COPYRIGHT NOTICE

This geotechnical log and its associated data (the Document) is licensed by the Queensland Department of Transport and Main Roads under the <u>Creative Commons Attribution 4.0 Licence</u> (CC BY 4.0). When reusing the Document, in whole or in part, please attribute the Department as follows: "(c) State of Queensland (Department of Transport and Main Roads) 2020, licensed under the CC BY 4.0 Licence". This licence does not apply to the Queensland Government logo or trademarks.

LIMITATION OF LIABILITY

The CC BY 4.0 Licence contains a comprehensive Disclaimer of Warranties and Limitation of Liability. In addition, please note that this Document was prepared for Departmental use only. Reuse of the Document by anyone for any other purpose could result in error and/or loss. You should obtain professional advice before making decisions based on the contents of the Document.

When reproducing any part of this Document, you must also reproduce this limitation of liability notice in addition to the italicised attribution statement above.

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



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

ENGINEERINGBOREHOLE LOG

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

BOREHOLE No ___BH162 ___

SHEET __1__ of __2__

REFERENCE No ___12103 ___

PROJI						Geotechnical Investigation - Stage 1 Overpass Abutment B; CH: 11000m;							
						SURFACE R.L15.69m_ PLUNGE							
JOB N	0					HEIGHT DATUM AHD BEARING			DATE COMP	LETED 15	<u>/12/1</u>	4 DRILLER ND Drilling Pt	<u>y Ltd</u> _
DEPTH (m)	R.L. (m)	JGER ASING ASH BORING		RQD ()%	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	SC FATHERING		DEFECT SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
0	15.69	₹0≥	S T	REC %	S	Sandy CLAY (TOPSOIL)	7/1/		1 : : : : : 1		5		√s ⊨
0.40	15.29					Black, moist, firm. Medium plasticity. Fine to coarse grained sand. Some organics.	17 · 7 ₇	(CI)	<u> </u>				-
 - - - 1.00	14.69					Sandy CLAY (RESIDUAL) Orange, red, grey, moist, stiff to very stiff. High Plasticity. Fine to coarse grained		(CH)				- - - - -
- - - - - -					А	Clayey SAND (RESIDUAL) Orange, white, black, dry, medium dense. Fine to coarse grained.						5,8,10 N=18	SPT =
- - - 2 - - -					В							6,8,11 N=19	SPT -
- - - - -3 -					С	3.00m: Becoming dense.						12,17,17	SPT -
- - - - - -								(SC				N=34	
-4 - - - - -					D	4.00m: Becoming very dense.						10,24,28 N=52	SPT =
- - - - 5 - - -					E							10,24,33 N=57	SPT
 - - - - - 6		ľ,			F	6.00-6.50m: Becomes Silty SAND.						27,50/120	SPT [
6.50	9.19	<u></u>				GRANODIORITE (Kgwu) XW: Recovered as white, grey brown, moist, hard, Sandy CLAY.	+						
-7 - - - - -					G	, , , .	-	xw				15,19,24 N=43	SPT =
- - - - 8 - -							-						- - - - - -
	7.19			(100) 100 (100)		MICRODIORITE (Kgwu) SW: Dark grey to brown-grey, medium to coarse grained, massive, very high strength.	+ +				-	UCS=179 Is(50) = 12.16MPa Is(50) = 7.15MPa	D _(8.69m) -
				(100)		Defects: - Js; 10°-30° (1/m); PI/Ro, TI, Fe St or Cn;	+ + +	SW				ls(50) = 6.41MPa ls(50) = 2.79MPa ls(50) = 7.95MPa	A _(9.36m) – D _(9.38m) – A _(9.41m) –
10 RE	MARK	(S <u>Kg</u>	wu_	- <u>Wunda</u>	aru G	9.70m: Becoming fine to medium grained. Granodiorite;						LOGGED BY ML	_



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

ENGINEERINGBOREHOLE LOG

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

BOREHOLE No __BH162 __

SHEET __2 _ of __2 __

REFERENCE No __12103 ___

PROJECT LOCATION				Geotechnical Investigation - Stage 1 Overpass Abutment B; CH: 11000m;								 721207	.4 E; 7663229.	
PROJECT N JOB No	lo_F <u>G</u> 61	184		SURFACE R.L. <u>15.69m</u> PLUNGE HEIGHT DATUM <u>AHD</u> BEARING				DA	TE S	TARTED			GDA 94 /MG/	
R.L. (m)	AUGER CASING WASH BORING	RQD ()% CORE REC%	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USC	WEATHEKING	INTAC STREN	STH	DEFECT SPACING (mm)	- VW - EW GRAPHIC LOG	ITIONAL I AND ST RESU		SAMPLES TESTS
- - - - - - - - - - - - - - - - - - -		100 (100)		MICRODIORITE (Kgwu) SW: (Cont'd) 10.40m: Becoming medium to coarse grained.	+ + + + + + +	-						Is(50) = 15.80MPa	-
- - - - - - - - 12 - - - -		(100) (100) 100 (100) 100 (100)	/	11.60m: Becoming pale grey. Defects: - Js; 0°-20° (2-3/m); Pl/Ro;	+ + + + + + + + +	sv	v					ls(5	0) = 7.11MPa 0) = 7.00MPa	(11.68m)_ - - - - - -
- - - - 13 -					+ + 	-						Is(5	0) = 4.05MPa 0) = 4.68MPa 0) = 8.81MPa	D
- - - - - - _{13.78} 1.9	1	100			+							ls(5 ls(5	0) = 8.96MPa 0) = 6.78MPa	D (13.44m) A (13.47m)
		u - Wund	anı G	Borehole terminated at 13.78m									0) = 8.99MPa	A (14.42m)
REMAR	KS <u>Kgw</u> ı — —	u - Wund	aru C	<u>Granodiorite;</u>	 		 					L	OGGED BY	

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



Project Name	Mackay – Ring Roa	ad	ľ		
Project No	FG6184		Date		15/12/14
Borehole No	BH162		TMR H I	No	12103
Location	Ring Road Stage 2	Overpass	Start De	pth (m)	8.5
Detail	Abutment B		Finish D	epth (m)	13.78
Chainage	11000		Submitte	ed By	DC
Remarks					
0	408:1133 BH162	START 8.50	THE RESERVE AND ADDRESS.		2 200
8.00	AUS CITY DATE	54			F F
M P					
S Comments		the same of			
O TOTAL STATE OF THE PARTY OF T					-
10 00					11:00
	A STATE OF THE STA	4			B
	And the second				1 284
22 #	THE PARTY OF THE PARTY.	1		NO. THE R.	O SHOULD BE WANTED
E . 64		23	Transition (The second	of production of the second
2				84X 1408	:1133 54162
(3:00	A CONTRACTOR OF THE PARTY OF TH			50 B	7419.7
1					111
-					118
-					
			NAME OF THE OWNER, WHEN PARTY AND PARTY.		
The state of the s					
	Control of the Contro				Carlo Since
The state of the					
			And the second second		
		Scale (m	n)		
100	200 300 400	Scale (mi		800	900 1000
100	200 300 400		m) 600 700	800	900 1000
100	200 300 400			800	900 1000