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**Queensland
Government**

GEOTECHNICAL BOREHOLE LOG

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

BOREHOLE No **BH249**

Sheet 1 of 4

REFERENCE No **H12258**

PROJECT **Mackay Ring Road**

LOCATION **Pioneer River Bridge, Pier 16 (LHS)**

COORDINATES **721349.3 E; 7660556.1 N**

PROJECT No **FG6184**

SURFACE RL **3.44m**

PLUNGE **90°**

DATE STARTED **07/11/2015**

GRID DATUM **GDA 94 / MGA 255**

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

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

BEARING **°**

DATE COMPLETED **08/11/2015**

DRILLER **Saxon Drilling**

DEPTH (m)	R.L. (m)	AUGER Casing Washing Cone 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) Orange grey, dry to moist, loose to medium dense. Sand is fine to medium grained; trace silt; trace gravel and cobbles <80mm, rounded.	(SP)					5, 8, 7 N=15 SPT
2				B	2.0m: Becoming wet. Becoming very loose to loose.						1, 2, 2 N=4 SPT
3				C	3.0m: Becoming very loose.						1, hw, 1 N=1 SPT
4	-0.26			D	SAND (Alluvium) Dark grey, wet, loose. Sand is fine to coarse grained; trace silt; trace gravel <40mm, rounded.	(SP)					2, 3, 3 N=6 SPT
5	-1.26			E	Sandy GRAVEL (Alluvium) Grey and orange, wet, medium dense. Gravel is fine, subangular to subrounded; sand is fine to coarse.	(GP)					2, 9, 8 N=17 SPT
6	-2.76			F	Silty SAND (Alluvium) Pale grey, moist, medium dense. Sand is fine to medium grained; trace clay.	(SM)					14, 14, 7 N=21 SPT
7				G	7.0m: Becoming orange grey, fine grained.						8, 9, 9 N=18 SPT
8				H	8.0m: Becoming pale grey.						7, 7, 8 N=15 SPT
9				I	9.0m: Sand is becoming fine to coarse grained.						6, 9, 9 N=18 SPT
	-6.56										

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REMARKS: Kgwu = Wundaru Granodiorite

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C. Boyes

S.Foley



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GEOTECHNICAL BOREHOLE LOG

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

BOREHOLE No **BH249**

Sheet 2 of 4

REFERENCE No **H12258**

PROJECT	Mackay Ring Road				
LOCATION	Pioneer River Bridge, Pier 16 (LHS)			COORDINATES 721349.3 E; 7660556.1 N	
PROJECT No	FG6184	SURFACE RL	3.44m	PLUNGE	90°
				DATE STARTED	07/11/2015
				GRID DATUM	GDA 94 / MGA Z55
JOB No	242/10G/906	HEIGHT DATUM	A.H.D.	BEARING	°
				DATE COMPLETED	08/11/2015
				DRILLER	Saxon Drilling

DEPTH (m)	R.L. (m)	AUGER Casing Washing Cone Drilling	RQD (%) CORE REC %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USCS WEATHERING	INTACT STRENGTH	DEFECT SPACING	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
				J	CLAY (Residual) Orange brown, moist, hard. Low to medium plasticity; trace fine sand.		(CI)			9, 14, 20 N=34	SPT
11	-7.71			K	GRANODIORITE (Kgwu) XW: Recovered as Silty Clayey SAND. Pale grey, moist, very dense. Sand is fine to coarse grained; Pyrite throughout.					10, 17, 30 N=47	SPT
12				L			XW			23, 20, 24 N=44	SPT
13				M						22, 30/110mm	SPT
14	-10.26			N	DOLERITE (Kgwu) XW: Recovered as Silty CLAY. Pale green grey, moist, hard. Clay is low to medium plasticity; trace gravel.		XW			21, 30/140mm	SPT
15	-11.76									30/50mm hb	SPT
16				P	GRANODIORITE (Kgwu) HW: Brown grey, coarse grained, massive, extremely low to very low strength.					30, 30/70mm hb	SPT
17				Q						30/20mm hb	SPT
18				R			HW			30/20mm hb	SPT
19				S						30/20mm hb	SPT
	-16.56										

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REMARKS: Kgwu = Wundaru Granodiorite

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BOREHOLE No **BH249**

Sheet 3 of 4

REFERENCE No **H12258**

PROJECT **Mackay Ring Road**

LOCATION **Pioneer River Bridge, Pier 16 (LHS)**

COORDINATES **721349.3 E; 7660556.1 N**

PROJECT No **FG6184**

SURFACE RL **3.44m**

PLUNGE **90°**

DATE STARTED **07/11/2015**

GRID DATUM **GDA 94 / MGA 255**

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

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

BEARING **°**

DATE COMPLETED **08/11/2015**

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
21				T	GRANODIORITE (Kgwu) HW: Cont'd. Becoming very low to low strength.					30/10mm hb	SPT
22				U						30/10mm hb	SPT
23				V						30/10mm hb	SPT
24				W						30/10mm hb	SPT
25				X						30/10mm hb	SPT
26	-21.76		(33)	Y	GRANODIORITE (Kgwu) MW: Pale grey and dark grey, medium to coarse grained, porphyritic, high strength.					30/10mm hb	SPT
27	-22.56		100 (88)		GRANODIORITE (Kgwu) SW: Pale grey and dark grey, medium to coarse grained, porphyritic, very high to extremely high strength. - Js: 5°-15° (<4/m) Pl/Sm, TI, Cn or CA Vr - Js: 20°-50° (<2/m) Pl/Sm, TI, Cn or CA Vr					30/10mm hb	SPT
28										30/10mm hb	SPT
29	-26.56		100 (63)							30/10mm hb	SPT

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REMARKS: Kgwu = Wundaru Granodiorite

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GEOTECHNICAL BOREHOLE LOG

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

BOREHOLE No **BH249**

Sheet 4 of 4

REFERENCE No **H12258**

PROJECT	Mackay Ring Road
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LOCATION	Pioneer River Bridge, Pier 16 (LHS)
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COORDINATES 721349.3 E; 7660556.1 N

PROJECT No FG6184

SURFACE RL 3.44m

PLUNGE 90°

DATE STARTED 07/11/2015

GRID DATUM GDA 94 / MGA Z55

JOB No 242/10G/906

HEIGHT DATUM A.H.D.

