



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

PROJECT NO. 33296.1.1		ID No. B-3848		COUNTY Guilford		GEOLOGIST G.Licayan/P.Weaver						
SITE DESCRIPTION Bridge No. 102 Over Lake Higgins/Brush Creek on SR 2124							GROUND WATER (ft)					
BORING NO. B1-B		BORING LOCATION 13+29		OFFSET 21ft RT		ALIGNMENT -L-						
COLLAR ELEV. 759.5 ft		NORTHING 874700.80		EASTING 1734172.34		0 HR. NA						
TOTAL DEPTH 59.7 ft		DRILL MACHINE CME 45 SKID		DRILL METHOD Wash Rotary/NQ Core		HAMMER TYPE 140 lb Manual						
DATE STARTED 5/18/05		COMPLETED 5/20/05		SURFACE WATER DEPTH 5.5 ft								
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	MOI	
765.0												Water Surface
												Mud Line
758.5	1.0											759.5 0.00
756.0	3.5	WOR	WOR	WOH								ALLUVIAL: Very Soft to Stiff, Grey, Clayey, Coarse to Fine Sandy SILT with a Trace of Organics (Decayed Plant Material), Trace Mica, and a Sand Layer from 6.0ft to 6.5ft.
753.5	6.0											SS-8 51.3%
751.0	8.5	2	WOH	1								W
		3	4	5								W
746.0	13.5	3	3	3								W
741.0	18.5	1	6	10								743.5 16.0
												ALLUVIAL: Medium Dense, Grey to Orange, Silty, Fine to Coarse SAND with a Trace of Mica and Gravel
736.0	23.5	5	5	6								SS-9 W
731.0	28.5	25	50	50/4								W
726.8	32.7	54	46/3									730.5 29.0
721.8	37.7	58	42/2									WEATHERED ROCK: White and Brown, Severely Weathered, Very Soft to Soft, METAMORPHOSED GRANITIC ROCK with Very Close Fracture Spacing
716.8	42.7	100/3										
711.8	47.7	60/1										711.8 47.7
												CRYSTALLINE ROCK: White, Black and Grey; Moderately Weathered; Medium Hard to Moderately Hard; METAMORPHOSED GRANITIC ROCK with Very Close Fracture Spacing
												710.0 49.5
												708.7 50.8
												CRYSTALLINE ROCK: White, Black and Grey with Some Pink; Slightly Weathered; Moderately Hard to Hard; METAMORPHOSED GRANITIC ROCK with Close Fracture Spacing
												699.8 59.7
												CRYSTALLINE ROCK: Black, White to Tan and Grey; Fresh; Very Hard; METAMORPHOSED GRANITIC ROCK with Wide Fracture Spacing
												Boring Terminated at Elevation 699.8ft in CRYSTALLINE ROCK: METAMORPHOSED GRANITIC ROCK
												Note: Drilling Fluid = Lake Water Alone

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CORE BORING REPORT  
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SITE DESCRIPTION Bridge No. 102 Over Lake Higgins/Brush Creek on SR 2124							GROUND WATER (ft)			
BORING NO. B1-B		BORING LOCATION 13+29		OFFSET 21ft RT		ALIGNMENT -L-				
COLLAR ELEV. 759.5 ft		NORTHING 874700.80		EASTING 1734172.34		0 HR. NA				
TOTAL DEPTH 59.7 ft		DRILL MACHINE CME 45 SKID		DRILL METHOD Wash Rotary/NQ Core		HAMMER TYPE 140 lb Manual				
DATE STARTED 5/18/05		COMPLETED 5/20/05		SURFACE WATER DEPTH 5.5ft						
CORE SIZE NQ		TOTAL RUN 27.9 ft		DRILLER R.Toothman						
ELEV. (ft)	DEPTH (ft)	RUN (ft)	DRILL RATE (Min/ft)	REC. (%)	RQD (%)	SAMP. NO.	STRATA REC. (%)	RQD (%)	LOG	DESCRIPTION AND REMARKS
										Begin Coring @ 29.9 ft
729.6	29.9	2.8	:25/0.8	(0.0)	(NA)		(0.8)	(NA)		729.6 WEATHERED ROCK: White and Brown, Severely Weathered, Very Soft to Soft, METAMORPHOSED GRANITIC ROCK with Very Close Fracture Spacing 29.9
726.8	32.7		:33	0%			5%			
			:36							
726.0	33.5	4.2	N=100/8 :07/0.2	(0.0)	(NA)					
			:27	0%						
721.8	37.7		:30							
			:34							
721.1	38.4	4.3	N=100/7 :35	(0.0)	(NA)					
			:16/0.3	0%						
716.8	42.7		:52							
716.5	43.0	4.7	:28	(0.8)	(NA)					
			:42	17%						
			:54							
711.8	47.7		N=100/3 :41/0.7				(0.3)	(0.0)		711.8 CRYSTALLINE ROCK: White, Black and Grey; Moderately Weathered; Medium Hard to Moderately Hard; METAMORPHOSED GRANITIC ROCK with Very Close Fracture Spacing 47.7
711.7	47.8	4.9	1:00	(3.5)	(3.0)		17%	0%		710.0 49.5
			1:15	71%	61%		(1.3)	(1.1)		708.7 50.8
			:40				100%	85%		
			:52				100%	85%		
706.8	52.7	4.0	N=60/1 1:10/0.9	(4.0)	(4.0)		100%	100%		CRYSTALLINE ROCK: White, Black and Grey, with Some Pink; Slightly Weathered; Moderately Hard to Hard; METAMORPHOSED GRANITIC ROCK with Close Fracture Spacing
			2:56	100%	100%					2 Joints at 10 Degrees to 20 Degrees
702.8	56.7	3.0	3:20							2 Joints at 60 Degrees to 70 Degrees with Heavy Iron Staining
			5:00	(3.0)	(3.0)					Partially Healed High Angle Fractures
			6:30	100%	100%					CRYSTALLINE ROCK: Black, White to Tan and Grey; Fresh; Very Hard; METAMORPHOSED GRANITIC ROCK with Wide Fracture Spacing
699.8	59.7		4:50							699.8
			4:50							
			5:50							
			7:25							
			7:15							
			5:30							
			6:00							
										No Natural Breaks
										Boring Terminated at Elevation 699.8ft in CRYSTALLINE ROCK: METAMORPHOSED GRANITIC ROCK
										Note: Run #6 and Run #7 Cut Short Due to Core Left in Ground from Previous Runs

NC DOT CORE SINGLE 07105012C.GPJ NC\_DOT.GDT 6/20/05