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

SHEET 1 OF 1

PROJECT NO. 8.2502001	ID. B-3885	COUNTY Orange	GEOLOGIST D. Goodnight
SITE DESCRIPTION Bridge No. 174 Over Cane Creek on SR 1958			GROUND WATER (ft)
BORING NO. B1-B	BORING LOCATION 17+44.0	OFFSET 15.0 ft RT	ALIGNMENT -L-	0 HR. 4.50
COLLAR ELEV. 418.20 ft	NORTHING 792864.87	EASTING 1923536.96		24 HR. 5.00
TOTAL DEPTH 37.50 ft	DRILL MACHINE CME 45 Skid Rig	DRILL METHOD Wash Rotary 2.94 in. Tricone	HAMMER TYPE 140 lb. Manual
DATE STARTED 7/22/03	COMPLETED 7/23/03	SURFACE WATER DEPTH NA	

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
418.2									
417.2	1.0								418.2 — 0.00
		2	2	1	3	SS-8	24.3		Alluvial: Soft, Brown, Coarse to Fine Sandy, Silty CLAY (A-6)
414.7	3.5								415.2 — 3.0
		7	12	18	30	SS-9	MF		Residual: Medium Dense, Tan, Silty, Coarse to Fine SAND with Rock Fragments (A-2-4)
412.2	6.0								413.2 — 5.0
		60/0			60/0				412.2 — 6.0 Weathered Rock: Tan, Metavolcanic Rock
									Crystalline Rock: Moderately to Slightly Weathered, Medium Hard to Moderately Hard, Green-Gray, Metavolcanic Rock with Very Close to Close Fracture Spacing
396.8	21.4					RS-3			
387.3	30.9					RS-4			388.3 — 29.9 Crystalline Rock: Slightly to Very Slightly Weathered, Hard to Very Hard, Green-Gray, Metavolcanic Rock with Moderately Close to Wide Fracture Spacing
									380.7 — 37.5 Coring Terminated at 37.5 feet (Elev. 380.7) in Crystalline Rock (Metavolcanic)

Drilling Fluid Properties: Water

N.C.D.O.T. GEOTECHNICAL UNIT
CORE BORING REPORT

SHEET 1 OF 1

PROJECT NO. 8.2502001	ID. B-3885	COUNTY Orange	GEOLOGIST D. Goodnight
SITE DESCRIPTION Bridge No. 174 Over Cane Creek on SR 1958			GROUND WATER (ft)
BORING NO. B1-B	BORING LOCATION 17+44.0	OFFSET 15.0 ft RT	ALIGNMENT -L-	0 HR. 4.50
COLLAR ELEV. 418.20 ft	NORTHING 792864.87	EASTING 1923536.96		24 HR. 5.00
TOTAL DEPTH 37.50 ft	DRILL MACHINE CME 45 Skid Rig	DRILL METHOD Wash Rotary 2.94 in. Tricone	HAMMER TYPE 140 lb. Manual
DATE STARTED 7/22/03	COMPLETED 7/23/03	SURFACE WATER DEPTH NA	
CORE SIZE NQ	TOTAL RUN 31.5 ft	DRILLER W. Whichard	

ELEV. (ft)	DEPTH (ft)	RUN (ft)	DRILL RATE (Min/ft)	RUN REC. (ft) %	RUN RQD (ft) %	SAMP. NO.	STRATA REC. (ft) %	STRATA RQD (ft) %	LOG	DESCRIPTION AND REMARKS
			N=60/0							Begin Coring @ 6.0 ft
412.2	6.0	1.5	7:49	(1.4)	(1.1)		(21.3)	(8.4)		412.2 — 6.0 Crystalline Rock: Moderately to Slightly Weathered, Medium Hard to Moderately Hard, Green-Gray, Metavolcanic Rock with Very Close to Close Fracture Spacing
410.7	7.5	5.0	2:58/0.5	93%	73%		89%	35%		
			5:06	(4.7)	(1.5)					5 joints at 30-40°
			3:23	94%	30%					25 joints at 50-60°
			7:25							4 joints at 70-80°
405.7	12.5		7:54							Numerous joints at Various Angles
		5.0	3:42	(5.0)	(1.5)					
			5:38	100%	30%					Partially Open Fractures Throughout
			5:48							
			6:29							
400.7	17.5		6:23							
		5.0	5:29	(4.5)	(3.0)					Near Vertical joint at 23.7-24.5 feet
			7:44	90%	60%					
			5:30							Very Broken at 9.9-10.5 feet; 15.1-16.1 feet; 17.5-18.5 feet; 22.5-25.5 feet; 27.5-29.0 feet
			3:20							
395.7	22.5		3:22			RS-3				
		5.0	3:41	(3.8)	(1.3)					Core Loss at 6.0-6.1 feet; 9.9-10.2 feet- 18.0-18.5 feet; 22.5-23.7 feet; 28.5-29.0 feet
			5:07	76%	26%					
			4:32							
390.7	27.5		3:33							
		5.0	6:50	(4.5)	(1.8)					
			8:43	90%	36%					
			9:55							388.3 — 29.9
			9:59				(7.6)	(6.8)		Crystalline Rock: Slightly to Very Slightly Weathered, Hard to Very Hard, Green-Gray, Metavolcanic Rock with Moderately Close to Wide Fracture Spacing
385.7	32.5		3:55			RS-4	100%	89%		
		5.0	2:59	(5.0)	(5.0)					1 joint at 45°
			3:08	100%	100%					
			7:29							
			4:29							
380.7	37.5		3:50							380.7 — Highly Fractured Zone at 31.9-32.2 feet
			3:10							37.5 — Coring Terminated at 37.5 feet (Elev. 380.7) in Crystalline Rock (Metavolcanic)
			4:09							

Drilling Fluid Properties: Water