BEARING °

DATE COMPLETED 08/11/2015

DRILLER Saxon Drilling

[illegible]

REMARKS: Kgwu = Wundaru Granodiorite

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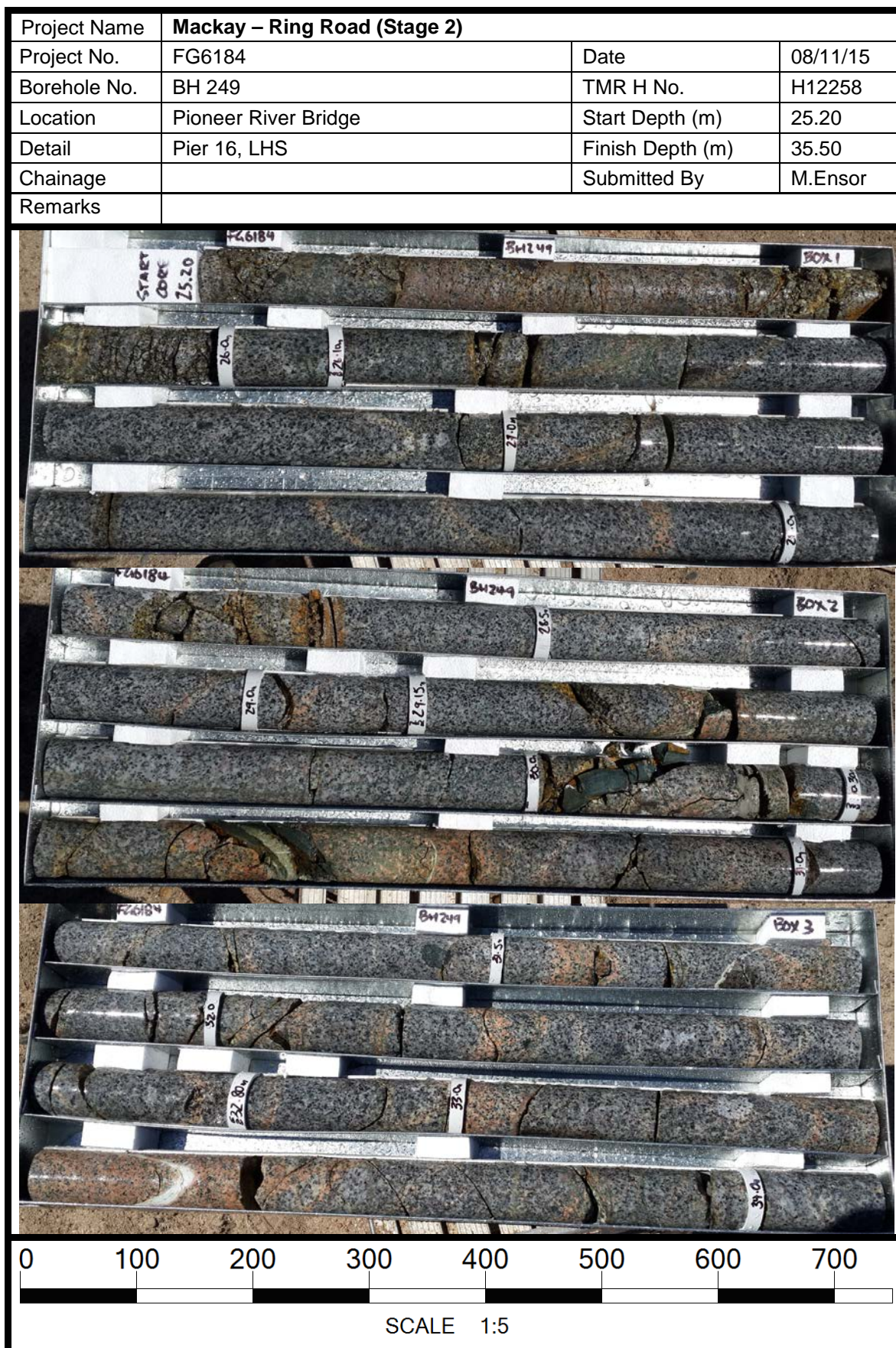
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Project Name	Mackay – Ring Road (Stage 2)		
Project No.	FG6184	Date	08/11/15
Borehole No.	BH 249	TMR H No.	H12258
Location	Pioneer River Bridge	Start Depth (m)	25.20
Detail	Pier 16, LHS	Finish Depth (m)	35.50
Chainage		Submitted By	M.Ensor
Remarks			

A photograph showing two cylindrical core samples of soil or rock. The top sample is dark and has a label with "BH 249" and "35.5". The bottom sample is lighter and has a label with "35.50" and "EOM".

A horizontal scale bar with markings every 100 units from 0 to 700.

SCALE 1:5