



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

SHEET 19 OF 29

PROJECT NO. 8.2721501		ID. B-3808		COUNTY Avery		GEOLOGIST D. Goodnight/P. Weaver							
SITE DESCRIPTION Bridge No. 58 Over Henson Creek on SR1126 (Henson Creek Road)						GROUND WATER (ft)							
BORING NO. EB2-B		BORING LOCATION 17+42		OFFSET 12ft RT		ALIGNMENT -L-							
COLLAR ELEV. 3176.7 ft		NORTHING 847014.49		EASTING 1099141.13		0 HR. NM							
TOTAL DEPTH 34.1 ft		DRILL MACHINE Mobile B-57		DRILL METHOD Wash Rotary		HAMMER TYPE 140 lb. Manual							
DATE STARTED 12/22/03		COMPLETED 12/22/03		SURFACE WATER DEPTH NA									
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	
		0.5ft	0.5ft	0.5ft	0	20	40	60	80				100
3,176.7													3,176.7 0.00
3,175.7	1.0	5	4	4								SS-8 M	ROADWAY EMBANKMENT FILL: Loose, Brown, Silty, Coarse to Fine SAND and Gravel with a Trace of CLAY
3,173.2	3.5	6	6	17								M	ROADWAY EMBANKMENT FILL: Medium Dense, Brown, Micaceous, Gravel and Silty, Coarse to Fine SAND
3,170.7	6.0	4	8	16								W	
3,168.2	8.5	55	45/0.1										3,168.7 WEATHERED ROCK: White, Grey, and Brown Biotite Gneiss
													3,167.6 WEATHERED ROCK: Core Loss in Weathered Rock - Biotite Gneiss
													3,161.6 CRYSTALLINE ROCK: Brown and Light to Dark Grey with White, Moderately Severely to Moderately Weathered, Moderately Hard to Hard, Moderately to Well Foliated Biotite Gneiss with Very Close to Close Fracture Spacing
													3,155.4 WEATHERED ROCK: Core Loss in Weathered Rock - Biotite Gneiss
3,157.6	19.1	60	40/0.1										3,155.4 CRYSTALLINE ROCK: Brown and Light to Dark Grey with White, Slightly to Moderately Weathered, Medium Hard to Moderately Hard, Moderately Foliated Biotite-Mica Gneiss with Very Close to Close Fracture Spacing
													3,153.5 CRYSTALLINE ROCK: Light and Dark Grey with White, Slightly to Very Slightly Weathered, Hard, Moderately to Slightly Foliated Biotite Gneiss with Moderately Close Fracture Spacing
													3,148.8 CRYSTALLINE ROCK: Brown and Light Grey, Moderately Severe to Moderately Weathered, Soft to Medium Hard Biotite Gneiss with Very Close Fracture Spacing
													3,147.8 CRYSTALLINE ROCK: Light and Dark Grey with White, Slightly to Very Slightly Weathered, Hard, Moderately to Slightly Foliated Biotite Gneiss with Moderately Close Fracture Spacing
													3,144.8 CRYSTALLINE ROCK: Brown and Light Grey, Moderately Severe to Moderately Weathered, Soft to Medium Hard Biotite Gneiss with Very Close Fracture Spacing
													3,143.8 CRYSTALLINE ROCK: Light and Dark Grey with White, Very Slightly Weathered, Moderately Hard to Hard, Moderately to Slightly Foliated Biotite Gneiss with Moderately Close Fracture Spacing
													3,142.8 CRYSTALLINE ROCK: Light and Dark Grey with White, Slightly to Very Slightly Weathered, Hard, Moderately to Slightly Foliated Biotite Gneiss with Moderately Close Fracture Spacing
													3,142.6 CRYSTALLINE ROCK: Brown and Light Grey, Moderately Severe to Moderately Weathered, Soft to Medium Hard Biotite Gneiss with Very Close Fracture Spacing
													3,142.6 CRYSTALLINE ROCK: Light and Dark Grey with White, Very Slightly Weathered, Moderately Hard to Hard, Moderately to Slightly Foliated Biotite Gneiss with Moderately Close Fracture Spacing

