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GEOTECHNICAL BOREHOLE LOG

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

BOREHOLE No **BH203**

Sheet 1 of 5

REFERENCE No **H12212**

PROJECT	Mackay Ring Road				
LOCATION	Pioneer River Bridge, Abutment A (RHS)			COORDINATES 721288.7 E; 7660018.5 N	
PROJECT No	FG6184	SURFACE RL	7.33m	PLUNGE	90°
				DATE STARTED	21/09/2015
				GRID DATUM	GDA 94 / MGA Z55
JOB No	242/10G/906	HEIGHT DATUM	A.H.D.	BEARING	°
				DATE COMPLETED	24/09/2015
				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				VI	EL	EC	VC	C	M	W	VW	EW
	6.63				Silty CLAY trace sand (Topsoil) Dark brown, dry, firm. Medium plasticity. 0.30m: becomes moist																			
1				A	Silty CLAY trace sand (Alluvium) Mottled brown and orange brown, moist, firm to stiff. Fine to medium grained sand, medium plasticity.																		2, 3, 6 N=9	SPT
2				B	2.00m: sand content increasing		(CI)																3, 3, 5 N=8	SPT
3	4.03			C	3.00m: becomes stiff																		4, 6, 10 N=16	SPT
4				D	Sandy CLAY (Alluvium) Grey mottled orange brown, moist, very stiff. Fine grained sand, medium plasticity.		(CI)																6, 7, 10 N=17	SPT
5	2.53			E	Silty SAND (Alluvium) Pale grey, moist, medium dense. Fine grained sand.																		5, 5, 6 N=11	SPT
6				F			(SM)																5, 7, 9 N=16	SPT
7	0.53			G	Silty SAND trace clay (Alluvium) Pale grey, moist, medium dense. Fine grained sand.		(SM)																7, 12, 15 N=27	SPT
8	-0.47			H	CLAY trace sand (Alluvium) Orange brown mottled grey, moist, stiff to very stiff.		(CI)																8, 8, 15 N=23	SPT
9	-0.97			I	Fine to medium grained sand, low to medium plasticity. Clayey SAND (Alluvium) Orange brown mottled grey, moist, medium dense. Fine to medium grained sand. 9.50m: clay content decreasing.		(SC)																8, 10, 11 N=21	SPT

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REMARKS: Kgwu = Wundaru Granodiorite

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BOREHOLE No **BH203**

Sheet 2 of 5

REFERENCE No **H12212**

PROJECT	Mackay Ring Road
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LOCATION	Pioneer River Bridge, Abutment A (RHS)
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COORDINATES 721288.7 E; 7660018.5 N

PROJECT No. FG6184

SURFACE RI 7.33m

PLUNGE 90°

DATE STARTED 21/09/2015

GRID DATUM GDA 94 / MGA Z55

JOB No 242/10G/906

HEIGHT DATUM A.H.D.

BEARING °

DATE COMPLETED 24/09/2015

DRILLER Saxon Drilling

DEPTH (m)	R.L. (m)	AUGER CASING WASH BORING CORE DRILLING	RQD (%) CORE REC %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USCS WEATHERING	INTACT STRENGTH										DEFECT SPACING										ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
								EH	LVH	H	M	L	VL	EL	EC	VC	C	M	W	LV	W	EW																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
	-2.87			J	10.00m: becomes fine to coarse grained sand																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										</

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REMARKS: Kgwu = Wundaru Granodiorite

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BOREHOLE No **BH203**

Sheet 3 of 5

REFERENCE No **H12212**

PROJECT	Mackay Ring Road
---------	------------------

LOCATION	Pioneer River Bridge, Abutment A (RHS)
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COORDINATES 721288.7 E; 7660018.5 N

PROJECT No FG6184

SURFACE RL 7.33m

PLUNGE 90°

DATE STARTED 21/09/2015

GRID DATUM GDA 94 / MGA Z55

JOB No 242/10G/906

HEIGHT DATUM A.H.D.

