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Queensland

GEOTECHNICAL BOREHOLE LOG

FINAL 02/03/2018

BOREHOLE No **CRR731**

Sheet 1 of 2

1		% .		GO	VE	ernment	SY		GEOTECHNICAL TER REFER FORM F:GEO			REFERENCE No	H1	12957
PROJECT	Т	С	ros	s River I	Rail	CRR2017 - Additional Geotechnical I	nves	tigatio	on					
OCATIO	ON	R	NA	showgr	rour	nds						COORDINATES 503045.9	E; 696370	08.7 N
PROJECT	T No	F	G6	470		SURFACE RL 8.58m	PLU	INGE S	0°	DATE STAR	TED 25/09/201	7 GRID DATUM N	1GA94	
OB No		_				HEIGHT DATUM AHD	BEA	RING _		DATE COMPLE	TED 25/09/201	7 DRILLER S	chneider	
DEPTH (m)	R.L. (m)	AUGER CASING	WASH BORING CORE DRILLING	RQD ()%	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USCS WEATHERING	INTACT STRENGTH	DEFECT SPACING		ADDITIONAL DATA AND TEST RESULTS		SAMPLES TESTS
— 1	7.08					Gravelly SAND (Fill) Grey, moist to dry, fine to coarse grained. Fine grained, angular gravel.		(SW)	-	-	0.00m-1.50m: Non drilling	destructive		
_ 2	6.18				Α	Clayey SAND (Fill) Grey brown, moist, loose. Fine grained sand. Trace fine to medium grained, sub rounded gravel.		SC				MC=7.9	1, 3, 4 N=7 =21% PI= 2% 9% LS= 150% <75µm= 28%	SPT
3	5.22			(87)		TUFF (Rif) MW: Orange, fine grained, massive medium strength, iron stainingJs: 0°-5° (4/m), Un/Sm, OP, FeSt -Js: 70°-90° (2/m), Un/Sm, OP, FeSt TUFF (Rif)		MW	M	c			30/70mm 0)=0.67 MPa 0)=2.10 MPa	D (3.05m) – A (3.06m) –
- 4						FR: Grey-purple mottled brown and white, fine to coarse gravel sized clasts within fine grained matrix, massive, high to very high strength. -Js: 0°-10° (1/m), Un/Sm, OP, Cn Between 4.6m-5.0m: becoming pale grey white with mottled grey				м		Is(5 UCS Is(5 Is(5	0)=3.60 MPa 0)=5.30 MPa 5=88.20 MPa E=17.1 GPa v= 0.152 0)=4.00 MPa 0)=6.00 MPa	D (4.05m) _ A (4.06m) _ (4.44m) _ D (4.60m) _ A (4.61m) _ D (4.90m) _
- 6				100 (100)		and brown. At 6.5m: becoming pale grey white with mottled grey and brown.	\$\$\text{\$\ext{\$\text{\$\exitt{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\exitt{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\exittit{\$\text{\$\exittit{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\texitt{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{	FR	H-VH			Is(5 Is(5 Is(5 Is(5 UC:	0)=2.80 MPa 0)=5.40 MPa 0)=4.20 MPa 0)=6.10 MPa 0)=6.10 MPa 0)=6.90 MPa 6=91.70 MPa E=17.2 GPa v= 0.103 0)=5.30 MPa 0)=6.10 MPa	D (5.60m) = A (5.62m) = D (5.78m) = A (5.80m) = (6.13m) = D (6.40m) = A (6.42m) = A (6.42m
- 7										w			0)=1.70 MPa 0)=5.10 MPa	D (7.30m) = A (7.31m) =
8				100 (33)									0)=2.10 MPa 0)=4.30 MPa	D (8.10m) = A (8.11m) =
-	-1.42					Continued on next sheet			C	С			0)=4.80 MPa 0)=1.20 MPa	D (9.80m) = A (9.82m)
RE	MAR	KS:	F	Rif - Br	isb	ane Tuff						LOGGED BY	REVIE	WED BY
												ZC	S.	Foley

