

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

PROJECT NO. 8.2721501 ID. B-380						3-3808	3808 COUNTY Avery								GEOLOGIST D. Goodnight/P. Weaver			
ITE D	ESCRI	PTION	Bridg	e No. 58	3 Ov	er Henso	n Creek	on SR11	26 (He	nson C	reek R	oad)					GROUND	WATER (f
ORIN	G NO.	EB1-A	,	BC	ORIN	NG LOCA	TION 1	16+82		OFFS	ET 13	ft LT		ALIG	NMENT -L-		0 HR.	NM
COLLAR ELEV. 3177.6 ft NORT					DRTHING 847064.42						EASTING 1099099.31						24 HR.	4.6
												METHOD Wash Rotary HAMMER TYPE 140 lb. Man						
	START		/23/03	1				12/24/03						PTH N	 A	L		
		·	ow co	UNT	Т			PER FOO		L	SAMP.		1					
(ft)	(ft)	0.5ft	0.5ft	0.5ft	o.	20	40	60	80	100	1 .	МО	0		SOIL AN	D ROCK	DESCRIPTION	N , :
` '					t'							1			<u> </u>			
														-				
177.6 176.6-	- 1.0	<u> </u>		<u> </u>		- 1,50						ـــــ	100	3,177.6	DOADWAYE	AD ANIIZA	JENE EUL VA	
	-	6	10	44	1:				• • •			М			Dense to Med	ium Den	MENT FILL: Ve se, Brown, Gra	vel and
174.1	3.5	6	3	12	:				• • •					-	Silty, Coarse t (2.5 feet to 3.5		AND with a Bou	ulder
71.6	- - 6.0		_		·	. • 15		i : : : :			<u> </u>	Ϳ┻		3,172.1	` `*Note: Blow.c	ount at 2	2.0 feet influenc	ed by
60 1	- - 8.5	10	25	25	:			50			SS-1	W	000	<u>-</u>	gravel		to Very Dense.	- 1
	-	11	39	32	•				D 71			w	600	-			to Very Dense, to Coarse SAN	
66.6	<u>- 11.0</u>	34	21	31	:		• • • ;•	/.	• • •			w	800	-		. :	1 1 1	
64.1	13.5				:	• • • • •		J 52· · ·		· · · ·]	ĕĕĕ	<u> 3,164.6</u>	RESIDUAL - F	ense T	an, Micaceous,	~
1		13	13	27	:		♦ 400		• • •		SS-2	M		_	Saprolitic, Coa	rse to F	ine SAND with	a Trace
Ŧ	•		4 4 5 7		:	• • • • •	:: :		• • •					3,160.1	of Silt and Cla	· · .		
59.1	18.5	60/0.0			:					60/0.0				3,159.0			Dark Grey wit Moderately Ha	
1	- -	00,010			:					::!				3,157.0	Moderately Fo	lated Bio	tite-Hornblende	Gneiss
£, 4	- - 23.5						• • • •			::1			5	- 3,155.5 - 3,155.5	with Very Clos WEATHERED	ROCK:	Core Loss in	<u> </u>
54.11		60/0.1			:					60/0.1 .	RS-1		M	3,154.0	Weathered Ro	ck - Biot ROCK:	ite-Hornblende Dark Grey wit	Gneiss
1	-				:		• • • •					1	1	<u>3,151.7</u>	Moderately We	athered		lo
Ŧ	-				:				• • •					-	Biotite-Hornble	nde Gne	iss with Very C	
†	-								• • •					-	Close Fracture WEATHERED	Spacing ROCK:	Corse Loss in	
‡	-									:::				-	Weathered Ro CRYSTALLINE	ck - Biot	te-Hornblende	
†	-												[4]	3,144.2	Slightly Weath	ered, Ha	rd, Slightly to	`l
. 1	•													-	Moderately Fol with Close to N			re II
<u>±</u>	-				:	• • • • •			• • •				7	3,141.2 -3,139.6	Spacing CRYSTALLINE	ROCK:	Brown and Gr	By with
7						• •, • • •							7	- 0,100.0	White, Modera to Moderately I	lely Wea	thered, Mediun	Hard
Ŧ	•	14.1%							• • •		*			-	Foliated Biotite	-Homble	inde Gneiss wit	h Very
1	-				•	• • • • •		<u> </u>	• • •	• • •			1 //	- <u>- 3,134.6</u>	Close to Close CRYSTALLINE	ROCK:	Dark and Light	Grey
‡	•													•	with White, Slig Foliated Biotite	htly We Gneiss	athered, Hard, \ with Close to	Well
‡														•	Moderately Clo CRYSTALLINE	se Fract	ure Spacing	and
+				100										-	Grey; Moderate Hard; Well Foll	ly Weat	hered; Soft to M	edium
<u> </u>									٠				<u> </u>	•	Close to Close CRYSTALLINE	Fracture	Spacing	Very
\pm	:												lŁ		CRYSTALLINE with White, Slig Weathered, Ha	ROCK: thtly to V	Light and Dark ery Slightly	Grey
Ť	•		. 1										<u> </u>	•	Weathered, Ha with Close to M	rd, Well oderatel	Foliated Biotite v Close Fractur	Gneiss e ı
Ŧ			: · · · :										F	•	Spacing Coring Termina		•	- 1
Ŧ	-												F	_	Crystalline Roc	k: Biotite	Gneiss	
Ŧ														•				
‡																		
+	•													-				
±	.												<u> </u>		T-4-, 35-111 771	.:		1
<u></u>	. 1												-	. , [[]	Note: Drill Fl	uia = C	reek water A	lone
Ŧ					- 45 - 5 - 54 -							597	l F	•				
Ŧ										- 1				•				
#	.													• ••••				
+	[- 1			To the first					L					10 mg - 10 mg



