



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. EB1-A		BORING LOCATION 16+82		OFFSET 13ft LT		ALIGNMENT -L-							
COLLAR ELEV. 3177.6 ft		NORTHING 847064.42		EASTING 1099099.31		0 HR. NM							
TOTAL DEPTH 43.0 ft		DRILL MACHINE Mobile B-57		DRILL METHOD Wash Rotary		HAMMER TYPE 140 lb. Manual							
DATE STARTED 12/23/03		COMPLETED 12/24/03		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
3,177.6													3,177.6 0.00
3,176.6	1.0	6	10	44								M	ROADWAY EMBANKMENT FILL: Very Dense to Medium Dense, Brown, Gravel and Silty, Coarse to Fine SAND with a Boulder (2.5 feet to 3.5 feet)
3,174.1	3.5	6	3	12									
3,171.6	6.0	10	25	25									
3,169.1	8.5	11	39	32								SS-1	*Note: Blow count at 2.0 feet influenced by gravel COLLUVIUM: Dense to Very Dense, Brown, Gravel and Silty, Fine to Coarse SAND
3,166.6	11.0	34	21	31								W	
3,164.1	13.5	13	13	27								W	
												SS-2	RESIDUAL: Dense, Tan, Micaceous, Saprolitic, Coarse to Fine SAND with a Trace of Silt and Clay
3,159.1	18.5											M	
		60/0.0											3,160.1 17.5
													3,159.0 18.6
													3,157.0 20.6
													3,155.5 22.1
													3,154.0 23.6
3,154.1	23.5	60/0.1										RS-1	CRYSTALLINE ROCK: Dark Grey with White, Moderately Weathered, Moderately Hard, Moderately Foliated Biotite-Hornblende Gneiss with Very Close to Close Fracture Spacing
													3,151.7 25.9
													3,144.2 33.4
													3,141.2 36.4
													3,139.6 38.0
													3,134.6 43.0

Note: Drill Fluid = Creek Water Alone

NCDOT BORE SINGLE 07103034.GPJ NC\_DOT.GDT 1/30/04



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TOTAL DEPTH 43.0 ft		DRILL MACHINE Mobile B-57		DRILL METHOD Wash Rotary		HAMMER TYPE 140 lb. Manual				
DATE STARTED 12/23/03		COMPLETED 12/24/03		SURFACE WATER DEPTH NA						
CORE SIZE HQ		TOTAL RUN 25.4 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. (%)	RQD (%)		
										Begin Coring @ 17.5 ft
3,160.1	17.5	1.0	2:09	(1.0)	(0.0)		(1.0)	(0.0)		CRYSTALLINE ROCK: Dark Grey with White, Moderately Weathered, Moderately Hard, Moderately Foliated Biotite-Hornblende Gneiss with Very Close to Close Fracture Spacing
3,159.1	18.5	5.0	N=60/0.0	100%	0%		(0.0)	(NA)		
			1:12	(1.3)	(0.0)		0%	(0.0)		3,157.0 20.6
			1:27	26%	0%		(1.3)	0%		3,155.5 22.1
3,154.1	23.5		2:20				87%	(NA)		1 jt @ 30° parallel to foliation with heavy iron staining
3,154.0	23.6	4.4	2:47	(4.3)	(3.1)	RS-1	(0.0)	(2.3)		2 its @ 10°
			N=60/0.1	98%	70%		0%	100%		WEATHERED ROCK: Core Loss in Weathered Rock - Biotite-Hornblende Gneiss
3,149.6	28.0		2:36/0.9				(2.3)	(2.4)		CRYSTALLINE ROCK: Dark Grey with White, Moderately Weathered, Medium Hard to Moderately Hard, Moderately to Well Foliated Biotite-Hornblende Gneiss with Very Close to Close Fracture Spacing
		5.0	3:14				100%	32%		
			3:20	(4.3)	(1.2)		(6.8)			Iron staining of majority of joint face
			3:08	86%	24%					Joint angles vary from very low to very high
3,144.6	33.0		2:03/0.5							WEATHERED ROCK: Core Loss in Weathered Rock - Biotite-Hornblende Gneiss
		5.0	2:10				(3.0)	(2.9)		3,144.2 33.4
			2:52	(4.6)	(3.3)		100%	97%		
			2:50	92%	66%					CRYSTALLINE ROCK: Dark Grey with White, Slightly Weathered, Hard, Slightly to Moderately Foliated Biotite-Hornblende Gneiss with Close to Moderately Close Fracture Spacing
			2:00							3,141.2 36.4
			2:17				(1.1)	(0.0)		3,139.6 38.0
3,139.6	38.0		2:41				69%	0%		
		5.0	2:56	(5.0)	(3.9)		(5.0)	(3.9)		2 its @ 30° parallel to foliation with light to moderate iron staining
			2:37	100%	78%					CRYSTALLINE ROCK: Brown and Grey with White, Moderately Weathered, Medium Hard to Moderately Hard, Moderately to Well Foliated Biotite-Hornblende Gneiss with Very Close to Close Fracture Spacing
			2:47							3,134.6 43.0
3,134.6	43.0		3:10							Majority of jts @ 20° to 30° parallel to foliation
			3:47							3 - 0.1 foot to 0.5 foot thick zones of moderately severely weathered, soft
			3:05							CRYSTALLINE ROCK: Dark and Light Grey with White, Slightly Weathered, Hard, Well Foliated Biotite Gneiss with Close to Moderately Close Fracture Spacing
			3:11							jts @ 20° to 30° parallel to foliation
			3:37							CRYSTALLINE ROCK: White, Brown, and Grey; Moderately Weathered; Soft to Medium Hard; Well Foliated Biotite Gneiss with Very Close to Close Fracture Spacing
			3:19							CRYSTALLINE ROCK: Light and Dark Grey with White, Slightly to Very Slightly Weathered, Hard, Well Foliated Biotite Gneiss with Close to Moderately Close Fracture Spacing
										Majority of jts @ 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 jt with iron staining 42.0 feet to 42.7 feet
										Coring Terminated at Elevation 3134.6 feet in Crystalline Rock: Biotite Gneiss

\*Note: Run No. 3 (23.6 feet to 28.0 feet) cut short to adjacent stroke

NCDOT CORE SINGLE 07103034.GPJ NC\_DOT.GDT 1/28/04