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**Queensland
Government**

GEOTECHNICAL BOREHOLE LOG

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

BOREHOLE No **BH242**

Sheet 1 of 4

REFERENCE No **H12251**

PROJECT **Mackay Ring Road**

LOCATION **Pioneer River Bridge, Pier 13 (RHS)**

COORDINATES **721353.5 E; 7660452.9 N**

PROJECT No **FG6184**

SURFACE RL **3.75m**

PLUNGE **90°**

DATE STARTED **01/12/2015**

GRID DATUM **GDA 94 / MGA 255**

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

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

BEARING **°**

DATE COMPLETED **03/12/2015**

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, moist, very loose. Fine to coarse grained; trace gravel.	(SW)					1, 2, 2 N=4 SPT
2				B							2, 2, 2 N=4 SPT
3				C	3.0m: Becoming loose.						3, 2, 3 N=5 SPT
4				D							3, 4, 3 N=7 SPT
5				E							4, 4, 5 N=9 SPT
-1.95											
6				F	SAND (Alluvium) Brown, wet, loose to medium dense. Fine to coarse grained; trace silt; trace gravel.	(SW)					4, 4, 4 N=8 SPT
7				G							6, 7, 9 N=16 SPT
-3.55											
8				H	Clayey SAND (Alluvium) Pale grey brown, wet, medium dense to dense. Medium to coarse grained sand; trace gravel.	(SC)					7, 6, 5 N=11 SPT
9				J							11, 15, 15 N=30 SPT
-6.25											

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10.00m-10.20m: Gravelly CLAY

4, 6, 25
N=31

REMARKS: Kgwu = Wundaru Granodiorite

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REVIEWED BY

M. Ensor

S.Foley



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BOREHOLE No **BH242**

Sheet 2 of 4

REFERENCE No **H12251**

PROJECT Mackay Ring Road

LOCATION Pioneer River Bridge, Pier 13 (RHS) COORDINATES 721353.5 E; 7660452.9 N

PROJECT No FG6184 SURFACE RL 3.75m PLUNGE 90° DATE STARTED 01/12/2015 GRID DATUM GDA 94 / MGA Z55

JOB No 242/10G/906 HEIGHT DATUM A.H.D. BEARING ° DATE COMPLETED 03/12/2015 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
				K	Sandy Silty CLAY (Alluvium) Pale grey, moist, hard. Low plasticity; fine grained sand; trace gravel.		(CL)				SPT
11	-7.25			L	Silty CLAY (Alluvium) Pale grey and brown, moist, stiff to very stiff. Low to medium plasticity; trace sand; trace gravel; some Calcite nodules.		(CI)			7, 9, 15 N=24	SPT
12				M			(CI)			2, 3, 5 N=8	SPT
13	-9.45			N	Gravelly CLAY (Alluvium) Pale grey, wet, very stiff. Medium plasticity; medium gravel, subangular.		(CI)			hw, 9, 20 N=29	SPT
14	-10.15			P	GRANODIORITE (Kgwu) XW: Recovered as Sandy Silty CLAY. Grey and pale red, moist, hard. Low plasticity; fine grained sand.					9, 13, 22 N=35	SPT
15				Q	From 15.0m: Recovered as Clayey SAND. Very dense, fine to coarse grained; trace gravel.					16, 30/140mm	SPT
16				R			XW			22, 30/140mm	SPT
17				S						30/130mm	SPT
18				T						30/110mm	SPT
19	-15.25			U	GRANODIORITE (Kgwu) HW: Grey and pale red, medium to coarse grained, massive, extremely low to very low strength.		HW			30/70mm	SPT
	-16.25									30/110mm	

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REFERENCE No **H12251**

PROJECT **Mackay Ring Road**

LOCATION **Pioneer River Bridge, Pier 13 (RHS)**

COORDINATES **721353.5 E; 7660452.9 N**

PROJECT No **FG6184**

SURFACE RL **3.75m**

PLUNGE **90°**

DATE STARTED **01/12/2015**

GRID DATUM **GDA 94 / MGA 255**

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

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

BEARING **°**

DATE COMPLETED **03/12/2015**

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					
								EH	VH	H	M	J	VI	EL	EC	VC	C			M	W	VW	EW	
				V	GRANODIORITE (Kgwu) HW: Cont'd.																	SPT		
21				W																	30/80mm	SPT		
22				X			HW														30/120mm	SPT		
23				Y																	30/50mm	SPT		
24				Z	24.0m: Becoming low to medium strength.																30/10mm hb	SPT		
-20.75				(25)	GRANODIORITE (Kgwu) MW: Grey and pale red, medium to coarse grained, massive, generally medium to high strength. - Js: 5°-20° (8/m) Pl/Ro, TI-CD, Slnf, Fe St - Js: 40°-60° (3/m) Pl-Un/Ro, TI-CD, Slnf, Fe St		MW														UCS=6.12 MPa	(24.56m)		
25				100 (54)																		Is(50)=0.17 MPa	A (25.54m)	
26																						Is(50)=0.37 MPa	I (26.10m)	
-22.65					GRANODIORITE (Kgwu) SW: Grey and pale red, medium to coarse grained, massive, high to very high strength. - Js: 5°-20° (4/m) Pl-Stp/Ro, TI, Fe St - Js: 30°-50° (1/m) Pl/Ro, TI-OP, Fe St																	Is(50)=5.20 MPa Is(50)=4.80 MPa	D (26.74m) A (26.80m)	
27																								
28				100 (99)			SW																Is(50)=0.63 MPa	D (27.85m)
29				100 (92)																			UCS=53.50 MPa	(28.81m)
-26.25																							Is(50)=2.60 MPa	D (29.90m)

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PROJECT No FG6184 SURFACE RL 3.75m PLUNGE 90° DATE STARTED 01/12/2015 GRID DATUM GDA 94 / MGA Z55

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CORE PHOTO LOG

DEPARTMENT OF TRANSPORT AND MAIN ROADS
Geotechnical Section
35 Butterfield Street, Herston Qld 4006
Phone 07 3066 3336



Project Name	Mackay – Ring Road (Stage 2)		
Project No.	FG6184	Date	03/12/15
Borehole No.	BH 242	TMR H No.	H12251
Location	Pioneer River Bridge	Start Depth (m)	24.50
Detail	Pier 13, RHS	Finish Depth (m)	35.00
Chainage		Submitted By	M.Ensor
Remarks			

0 100 200 300 400 500 600 700

SCALE 1:5

CORE PHOTO LOG

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35 Butterfield Street, Herston Qld 4006
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Detail	Pier 13, RHS	Finish Depth (m)	35.00
Chainage		Submitted By	M.Ensor
Remarks			




0 100 200 300 400 500 600 700

SCALE 1:5