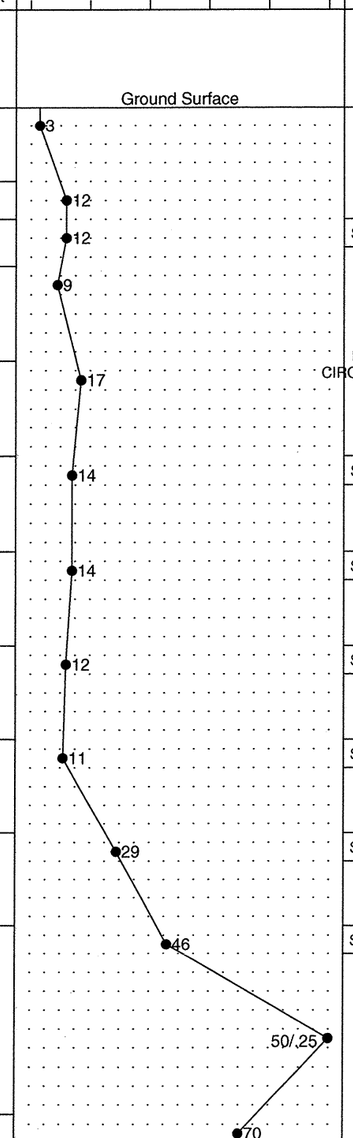
CATLIN ENGINEERS and SCIENTISTS

NCDOT BORING LOG

SHEET 1 OF 1

PROJECT NO. 8.1442601	ID. U-0620	COUNTY CUMBERLAND	GEOLOGIST Charles Ray
SITE DESCRIPTION Bridge on Hope Mills Bypass (-L-) over Beaver Creek			GROUND WATER (ft)
BORING NO. EB1-B	BORING LOCATION 31+73	OFFSET 55ft RT	ALIGNMENT -L-	0 HR. 6.0
COLLAR ELEV. 124.4 ft	NORTHING 455,972	EASTING 2,006,335	24 HR. 6.0
TOTAL DEPTH 55.0 ft	DRILL MACHINE CME45B ATV	DRILL METHOD Mud Rotary	HAMMER TYPE Manual
DATE STARTED 6/19/01	COMPLETED 6/19/01	SURFACE WATER DEPTH	

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	SAMP. NO.	MOI	SOIL AND ROCK DESCRIPTION
124.4	0.0						Ground Surface
120.4	4.0	2	1	2		M	Brown, tan, moderate to well sorted, SILTY, v.f. to f./cse. SAND. Trace root frags. in top 0.5ft. of strata. Grades to clayey sand. ALLUVIUM (124.4 – 118.4, 0.00 – 6.0)
118.4	6.0	4	6	6		Sat.	
115.9	8.5	4	6	6	SS-01	Sat.	Tan, f. to cse., qtz. SAND with trace gravels up to 2mm. (118.4 – 111.4, 6.0 – 13.0)
110.9	13.5	1	5	4	LOST CIRCULATION	Sat.	
105.9	18.5	4	5	12		Sat.	Tan, light gray, SILTY/CLAYEY, v.f. to f./cse. SAND with qtz. gravels up to 4mm in size. (v.sev. weathered LS.) CAPE FEAR FORMATION (111.4 – 101.9, 13.0 – 22.5)
100.9	23.5	7	8	6	SS-03	Sat.	
95.9	28.5	7	7	7	SS-04	Sat.	Gray, SILTY CLAY with f./cse. qtz. grains. (101.9 – 98.4, 22.5 – 26.0)
90.9	33.5	9	5	7	SS-05	Sat.	Light gray, SILTY/CLAYEY, v.f. to f./cse. SAND with mica. (v.sev. weathered LS.) (98.4 – 91.9, 26.0 – 32.5)
85.9	38.5	5	5	6	SS-06	Sat.	
80.9	43.5	10	14	15	SS-07	M	Dark gray, red, v. stiff to hard, v.f. to f. SANDY CLAY with trace f./cse. qtz. grains. (91.9 – 82.4, 32.5 – 42.0)
75.9	48.5	20	22	24	SS-08	M	
70.9	53.5	34	50/.25			M	
		20	35	35		M	Boring Terminated at Elevation 69.4 ft in dark gray, hard, SILTY, v.f. to f. SANDY CLAY w/trace f./cse. quartz grains. Cape Fear Formation (82.4 – 69.4, 42.0 – 55.0)



