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GEOTECHNICAL BOREHOLE LOG

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

BOREHOLE No **BH229**

Sheet 1 of 3

REFERENCE No **H12238**

PROJECT Mackay Ring Road

LOCATION Pioneer River Bridge, Pier 9 (CL) COORDINATES 721321.5 E; 7660315.4 N

PROJECT No FG6184 SURFACE RL 3.47m PLUNGE 90° DATE STARTED 21/10/2015 GRID DATUM GDA 94 / MGA Z55

JOB No 242/10G/906 HEIGHT DATUM A.H.D. BEARING ° DATE COMPLETED 23/10/2015 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
1					SAND trace gravel (Fill) Pale orange, moist, very loose to loose. Fine to coarse grained sand.						
2					2.00m: becomes loose						
3				A						3.00m-3.45m: Casing dropping with SPT	SPT
4				AX							4, 6, 3 N=9 SPT
	-1.03			B							6, 4, 4 N=8 SPT
5				BX	Sandy GRAVEL (Alluvium) Pale orange grey, wet, medium dense to dense.						8, 15, 15 N=30 SPT
				C	Fine to coarse grained sand, fine to medium grained gravel, rounded to subrounded grains.	(GP)					8, 11, 4 N=15 SPT
6	-2.63			CX	5.50m: gravel becomes medium to coarse grained, rounded <40mm						13, 10, 9 N=19 SPT
7				D	Silty SAND (Alluvium) Pale grey, moist to wet, medium dense.						8, 13, 10 N=23 SPT
				DX	Fine to medium grained sand. 6.70m: trace clay						15, 16, 11 N=27 SPT
				E	7.00 to 7.25m: Sandy CLAY: Pale grey, wet, very soft. Medium plasticity. Fine grained sand.						1, 2, 9 N=11 SPT
8				EX		(SM)					5, 12, 14 N=26 SPT
				F							7, 11, 11 N=22 SPT
				FX	8.50m: Clay content no longer evident						9, 8, 8 N=16 SPT
9	-6.03			G	9.00m: Sand becomes fine to coarse grained. Trace clay.						10, 10, 7 N=17 SPT
	-6.53			GX	Sandy CLAY trace gravel (Alluvium)	(CL)					6, 9, 10 N=19 SPT

Continued on next sheet

REMARKS: Kgwu = Wundaru Granodiorite

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GEOTECHNICAL BOREHOLE LOG

FOR GEOTECHNICAL TERMS AND
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BOREHOLE No **BH229**

Sheet 2 of 3

REFERENCE No **H12238**

PROJECT	Mackay Ring Road				
LOCATION	Pioneer River Bridge, Pier 9 (CL)			COORDINATES 721321.5 E; 7660315.4 N	
PROJECT No	FG6184	SURFACE RL	3.47m	PLUNGE	90°
				DATE STARTED	21/10/2015
				GRID DATUM	GDA 94 / MGA Z55
JOB No	242/10G/906	HEIGHT DATUM	A.H.D.	BEARING	°
				DATE COMPLETED	23/10/2015
				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	H	M	J	VL	EL	EC	VC	C	M	W	VW	EW			
11	-7.23			H	Sandy CLAY trace gravel (Alluvium) (Cont'd) Pale grey and brown, moist, very stiff. Fine to medium grained sand, fine grained gravel, rounded grains, medium plasticity.		(CL)																8, 11, 13 N=24	SPT
				HX	Gravelly Sandy CLAY (Residual) Pale grey and grey, moist, firm. Fine grained gravel, angular grains, medium to high plasticity.		(CH)															7, 11, 17 N=28	SPT	
				I																			11, 6, 11 N=17	SPT
12	-8.53			IX																			4, 4, 3 N=7	SPT
	-8.93			J	Silty Clayey SAND (Residual) Green grey, moist, medium dense. Fine grained sand. Medium plasticity clay.		(SC)															5, 5, 12 N=17	SPT	
13				JX	MICRODIORITE (Kgwu) XW: Recovered as pale green grey, moist, very dense, clayey sand. Fine grained sand.		XW																11, 15, 30/140	SPT
	-10.03			K																				
14					MICRODIORITE (Kgwu) HW: Grey, fine grained, massive, very low to low strength.																		30/100	
				L			HW																20, 17, 30/100	SPT
16			(0)	M																			30/80 hb	SPT
	-12.53				GRANODIORITE (Kgwu) HW: Brown and grey, medium to coarse grained, massive, extremely low to very low strength.		HW																	
	-13.13		67																					
17				N	MICRODIORITE (Kgwu) XW: Recovered as brown, moist, very dense gravelly sandy clay. Fine to medium grained sand.																		11, 30/100 hb	SPT
18				O																			30/90 hb	SPT
19	-15.53		(70)		MICRODIORITE (Kgwu) SW: Green grey, fine to medium grained, massive, very high strength. Js: 5° to 15°; (6/m); Pl/Sm; OP; Cn or																		19.00m: No sample recovered	hb
			83				SW																	
	-16.53		(77)				SW																Is(50)=2.00 MPa Is(50)=5.30 MPa	A (19.70m) D (19.90m)

