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Retrieved from the Queensland Geotechnical Database http://qgd.org.au/

								FINAL 2	7/09/2018
1. 57	致同	Aler) at		GE	OTECHNICAL		BOREHOLE No	CR	R904
	🔊 Que	ensland		BO	REHOLE LOG		Sheet	1 of 2	
	Gov Gov	ernment	SYIV	FOR 1BOLS	GEOTECHNICAL TERMS AND REFER FORM F:GEOT 017/8-2014		REFERENCE No	H1	3109
PROJECT	Cross River Rai	l (CRR) Project - Additional Geotechni	cal Inv	vesti	gation				
LOCATION	Rocklea Statior	ı					COORDINATES 501405.5	E; 695323	9.5 N
PROJECT No	FG6470	surface rl 9.03m	PLUM	NGE 9	0° DATE STA	ARTED 03/07/201	8 GRID DATUM N	MGA94	
JOB No		HEIGHT DATUM AHD	BEAR	ING °	DATE COMPI	LETED 04/07/201	8 DRILLER G	Geodrill	
(iii) HLABO HLABO 9.00	AUGER CASHIG CASHIBORING CORE FIGURING CORE FIGURING CORE REC %	MATERIAL DESCRIPTION	ГІТНОLOGY	USCS WEATHERING	INTACT DEFECT STRENGTH SPACING 표독표표권		ADDITIONAL DATA AND TEST RESULTS		SAMPLES TESTS
		Asphalt	/	(SP-					
- 8.53	A	Grey to brown, dry, medium dense		SC)	÷				BULK
-	В	to dense. Fine to medium, angular to subangular gravel. Medium	F		÷			ľ	BULK
- 1		grained sand.	归		+				
-		Pale brown to grey, moist, soft to			1				-
	G	firm. High plasticity, With some organic					MC=31.39	% Oedometer	
- 2		content (wood fragments etc.).	=	(CH)	<u>+</u>		v S	vD= 1.9 t/m3 u(PP)=75 kPa	
-		mottled pale red, firm to stiff.		(0.1)	+				-
-		From 2.5m: Trace sand, fine to			+			2, 3, 4	_
-	D	coarse grained.			±			N=7	SPT
- 3									
5.53					+				-
-	E	Sandy CLAY (Residual)					11=	4, 6, 8 N=14 56% PI= 39%	SPT
- - - 4		red, moist, stiff.			ļ <u>+</u>		MC=1	7.5% LS= 17% <75μm= 53%	
-		Medium to coarse grained sand. High plasticity. Interbedded Clayey		СН	1				-
- 4.35		SAND and Clay with Sand.			+		8, :	19, 30/80mm	-
-		SANDSTONE							SPT
- 5		grey, dry, hard, Sandy CLAY.	•••						
-		Medium to coarse grained sand.	· · ·		±				-
-		Low plusticity.	:::		±				-
- 6	G		::		<u>+</u>		:	14, 30/30mm	SPT -
-			· · · ·		±		LL= MC=:	=31% PI= 17% 12.4% LS= 9% <75um= 38%	
-			•••						-
- ,			· · ·						-
- /			•••		Ŧ				-
-		From 7.5m; Recovered as pale		XW	1			30/90mm	SPT
-		brown to grey, moist, very dense,	:::		ŧ.				-
- 8			:::		+				-
-			::		1				-
-			· · · · ·						-
- - - 9		From 0.0m Data	•••		1			30/80mm =	- - -
		grained sand.	:::		±			,	
-			· · · ·						-
-					±				-
-0.97		Continued on next sheet	1		LI	1			
REMAR	KS: Rjbw - W	'oogaroo Subgroup.					LOGGED BY	REVIE	WED BY
							ND	S. I	Foley

