CORE BORING REPORT

SHEET 21 OF 40

PAGE 1 OF 1

PROJECT NO. 33253.1.1	**ID No.** B-3714	**COUNTY** Wilkes	**GEOLOGIST** P. Alton
SITE DESCRIPTION Bridge No. 83 over Mulberry Creek on NC 268			**GROUND WATER (ft)**
BORING NO. TB1-A	**BORING LOCATION** 16+62	**OFFSET** 14ft LT	**ALIGNMENT** -L-	**0 HR.** NM
COLLAR ELEV. 985.4 ft	**NORTHING** 895330.31	**EASTING** 1372377.94		**24 HR.** 0.0
TOTAL DEPTH 76.6 ft	**DRILL MACHINE** CME 850	**DRILL METHOD** Wash Rotary/HQ & NQ Core		**HAMMER TYPE** 140lb Manual
DATE STARTED 11/30/04	**COMPLETED** 12/13/04	**SURFACE WATER DEPTH** NA		
CORE SIZE HQ & NQ	**TOTAL RUN** 47.8 ft	**DRILLER** R. Toothman		

ELEV. (ft)	DEPTH (ft)	RUN (ft)	DRILL RATE (Min/ft)	RUN REC. (ft) %	RUN RQD (ft) %	SAMP. NO.	STRATA REC. (ft) %	STRATA RQD (ft) %	LOG	DESCRIPTION AND REMARKS
										Begin Coring @ 14.8 ft
970.6	14.8	2.0	1:18	(0.5)	(0.4)		(0.5)	(0.4)		970.6 BOULDER: White and Orange Brown, Slightly Weathered, Very Hard Quartzite 14.8
968.6	16.8		0:49	23%	18%		50%	40%		969.6 with Very Close to Close Fracture Spacing 15.8
		5.0	0:45	(0.0)	(NA)		(0.2)	(NA)		RESIDUAL: Dense, Tan Brown, Silty, Coarse to Fine SAND (Saprolite)
			0:29	0%			2%			
			0:51							
963.6	21.8		1:09							
			1:26							
			N=37			*SS-21*				
962.1	23.3	3.5	0:52/0.5	(0.2)	(NA)					
			0:54	6%						
958.6	26.8		0:47							
			0:52							958.1 27.3
			N=100/0.8				(0.3)	(NA)		WEATHERED ROCK: White, Gray and Brown; Severely Weathered; Medium
957.3	28.1	3.7	0:52/0.7	(0.3)	(NA)		18%			956.4 to Moderately Hard; Biotite Gneiss with Very Close Fracture Spacing 29.0
			1:06	8%			(0.0)	(NA)		RESIDUAL: Very Dense, White and Brown, Micaceous, Silty, Coarse to Fine
953.6	31.8		1:26				0%			SAND (Saprolite)
			1:13							951.6 33.8
952.1	33.3	3.5	*N=81*	(3.0)	(2.4)		(4.6)	(3.1)		CRYSTALLINE ROCK: White with Gray and Brown, Slightly Weathered,
			1:08/0.5	86%	69%	RS-1	92%	62%		Moderately Hard, Calc-Silicate Rock with Close to Moderately Close Fracture
948.6	36.8		4:01							Spacing and with Isolated Garnet
		5.0	3:58	(1.6)	(0.7)					946.6 Very Close Fracture Spacing 37.5ft to 37.7ft and 38.6ft to 38.8ft 38.8
			6:21	32%	14%					Soft from 38.0ft to 38.2ft
			3:35				(0.1)	(NA)		RESIDUAL: Medium Dense to Very Dense, Orange Brown to Tan Brown,
943.6	41.8		3:06				0%			Variably Micaceous, Silty, Coarse to Fine SAND (Saprolite)
			0:30							
			0:30							
			0:30							
942.1	43.3	3.5	*N=29*	(0.0)	(NA)					
			0:40/0.5	0%						
938.6	46.8		1:20							
			1:03							
937.1	48.3	2.7	1:46	(0.1)	(NA)					
			N=69	4%						
934.4	51.0		1:53							
			2:04							
932.9	52.5	3.5	1:44/0.7	(0.0)	(NA)					
			N=68	0%						
929.4	56.0		1:15/0.5							
			2:15			*SS-22*				
			3:03							
927.9	57.5	3.5	1:44	(0.0)	(NA)					
			N=40	0%						
924.4	61.0		0:39/0.5							
			1:17							
			0:55							
922.9	62.5	3.5	2:39	(0.0)	(NA)					
			N=30	0%						
919.4	66.0		1:00/0.5							
			3:50							918.9 66.5
918.0	67.4	3.6	3:02	(2.8)	(NA)		(4.8)	(NA)		WEATHERED ROCK: Brown with Gray, Severely Weathered, Very Soft to Soft
			3:56	78%			48%			with Isolated Moderately Hard Pieces, Biotite Gneiss with Very Close Fracture
914.4	71.0		*N=100/0.9*							Spacing
			4:26/0.6							
914.2	71.2	4.8	3:52	(2.0)	(NA)					
			6:08	42%						
			5:42							
909.4	76.0		*N=60/0.2*							908.8 76.6
908.8	76.6		9:00/0.8							Coring Terminated at Elevation 909.4ft in WEATHERED ROCK: Biotite Gneiss
			17:00							
			5:55							Boring Terminated at Elevation 908.8ft in WEATHERED ROCK
			12:30							
			7:37							NOTE: Bentonite and creek water used as drilling fluid
			N=100/0.6							
										Mud density = 63.5lbs/cu. ft. at 8.5ft

NCDOT CORE SINGLE 07104040.GPJ NC_DOT.GDT 12/23/04