BEARING °

DATE COMPLETED 24/09/2015

DRILLER Saxon Drilling

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REMARKS: Kgwu = Wundaru Granodiorite

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GEOTECHNICAL BOREHOLE LOG

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BOREHOLE No **BH203**

Sheet 4 of 5

REFERENCE No **H12212**

PROJECT	Mackay Ring Road
---------	------------------

LOCATION	Pioneer River Bridge, Abutment A (RHS)
----------	--

COORDINATES 721288.7 E; 7660018.5 N

PROJECT No	FG6184
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SURFACE RL 7.33m

PLUNGE 90°

DATE STARTED 21/09/2015

GRID DATUM GDA 94 / MGA Z55

JOB No 242/10G/906

HEIGHT DATUM A.H.D.

BEARING °

DATE COMPLETED 24/09/2015

DRILLER Saxon Drilling

DEPTH (m)	R.L. (m)	AUGER CASING	WASH BORING 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	WV	EW	EC	VC	C	W	WV	EW									
31	-23.86			100 (0)			porphyritic, very high strength. Js: 5°-15°; (<4/m); Pl-Un/Ro; OP; FeSt Js: 60°(<2/m); Pl/Sm; OP; FeSt/Sinf GRANODIORITE (Kgwu) MW: Grey, dark grey and pink, medium grained, porphyritic, high to very high strength.	+	MW																					30.25m-30.43m: HFZ; 80°, Pl/Sm, OP, CA <1mm; 30.60m-30.67m: SZ; XW Cly FL; 30.80m-31.07m: HFZ	Is(50)=2.80 MPa	I (30.10m)					
				81 (0)	CORE LOSS			+																													
32				100 (29)			Js: 5° to 15° ;(<3/m); Pl-St/Sm; OP; Fe St or Cly/Sinf; Js: 50° to 70°; (<4/m); Pl/Sm-SI; OP; Fe St or Cly; MICRODIORITE (Kgwu) SW: Grey, fine grained, massive, very high strength. Calcite veins throughout <4mm. Js: 5° to 15°; (<5/m); Pl-Un/Sm-Ro; OP; Cn or CA VN <2mm; Js: 30° to 50°; (<3/m); Pl/Sm; CA VN <2mm; Js: 70° to 80°; (<1/m); Pl-Un/Sm; CD; CA VN <2mm;	+																								31.19m: Contact; 60°, Pl/SI, OP, Cly Vr <1mm; SZ; HW, Cly FL, 60°, Pl/SI;	Is(50)=2.10 MPa	A (31.42m)			
				100 (97)				+																								UCS=49.80 MPa	(31.80m)				
								+																								Is(50)=2.10 MPa	D (32.15m)				
33				100 (89)				+																								Is(50)=12.00 MPa	A (33.17m)				
34								+																													
								+																								Is(50)=7.40 MPa	D (34.46m)				
35								+																													
36								+	SW																							Is(50)=8.20 MPa Is(50)=1.60 MPa	A (35.78m) D (35.86m)				
				100 (80)				+																								36.07m-36.10m: VN; 70°, Pl/Sm, FL, CA 36.18m-36.33m: VN; 80°, CA;					
37								+																								Is(50)=8.50 MPa Is(50)=10.00 MPa	A (37.20m) I (37.35m)				
38								+																								37.74m-37.92m: HFZ					
	-31.33							+																													
39							GRANODIORITE (Kgwu) SW: Grey and dark grey, medium to coarse grained, porphyritic, very high strength. Js: 5° to 15°; (<2/m); Pl-Un/Ro; OP; Cn or CA VN; Js: 30° to 50°; (<3/m); Pl-Un/Ro; OP;	+																								38.66m: CContact; 5°, Pl/Sm, CD;	UCS=132.00 MPa	(38.95m)			
	-32.67			100 (97)				+																													

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REMARKS: Kgwu = Wundaru Granodiorite

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BOREHOLE No **BH203**

Sheet 5 of 5

REFERENCE No **H12212**

PROJECT	Mackay Ring Road
---------	------------------

LOCATION	Pioneer River Bridge, Abutment A (RHS)
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COORDINATES 721288.7 E; 7660018.5 N

PROJECT No FG6184

SURFACE RL 7.33m

PLUNGE 90°

DATE STARTED 21/09/2015

GRID DATUM GDA 94 / MGA Z55

JOB No 242/10G/906

HEIGHT DATUM A.H.D.

