	ELEV. (ft)			RATE	REC.	RQD		REC.	RQD	0	**************	DESCRIPTION AND REMARKS
223.5 24.0 2.0 4.06 (80% (0% 56% 0% 56% 0% 5.0 2.8 0.0 0.0 5.1 1.3 2.0 5.0 5.1 1.3 2.0 5.0 5.1 1.3 2.0 5.0 5.1 1.3 2.0 5.0 5.1 1.3 2.0 5.0 5.1 1.3 2.0 5.0 5.1 1.3 2.0 5.0 5.1 1.3 2.0 5.0 5.1 1.3 2.0 5.0 5.1 1.3 2.0 5.0 5.1 1.3 2.0 5.0 5.1 1.3 2.0 2.0 5.0 5.1 1.3 2.0 2.0 5.0 5.1 1.3 2.0 2							-					Begin Coring @ 24.0 ft
Solid Soli			2.0								225.	Oreensin Grey and Reduish Brown, Moderately Weathered, Golf to Medium
S-11	223.5	26.0	5.0					2.8)	0.0)	昌	•	Hard; Indurated Triassic Mudstone with Very Close to Close Fracture Spacing
218.5 31.0 7.46 6.42 (100% (100% 5.0) 8.5.1 (100% (100% 5.0) 8.5.1 (100% (100% 5.0) 8.5.1 (5:11						믈	-	
213.5 36.0 5.0 3.54 4.3 3.5 36.0 5.0 3.21 1.35 36.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5								(100%	(100%	圔	- 220.	Very broken 20.0 feet to 29.0 feet
100% (100% 1	218.5	31.0	F		14000	10000	,			目	217	Indianated Tripopia Studeture with Studenately Class Francisco Consider
213.5 36.0 2.47 2.43			5.0	5:31						囯		
247 3.27 1.00% (74% 4.5) 3.2)					5.0,	5.0,	· · · · ·	4.8)	4.8)	昌		
1 100% 100	213.5	36.0		2:47	L .	L				囯		Indurated; Micaceous; Fine to Coarse Grained; Triassic Sandstone with
1:35 3.7 4.5 3.2 1 1 1 1 1 1 1 1 1			5.0					(100%	(71%		213.	Moderately Close to Wide Fracture Spacing
208.5 41.0 2.11 3.00 2.20 (88% (68% 4.4) 3.4) 3.4) 3.5) 3.4 2.22 3.30 (75% (35% 4.4) 3.4) 2.7) 3.5) 3.4 2.7) 3.5) 46.0 5.0 2.20 4.45 4.52 4.50 4.7) 4.7) 4.70 4.7) 4.70				1:35	5.0)	3.7)				芦	•	
198.5 51.0 2.20	200 5	44.0								目	- 200	Pink, Green, and Grey; Moderately to Slightly Weathered; Moderately Hard to
203.5 46.0 2.22 3:30 4.45 2:22 3:30 4.45 5.0 4.55 4.55 4.55 4.65 4.7 3.49 4.70 3.49 4.	208.5	41.0	5.0		(88%	(68%	:	(100%	(97%	鬪	208.	
203.5 46.0 3.30 4.45 5.0 4.45 5.0 4.45 5.0 4.7) 3.4) (94% (68% 4.7) 3.4) (100% (100% 1.8) 1.8) 1.8) 1.8) 1.8) 1.8) 1.8) 1.8)				2:45						〓		and with Pebbles
203.5 46.0 5.0 12:19 (94% (68% 4.7) 3.4) 201.4 (100% (100% 1.8) 1.8) 1.8) 1.8) 1.8) 1.8) 1.8) 1.8)								/7E0/	(269/		205.	0 1 it @ 80° at 36.8 feet, it thickness = <0.01 foot
198.5 51.0 12:19 (4.7) 3.4) (100% (1	203.5	46.0	50	4:45	19.49/	(690/	<u> </u>			畦	•	1 jt @ 10° at 37.0 feet with clay, jt thickness = 0.01 foot
198.5 51.0 1.8) 1.8)			5.0	12:19 7:17			'				201.	
198.5 51.0 4:33 7:46 (100% (27% 198.5				4.50 4.53		'						3 its @ 0° to 10° between 40.3 feet and 41.0 feet
Mudstone layer 43.4 feet to 43.7 feet It @ 0° at 44.4 feet with light iron staining	198.5	51.0		4:33 7:46	<u> </u>					重		Red and Grey to Tan; Slightly to Very Slightly Weathered; Hard; Indurated
Mudstone layer 43.4 feet to 43.7 feet 1 it @ 0° at 44.4 feet with light iron staining Brown and Greenish Grey; Moderately to Slightly Weathered; Soft to Medium Hard; Indurated Triassic Mudstone with Very Close to Close Fracture Spacing and with Iron Clasts Very broken 44.5 feet to 45.8 feet and 46.0 feet to 46.6 feet 1 jt @ 25° at 46.8 feet 1 jt @ 25° at 46.8 feet 4 its @ 0° to 10° from 46.8 feet to 48.1 feet Greenish Grey and Brown; Slightly Weathered; Hard; Indurated Triassic Mudstone with Moderately Close Fracture Spacing No natural breaks Greenish Grey and Reddish Brown; Moderately Weathered; Medium Hard; Indurated Triassic Mudstone with Very Close to Close Fracture Spacing Coring Terminated at Elevation 198.5 feet in Non-Crystalline Rock (Moderately				1.40	1					1 E		
It @ 0° at 44.4 feet with light iron staining							1			l F		
Brown and Greenish Grey; Moderately to Slightly Weathered; Soft to Medium Hard; Indurated Triassic Mudstone with Very Close to Close Fracture Spacing and with Iron Clasts Very broken 44.5 feet to 45.8 feet and 46.0 feet to 46.6 feet 1 jt @ 30° at 45.8 feet 1 jt @ 25° at 46.6 feet 4 jts @ 0° to 10° from 46.8 feet to 48.1 feet Greenish Grey and Brown; Slightly Weathered; Hard; Indurated Triassic Mudstone with Moderately Close Fracture Spacing No natural breaks Greenish Grey and Reddish Brown; Moderately Weathered; Medium Hard; Indurated Triassic Mudstone with Very Close to Close Fracture Spacing Coring Terminated at Elevation 198.5 feet in Non-Crystalline Rock (Moderately		1									-	
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Greenish Grey and Reddish Brown; Moderately Weathered; Medium Hard; Indurated Triassic Mudstone with Very Close to Close Fracture Spacing Coring Terminated at Elevation 198.5 feet in Non-Crystalline Rock (Moderately										lt		eviduatorie with moderately close Fracture Spacing
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Coring Terminated at Elevation 198.5 feet in Non-Crystalline Rock (Moderately	l	l					1 .			lt	-	Indurated Triassic Mudstone with Very Close to Close Fracture Spacing
Weathered Triassic Mudstone)		I								F		Coring Terminated at Elevation 198.5 feet in Non-Crystalline Rock (Moderately
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