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TMR JAN 15.GLB Log A_ENGINEERING BOREHOLE LOG W LITHOLOGY FG6184 - BOREHOLES.GPJ <<DrawingFile>> Datgel CPT Tool glNt Add-In 04/03/2015 10:52

ENGINEERING BOREHOLE LOG

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

BOREHOLE No __BH171__

SHEET __1_ of __3__

REFERENCE No __12112___

PROJECT	_Macka	ay Ring F	Road_	Geotechnical Investigation - Stage 1							
LOCATION	<u>Fursde</u>	en Creek	<u>Ove</u>	rflow Bridge Abutment A; CH: 8690m;				COORD	INATES <u>721</u>	129.5 E; 7661010	<u>.6 N</u>
PROJECT N	o <u>FG618</u>	84		SURFACE R.L 7.60m PLUNGE			DATE STARTED 2	<u>1/10/14</u>	GRID DATUI	M <u>GDA 94 /MG</u>	<u> A Zone 55</u>
JOB No				HEIGHT DATUM <u>AHD</u> BEARING			DATE COMPLETED _2	2/10/14	DRILLE	R <u>Saxon Drilling</u>	<u> </u>
R.L. (m) HL430 0 7.60	AÚGER CASING WASH BORING CORE DRILLING		SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USC	INTACT DEFECT STRENGTH SPACING (mm) ボジェンラゴロシッショ	GRAPHIC LOG	ADDITIONA AND TEST RES)	SAMPLES TESTS
- - - - - -				Silty Sandy CLAY (TOPSOIL) Dark brown, moist, soft. Low plasticity. Some roots.	77.	(CL)					- - - - - - - -
- 6.60 			А	Silty SAND (ALLUVIUM) Brown, moist, loose to medium dense. Fine grained sand.						5,6,5 N=11	SPT =
			В							2,3,4 N=7	SPT -
- - -3 - - - -			С				-			4,5,5 N=10	SPT -
			D			(SM)			4,7,7 N=14	SPT -
 			Е	5.00m: Becoming medium grained sand.			T T T T T T T T T T T T T T T T T T T			3,4,4 N=8	SPT -
- - - - - - - - - -			F	6.00m: Trace medium, angular gravel.						4,5,6 N=11	SPT :
7.40 0.60			G	Sandy GRAVEL (ALLUVIUM) Brown and black, moist to wet, medium dense to dense. Fine to medium, subrounded gravel. Fine to coarse grained sand.						 14,15,14 N=29	SPT -
			Н	7.90-8.30m: Some cobbles.		(GW)			10,16,14 N=30	SPT -
			J	Silty CLAY (ALLUVIUM)						10,16,6 N=22	SPT -
- 10				Only OLA! (ALLOVIOIVI)		(CH					
REMARK	S Kgwu	- Wunda	aru G	ranodiorite;				— — — —		LOGGED BY MS	
					_						



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ENGINEERING BOREHOLE LOG

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

BOREHOLE No	BH171
SHEET	_2_ of _3_
REFERENCE No	12112

PROJECT				Geotechnical Investigation - Stage 1						
				rflow Bridge Abutment A; CH: 8690m;				RDINATES 72142		
				SURFACE R.L. 7.60m PLUNGE _						
JOB No				HEIGHT DATUM <u>AHD</u> BEARING _		-	DATE COMPLETED 22/10/1	4 DRILLER	Saxon Drilling	<u> </u>
R.L. (m) HLL day 10 -2.40	NUGER SASING VASH BORING SORE DRILLING	RQD () % CORE REC %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	VEATHERING	INTACT DEFECT SPACING (mm)	ADDITIONAL AND TEST RESU		SAMPLES TESTS
10 -2.40 ·	1	REC %		Silty CLAY (ALLUVIUM) (Cont'd)		>			3,4,10	-
- - - - -			K	Pale brown, yellow and grey, moist, stiff to very stiff. High plasticity.			±		N=14	SPT :
- -11 - - - -			L			CH)			5,9,11 N=20	SPT :
- - - -12 - -			М				± ± ± ±		6,8,11 N=19	SPT
- - - - - - - - 13				Sandy Silty CLAY (ALLUVIUM)						- - - - - -
- - - - - -			N	Brown, orange and grey, moist, very stiff. High plasticity.					9,13,14 N=27	SPT -
			Р			CH)	-		7,12,14 N=26	SPT :
- - - - 15 - - - - - - - - - - - - - - -			Q				+		6,10,12 N=22	SPT :
- - - - - - - - - - - - -			R	Silty CLAY (RESIDUAL) Brown and grey, moist, very stiff to hard. Medium to high plasticity.					13,11,15 N=26	SPT -
- - - - - - - - - - -			S			CI- :H)			10,25,26 N=51	SPT =
			Т	GRANODIORITE (Kgwu)	+				12,30/120	SPT]
			U	XW: Recovered as grey, white and brown, moist, very dense Silty SAND. Fine to coarse grained sand. Trace fine angular gravel.	+	Œ			30/100	SPT
REMARKS	<u> </u>	- Wund	aru G	iranodiorite;	<u> </u>				LOGGED BY MS	_



