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**Queensland
Government**

GEOTECHNICAL BOREHOLE LOG

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

BOREHOLE No **BH243**

Sheet 1 of 4

REFERENCE No **H12252**

PROJECT **Mackay Ring Road**

LOCATION **Pioneer River Bridge, Pier 14 (LHS)**

COORDINATES **721337.7 E; 7660489.9 N**

PROJECT No **FG6184**

SURFACE RL **3.45m**

PLUNGE **90°**

DATE STARTED **18/11/2015**

GRID DATUM **GDA 94 / MGA Z55**

JOB No **242/10G/906**

HEIGHT DATUM **A.H.D.**

BEARING **°**

DATE COMPLETED **20/11/2015**

DRILLER **Cairns Drilling**

DEPTH (m)	R.L. (m)	AUGER CASING WASHBORING CORE DRILLING	RQD (%) CORE REC %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USCS WEATHERING	INTACT STRENGTH	DEFECT SPACING	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
1				A	SAND (Fill) Brown, dry, very loose to loose. Fine to coarse grained sand. Trace gravel. (River bund) Becoming very loose.	SP					1, 2, 1 N=3 SPT
2				B	Becoming very loose to loose and moist to wet.						2, 2, 2 N=4 SPT
3				C	Becoming very loose.						1, 1, 2 N=3 SPT
4				D	Becoming loose.						2, 3, 3 N=6 SPT
5				E							2, 2, 3 N=5 SPT
6				F	Becoming very loose to loose. Increasing in gravel (Alluvial?)						2, 2, 2 N=4 SPT
7	-3.55			G	Silty Clayey SAND (Alluvium) Pale brown grey, wet, medium dense. Fine to medium grained sand.	(SC)					5, 9, 12 N=21 SPT
8				H							7, 11, 13 N=24 SPT
9	-5.75			I	GRAVEL (Alluvium) Brown grey, wet, medium dense. Fine to medium grained. Rounded clasts.	(GP)					6, 6, 7 N=13 SPT
10	-6.55										10, 13, 18 N=31

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REMARKS: Kgwu = Wundaru Granodiorite

LOGGED BY

REVIEWED BY

T.Goosey

S.Foley

PROJECT	Mackay Ring Road
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LOCATION	Pioneer River Bridge, Pier 14 (LHS)
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COORDINATES 721337.7 E; 7660489.9 N

PROJECT No FG6184

SURFACE RL 3.45m

PLUNGE 90°

DATE STARTED 18/11/2015

GRID DATUM GDA 94 / MGA Z55

JOB No 242/10G/906

HEIGHT DATUM A.H.D.

BEARING °

DATE COMPLETED 20/11/2015

DRILLER Cairns Drilling

DEPTH (m)	R.L. (m)	AUGER CASING	WASTEBORING CORE DRILLING	RQD (%) CORE REC %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USCS WEATHERING	INTACT STRENGTH										DEFECT SPACING						ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS		
									EH	VH	H	M	L	VL	EL	EC	VC	C	W	WW	EW							
					J	Sandy CLAY (Alluvium) Grey brown, moist, hard. Low to medium plasticity. Fine to medium grained sand. Trace gravel.		(CL)																		SPT		
11	-7.55				K	MICRODIORITE (Kgwu) XW: Recovered as dark grey to grey, moist, hard. Low to medium plasticity, Gravelly Sandy CLAY.																				16, 23, 30/90mm	SPT	
12					L	Gravel content reducing.		XW																		10, 30/150mm	SPT	
13					M																					29, 30/100mm	SPT	
14	-10.55				N	GRANODIORITE (Kgwu) XW: Recovered as Silty Clayey SAND. Grey, moist, very dense. Fine to coarse grained sand. Trace gravel.		XW																		30/70mm	SPT	
15					O			XW																		30/140mm	SPT	
16	-12.55				P	GRANODIORITE (Kgwu) HW: Recovered as Clayey Sandy GRAVEL. Dark grey, moist, very dense. Fine to medium gravel. Fine to coarse sand.		HW																		30/90mm	SPT	
17					Q																					30/60mm hb	SPT	
18	-14.70				R																					30/90mm hb	SPT	
19				(89)		MICRODIORITE (Kgwu) SW: Blue grey, fine to medium grained, massive, high to very high strength. Calcite veining and iron staining throughout. - J's: 5°-15° (2/m), Pl/Ro, TI-OP, FeSt, CA. J's: 25°-35° (1/m), Pl/Sm, TI, OP,		SW																		18.15m: Rockroller refusal. 18.60m-18.64m: BZ, DI?	A (18.20m) D (18.50m) Is(50)=2.80 MPa Is(50)=3.00 MPa UCS=8.83 MPa	(19.38m)
				100 (61)																								

Continued on next sheet

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BOREHOLE No **BH243**

Sheet 3 of 4

REFERENCE No **H12252**

PROJECT	Mackay Ring Road				
LOCATION	Pioneer River Bridge, Pier 14 (LHS)			COORDINATES 721337.7 E; 7660489.9 N	
PROJECT No	FG6184	SURFACE RL	3.45m	PLUNGE	90°
				DATE STARTED	18/11/2015
				GRID DATUM	GDA 94 / MGA Z55
JOB No	242/10G/906	HEIGHT DATUM	A.H.D.	BEARING	°
				DATE COMPLETED	20/11/2015
				DRILLER	Cairns Drilling

DEPTH (m)	R.L. (m)	AUGER CASING WASHBORING CORE DRILLING	RQD (%) CORE REC %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USCS WEATHERING	INTACT STRENGTH											DEFECT SPACING	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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BOREHOLE No **BH243**

Sheet 4 of 4

REFERENCE No **H12252**

PROJECT Mackay Ring Road

LOCATION Pioneer River Bridge, Pier 14 (LHS) COORDINATES 721337.7 E; 7660489.9 N

PROJECT No FG6184 SURFACE RL 3.45m PLUNGE 90° DATE STARTED 18/11/2015 GRID DATUM GDA 94 / MGA Z55

JOB No 242/10G/906 HEIGHT DATUM A.H.D. BEARING ° DATE COMPLETED 20/11/2015 DRILLER Cairns Drilling

DEPTH (m)	R.L. (m)	AUGER CASING WASHBORING CORE DRILLING	RQD (%) CORE REC %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USCS WEATHERING	INTACT STRENGTH	DEFECT SPACING	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
					Pl's: 35°-45° (1/m), Pl/Ro, Tl, FeSt Borehole completed at 29.85m						
31											
32											
33											
34											
35											
36											
37											
38											
39											

REMARKS: Kgwu = Wundaru Granodiorite

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CORE PHOTO LOG

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Phone 07 3066 3336



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Project Name	Mackay – Ring Road (Stage 2)		
Project No.	FG6184	Date	20/11/15
Borehole No.	BH 243	TMR H No.	H12252
Location	Pioneer River Bridge	Start Depth (m)	18.15
Detail	Pier 14, LHS	Finish Depth (m)	29.85
Chainage		Submitted By	M.Ensor
Remarks			

A photograph showing four horizontal sections of soil core samples held in a metal tray. From top to bottom, the sections are labeled with white tape: "27.15m", "28.0m", "29.0m", and "29.85m". The top section is light brown and sandy. The second section is darker and more silty. The third section is dark grey and appears to be a different soil type. The bottom section is very dark, almost black, and appears to be a different soil type. There are also labels "FG6184", "M.R.R.", and "BOX 4" visible on the tray.

A horizontal scale bar with markings every 100 units from 0 to 700. Below the bar, the text "SCALE 1:5" is printed.