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**Queensland  
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**GEOTECHNICAL  
BOREHOLE LOG**

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

BOREHOLE No **BH267**

Sheet 1 of 3

REFERENCE No **H12276**

PROJECT	Mackay Ring Road		
LOCATION	Fursden Creek Bridge, Pier 3 (RHS)	COORDINATES 721496.9 E; 7661475.2 N	
PROJECT No	FG6184	SURFACE RL 4.80m	PLUNGE 90°
			DATE STARTED 29/07/2015
			GRID DATUM GDA 94 / MGA Z55
JOB No	242/10G/906	HEIGHT DATUM A.H.D.	BEARING °
			DATE COMPLETED 30/07/2015
			DRILLER Saxon 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
1	3.70				Clayey SILT (Alluvium) Dark brown, moist, soft. Trace rootlets.	(ML)							
				A	Silty Sandy CLAY (Alluvium) Dark brown, moist, very stiff to stiff. Fine grained sand, medium plasticity, trace rootlets.	CI				3, 8, 7 N=15	SPT		
2	2.70			B	Sandy CLAY (Alluvium) Mottled brown, orange and grey, moist, firm to stiff. Fine grained sand, medium plasticity.	(CI)				3, 4, 5 N=9	SPT		
				C						3, 4, 3 N=7	SPT		
3	1.00												
4	0.40			D	Sandy CLAY (Alluvium) Dark grey, wet, very soft. Fine grained sand, high plasticity, trace rootlets.	(CH)				hw, hw, 1 N=1	SPT		
					Clayey Silty SAND (Marine) Pale grey, wet, very loose. Fine grained sand, medium plasticity.	(SC)							
5	-0.30			E	Silty SAND (Alluvium) Pale grey, moist, medium dense. Fine to medium grained sand.	(SM)				4, 5, 10 N=15	SPT		
				F						7, 6, 7 N=13	SPT		
6	-1.90												
7	-3.10			G	Silty CLAY (Alluvium) Mottled pale grey and orange, moist, very stiff. Fine grained sand, medium plasticity.	(CI)				6, 8, 10 N=18	SPT		
8				H	MICRODIORITE (Kgwu) XW: Recovered as grey and brown, moist, very stiff to hard, sandy clay trace gravel. Fine to medium grained sand, medium plasticity.	XW				8, 11, 17 N=28	SPT		
9				I						9, 14, 21 N=35	SPT		
	-5.20												

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REMARKS: Kgwu = Wundaru Granodiorite

<b>LOGGED BY</b>	<b>REVIEWED BY</b>
C.Boyes	S.Foley



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Sheet 2 of 3

REFERENCE No **H12276**

PROJECT	Mackay Ring Road				
LOCATION	Fursden Creek Bridge, Pier 3 (RHS)			COORDINATES 721496.9 E; 7661475.2 N	
PROJECT No	FG6184	SURFACE RL	4.80m	PLUNGE	90°
				DATE STARTED	29/07/2015
				GRID DATUM	GDA 94 / MGA Z55
JOB No	242/10G/906	HEIGHT DATUM	A.H.D.	BEARING	°
				DATE COMPLETED	30/07/2015
				DRILLER	Saxon Drilling

DEPTH (m)	R.L. (m)	FAUGER CASING WASHBORING CONE DRILLING	RQD (%) CORE REC %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USCS WEATHERING	INTACT STRENGTH	DEFECT SPACING	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS		
												EH	VH
10.5				J	MICRODIORITE (Kgwu) HW: Grey, fine grained, massive, very low strength. Calcite veins throughout.	∇	HW				24, 30/140	SPT	
11.0				K		∇	HW				30/75 hb	SPT	
12.0				L		∇	HW				30/30	SPT	
13.0	-8.10			M	GRANODIORITE (Kgwu) HW: Grey and pink, coarse grained, massive, very low strength.	+	HW				30, 30/70 hb	SPT	
14.0	-9.00			N	MICRODIORITE (Kgwu) HW: Grey, fine grained, massive, very low strength. Calcite veins throughout.	∇	HW				30/40 hb	SPT	
15.0	-10.60			O		∇	HW				30/40 hb	SPT	
16.0				P	GRANODIORITE (Kgwu) HW: Grey and white, coarse grained, massive, very low strength.	+	HW				30/40 hb	SPT	
17.0				Q		+	HW				30/85	SPT	
18.0				R		+	HW				30/140 hb	SPT	
19.0				S		+	HW				30/90 hb	SPT	
19.5	-15.20					+	HW						

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REMARKS: Kgwu = Wundaru Granodiorite

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Sheet 3 of 3

REFERENCE No **H12276**

PROJECT	Mackay Ring Road				
LOCATION	Fursden Creek Bridge, Pier 3 (RHS)			COORDINATES 721496.9 E; 7661475.2 N	
PROJECT No	FG6184	SURFACE RL	4.80m	PLUNGE	90°
				DATE STARTED	29/07/2015
				GRID DATUM	GDA 94 / MGA Z55
JOB No	242/10G/906	HEIGHT DATUM	A.H.D.	BEARING	°
				DATE COMPLETED	30/07/2015
				DRILLER	Saxon Drilling

DEPTH (m)	R.L. (m)	FAUGER 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
21	-16.60				U	GRANODIORITE (Kgwu) HW: Pink and grey, coarse grained, massive, very low strength.	+	HW				30/60 hb	SPT
22						MICRODIORITE (Kgwu) HW: Grey, fine grained, massive, very low strength. Calcite veins throughout.	∇	HW				30/140 hb	SPT
23	-18.00		(96)			MICRODIORITE (Kgwu) SW: Grey, fine to medium grained, massive, generally high to very high strength. Calcite veins throughout. Altered throughout. Js: 0° to 30°; PI-Sm/Ro; OP-CD; CA Vr;	∇	SW	H-VH	M	23.10m-23.22m: Altered Granodiorite: 50°; Is(50)=2.40 MPa UCS=76.30 MPa E=43.6 GPa v= 0.118	A (22.85m) (23.34m)	
24			100 (66)					SW	MH		Is(50)=3.80 MPa Is(50)=4.30 MPa	A (24.00m) D (24.10m)	
25								SW	H	CM	Is(50)=0.85 MPa Is(50)=0.66 MPa	D (24.54m) A (24.63m)	
26								SW	H-VH	M	25.28m-25.30m: VN: CA; Is(50)=2.80 MPa Is(50)=7.30 MPa	D (26.15m) A (26.26m)	
27								HW	H	C	Is(50)=1.90 MPa	D (26.87m)	
28			93 (79)			27.15 to 27.35m: CORE LOSS		SW	H	C	UCS=38.10 MPa	(27.69m)	
29	-23.95		100			Borehole completed at 28.75m		MW	H	C	28.45m-28.50m: CZ Is(50)=1.20 MPa Is(50)=0.52 MPa	A (28.60m) D (28.70m)	

REMARKS: Kgwu = Wundaru Granodiorite	<b>LOGGED BY</b>	<b>REVIEWED BY</b>
	C.Boyes	S.Foley

**CORE PHOTO LOG**

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



Project Name	<b>Mackay – Ring Road (Stage 2)</b>		
Project No.	FG6184	Date	30/07/15
Borehole No.	BH 267	TMR H No.	H12276
Location	Fursden Creek Bridge	Start Depth (m)	22.80
Detail	Pier 3, RHS	Finish Depth (m)	28.75
Chainage		Submitted By	M.Ensor
Remarks			

