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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	BH153
SHEET	_1_ of _3_
REFERENCE No	12094

PROJ	ECT	_Macl	kay R	Ri <u>ng F</u>	Road_	Geotechnical Investigation - Stage 1									
LOCA	TION					il Overpass Abutment B; CH: 9981m;					СО	ORDINATES	721587	7 <u>.1 E; 7662291.</u>	7 <u>N</u>
PROJ	ECT No	F <u>G</u> 6	<u>184</u>			SURFACE R.L 11.07m PLUNGE _				DATE STARTED	29/10	<u>//14</u> GRID	DATUM	GDA 94 /MG/	<u> Zone 5</u>
JOB N	Ю					HEIGHT DATUM <u>AHD</u> BEARING _				DATE COMPLETED _	30/10	<u>)/14</u> [ORILLER	Saxon Drilling	L
DEPTH (m)	R.L. (m)	GER SING ASH BORING PE DELLING		QD)%	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	S	EATHERING	INTACT DEFECT STRENGTH SPACING (mm)	EW GRAPHIC LOG		OITIONAL I AND		SAMPLES TESTS
0	11.07	3898	RE	C %	SAI		5	Š	× K	 - - - - - - -	GR		OT NEGO	LIO	SAI
0.70	10.37					Gravelly Clayey SAND (FILL) Brown, moist to dry, loose. Fine to coarse grained sand. Medium gravel.		(S	C)	-					- - - -
- - -1 - - -					А	Silty CLAY (ALLUVIUM) Dark brown to black, moist, stiff. High plasticity.								Su _(PP) =60kPa;	U50]
- - - - - 2								(CI	H)	Ŧ					-
- 2.90	8.17				В									Su _(PP) =95kPa;	U50 <u>-</u> - -
-3 - - - - - -					С	Silty Sandy CLAY (ALLUVIUM) Grey mottled orange-brown, moist, stiff to very stiff. Medium to high plasticity.		(C						4,5,8 N=13	SPT -
- -4 - - - 4.40	6.67				D	Clayey SAND (ALLUVIUM)			'/	± 				3,4,14 N=18	SPT -
- - - - 5.60	6.07					Grey-brown, moist, medium dense. Fine to coarse grained. Silty CLAY (ALLUVIUM)		(S	C)						-
- - - - - - -					Е	Grey mottled brown, moist, stiff to very stiff. High plasticity.								4,4,8 N=12	SPT -
- -6 - - - - -					F			(CI	H)	+				4,7,9 N=16	SPT -
- - - - - - - - - - -					G					±				4,5,9 N=14	SPT -
7.90 - 8 	3.17				Н	Clayey SAND (ALLUVIUM) Pale brown to white, moist, mainly medium dense to dense.								8,11,12 N=23	SPT
- - - - - - - 9						Fine grained sand.		(S(C)						1
- - - - - - - - - - -					J	9.00m: Becoming fine to medium grained sand.				± ± ± ± ± ± ± ± ± ± ± ± ± ± ± ± ± ± ±				6,8,8 N=16	SPT -
10 RI	EMARK					ranodiorite; ng existing defect surface.	<i>v.y.</i>	_	1 				L	OGGED BY	
												_			



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

ENGINEERINGBOREHOLE LOG

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

BOREHOLE No __BH153 __

SHEET __2_ of __3__

REFERENCE No __12094 ___

PROJI LOCA						Geotechnical Investigation - Stage 1					- -	 ORDINATES	 7 N
PROJI JOB N		0 <u>F</u> G	618	<u> 34</u>		SURFACE R.L11.07m_ PLUNGE HEIGHT DATUMAHD BEARING			DATE S	TARTED 2	<u>9/10</u>	/14 GRID DATUM <u>GDA 94 /MG</u> /	A Zone 5
DEPTH (m)	R.L. (m)	NÚGER SASING MASH BODING	SORE DRILLING	RQD () % CORE REC %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	JSC	INTACT STRENGTH	DEFECT SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES
10 				REC %	K	Clayey SAND (ALLUVIUM) (Cont'd)		(SC)		U	10,16,20 N=36	SPT :
	0.27	-			L	Silty CLAY (RESIDUAL) Brown-grey, moist, very stiff. Medium plasticity.		(CI)				6,12,15 N=27	SPT -
- - - 12 - - - - - 12.50	-1.43				М							8,11,13 N=24	SPT -
- - - - - 13 - - -					N	GRANODIORITE (Kgwu) XW: Recovered as grey, white and brown, moist to dry, hard Sandy Silty CLAY. Low to medium plasticity. Some HW rock fragments.	+ -					9,16,22 N=38	SPT
— - - - - - 14 - -					Р		 + + 	xw				15,29,28 N=57	SPT
- - - - - - - 15,00	-3.93	-			Q	GRANODIORITE (Kgwu)	+	-					- - - - - - SPT _
- - - - - - - - - -						HW: Grey, white and brown, fine to coarse grained, very low strength. Some XW zones throughout.	 + + 					200/50	- - - - -
- 10 				(78)	R		 - - - -	HW	1			30/50	- SPI _ - - - - - - - -
- - - - - - - - - -	6 93			100 (43)			+ + +						- - - - - - -
17.90 - 18 - - - - -	<u>-6.83</u>	-				GRANODIORITE (Kgwu) MW: Grey, white and pink, fine to coarse grained, medium strength. Defects: - Js; 20° (1/m); PI/Ro, some Cly;	+	MW				UCS=13.6MPa ls(50) = 1.24MPa ls(50) = 0.50MPa	A (18.10m) D (18.15m)
- - - - - - - - - - - - - - - - -	-8.43	_		100 (27)		- Js; 60°-65° (4/m); Pl/Ro, some Cly;	-					_	
20 RE	MARK					MICRODIORITE (Kgwu) SW: Granodiorite;	-	SW				LOGGED BY	- - - -
		<u>#</u> .S	<u>Sam</u>	nple faile	d alc	ong existing defect surface.						IVIO	



