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

SHEET 1 OF 1

PROJECT NO. 8.T311002		ID. R-2552B		COUNTY Johnston		GEOLOGIST D. Carr							
SITE DESCRIPTION Relocation of Bridge #207 on SR 1560 over Little Creek						GROUND WATER (m)							
BORING NO. B1-A		BORING LOCATION 14+65.84		OFFSET 3.13m Lt.		ALIGNMENT -Y11-REV							
COLLAR ELEV. 59.79 m		NORTHING 206,946.08		EASTING 658,546.64		0 HR. 1.02							
TOTAL DEPTH 10.43 m		DRILL MACHINE CME 550 Track		DRILL METHOD 8.26cm ID HSA		HAMMER TYPE Automatic							
DATE STARTED 7/10/01		COMPLETED 7/10/01		SURFACE WATER DEPTH N/A									
ELEV. (m)	DEPTH (m)	BLOW COUNT			BLOWS PER 30 CM					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	
		15cm	15cm	15cm	0	20	40	60	80				100
59.79													Ground Surface
0.00	0.61	WOH	WOH	WOH							SS-1	25.7%	59.18m Tan/brown, fine to coarse SAND (A-2-4), with some silt, some clay & roots. 0.61m
1.07		WOH	1	1							SS-2	33.7%	58.72m Gray/green, fine sandy SILT (A-4), with some clay & some coarse sand. PP=0.0 kg/cm ³ 1.07m
1.98		WOH	WOH	1							M		57.48m Gray/green, fine sandy CLAY (A-6), with some silt, silty fine sand layers. PP=0.0 kg/cm ³ 2.31m
2.59		1	4	8							M		57.13m Gray & tan, silty fine to coarse SAND (A-1-b), with 2-25mm dia. rounded quartz gravel. 2.66m
4.11		8	16	26							SS-5	11.7%	55.68m Tan/gray & white, fine sandy SILT (A-4), with trace clay, some coarse sand, saprolitic. 4.11m
5.72		100/9cm									D		55.59m Tan, quartz-muscovite schist. 4.20m
5.72		16	84/3cm								M		54.20m Tan/gray, moderately weathered, sound to slightly fractured quartz-muscovite schist. 5.59m
8.91		50/2cm											53.39m Tan/gray & white, severely weathered, moderately to extremely fractured quartz-muscovite schist. 6.40m
													51.62m Tan/gray & white, moderately weathered, slightly to moderately fractured quartz-muscovite schist. 8.17m
													50.97m White, very slightly weathered, slightly to moderately fractured quartz-muscovite schist. 8.82m
													50.86m Tan, moderately severely weathered, extremely fractured quartz-muscovite schist. 8.98m
													49.36m Tan/gray & white, moderately weathered, slightly to moderately fractured quartz-muscovite schist. 10.43m
Coring terminated at elev. 49.36m in QUARTZ-MUSCOVITE SCHIST.													

- Notes:
 1) PP=Pocket Penetrometer
 2) Geologist indicates strata change in split spoon at 2.31m and 2.66m.
 3) Driller switched to coring techniques at 4.20m.
 4) 4.57m of casing set at 4.19m.

CORE BORING REPORT

Sheet 1 of 1
 DATE: 07/10/2001

PROJECT: 8.T311002 I.D. NO.: R-2552B BORING NO.: B1-A GEOLOGIST: Dan Carr
 DESCRIPTION: Relocation of Bridge #207 on SR 1560 over Little Creek SENIOR DRILLER: J.W. Gilchrist, Jr.
 COUNTY: Johnston COLLAR ELEVATION: 59.79m TOTAL DEPTH: 10.43m DRILLING ASSISTANT: M.W. Renza

Elev. (m)	Depth (m)	Drill Rate min./0.3m	Run Length (m)	REC (%)	RQD (%)	Sample #	FIELD CLASSIFICATION AND REMARKS
55.59	4.20		1.52	1.29/1.52	0.89/1.52		55.59m (4.20m)
		2:30		84.9%	58.6%	RS-1	Tan/gray and white, moderately weathered, sound to slightly fractured, quartz-muscovite schist with disseminated pyrite.
		3:08				RS-2	Severely weathered zone from 4.20 - 4.38 m
		3:03					Extremely fractured zone from 4.81 - 5.06 m with two severely weathered zones STRATA REC. = 83% STRATA RQD. = 64%
		2:57					Major joint set between 0-10° RS-1 = 14, 11°, 02 kPa RS-2 = 8, 02L, 43 kPa
54.07	5.72	2:16/0.32					54.20m (5.59m) Tan/gray and white, severely weathered, moderately to extremely fractured, quartz-muscovite schist with disseminated pyrite
							SPT taken from 5.72-5.90m (N value=100/18cm) Schist STRATA REC. = 81% STRATA RQD. = 0%
53.89	5.90	2:14/0.29	1.49	1.37/1.49	0.64/1.49		53.39m (6.40m) Major joint set @ 0° and 45°
		2:55		91.9%	42.9%		Tan/gray and white, moderately weathered, slightly to moderately fractured, quartz-muscovite schist with disseminated pyrite.
		2:59					Major joint set @ 60° STRATA REC. = 81% STRATA RQD. = 36%
52.40	7.39	2:29					52.40m (8.17m) Extremely fractured zone from 6.87 - 6.92 m Severely weathered and extremely fractured zone from 7.39 - 8.17 m
		3:06	1.52	1.19/1.52	0.31/1.52		White very slightly weathered, slightly to moderately fractured, quartz muscovite schist with disseminated pyrite. Very high feldspar content. Major joint set @ 0-10° and 60° STRATA REC. = 100% STRATA RQD. = 48%
		3:11		78.3%	20.4%		50.97m (8.82m) Tan, moderately severely weathered, extremely fractured, quartz-muscovite schist with disseminated pyrite. Major joint set @ 60°
		3:33					SPT taken from 8.91-8.93m (N value=50/2cm) Schist STRATA REC. = 100% STRATA RQD. = 0%
50.86	8.91	4:47/0.32					50.86m (8.93m) Tan/gray and white, moderately weathered, slightly to moderately fractured, quartz-muscovite schist with disseminated pyrite.
		2:56	1.50	1.28/1.50	0.74/1.50		Major joint set @ 0°, 30°, 45°, and 60° STRATA REC. = 85% STRATA RQD. = 49%
		3:07		85.3%	49.3%		Severely weathered zones from 8.93-9.05m, 9.62-9.67m, and 9.90-9.95m.
		3:15					49.36m (10.43m) Coring terminated at elevation 49.36m in quartz-muscovite schist.
49.36	10.43	4:07					
49.36	10.43						

DRILLING EQUIPMENT:
 CME - 550 ATV Track rig with automatic hammer.
 HOLE ADVANCEMENT:
 1. HSA from 0.00 - 4.20 meters using 8.26cm hollow stem augers.
 2. Corred using NQ3 triple barrel and a Series 6 face-discharge diamond impregnated bit from 4.20-10.43 meters.

NOTES:

NCDOT_BORE R2555 NCDOT.GDT 9/24/01