N.C.D.O.T. GEOTECHNICAL UNIT CORE BORING REPORT

SHEET 13 OF 2

We will	MARKE		·								SHEET 13 OF 29						
										CO	OUNTY Avery GEOLOGIST D. Goodnight/P. Weaver						
SITE D	SITE DESCRIPTION Bridge No. 58 Over Henson Creek on SR1126 (h										enson Creek Road) GROUND WATER (fi						
BORIN	BORING NO. EB1-A BORING LOCATION 16+82										DFFSET 13ft LT ALIGNMENT -L- 0 HR. NM						
COLL	AR ELE	/. 317	77.6 ft	NORT	HING	847064	.42			E	EASTING 1099099.31 24 HR. 4.6						
TOTAL DEPTH 43.0 ft DRILL MACHINE Mobile B-57									D	RILL I	METHOD Wash Rotary HAMMER TYPE 140 lb. Manual						
DATE STARTED 12/23/03 COMPLETED 12/24/03										5	SURFACE WATER DEPTH NA						
CORE	SIZE H	IQ .				TOTAL F	RUN 2	25.4 ft		1	DRILLER B. Shull						
ELEV. (ft)	DEPTH (ft)	RUN (ft)	DRILL RATE (Min/ft)	REC. (ft)%	RQD (ft)%	SAMP. NO.	REC. (ft)	RQD (ft) %	LOG		DESCRIPTION AND REMARKS						
											Begin Coring @ 17.5 ft						
3,160.1	17.5	1.0	2:09	(1.0)	(0.0)		(1.0)	(0.0)	区	₹·18	CRYSTALLINE ROCK: Dark Grey with White, Moderately Weathered.						
3.159.1	18.5	5.0	N=60/0.0 1:12	(1.3)	(0.0)		91% / (0.0)	(NA)		3,157	Moderately Hard, Moderately Foliated Biotite-Hornblende Gneiss with Very Close to Close Fracture Spacing 20.6						
3,154.1	23.5		1:27 2:20	26%	0%		(1.3)	(0.0) 0%	5	- 3,155 - 3,154	1 jt @ 30° parallel to foliation with heavy iron staining						
3,154.0	23.6	4.4	2:47 1:59	(4.3) 98%	(3:1) 70%	RS-1	87% (0.0)	(NA) (2.3)	7	-	WEATHERED ROCK: Core Loss in Weathered Rock - Biotite-Homblende						
			N=60/0.1 2:36/0.9	98%	70%		(2.3)	100%	47	<u>3,151</u>	1.7 Gneiss 25.9 CRYSTALLINE ROCK: Dark Grey with White, Moderately Weathered,						
3,149.6	28.0	5.0	3:14 3:20	(4.3)	(1.2)		100% (6.8)	(2.4) 32%	سريا	<u> </u>	Medium Hard to Moderately Hard, Moderately to Well Foliated Biotite-Hornblende Gneiss with Very Close to Close Fracture Spacing						
	,		3:08	86%	(1.2) 24%		91%		(/)	<u> </u>	Iron staining of majority of joint face						
3.144.6	33.0		2:03/0.5 2:10	1						<u>L</u>	Joint angles vary from very low to very high						
0,,,,,,	99.0	5.0	2:52 2:50	(4.6) 92%	(3.3) 66%		(3.0)	(2.9)	1	3,144	L2 WEATHERED ROCK: Corse Loss in Weathered Rock - Biotite-Hornblende 33.4 Gneiss						