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ENGINEERING BOREHOLE LOG

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

PROJECT LOCATION		Geotechnical Investigation - Stage 1					- — — — — — — — — — RDINATES 721429.5 E; 7661010.	
		erflow Bridge Abutment A; CH: 8690m; SURFACE R.L. 7.60m PLUNGE						
JOB No								
R.L. (m) HLL 430 20 -12.4	ROD ROD REC % SAMPLE	MATERIAL DESCRIPTION	- LITHOLOGY USC		INTACT DEFECT SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
- - - - - - - - - - - - - - - - - - -			[+]	<w 1<="" td="" =""><td></td><td></td><td>30/140 <u> </u></td><td>- - - - - -</td></w>			30/140 <u> </u>	- - - - - -
	(0) 100 (0) 88 (0) 100 (0)	GRANODIORITE (Kgwu) HW: Grey, white and pink, fine to coarse grained, massive, very low to low strength.	+ + + + + + + + + + +	HW :			- 21.86m-21.92m: Core Loss - 22.60m-22.68m: Core Loss	
- 23 - - -23.35	(0) (22)	GRANODIORITE (Kgwu) MW: Grey, white and pink, fine to coarse grained, massive, medium strength. Highly fractured rock.	+	1W			-23.26m-23.30m: Core Loss -23.30m-23.35m: Core Loss Is(50) = 0.39MPa	-
 25	(78)	GRANODIORITE (Kgwu) SW: Grey, white and pink, fine to coarse grained, massive, very high strength. Defects: - Js; 0°-10° (1/m); Pl/Ro, OP, Cn; - Js; 30° (1/m); Pl/Ro, OP, Cn; - Js; 40°-45° (1/m); Pl/Ro, OP, Cn;	+ + + + + + + + +				Is(50) = 5.52MPa UCS=107MPa Is(50) = 7.00MPa	A _(24.40m) -
- - - - - - - - - - - - - - - - - - -	100 (100)		+ + + + + + + + + + + + + + + + + + + +	SW :			Is(50) = 3.61MPa	A _(25.25m) -
- - - - - - - -27	100		+ + + + +				Is(50) = 4.45MPa; #	-
			+ + + + + + + + + + + + + + + + + + + +				ls(50) = 4.27MPa ls(50) = 2.36MPa	-
-21.0 -21.0 -29 -29 -30		Borehole terminated at 28.6m						
REMAR	KS <u>Kgwu - Wundaru (</u>	Granodionte;		- — - · - — - ·			LOGGED BY MS	

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



Project Name	Mackay – Ring Road		
Project Name Project No	FG6184	Date	22/10/14
Borehole No	BH171	TMR H No	12112
Location	Fursden Creek Overflow Bridge		21.1
Detail	Abutment A		28.6
		Finish Depth (m)	
Chainage Remarks	8690m	Submitted By	J. Lopez
22.6 21.86 27.17 C 21.86 27.17 C 27.47	200 200 200 200 200 200 200 200 200 200	12 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	25.26
F66134	BHIT	Zno Z	E X SON STATE
FG6184	28.0	Box	EAST STATE OF THE
0 100	200 300 SCALE	1:5	700