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ENGINEERING BOREHOLE LOG

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

BOREHOLE No **BH169**
SHEET **1** of **1**
REFERENCE No **12110**

PROJECT Mackay Ring Road Geotechnical Investigation - Stage 1
LOCATION Embankment - North of QR Port Rail Overpass; CH: 11260m; COORDINATES 721163.4 E; 7663483.0 N
PROJECT No FG6184 SURFACE R.L. 29.53m PLUNGE _____ DATE STARTED 22/1/15 GRID DATUM GDA 94 / MGA Zone 55
JOB No _____ HEIGHT DATUM AHD BEARING _____ DATE COMPLETED 27/1/15 DRILLER ND Drilling Pty Ltd

DEPTH (m)	R.L. (m)	AUGER CASING WASH BORING CORE DRILLING	RQD () %	CORE REC %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USC WEATHERING	INTACT STRENGTH	DEFECT SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
0	29.53												
0.45	29.08					Sandy CLAY (TOPSOIL) Black, dry, stiff. Medium plasticity. Fine to coarse grained sand. Roots & root fibres.	(CI)						
1					A	Sandy CLAY (RESIDUAL) Orange, brown, white, dry, very stiff. High plasticity. Fine to coarse grained sand.	(CH)					6,11,14 N=25	SPT
2.20	27.53				B	MICRODIORITE (Kgwu) HW: Orange-grey, fine grained, massive, extremely low to low strength.	HW					5,8,6/10	SPT
2.50	27.03					MICRODIORITE (Kgwu) SW: Grey, fine grained, massive, mainly very high strength. Weakly Foliated. Defects: - Js: 5°-20° (2-3/m); Pl/Ro, TI, Fe St; - Js: 30°-50° (1-2/m); Pl/Ro, TI, some Fe St; - Js: 70°-90° (1-2/m); Pl/Ro, TI, some Fe St;	SW					Is(50) = 5.27MPa Is(50) = 8.74MPa	L (2.84m) L (3.15m)
3			(100)									2.87m-3.09m: BZ;	
			100									3.44m-3.80m: BZ;	
			(66)									3.80m-4.25m: Core Loss	
			100									4.25m-4.45m: BZ;	
4			(14)									Is(50) = 2.40MPa UCS=34.1MPa	A (4.53m)
			35			4.25m: Becoming grey-brown. Defects: - Js: 5°-20° (2-3/m); - Js: 40°-60° (2-3/m); - Js: 70°-90° (1-2/m);	MW					5.50m-5.60m: BZ;	
			(100)									Is(50) = 2.49MPa	A (5.86m)
5			100									Is(50) = 10.31MPa Is(50) = 10.83MPa	D (6.23m) L (6.23m)
			(100)									Is(50) = 7.73MPa Is(50) = 9.79MPa Is(50) = 7.10MPa	A (7.02m) D (7.05m) A (7.08m)
6			100									7.55m-7.68m: BZ;	
			(100)			7.1m: Becoming mainly extremely high strength. Altered in parts. Defects from 7.1m: - Js: 0°-20° (1-2/m); Pl/Ro, TI, Cn or some Fe St; - Js: 40°-60° (1-2/m); Pl/Ro, TI, Cn or some Fe St; - Js: 70°-90° (<1/m); Pl/Ro, TI, Cn or some Fe St;	SW					8.40m-8.47m: BZ; Cly;	
7			100									Is(50) = 7.08MPa Is(50) = 6.58MPa	D (8.96m) L (8.96m)
8			(100)										
9			100			8.82m: Becomes predominantly dark grey. Defects: - Js: 40°-60° (2/m); Pl/Ro, TI, some Fe St; - Js: 80°-90° (<1/m); Pl/Ro, TI, some Fe St;	SW						
10.10	19.53		100										

REMARKS Kgwu - Wundaru Granodiorite. Borehole terminated at 10m.

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ML

CORE PHOTO LOG

DEPARTMENT OF TRANSPORT & MAIN ROADS
Geotechnical Branch
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Department of
Transport and Main Roads

Project Name	Mackay – Ring Road		
Project No	FG6184	Date	27/01/15
Borehole No	BH169	TMR H No	12110
Location	North of QR Port Rail Overpass	Start Depth (m)	2.5
Detail	Embankment	Finish Depth (m)	10.0
Chainage	11260m	Submitted By	DC
Remarks			



Scale (mm)