Continued on next sheet

REMARKS: Kgwu = Wundaru Granodiorite

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LOCATION	Pioneer River Bridge, Pier 9 (CL)
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COORDINATES 721321.5 E; 7660315.4 N

PROJECT No	FG6184	SURFACE RL	3.47m	PLUNGE	90°	DATE STARTED	21/10/2015	GRID DATUM	GDA 94 / MGA Z55
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JOB No 242/10G/906 HEIGHT DATUM A.H.D. BEARING ° DATE COMPLETED 23/10/2015 DRILLER Saxon Drilling

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REMARKS: Kgwu = Wundaru Granodiorite

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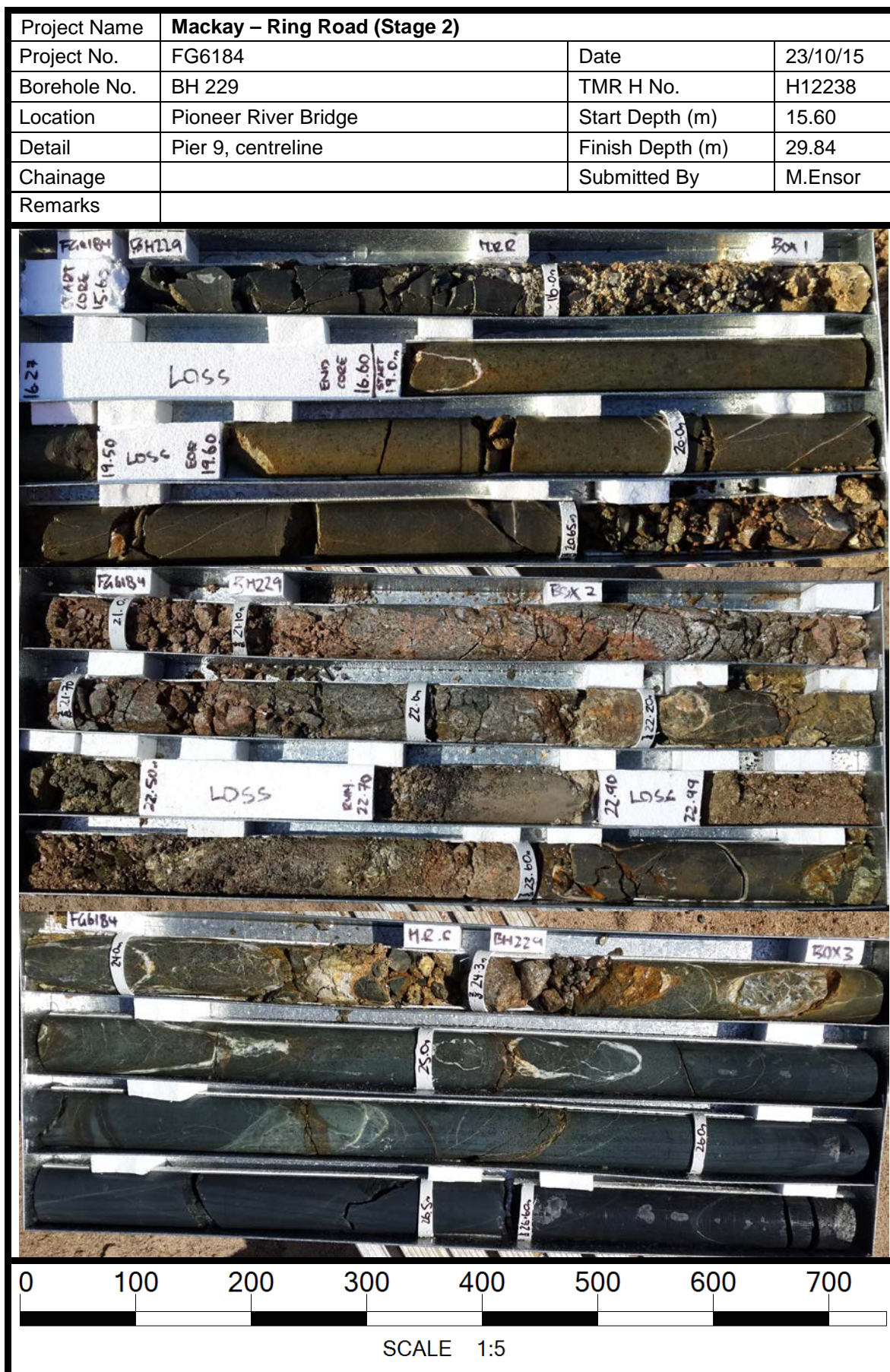
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Project Name	Mackay – Ring Road (Stage 2)		
Project No.	FG6184	Date	23/10/15
Borehole No.	BH 229	TMR H No.	H12238
Location	Pioneer River Bridge	Start Depth (m)	15.60
Detail	Pier 9, centreline	Finish Depth (m)	29.84
Chainage		Submitted By	M.Ensor
Remarks			




0 100 200 300 400 500 600 700

SCALE 1:5