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GEOTECHNICAL BOREHOLE LOG

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

BOREHOLE No **BH255**

Sheet 1 of 4

REFERENCE No **H12264**

PROJECT **Mackay Ring Road**

LOCATION **Pioneer River Bridge, Pier 18 (LHS)** COORDINATES **721356.5 E; 7660627.8 N**

PROJECT No **FG6184** SURFACE RL **5.61m** PLUNGE **90°** DATE STARTED **06/07/2014** GRID DATUM **GDA 94 / MGA Z55**

JOB No **242/10G/906** HEIGHT DATUM **A.H.D.** BEARING **°** DATE COMPLETED **08/07/2015** 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																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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	5.11				Silty Sandy CLAY (Topsoil) Dark brown, moist, soft. Fine grained sand, high plasticity.		(CH)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			

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REMARKS: Kgwu = Wundaru Granodiorite

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C.Boyes

S.Foley



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BOREHOLE No **BH255**

Sheet 2 of 4

REFERENCE No **H12264**

PROJECT **Mackay Ring Road**

LOCATION **Pioneer River Bridge, Pier 18 (LHS)** COORDINATES **721356.5 E; 7660627.8 N**

PROJECT No **FG6184** SURFACE RL **5.61m** PLUNGE **90°** DATE STARTED **06/07/2014** GRID DATUM **GDA 94 / MGA Z55**

JOB No **242/10G/906** HEIGHT DATUM **A.H.D.** BEARING **°** DATE COMPLETED **08/07/2015** 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	
				J	Clayey SAND (Alluvium) (Cont'd) 10.10m: clay content decreasing, gravel content increasing. Fine to medium grained gravel, subrounded to rounded grains. 10.90m: becomes fine to medium grained sand. Occasional gravelly layers.		(SC)				7, 11, 12 N=23	SPT
11				K							8, 14, 12 N=26	SPT
12	-6.89			L							8, 8, 9 N=17	SPT
13	-8.09			M	CLAY trace sand (Residual) Pale green grey, moist, very stiff. Fine grained sand, medium to high plasticity.		(CI)				13, 11, 13 N=24	SPT
14				N	GRANODIORITE XW: Recovered as pale to dark grey and pink, moist, very dense, silty sand. Fine to medium grained sand.		XW				30, 30/100mm	SPT
15				O							29, 30/90mm	SPT
16	-10.64		(12)	P						16.00m: No sample recovered		SPT
17	-11.56 -11.64		93		MICRODIORITE SW: Grey, fine grained, massive, medium to very high strength. Js: 10° to 30°; (>10/m); Pl/Sm-Ro; OP; Cly Co (<20mm);		SW			16.30m-16.37m: CZ 16.37m-16.39m: SZ; 30°, Pl/Sm-Ro, OP, Cly FL, brecciated. 16.67m-16.80m: BZ;	Is(50)=3.00 MPa hb	D (16.20m)
18				Q	CORE LOSS GRANODIORITE XW: Recovered as pale grey and pale red, moist, very dense, silty sand. Medium to coarse grained sand.		XW			18.00m-18.45m: No sample recovered	1, 3, 7 N=10	SPT
19				R							11, 30/120mm	SPT
20	-14.39											

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BOREHOLE No **BH255**

Sheet 3 of 4

REFERENCE No **H12264**

PROJECT	Mackay Ring Road		
LOCATION	Pioneer River Bridge, Pier 18 (LHS)		COORDINATES 721356.5 E; 7660627.8 N
PROJECT No	FG6184	SURFACE RL 5.61m	PLUNGE 90°
			DATE STARTED 06/07/2014
			GRID DATUM GDA 94 / MGA Z55
JOB No	242/10G/906	HEIGHT DATUM A.H.D.	BEARING °
			DATE COMPLETED 08/07/2015
			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
				S	GRANODIORITE XW: (Cont'd)					8, 30/60mm hb	SPT
21				T			XW				
										30/110mm	SPT
22				U						22.00m-22.02m: No sample recovered	SPT
	-16.89									30/20mm hb	
			(74)		MICRODIORITE SW: Grey, fine to medium grained, massive, very high strength. Js: 5° to 20°; (<3/m); Pl-Un/Ro; OP; Cn; Js: 70° to 80°; (<1/m); Pl/Ro-Sm; CD; Tl; CA (<1mm);		SW			22.54m-22.61m: CZ; 70°, Pl/Ro, OP, CA VN; 22.73m-22.75m: BZ; 5°, OP	A (22.63m)
23			100 (100)							Is(50)=2.30 MPa UCS=65.70 MPa E=56.1 GPa	(23.00m)
			(40)							Is(50)=5.90 MPa Is(50)=8.00 MPa	A (23.30m) D (23.40m)
24			100 (46)							Is(50)=11.00 MPa	D (24.02m)
	-19.24									24.14m-24.21m: HW BZ; 24.31m-24.85m: BZ; CI 24.56m-24.57m: XW Cly zone 24.85m-24.96m: HW CZ;	
25					GRANODIORITE SW: Grey to dark grey and pale red, coarse grained, massive, very high strength. Js: 5° to 20°; (4/m); Pl-Un/Ro; OP; Cn to Fe St; Js: 55° to 75°; (1/m); Pl/Ro-Sm; OP; Vr CA (<5mm) & Cn;		SW			Is(50)=6.40 MPa Is(50)=6.90 MPa	A (25.23m) D (25.35m)
26			100 (51)							Is(50)=11.00 MPa UCS=77.20 MPa UCS=121.00 MPa	A (26.17m) (26.31m) (26.45m)
27	-21.27 -21.39		85 (100)		CORE LOSS GRANODIORITE SW: (Cont'd)					26.71m-27.15m: HW band, BZ; jointed at 65°-75°, Pl/Sm-Ro, OP, some CA VN;	
										Is(50)=8.90 MPa Is(50)=6.20 MPa	D (27.55m) A (27.70m)
28			100 (87)							Is(50)=11.00 MPa Is(50)=11.00 MPa	A (28.63m) D (28.70m)
29										29.06m: J; 55°, Pl/Sm, OP, CA VN	
	-24.39									Is(50)=0.56 MPa	A (29.40m)
										29.76m-29.81m: CZ; 55°-70°, J; Pl/ Sm, OP, CA VN	