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

ENGINEERING BOREHOLE LOG

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

BOREHOLE No	BH153
SHEET	_3_ of _3_
REFERENCE No	12094

PRO	JECT	_Mack	ay Ring F	Road_	Geotechnical Investigation - Stage 1							
LOC	ATION	<u>QR N</u>	lorth Coa	st <u>Ra</u>	il Overpass Abutment B; CH: 9981m;					CC	OORDINATES 721587.1 E; 7662291	<u>.7 N</u>
PRO	JECT No	<u>FG61</u>	184		SURFACE R.L. <u>11.07m</u> PLUNGE			DATE ST	TARTED 2	9/10	<u>0/14</u> GRID DATUM <u>GDA 94 /MG</u>	<u>A Zone 55</u>
JOB	No				HEIGHT DATUMAHD BEARING			DATE COM	PLETED 3	0/10	<u>D/14</u> DRILLER <u>Saxon Drilling</u>	1
DEPTH (m)	R.L. (m)	AUGER CASING WASH BORING CORE DRILLING	RQD ()%	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USC	INTACT STRENGTH	DEFECT SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
20	-8.93	7070	(23)	0,	MICRODIORITE (Kgwu)	+					Is(50) = 5 16MPa: #	D (20 40)
- - - - - - - -			100 (26)		SW: (Cont'd) Black, fine grained, massive, high strength. Some highly fractured zones. Defects: - Js; 20° (1/m); PI-Un/Ro, Fe St, Cly Ct; - Js; 50° (2/m); PI-Un/Ro, Fe St, Cly Ct;	+ + - + - - - -	MV			+	Is(50) = 4.17MPa; # -20.35m-20.75m: MW Granodiorite; -20.75m-20.92m: BZ;	A (20.15m)
' - - -			100		- Js; 80° (3/m); Pl-Un/Ro, Fe St, Cly Ct;	+ + + +	SW	, 				-
21.70	-10.63		(37)			+						
- 22 -					GRANODIORITE (Kgwu) SW: White, grey and pink, fine to coarse grained, massive, high strength. Defects:	- - +	SW	<u>/ </u>			Is(50) = 4.98MPa Is(50) = 5.80MPa Is(50) = 1.76MPa; # Is(50) = 5.11MPa	D _(21.85m) A _(21.87m) -
					- Js; 25° (1/m); Pl/Ro, OP, Cly; - Js; 45° (2/m); Pl/Ro, OP, Cly;	+	MV				Is(50) = 3.64MPa; #	A _(22.20m)
23:18	-12.03		100		- Js; 70°-80° (3/m); Pl/Ro, OP, Cly;	+	SW	,			Is(50) = 8.28MPa	D (22.90m)
	EMADIA	e Kawi	ı - Wund	aru G	Borehole terminated at 23.1m						LOGGED BY	
R	EMARK	S <u>Kgw</u> ı	ı - Wunda	aru G	sranodiorite;						LOGGED BY	
		<u># Sa</u> r	mple faile	<u>d alo</u>	ong existing defect surface.						MS	

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		30/10/14
Borehole No	BH153			TMR H N	0	12094
Location	QR North Coas	t Rail Overpa	SS	Start Dep	th (m)	16.1
Detail	Abutment B			Finish De		23.1
Chainage	9981m			Submitted		J. Lopez
Remarks						
				A CONTRACTOR	District Control	
Ž į	Was said				ALC:	
The state of the s					(-)	(II +
Marie Sand						7
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OR STATE					2	A CONTRACTOR OF THE PARTY OF TH
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AL SALES				(Care		
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	N. A.					
9 -					THE PASS	1
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OF THE PERSON NAMED IN COLUMN TO PERSON NAME						
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Children of	23.0 13.64					
の大学芸術学	24					
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100	200	300	400	300	300	700
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