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

SHEET 14 OF 29

SHEET 1 OF 1

PROJECT NO. 33321.1.1		ID. B-3877		COUNTY Nash		GEOLOGIST C. Baldwin									
SITE DESCRIPTION Bridge No. 52 over Turkey Creek on SR 1101 (Claude Lewis Rd.)						GROUND WATER (ft)									
BORING NO. B1-A		BORING LOCATION 25+56		OFFSET 6ft LT		ALIGNMENT -L-									
COLLAR ELEV. 148.9 ft		NORTHING 727,029		EASTING 2,252,324		0 HR. N/A*									
TOTAL DEPTH 42.5 ft		DRILL MACHINE CME 550		DRILL METHOD 3.25" ID HSA/NQ3 Core		HAMMER TYPE Automatic									
DATE STARTED 10/18/04		COMPLETED 10/19/04		SURFACE WATER DEPTH N/A											
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		
148.9	0.0	WOH	WOH	WOH								W	148.9	0.0	Ground Surface
143.9	5.0	WOH	WOH	3								W	140.6	8.3	-ALLUVIAL- Gray & brown, silty CLAY (A-6), with little fine sand & trace coarse sand.
138.9	10.0	WOH	WOH	3								W	137.4	11.5	Gray, fine to coarse SAND (A-1-b(0)), with trace silt & clay.
133.9	15.0	2	3	7								W	133.7	15.2	-WEATHERED ROCK- Gray, META-ARGILLITE.
131.4	17.5	60/0.2'										W	129.1	19.8	-WEATHERED ROCK- Gray, severely weathered, soft to medium hard META-ARGILLITE.
		60/0.2'										W	126.1	22.8	-NON-CRYSTALLINE ROCK- Gray, moderately severely weathered, medium hard META-ARGILLITE.
												W	123.8	25.1	-WEATHERED ROCK- Gray, severely weathered, medium hard META-ARGILLITE.
												W	120.3	28.6	-NON-CRYSTALLINE ROCK- Gray, moderately severely weathered, moderately hard META-ARGILLITE.
												W	119.0	29.4	-WEATHERED ROCK- Gray, severely weathered, soft META-ARGILLITE.
												W	110.8	38.1	-NON-CRYSTALLINE ROCK- Gray, moderately severely to moderately weathered, moderately hard META-ARGILLITE.
												W	109.0	39.9	-WEATHERED ROCK- Gray, severely weathered, soft META-ARGILLITE.
												W	106.4	42.5	-NON-CRYSTALLINE ROCK- Gray, moderately severely weathered, moderately hard META-ARGILLITE.
Boring Terminated at Elevation 106.4 ft in NON-CRYSTALLINE ROCK (META-ARGILLITE)															
NOTES: 1) 9.0' from bridge deck to natural ground. 2) Driller indicates harder drilling at a depth of 11.5' (elev. 137.4'). 3) Coring began at a depth of 15.2' (elev. 133.7'). * Groundwater not measured due to water introduced for coring.															