		·	2:00 2:17	9276	00%		100%	97%	1	3,141							
3,139.6	38.0	5.0	2:41 2:56	/5.00	(0.0)		(1.1) 69%	(0.0)	. /	-3,139							
		5.0	2:37 2:47	(5.0) 100%	(3.9) 78%		(5.0) 100%	(3.9) 78%		F	2 its @ 30° parallel to foliation with light to moderate iron staining CRYSTALLINE ROCK: Brown and Grey with White, Moderately Weathered,						
0.404.0	40.0		3:10	1			1.00%		[7]	F	Medium Hard to Moderately Hard, Moderately to Well Foliated						
3,134.6	43.0		3:47 3:05	-						<u>-3,13</u> 4							
	2		3:11 3:37		, ,					-	Majority of its @ 20° to 30° parallel to foliation 8 - 0.1 foot to 0.5 foot thick zones of moderately severely weathered, soft						
		-	3:19	1						_	CRYSTALLINE ROCK: Dark and Light Grey with White, Slightly Weathered, Hard, Well Foliated Biotite Gneiss with Close to Moderately Close Fracture						
										<u> </u>	Spacing						
				1.						_	its @ 20° to 30° parallel to foliation						
										- :	CRYSTALLINE ROCK: White, Brown, and Grey; Moderately Weathered; Soft to Medium Hard; Well Foliated Biotite Gneiss with Very Close to Close						
								- 1		<u> </u>	Fracture Spacing CRYSTALLINE ROCK: Light and Dark Grey with White, Slightly to Very						
		** - :						N		Ŀ	Slightly Weathered, Hard, Well Foliated Biotite Gneiss with Close to Moderately Close Fracture Spacing						
										Ŀ	Majority of its @ 30° parallel to foliation						
										-	Majority of its @ 30° parallel to foliation Moderately weathered, soft to medium hard zones 38.8 feet to 39.3 feet and 42.0 feet to 42.7 feet						
										-	Vertical it with iron staining 42.0 feet to 42.7 feet Coring Terminated at Elevation 3134.6 feet in Crystalline Rock: Biotite Gneiss						
										_							
			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1					Ŀ	*Note: Run No. 3 (23.6 feet to 28.0 feet) cut short to adjacent stroke						
										<u> </u>							
										<u> </u>							
								, .		-							
										-							
3.5										_							
	ı.							1									
7 ,										_							
									-	-							
				%						-							
			1.0		5					-							