TMR GEOTECHNICAL BOREHOLE LOG - CREATED WITH HOLEBASE SI

								FINAL 2	7/09/2018
			GE	OTECHN	IICAL		BOREHOLE No	CF	R904
	Queensland		BO	REHOLE	LOG		Sheet	2 of 2	
BU	Covernment Government	s	FOR	GEOTECHNICAL TE REFER FORM F:GE	RMS AND OT 017/8-2014		REFERENCE No	H	13109
PROJECT	 Cross River Rail (CRR) Proiect - Addit	_ional Geotechnical	Investia	zation					
LOCATION	Rocklea Station			5		(COORDINATES 501405.5	E; 69532	39.5 N
PROJECT No	FG6470 SURFACE F	ц. 9.03m рі	lunge 9	0°	DATE STAF	RTED 03/07/2018	GRID DATUM	MGA94	
JOB No	HEIGHT DATU	M AHD BE	ARING °		DATE COMPLI	ETED 04/07/2018	DRILLER	Geodrill	
(m) R.L. (m) EDTH	NATERIAL DES SU () % U SU () %	SCRIPTION	USCS	INTACT STRENGTH 표,독, _{エ,} , _{독,,} ,,,,,,,,,,,,,,,,,,,,,,,,,,,	DEFECT SPACING		ADDITIONAL DATA AND TEST RESULTS		SAMPLES TESTS
-	SANDSTONE XW: Cont'd.	• • •	xw					30/20mm	
	(94) SILTSTONE HW: Dark grey with banding, fine graine bedded, generally n -Js: 0°-20° (1-4/m), f (80) OP, Cn. -BP: 0°-20° (10-15/r OP, Cn or Cly Vr.	pale grey d, thinly redium strength. PI-Un/Sm-Ro, n), PI-Un/Sm,	•• • • • • • • • • • • • • • • • • • •	мн	W		15(15(15((50)=0.56 MPa (50)=0.72 MPa (50)=0.26 MPa (50)=0.53 MPa	D (11.20m) A (11.21m) D (11.95m) A (11.95m)
	<u>100</u> (78)	X X X X X X X X X X X X X X X X X X X	MW XW HW HW MW	M		☐ 12.16m-12.21m; B2 ☐ 12.30m-12.36m; B2 ☐ 12.43m 12.43m; XW ☐ 12.61m-12.83m; B2 ☐ 12.95m; J, 45°, PI/Rc	, Coal infill Is(Is) Ui	(50)=0.14 MPa (50)=0.20 MPa CS=11.60 MPa E=0.974 GPa v= 0.089 (50)=1.20 MPa	A (11:30m)
- 14 -5.08 	(39) From 15.52m: Becc grained, pale grey with a medium grained, that medium to high stree - BP: 0°-15° (1-2/m) OP, Cn or Coal/Carb	grey banding, inly bedded, ength. PI-Un/Ro-Sm, Vr. boming coarse and dark grey.	○ XW		M		is(is(is((50)=0.61 MPa (50)=1.10 MPa (50)=1.00 MPa	D (14.68m) A (14.69m)
	100 From 17.64: Becom	ing medium	sw	мн	w		is is ui is is	(50)=0.86 MPa (50)=0.74 MPa CS=26.70 MPa E=10.5 GPa v= 0.076 (50)=0.40 MPa (50)=1.20 MPa	D (16.42m) A (16.43m) (16.90m) D (17.20m) A (17.21m)
- 18 - 18 	(96) grained, with some banding.	dark grey	sw <u>ww</u>		M		is((50)=1.10 MPa (50)=1.30 MPa	D (18.70m) A (18.71m)
-	Borehole complet	ted at 19.50m			-				
REMAR	KS: Rjbw - Woogaroo Subgrou	р.					LOGGED BY	REVIE S.	E WED BY Foley
		TMP GEOTI	ECHNICAL BO				I	1	,

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Detailed Discontinuity Description Log



This form is intended for the detailed description of discontinuities and defects as measured in outcrop by line mapping, or as they occur downhole in drilled rock core. The descriptions and abbreviations used shall be in accordance with Australian Standard AS1726-1993 Geotechnical site investigations and TMR Geotechnical Terms and Symbols Form F:GEOT017/8.

Project Na	ne	Cross Rive	r Rail - Stag	ge 2		Project No. FG6470				
Site ID / Bo	rehole No.	CRR904				Surface RL 9.03				
Geologist		N.DEWOR				Date	4/07/2018			
		•				Page	1	of	2	
Traverse	Туре	Dip ° / Dip	Planarity	Roughness Roughness		Aperture	Infilling	Zones ¹	Other	
Chainage;		Direction °;			Class					
or	LP /	or				CD /	Cn /	SZ /		
Down hole	BP /	Angle ° from	Stp /	Ro /	I to IX	OP /	St /	CZ /		
depth	FP /	horizontal	Un /	Sm /		FL /	Vr /	HFZ /		
(rock core)	J etc.	(rock core)	PI	SI		TI	Ct ¹	AZ		
11.47	J	20°	UN	Ro(sandstone)	OP	Cn			
11.85	J	10°	UN	Ro(sandstone)	OP	Vr		CLAY	
11.90	J	0°	PI	Ro(sandstone)	OP	Cn			
11.98	J	20°	UN	Ro(sandstone)	OP	Cn			
12.13	BP	0°	UN	Ro(sandstone)	OP	Vr		CLAY	
12.17	BP	0°	UN	Ro(sandstone)	OP	Vr		CLAY	
12.22	BP	0°	PI	SO		OP	Vr		CLAY	
12.28	J	20°	UN	SO		OP	Cn			
12.36	BP	30°	UN	SO		OP	Vr		CLAY	
12.44	BP	0°	PL	SO		OP	Vr		CLAY	
12.49	BP	0°	PI	SO		OP	Vr		CLAY	
12.59	J	5°	UN	SO		OP	Cn			
12.63	J	0°	PL	SO		OP	Vr		CLAY	
12.66-12.7	XW CLAY F	FRACTERED WHEN TAKING FROM SPLIT								
12.7-12.75	LIKELY TO E	BE MORE FRACTERED, DAMAGED WHEN TAKING FROM SPLIT FZ								
12.75-12.83	J	80-90°	UN	SM		OP	Cn			
12.83	BP	0°	PI	SM		OP	Cn			
12.84	BP	0°	PI	SM		OP	Cn			
12.89								FZ		
12.9-12.94	J	70°	UN	SM		OP	Cn			
12.9-12.94	J	80-90°	UN	SM		ΤI	Cn			
12.9-12.98	J	50°	UN	SM		OP	Ct/St		/Fe	
12.96	J	10°	UN	SM		OP	St			
12.97-13.01	J	80°	UN	SM		OP/TI	Cn			
12.98	BP	10°	PI	SM		TI/CD	St		Fe	
12.99-13.15	J	70-90°	UN	SM		OP	Cn			
13.02-13.09								FZ		
13.12	J	90°	UN	SM		TI/DIS	Cn			
13.18	BP	50°	PI	SM		TI	Cn			
13.21	J	0-30°	Stp /	SM		TI	Cn			

