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TMR JAN 15.GLB Log A_ENGINEERING BOREHOLE LOG W LITHOLOGY FG6184 - BOREHOLES.GPJ <<DrawingFile>> Datgel CPT Tool gINt Add-In 04/03/2015 10:51

ENGINEERING BOREHOLE LOG

FOR GEOTECHNICAL TERMS AND SYMBOLS REFER FORM F:GEOT 017/8-2014

BOREHOLE No	BH150
SHEET	<u>1</u> of <u>2</u>
REFERENCE No	12091

PRO	JECT					Geotechnical Investigation - Stage 1							
						il Overpass Pier 1; CH: 9961m;					ATES 721578		
PRO	JECT No	0 <u>F</u> (SURFACE R.L. <u>10.83m</u> PLUNGE							
JOB	No	_			- - -	HEIGHT DATUM <u>AHD</u> BEARING			DATE COMPLETED _29	<u>9/10/14 </u>	DRILLER	Saxon Drilling	
DEPTH (m)	R.L. (m)	JGER	ASH BORING DRE DRILLING	RQD ()% CORE REC %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	SC	INTACT DEFECT STRENGTH SPACING (mm) THE SPACE OF THE SPA	GRAPHIC LOG	ADDITIONAL I AND TEST RESU		SAMPLES TESTS
0	10.83	49	3ŏ 	REC %	S	CHA, CLAY (ALLENJUBA)		S S		9			\$ ₽
- - - - - - - - -	9.83					Silty CLAY (ALLUVIUM) Dark brown, dry, firm. Medium plasticity. Trace sand and gravel.		(CI)					- - - - - - - - - - - - - - - - - - -
- 1					А	Silty CLAY (ALLUVIUM) Dark grey, moist, firm. High plasticity.						2,3,3 N=6	SPT
- -2 - - - - -					В				± ± ±			2,2,2 N=4	SPT =
- -3 - - - - -					С	3.00m: Becoming stiff.		(CH	1			3,4,7 N=11	SPT :
- - - - - - - - - - - - - - -	6.13				D	4.00m: Becoming very stiff.4.40m: Sand lense.						3,8,10 N=18	SPT :
- - - - 5 - - -	0.13				Е	Silty CLAY (ALLUVIUM) Brown-grey, moist, stiff. Medium plasticity.						3,4,6 N=10	SPT :
- - - - 6 - - - - -					F			(CI)				3,6,8 N=14	SPT :
- - - - - - - - - - -	3.23				G				<u>+</u>			4,6,8 N=14	SPT :
- - - - 8 - - - -					Н	Silty SAND (ALLUVIUM) Pale grey, moist, medium dense. Fine to medium grained sand. Low plasticity fines.			+			5,6,13 N=19	SPT =
- - - - 9 - - - - - -					J			(SM				9,12,15 N=27	SPT -
10				10/		and the state of			1			00055 51/	
F	REMARK					ranodiorite;						OGGED BY.	
# Sample failed along existing defect surface.									141				
		R	ock	Roller us	ed fr	om 11.14m to 13.08m.							