NCDOT BORE DOUBLE 201-075.GPJ NC DOT.GDT 8/15/01

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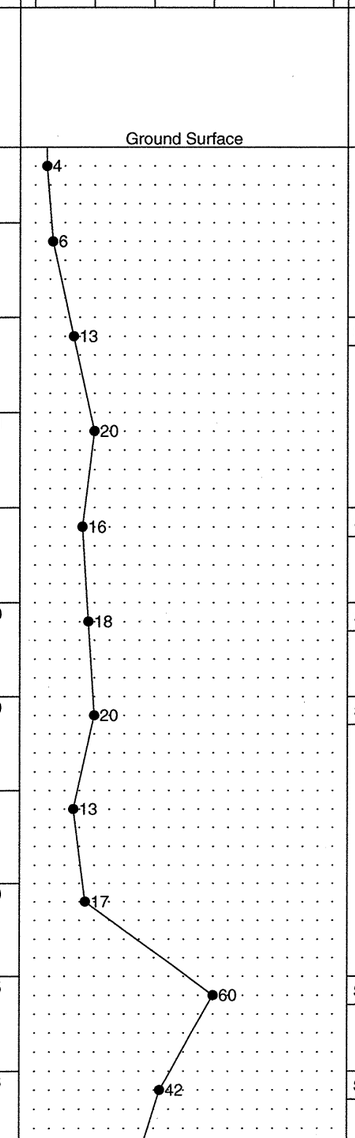
PROJECT NO. 8.1442601	ID. U-0620	COUNTY CUMBERLAND	GEOLOGIST Charles Ray
SITE DESCRIPTION Bridge on Hope Mills Bypass (-L-) over Beaver Creek			GROUND WATER (ft)
BORING NO. B1-A	BORING LOCATION 31+72	OFFSET 30ft LT	ALIGNMENT -L-	0 HR. 5.6
COLLAR ELEV. 122.1 ft	NORTHING 456,037	EASTING 2,006,389	24 HR. 5.0
TOTAL DEPTH 55.5 ft	DRILL MACHINE CME45B ATV	DRILL METHOD Mud Rotary	HAMMER TYPE Manual
DATE STARTED 6/26/01	COMPLETED 6/26/01	SURFACE WATER DEPTH	

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	SAMP. NO.	MOI	SOIL AND ROCK DESCRIPTION
122.1	0.0						Ground Surface
118.1	4.0	2	2	2		M	Dark brown to brown, SILTY,v.f. to f. SAND with trace organics and gravels. ROADWAY EMBANKMENT (122.1 – 118.6, 0.00 – 3.5)
116.1	6.0	WOH	WOH	6			Dark gray, v.f. to f. SANDY SILT. ALLUVIUM (118.6 – 116.1, 3.5 – 6.0)
113.1	9.0	4	6	7	SS-02	Sat.	Gray, light brown, moderate to well sorted, f. to f./cse. SAND. (116.1 – 109.1, 6.0 – 13.0)
108.1	14.0	6	9	11		Sat.	
103.1	19.0	5	8	8	SS-09	Sat.	
98.1	24.0	4	8	10	SS-10	W	Light gray, CLAYEY, f. to cse. SAND with subangular gravels. CAPE FEAR FORMATION (109.1 – 83.1, 13.0 – 39.0)
93.1	29.0	9	10	10	SS-11	W	
88.1	34.0	4	6	7		W	
83.1	39.0	4	7	10		W	
78.1	44.0	14	25	35	SS-12	M	Gray w/red, orange, and brown streaks, CLAY with trace cse. sand. High plasticity. (83.1 – 74.1, 39.0 – 48.0)
73.1	49.0	15	16	26	SS-13	M	Gray to light gray, CLAYEY SAND with some cse. sand. (74.1 – 66.6, 48.0 – 55.5)
68.1	54.0	12	14	18		M	Boring Terminated at Elevation 66.6 ft in gray to light gray, CLAYEY SAND with some cse. sand. Cape Fear Formation