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 GEOTECHNICAL • ENVIRONMENTAL • MATERIALS  
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N.C.D.O.T. GEOTECHNICAL UNIT  
 BORING LOG

SHEET 1 OF 1

SHEET 18 OF 29

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. B2-A		BORING LOCATION 26+24		OFFSET 6ft LT		ALIGNMENT -L-							
COLLAR ELEV. 148.9 ft		NORTHING 726,986		EASTING 2,252,377		0 HR. N/A*							
TOTAL DEPTH 46.6 ft		DRILL MACHINE CME 550		DRILL METHOD 3.25" ID HSA/NQ3 Core		HAMMER TYPE Automatic							
DATE STARTED 10/28/04		COMPLETED 10/28/04		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													Ground Surface
148.9	0.0	WOH	WOH	WOH								W	-ALLUVIAL- Gray, fine sandy CLAY (A-6), with some silt & trace coarse sand.
139.6	9.3	11	14	35									-RESIDUAL- Brown to gray, fine to coarse sandy SILT (A-5(4)), with trace clay.
134.6	14.3	43	57/0.5'										-WEATHERED ROCK- Gray, META-ARGILLITE.
129.6	19.3	60/0.3'											-WEATHERED ROCK- Gray, severely weathered, soft META-ARGILLITE.
122.3	26.6	31	55	43/0.1'									-WEATHERED ROCK- Gray, severely weathered, soft to medium hard META-ARGILLITE.
													-NON-CRYSTALLINE ROCK- Gray, moderately severely to moderately weathered, medium to moderately hard META-ARGILLITE.
													Boring Terminated at Elevation 102.3 ft in NON-CRYSTALLINE ROCK (META-ARGILLITE)

NOTES:  
 1) 9.0' from bridge deck to natural ground.  
 2) Geologist indicates strata change in split spoon at a depth of 9.8' (elev. 139.1').  
 3) Coring began at a depth of 19.6' (elev. 129.3').  
 \* Groundwater not measured due to water introduced for coring.

CORE BORING REPORT										DATE: 10/28/2004	
PROJECT: 33321.1.1		I.D. NO.: B-3877		BORING NO.: B2-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: 46.6 ft		DRILLING ASSISTANT: Nick Boudreaux					
Elev. (ft)	Depth (ft)	Drill Rate min/ft	Run Length (ft)	RBC (%)	RQD (%)	Sample #	FIELD CLASSIFICATION AND REMARKS				
129.3	19.6 ft	2:27	2.0	0.1/2.0	0.0/2.0		129.3 ft (19.6 ft)				
127.3	21.6	3:03		5%	N/A		WR - 19.6 - 29.6 ft Gray, severely weathered, soft Meta-Argillite with gray, fine to coarse sand (A-1-b) from 26.6 - 27.1 ft. Very close fracture spacing.				
127.3	21.6	1:42	5.0	0.0/5.0	0.0/5.0		STRATA REC.=1% STRATA RQD=N/A				
		1:37		0%	N/A						
		1:30									
		1:41									
122.3	26.6	1:36					Gray, fine to coarse sand (A-1-b) from 26.6 - 27.1 ft. SPT taken from 26.6 - 27.7 ft (N value=100/0.6 ft) Meta-Argillite				
121.2	27.7	2:38/0.9 ft	3.9	2.0/3.9	0.0/3.9		119.3 ft (29.6 ft)				
		3:12		51%	N/A		STRATA BREAK WR - 29.6 - 31.6 ft Gray, severely weathered, medium hard Meta-Argillite. Very close fracture spacing. 13 joints at 0° STRATA REC.=100% 1 joint at 75°				
117.3	31.6	3:25					117.3 ft (31.6 ft)				
117.3	31.6	3:29	5.0	3.8/5.0	1.0/5.0		WR - 31.6 - 32.8 ft Gray, severely weathered, soft Meta-Argillite. Very close fracture spacing. STRATA REC.=0% STRATA RQD=N/A				
		3:40		76%	20%		STRATA BREAK 12 joints at 0° 1 joint at 60° 1 joint at 90° 1 joint at 30° 1 joint at 70° NCR - 32.8 - 46.6 ft Gray, moderately severely to moderately weathered, medium to moderately hard Meta-Argillite. Close to moderately close fracture spacing.				
		3:36					9 joints at 0° 1 joint at 20° 3 joints at 60° STRATA REC.=87% STRATA RQD=43%				
112.3	36.6	3:46	5.0	5.0/5.0	2.7/5.0						
		3:37		100%	54%						
		3:40									
107.3	41.6	3:49					116.1 ft (32.8 ft)				
107.3	41.6	3:48	5.0	3.2/5.0	2.2/5.0	RS-3	RS-3 41.8 - 42.1 ft qu=5,479 psi				
		4:04		64%	44%		1 joint at 0° 2 joints at 10° 1 joint at 30° 1 joint at 70°				
		4:10					102.3 ft (46.6 ft)				
		3:56									
102.3	46.6	4:00					Coring Terminated at Elevation 102.3 ft				

DRILLING EQUIPMENT:  
 CME - 550 ATV with automatic hammer.  
 HOLE ADVANCEMENT:  
 1. HSA from 0.0 - 19.6 feet using 3.25" hollow stem augers.  
 2. Cored using NQ3 w/SICB and a Series 6 diamond impregnated bit from 19.6 - 46.6 feet.

NOTES:  
 1.) Core from 44.8 - 46.6 ft was lost down hole and was irretrievable.  
 2.) New lifter installed.  
 3.) Several attempts were made to retrieve core.

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