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ENGINEERING BOREHOLE LOG

FOR GEOTECHNICAL TERMS AND SYMBOLS REFER FORM F:GEOT 017/8-2014

BOREHOLE No __BH150 __
SHEET __2 _ of __2 __
REFERENCE No __12091 ___

PRO	PROJECT Mackay Ring Road Geotechnical Investigation - Stage 1													
	OCATION <u>QR North Coast Rail Overpass Pier 1; CH: 9961m;</u> COORDINATES <u>721578.3 E; 7662271.0 N</u> PROJECT No <u>FG6184</u> SURFACE R.L. <u>10.83m</u> PLUNGE DATE STARTED <u>28/10/14</u> GRID DATUM <u>GDA 94/MGA Zone 5</u>													
JOB					HEIGHT DATUM <u>AHD</u> BEARING _									
							· —-	_					711. BINELER GARAN BINNIN	
٦ آ	R.L. (m)	DNG ING	RQD ()%		MATERIAL			؛ او	INTACT STRENGTH	DEFEC	T G	90	ADDITIONAL DATA	
DEPTH (m)		R VG H BORING DRILLING		щ	MATERIAL	LOGY		H H H		(mm)		HC LC	AND	ES
_	0.00	VASH VASH VORE	CORE REC %	SAMPLE	DESCRIPTION	LITHOLOGY	USC	EH H	STRENGTH	∪∪ Ш>∪ ∑ ≷	× M M M M	GRAPHIC LOG	TEST RESULTS	SAMPLES
10 -	0.83	1030	REC %		Silty SAND (ALLUVIUM)	Ī	1212	1	 	- : : : :			10,11,13	-
-				K	(Cont'd)		(SN	1)	: : : : : : -				N=24	SPT -
10.70	0.13	-					:	_	: : : : : : -	-::::	: :			-
- - - 11					GRANODIORITE (Kgwu) HW: Grey and brown, medium to coarse	+	-		: : : : : <u>:</u>				20/425	CDT
-				L	grained, very low strength. Silicified in parts.	+							30/135	SPT -
- - -						+			: : : : : <u>-</u>					_
-						+								-
12 				М		-	HW	v	: : : : : : <u>-</u>	-::::			30/95 — 11.14m-13.08m: Rock Roller bit used.	SPT
- - -						-	-							-
-						+					: :			-
- - - 13						+			<u> </u>				00/75	-
-				N		+			: : : : : : -	- : : : :			30//5	SPT
13.40	-2.57		(0)		GRANODIORITE (Kgwu)	+		+				-+		-
-			(29)		SW: Grey and pink, medium to coarse grained, massive, high to very high	+	SW	V						-
- 14 			100		strength. Defects:	'	MV	V.		T				_
-			(0)		- Js- 0°-30° (10/m); PI/Sm, TI; - Js; 30°-60° (5/m); PI/Sm, TI;	+	SW	V					Is(50) = 1.66MPa; #	D (14.32m)
-					- Js; 60°-90° (5/m); PI/Sm, TI;	+	MV	v						-
- - -			100			+	SW	_	:					-
15 - -			(20)			+	MV	٧						-
-						'	SW							
15.80	-4.97					+	- 000	v						_
- 16			100		MICRODIORITE (Kgwu) SW: Grey, fine grained, massive, very	+	-							_
-			(16)		high strength. Defects:	+							Is(50) = 3.75MPa; #	D (16.23m)
- - - - -					- Js; 0°-30° (7/m); Pl/Sm, TI;	+	-						=− 16.58m-16.60m: VN; CA; 20°	_
- - -					- Js; 30°-60° (5/m); Pl/Sm, TI; - Js; 60°-90° (2/m); Pl/Sm, TI;	+	SW	۷					16.63m-16.65m: Clay seam; 30° 16.70m: Clay seam; □—16.90m-16.97m: CA; 70°	-
17 -			100			+							10.90III-10.97III. CA, 70	_
-			(37)			+	-							-
17.60	-6.77	1			GRANODIORITE (Kgwu)	+	-					Δ	- 17.50m-17.95m: Breccia; CA;	_
- - 18					HW: Grey, medium to coarse grained, massive, medium to high strength.	+	HW	v				Δ		-
					g. c. og.	-					: :			-
- -18.53	-7.70		100		D. J.	+	MV	٧					Is(50) = 0.57MPa Is(50) = 0.76MPa	D (40 27m)
-					Borehole terminated at 18.53m								ls(50) = 1.11MPa	A (18.45m)
- 19 -									: : : : : : <u>-</u>					-
-														
-														-
20									: : : : : : -					-
	REMARK	S Kgwu	<u>- Wund</u>	aru G	ranodiorite;								LOGGED BY	
		# San	nple faile	d alc	ng existing defect surface.								ME	
		Rock	Roller u	sed fi	rom 11.14m to 13.08m.									

DEPARTMENT OF TRANSPORT & MAIN ROADS Geotechnical Branch 35 Butterfield Street, HERSTON Qld 4006 Phone 07 3066 3336



Project Name	Mackay – Ring Road		
Project No	FG6184	Date	29/10/14
Borehole No	BH150	TMR H No	12091
Location	QR North Coast Rail Overpass	Start Depth (m)	13.4
Detail	Pier 1	Finish Depth (m)	18.53
Chainage	9961m	Submitted By	M.Ensor
Remarks			