GEOTECHNICAL

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CRR731

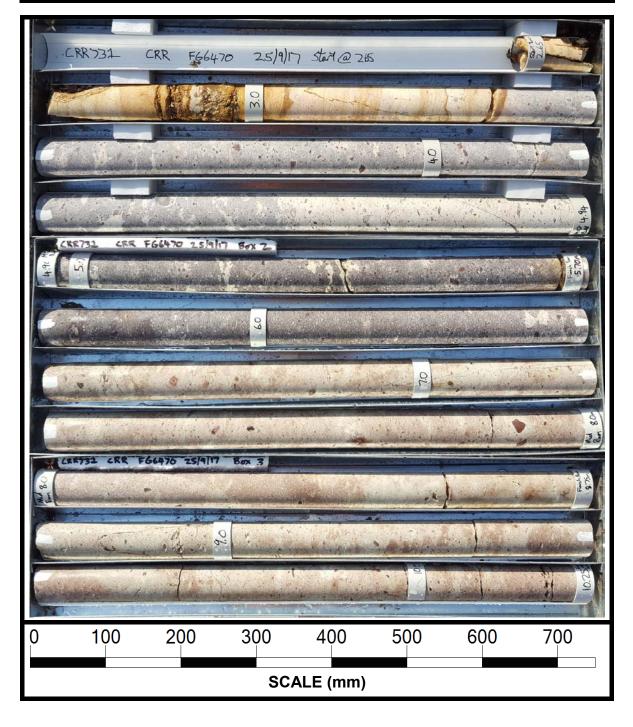
BOREHOLE No

) 🔀	3 (*/	Qu	Queenstand		BUKEHULE LUG					Sheet 2		
		Go	V	ernment	SYN		GEOTECHNICAL TE REFER FORM F:GE			REFERENCE No	H1	12957
Cross River Rail CRR2017 - Additional Geotechnical Investigation												
OCATION RNA showgrounds										COORDINATES 503045.9 I	E; 696370	08.7 N
ROJECT NO FG6470 SURFACE RL 8.58m					nge 9			25/09/201				
OB NO HEIGHT DATUM AHD				BEARING DATE COMPLETED 25/09/201					7 DRILLER S	chneider		
(m) R.L. (m)	AUGER CASING WASH BORING	RQD ()% CORE REC%	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USCS WEATHERING	INTACT STRENGTH	DEFECT SPACING		ADDITIONAL DATA AND TEST RESULTS		SAMPLES TESTS
-1.67 -11 -12 -13 -14 -15 -16 -17 -18		100		TUFF (Rif) FR: Cont'd. Borehole completed at 10.25m			#					
REMAR	KKS:	Rif - Bı	risb	ane Tuff						LOGGED BY	REVIE	WED BY
										ZC		Foley

CORE PHOTO LOG DEPARTMENT OF TRANSPORT AND MAIN ROADS GEOTECHNICAL SECTION



Project Name	Cross River Rail CRR2017 – Geotechnical Investigation						
Project No.	FG6470	Date	25/09/2017				
Borehole No.	CRR731	Reference No.	H12957				
Location	RNA Showgrounds	Start Depth (m)	2.65				
Submitted By	M. de Gee	Finish Depth (m)	10.25				



1

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 Nan	ne	Cross River	r Rail			Project No. FG6470				
Site ID / Bo	rehole No.	CRR731				Surface RL 8.58				
Geologist		Z.C.				Date	25/09/2017			
		•				Page	1	of	1	
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		
2.65	J	70	Un	Sm	٧	OP	St		Fe	
2.75	J	75	Un	Sm	٧	OP	St		Fe	
2.91	J	10	Un	Ro	IV	TI	St		Fe	
2.93	J	10	Un	Ro	IV	TI	St		Fe	
2.99	J	10	Un	Ro	IV	TI	St		Fe	
3.36	J	12	PI	Sm	VIII	OP	St		Fe	
4.14	J	5	Un	Sm	٧	OP	Cn			
5.36	J	20	Un	Sm	V	OP	Cn			
7.85	J	5	Un	Sm	V	OP	Cn			
8.55	J	5	Un	Sm	٧	OP	Cn			
8.75	J	85	Un	Sm	V	OP	Cn			
8.95	J	85	Un/Stp	Sm	V/II	OP	Cn			
9.34	J	90	Un/Stp	Sm	V/II	OP	Cn			
9.68	J	30	Stp	Sm	II	OP	Cn			
9.99	J	2	Un	Sm	V	OP	Cn			
10.08	J	0	Un	Sm	V	OP	Cn			
10.16	J	0	Un	Sm	٧	OP	Cn			
10.17	J	0	Un	Sm	V	OP	Cn			

Note: 1. Describe zones and coatings in terms of composition and thickness (mm) $F:GEOT\ 533/9-2014$