Note: 1. Describe zones and coatings in terms of composition and thickness (mm)

F:GEOT 533/9 - 2014

Detailed Discontinuity Description Log



This form is intended for the detailed description of discontinuities and defects as measured in outcrop by line mapping, or as they occur downhole in drilled rock core. The descriptions and abbreviations used shall be in accordance with Australian Standard AS1726-1993 Geotechnical site investigations and TMR Geotechnical Terms and Symbols Form F:GEOT017/8.

Project Name		Cross Rive	r Rail - Stag	ge 2		Project No FG6470					
Site ID / Borehole No.		CRR904		-		Surface RL	L 9.03				
Geologist		N.DEWOR				Date	4/07/2018				
						Page	2	2			
13.24	J	10°	St	SM		TI	Cn				
13.26	BP	20°	PI	SM		OP	Cn				
13.29	BP	5°	UN	SM		TI	Cn				
13.32	BP	0°	PI	SM		TI	Cn				
13.34	BP	0°	PI	SM		TI	Cn				
13.38	BP	0°	UN	SM		OP	Cn				
13.38	BP	0°	PI	SM		TI	Cn				
13.43	BP	0°	PI	SM		OP	Vr		CLAY		
13.45	BP	0°	PI	SM		OP	Cn				
13.69	BP	0°	PI	SM		OP	Cn				
13.77	J	10°	PI	SM		OP	Cn				
14.00	BP	0°	PI	SM		OP	Cn				
14.08	BP	5°	PI	SM		OP	Vr		CLAY		
14.11	BP	5°	PI	Ro(Sa)		OP	Vr		CLAY		
14.28	FP	15°	PI	Ro(Sa)		OP	Vr		COAL		
14.72	FP	0°	PI	SM		OP	Cn				
15.00	FP	0°	PI	SM		OP	Vr		COAL		
15.10	FP	0°	UN	Ro(Sa)		OP	Vr		COAL		
15.47	FP	10°	UN	Ro(Sa)		OP	Vr		COAL		
17.48	FP	10°	UN	Ro(Sa)		OP	Ct		COAL(2mm)		
17.80	J	20°	UN	Ro(Sa)		OP	Vr		COAL/CORB		
18.40	FP	0°	UN	SO		OP	Vr		CARB?(SIL TSTONE)		
18.42	FP	10°	UN	SO		OP	Vr		CARB?(SIL TSTONE)		
18.48	FP	10°	UN	SO		OP	Vr		CARB?(SIL TSTONE)		
18.51	FP	10°	UN	SO		OP	Vr		TSTONE)		
18.73	J	0°	PI	SO		OP	Cn				
18.79	FP	10°	PI	SO		OP	Vr		CARB/COAL		
18.92	J	10°	PI	SO		TI					
19.24	FP	10°	UN	Ro(Sa)		OP	Vr		CARB?		
19.41	J	5°	PI	SO		TI	Cn				
19.46	BP	0°	PI	SO		OP	Vr		CLAY		
19.46-19.5	J	50°	PI	SO		OP	Vr		CARB?		

CORE PHOTO LOG DEPARTMENT OF TRANSPORT AND MAIN ROADS GEOTECHNICAL SECTION



Project Name	Cross River Rail CRR 2018 – Geotechnical Investigation							
Project No.	FG6470	Date	03/07/2018					
Borehole No.	CRR904	Reference No.	H13109					
Location	Rocklea Station	Start Depth (m)	10.36					
Submitted By	J. Armstrong	Finish Depth (m)	19.50					