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BOREHOLE No **BH255**

Sheet 4 of 4

REFERENCE No **H12264**

PROJECT Mackay Ring Road

LOCATION Pioneer River Bridge, Pier 18 (LHS) COORDINATES 721356.5 E; 7660627.8 N

PROJECT No FG6184 SURFACE RL 5.61m PLUNGE 90° DATE STARTED 06/07/2014 GRID DATUM GDA 94 / MGA 255

JOB No 242/10G/906 HEIGHT DATUM A.H.D. BEARING ° DATE COMPLETED 08/07/2015 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																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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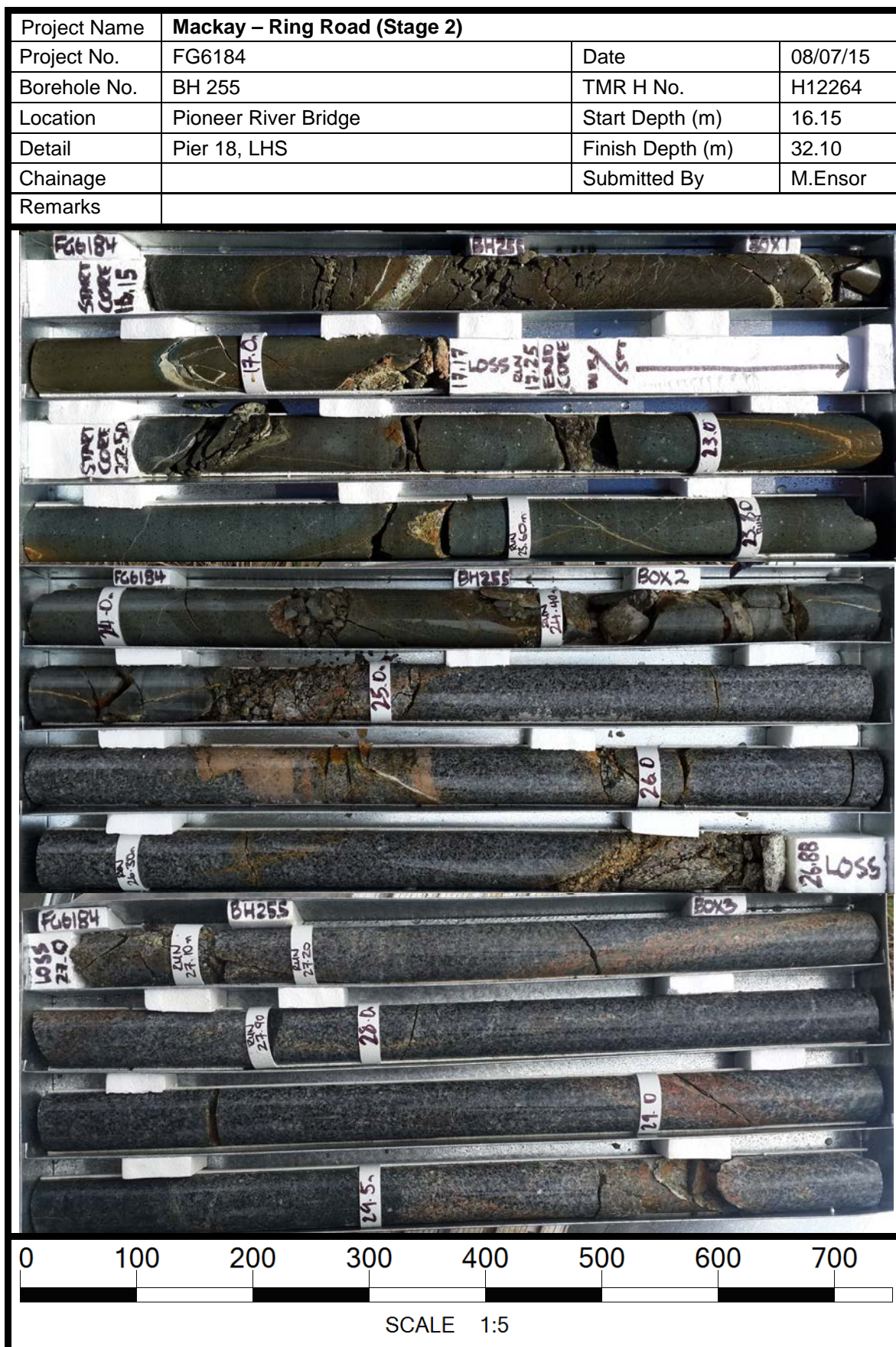
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CORE PHOTO LOG

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Project Name	Mackay – Ring Road (Stage 2)		
Project No.	FG6184	Date	08/07/15
Borehole No.	BH 255	TMR H No.	H12264
Location	Pioneer River Bridge	Start Depth (m)	16.15
Detail	Pier 18, LHS	Finish Depth (m)	32.10
Chainage		Submitted By	M.Ensor
Remarks			




0 100 200 300 400 500 600 700

SCALE 1:5