MACTEC

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

SHEET 1 OF 1

PROJECT NO. 6.529005T	ID. R-2610B(1)	COUNTY Chatham	GEOLOGIST M. Lear/B. Parks
SITE DESCRIPTION Bridge on SBL US 421(-L-) over Bear Creek (MACTEC Proj. No. 6468-03-0124)			GROUND WATER (m)
BORING NO. B2-B	BORING LOCATION 22+94.9	OFFSET 7.2m LT	ALIGNMENT -L-	0 HR. 1.72
COLLAR ELEV. 116.30 m	NORTHING 206,668.6	EASTING 578,421.0	24 HR. 0.60*
TOTAL DEPTH 9.08 m	DRILL MACHINE CME-550	DRILL METHOD Rotary Wash/Core	HAMMER TYPE 63.5kg Manual
DATE STARTED 4/8/03	COMPLETED 4/8/03	SURFACE WATER DEPTH N/A	

ELEV. (m)	DEPTH (m)	BLOW COUNT 15cm	15cm	15cm	BLOWS PER 30 CM 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
116.30					Ground Surface				116.30 0.00
116.30	0.00	1	2	3	5		M-W		Residual: Orange-brown, silty CLAY (A-7-6)
115.27	1.03								115.50 0.80
		9	15	17	32		D-M		Residual: Tan and lt. brown, f. sandy, silty CLAY (A-6) w/ relict rock fabric
									114.00 2.30
113.68	2.62								113.68 Weathered Rock: META-ARGILLITE 2.62
		50/0cm			50/0cm	RS-2			Crystalline Rock: Grayish green, mod. to sli. weathered, closely to mod. closely fractured, hard META-ARGILLITE (18 joints at 40-50° w/ trace clay and quartz and brown Fe stain; 16 joints at 60-70° w/ trace clay and quartz and brown to orange Fe stain; 4 joints at 80-90° w/ trace clay) RS-2: Sampled from 3.54m to 3.72m
									107.22 9.08
									Boring and Coring Terminated at 9.08m (Elev. 107.22m) in Crystalline Rock: META-ARGILLITE

Bits Used: 9cm roller cone and HQ (Series 2) core bit

Drilling Fluid Properties: Water

*24 HR Water Level taken on 4/14/02 (6 days after boring completed) due to flood conditions at site.

SHEET 16 OF 26

MACTEC

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

SHEET 1 OF 1

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SITE DESCRIPTION Bridge on SBL US 421(-L-) over Bear Creek (MACTEC Proj. No. 6468-03-0124)			GROUND WATER (m)
BORING NO. B2-B	BORING LOCATION 22+94.9	OFFSET 7.2m LT	ALIGNMENT -L-	0 HR. 1.72
COLLAR ELEV. 116.30 m	NORTHING 206,668.6	EASTING 578,421.0	24 HR. 0.60*
TOTAL DEPTH 9.08 m	DRILL MACHINE CME-550	DRILL METHOD Rotary Wash/Core	HAMMER TYPE 63.5kg Manual
DATE STARTED 4/8/03	COMPLETED 4/8/03	SURFACE WATER DEPTH N/A	
CORE SIZE HQ	TOTAL RUN 6.46 m	DRILLER D. Rhodes	

ELEV. (m)	DEPTH (m)	RUN (m)	DRILL RATE (Min/0.3m)	RUN REC. (m) %	RUN RQD (m) %	SAMP. NO.	STRATA REC. (m) %	STRATA RQD (m) %	LOG	DESCRIPTION AND REMARKS
										Begin Coring @ 2.62 m
113.68	2.62	0.71	N=50/0cm	(0.71)	(0.66)		(6.46)	(5.02)		113.68 Crystalline Rock: Grayish green, mod. to sli. weathered, closely to mod. closely fractured, hard META-ARGILLITE (18 joints at 40-50° w/ trace clay and quartz and brown Fe stain; 16 joints at 60-70° w/ trace clay and quartz and brown to orange Fe stain; 4 joints at 80-90° w/ trace clay) RS-2: Sampled from 3.54m to 3.72m 2.62
112.97	3.33		2:27	100%	93%		100%	78%		
			4:00							
		1.44	1:22/0.11	(1.44)	(1.00)	RS-2				
			3:03	100%	69%					
			3:02							
			2:16							
111.53	4.77		2:32							
		1.27	4:43/0.24	(1.27)	(0.58)					Very closely fractured zone from 5.37m to 5.47m
			2:33	100%	46%					
			2:15							
			3:38							
110.26	6.04		3:42/0.37							
		1.52	2:20	(1.52)	(1.26)					Very closely fractured zone from 7.46m to 7.56m
			2:25	100%	83%					
			2:15							
			2:18							
108.74	7.56		2:27/0.32							
		1.52	2:21	(1.52)	(1.52)					Very closely fractured zone from 8.64m to 8.84m (vertical fractures)
			2:28	100%	100%					
			2:34							
			2:35							
107.22	9.08		3:34/0.32							107.22 9.08
										Coring Terminated at 9.08m (Elev. 107.22m) in Crystalline Rock: Mod. to sli. weathered, mod. closely fractured, hard META-ARGILLITE