NCDOT BORE SINGLE F66-239.GPJ NC DOT.GDT 12/10/04

CORE BORING REPORT							DATE: 10/18-19/2004
PROJECT:	33321.1.1	ID. NO.:	B-3877	BORING NO.:	B1-A	GEOLOGIST:	Chris Baldwin
DESCRIPTION:	Bridge No. 52 over Turkey Creek on SR 1101 (Claude Lewis Road)					SENIOR DRILLER:	Jim Gilchrist
COUNTY:	Nash	COLLAR ELEVATION:	148.9 ft	TOTAL DEPTH:	42.5 ft	DRILLING ASSISTANT:	Bill Smith
Elev. (ft)	Depth (ft)	Drill Rate (min/ft)	Run Length (ft)	REC (%)	RQD (%)	Sample #	FIELD CLASSIFICATION AND REMARKS
133.7	15.2	0:37/0.3 ft	2.3	0.5/2.3	0.0/2.3		133.7 ft (15.2 ft)
		3:49		22%	N/A		WR - 15.2 - 17.0 ft Gray, severely weathered, soft Meta-Argillite Very close fracture spacing. 2 joints at 60° STRATA REC.=0%
		4:04					STRATA BREAK STRATA RQD=N/A 131.9 ft (17.0 ft)
131.4	17.5						SPT taken from 17.5 - 17.7 ft (N value=60/0.2 ft) Meta-Argillite
131.2	17.7	3:10/0.8 ft	4.8	3.2/4.8	2.3/4.8		WR - 17.0 - 19.8 ft Gray, severely weathered, medium hard Meta-Argillite Very close to close fracture spacing. STRATA REC.=38%
		3:47		67%	N/A		STRATA BREAK STRATA RQD=N/A 129.1 ft (19.8 ft)
		3:45					NCR - 19.8 - 22.8 ft Gray, moderately severely weathered, medium hard Meta-Argillite Close fracture spacing. 2 joints at 30° STRATA REC.=100%
		4:10					STRATA BREAK STRATA RQD=N/A 126.1 ft (22.8 ft)
		4:12					WR - 22.8 - 25.1 ft Gray, severely weathered, medium hard Meta-Argillite Very close to close fracture spacing. 2 joints at 0° STRATA REC.=77%
126.4	22.5	4:03	5.0	4.5/5.0	0.5/5.0		STRATA BREAK 1 joint at 0° 1 joint at 60° 123.8 ft (25.1 ft)
126.4	22.5	3:57		90%	N/A		WR - 25.1 - 28.6 ft Gray, moderately severely weathered, moderately hard Meta-Argillite Close to moderately close fracture spacing. 1 joint at 10° 1 joint at 40° 1 joint at 50° 1 joint at 90°
		3:55					STRATA BREAK STRATA RQD=N/A 120.3 ft (28.6 ft)
		4:10					WR - 28.6 - 29.1 ft Gray, severely weathered, soft Meta-Argillite Very close fracture spacing. STRATA REC.=0%
		4:09					STRATA BREAK STRATA RQD=N/A 119.8 ft (29.1 ft)
		4:15		90%	48%		5 joints at 0° 1 joint at 20° 1 joint at 50° 1 joint at 80°
121.4	27.5	4:10	5.0	4.5/5.0	2.4/5.0		1 joint at 10° 2 joints at 30° 1 joint at 70°
121.4	27.5	4:03					NCR - 29.1 - 38.1 ft Gray, moderately severely to moderately weathered, moderately hard Meta-Argillite Close to moderately close fracture spacing.
		4:15					3 joints at 0°
		4:21					3 joints at 10°
		4:09		100%	64%		2 joints at 20° STRATA REC.=100%
		4:12					3 joints at 30° STRATA RQD=56%
		4:20					1 joint at 80°
		4:15					RS-1 RS-1 36.2 - 36.5 ft qu=2,707 psi
111.4	37.5	4:23	5.0	4.0/5.0	1.2/5.0		STRATA BREAK 1 joint at 0° 1 joint at 10° 110.8 ft (38.1 ft)
111.4	37.5	4:19		80%	24%		WR - 38.1 - 39.9 ft Gray, severely weathered, soft Meta-Argillite Very close fracture spacing. 1 joint at 0°
		4:17					STRATA BREAK STRATA RQD=N/A 109.0 ft (39.9 ft)
		4:21					NCR - 39.9 - 42.5 ft Gray, moderately severely weathered, moderately hard Meta-Argillite Close fracture spacing. 4 joints at 0° STRATA REC.=100%
		4:18					2 joints at 30° STRATA RQD=31%
106.4	42.5						2 joints at 40° 1 joint at 70° 106.4 ft (42.5 ft)
DRILLING EQUIPMENT: CME - 550 ATV with automatic hammer. HOLE ADVANCEMENT: 1. HSA from 0.0 - 15.2 feet using 3.25" hollow stem augers. 2. Cored using NQ3 w/SICB and a Series 6 diamond impregnated bit from 15.2 - 42.5 feet.							NOTES: Coring Terminated at Elevation 106.4 ft