BEARING °

DATE COMPLETED 24/09/2015

DRILLER Saxon Drilling

REMARKS: Kgwu = Wundaru Granodiorite

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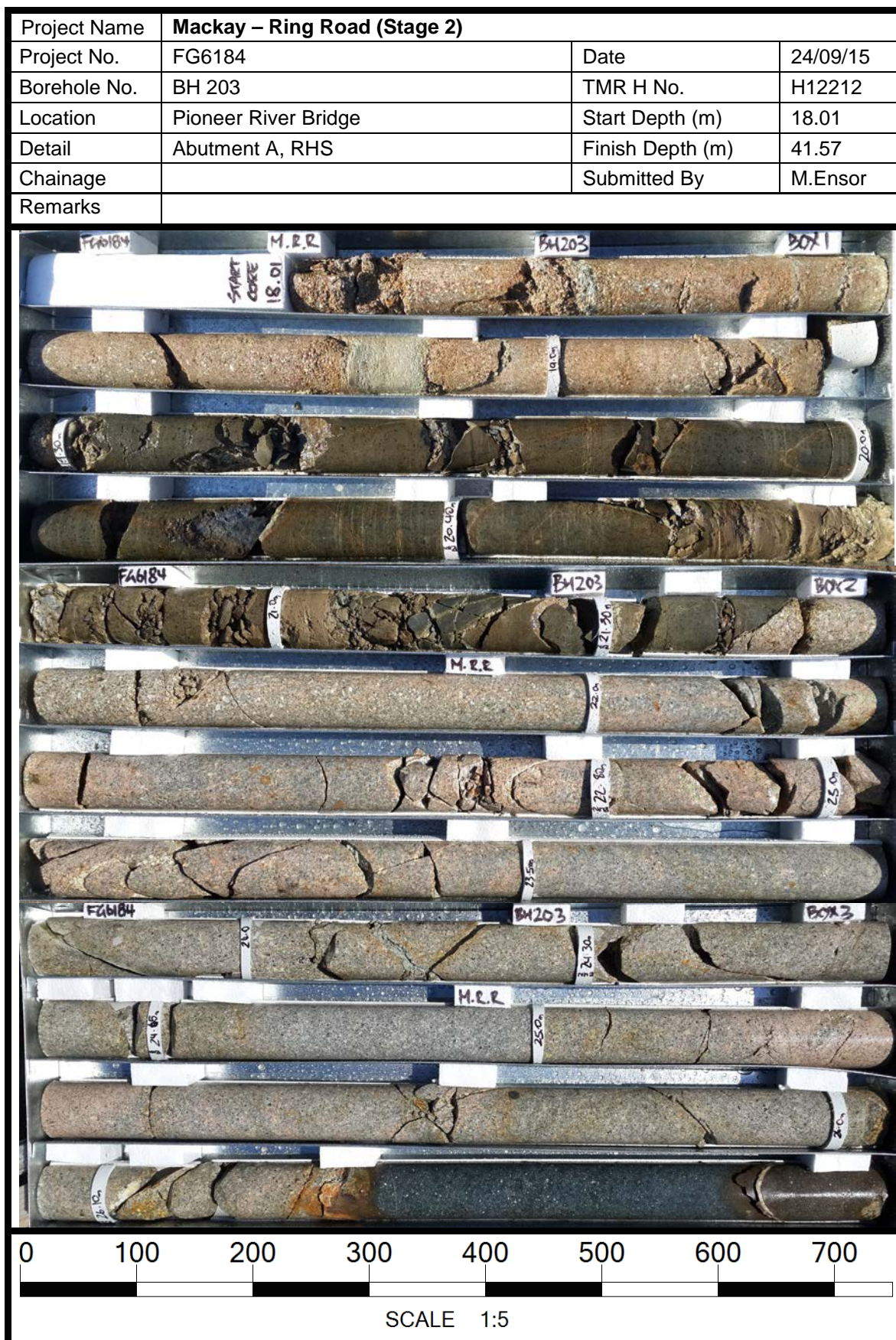
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CORE PHOTO LOG

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Phone 07 3066 3336



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Project Name	Mackay – Ring Road (Stage 2)		
Project No.	FG6184	Date	24/09/15
Borehole No.	BH 203	TMR H No.	H12212
Location	Pioneer River Bridge	Start Depth (m)	18.01
Detail	Abutment A, RHS	Finish Depth (m)	41.57
Chainage		Submitted By	M.Ensor
Remarks			

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SCALE 1:5

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