Note: Drill Fluid = Creek Water Alone



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CORE BORING REPORT

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SITE DESCRIPTION Bridge No. 58 Over Henson Creek on SR1126 (Henson Creek Road)						GROUND WATER (ft)				
BORING NO. EB2-B		BORING LOCATION 17+42		OFFSET 12ft RT		ALIGNMENT -L-				
COLLAR ELEV. 3176.7 ft		NORTHING 847014.49		EASTING 1099141.13		0 HR. NM				
TOTAL DEPTH 34.1 ft		DRILL MACHINE Mobile B-57		DRILL METHOD Wash Rotary		HAMMER TYPE 140 lb. Manual				
DATE STARTED 12/22/03		COMPLETED 12/22/03		SURFACE WATER DEPTH NA						
CORE SIZE HQ		TOTAL RUN 24.4 ft		DRILLER B. Shull						
ELEV. (ft)	DEPTH (ft)	RUN (ft)	DRILL RATE (Min/ft)	RUN		SAMP. NO.	STRATA		LOG	DESCRIPTION AND REMARKS
				REC. (ft)%	RQD (ft)%		REC. (ft)%	RQD (ft)%		
										Begin Coring @ 9.1 ft
3,167.6	9.1	5.0	2:29 3:17 4:45 3:05 2:47	(4.0) 80%	(0.4) 8%		(5.0) 83%	(0.9) 15%		3,167.6 CRYSTALLINE ROCK: Brown and Light to Dark Grey with White, Moderately Severely to Moderately Weathered, Moderately Hard to Hard, Moderately to Well Foliated Biotite Gneiss with Very Close to Close Fracture Spacing
3,162.6	14.1	5.0	2:56 0:30 1:11 1:41 2:12	(1.0) 20%	(0.5) 10%		(0.0) 0%	(NA)		3,161.6 Majority of fracture faces heavily iron stained Partially healed to open near vertical fracture 9.1 feet to 10.1 feet Fractures below 13.3 feet @ 35° to 45° parallel to foliation Isolated narrow (< 0.1 foot thick) severely weathered and soft zones throughout WEATHERED ROCK: Core Loss in Weathered Rock - Biotite Gneiss
3,157.6	19.1	4.4	1:23/0.4 1:08 2:59 6:00 4:52 3:45 4:10 4:38 4:43 4:04	(2.5) 64%	(1.0) 23%		(1.6) 84%	(0.0) 0%		3,155.4 CRYSTALLINE ROCK: Brown and Light to Dark Grey with White, Slightly to Moderately Weathered, Medium Hard to Moderately Hard, Moderately Foliated Biotite-Mica Gneiss with Very Close to Close Fracture Spacing
3,152.6	24.1	5.0	4:33 4:31 3:39 1:14 3:46	(4.2) 84%	(3.7) 74%		(4.7) 100%	(4.7) 100%		3,153.5 CRYSTALLINE ROCK: Light and Dark Grey with White, Slightly to Very Slightly Weathered, Hard, Moderately to Slightly Foliated Biotite Gneiss with Moderately Close Fracture Spacing
3,147.6	29.1	5.0		(4.3) 86%	(3.8) 76%		(0.4) 33%	(0.0) 0%		3,148.8 Majority of jts @ 45° to 50° parallel to foliation with heavy iron staining Quartz seam from 21.3 feet to 21.6 feet
							(2.8) 100%	(2.8) 100%		3,147.6 CRYSTALLINE ROCK: Light and Dark Grey with White, Slightly to Very Slightly Weathered, Hard, Moderately to Slightly Foliated Biotite Gneiss with Moderately Close Fracture Spacing
							(0.5) 42%	(0.0) 0%		3,144.8 jts @ 10° to 20°
							(1.0) 100%	(1.0) 100%		3,143.6 CRYSTALLINE ROCK: Brown and Lightly Grey, Moderately Severely Weathered, Medium Hard Biotite Gneiss with Very Close Fracture Spacing
										3,142.6 CRYSTALLINE ROCK: Light and Dark Grey with White, Slightly to Very Slightly Weathered, Hard, Moderately to Slightly Foliated Biotite Gneiss with Moderately Close Fracture Spacing
										1 ft @ 30° CRYSTALLINE ROCK: Brown and Light Grey, Moderately Severely to Moderately Weathered, Soft to Medium Hard Biotite Gneiss with Very Close Fracture Spacing
										CRYSTALLINE ROCK: Light and Dark Grey with White, Very Slightly Weathered, Moderately Hard to Hard, Moderately to Slightly Foliated Biotite Gneiss with Moderately Close Fracture Spacing Coring Terminated at Elevation 3142.6 feet in Crystalline Rock: Biotite Gneiss

NCDOT CORE SINGLE 07103034.GPJ NC_DOT.GDT 1/30/04

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