#### **COPYRIGHT NOTICE**

This geotechnical log and its associated data (the Document) is licensed by the Queensland Department of Transport and Main Roads under the <u>Creative Commons Attribution 4.0 Licence</u> (CC BY 4.0). When reusing the Document, in whole or in part, please attribute the Department as follows: "(c) State of Queensland (Department of Transport and Main Roads) 2020, licensed under the CC BY 4.0 Licence". This licence does not apply to the Queensland Government logo or trademarks.

#### **LIMITATION OF LIABILITY**

The CC BY 4.0 Licence contains a comprehensive Disclaimer of Warranties and Limitation of Liability. In addition, please note that this Document was prepared for Departmental use only. Reuse of the Document by anyone for any other purpose could result in error and/or loss. You should obtain professional advice before making decisions based on the contents of the Document.

When reproducing any part of this Document, you must also reproduce this limitation of liability notice in addition to the italicised attribution statement above.

Retrieved from the Queensland Geotechnical Database http://qgd.org.au/

# Queensland

## **GEOTECHNICAL BOREHOLE LOG**

**FINAL** 18/03/2016

BOREHOLE No BH262

Sheet 1 of 4

		K.	1	GO	Vŧ	ernment	SY		GEOTECHNICAL TE REFER FORM F:GE			REFERENCE No	H1	12271
PROJE	СТ	М	ack	ay Ring	Ro	ad								
LOCAT	ION	Pi	one	er Rive	rВ	ridge, Abutment B (CL)						OORDINATES 721374.2	E; 766068	32.2 N
PROJECT No		FG	FG6184			SURFACE RL 9.32m PL		plunge 90°		DATE STAF	RTED 28/06/2015	GRID DATUM	GDA 94 / N	ЛGA Z55
JOB No		24	242/10G/906			height datum A.H.D.	IEIGHT DATUM A.H.D. BEARING			DATE COMPLETED 29/06/2015		DRILLER Saxon Drilling		ing
DEPTH (m)	R.L. (m)	AUGER CASING WASH BORING	SORE DRILLING	RQD ()% CORE REC%	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USCS WEATHERING	INTACT STRENGTH ボデュミーブゴ	DEFECT SPACING	A	DDITIONAL DATA AND TEST RESULTS		SAMPLES TESTS
-						Silty SAND (Alluvium) Grey brown, moist, loose.	× ×.	(SM)	-					=
1 2 2	8.72				A	SAND (Alluvium) Pale orange brown, dry, loose. Fine grained sand. Trace silt.  2.00m: silt content increasing	X 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	(SP)	-				3, 3, 4 N=7 3, 3, 4 N=7	SPT SPT
- - - 3 - - - - - - - - -	5.52				С	SAND trace gravel (Alluvium)			- - - - - - - -				3, 2, 4 N=6	SPT
4 - 4 5						Pale orange grey, moist, medium dense. Fine to coarse grained sand, fine t medium grained gravel.	0						8, 13, 14 N=27	SPT
- - -					E				- - - - - -				14, 15, 10 N=25	SPT
- - - - - - - - - - - - - - - - - - -					F			(SP)	- - - - -				19, 11, 17 N=28	SPT
- - - - - - - - - 8					G				- - - - - -				15, 11, 11 N=22	SPT
- - - - - - -					Н	8.00m: Becomes dense.			- - - - - -				11, 16, 24 N=40	SPT
— 9 - - - - - - - -	-0.68				1				- - - - -				7, 9, 24 N=33	SPT
D	Continued on next sheet													
REMARKS: Kgwu = Wundaru Granodiorite							LOGGED BY REVIEWED B							
	C. Boyes S. Foley  TMR GEOTECHNICAL BOREHOLE LOG - CREATED WITH HOLEBASE SI													

# **Queensland** Government

### **GEOTECHNICAL BOREHOLE LOG**

FOR GEOTECHNICAL TERMS AND

FINAL 18/03/2016

**BH262** BOREHOLE No

Sheet 2 of 4

H12271 REFERENCE No SYMBOLS REFER FORM F:GEOT 017/8-2014 Mackay Ring Road PROJECT Pioneer River Bridge, Abutment B (CL) COORDINATES 721374.2 E; 7660682.2 N LOCATION FG6184 SURFACE RL 9.32m PLUNGE 90° DATE STARTED 28/06/2015 GRID DATUM GDA 94 / MGA Z55 PROJECT No 242/10G/906 DRILLER Saxon Drilling HEIGHT DATUM A.H.D. DATE COMPLETED 29/06/2015 JOB No BEARING USCS WEATHERING ADDITIONAL DATA INTACT DEFECT SPACING SAMPLES TESTS Ê LITHOLOGY AND TEST RESULTS STRENGTH RΙ DEPTH SAMP MATERIAL DESCRIPTION CORE REC % Gravelly SAND with cobbles SPT (Alluvium) 12, 16, 23 Grey brown, wet, dense. Medium to coarse grained sand, fine to coarse grained gravel, ubangular grains. (SP) 11.00m: becomes coarse grained 21, 23, 20 sand, with fine to medium grained gravel, subangular grains. 11.90: fines content increasing. -2.88 SPT Sandy CLAY (Alluvium) Pale grey, mottled orange, moist, stiff to very stiff. Fine grained sand, medium palsticity. 13 (CI) SPT N=16 -4.68 Silty SAND trace gravel (Alluvium) Ν SPT 7, 11, 14 Pale orange grey, moist, medium dense. Fine to medium grained sand, medium grained gravel. (SM) 15 15.00: Silt content decreasing 0 SPT 14, 15, 12 N=27 -6.68 16 Silty Clayey SAND trace gravel SPT (Alluvium) N=26 Pale grey, mottled orange, moist, medium dense to dense. (SC) Medium to coarse grained sand, medium grained gravel. 17 SPT -7.98Sandy CLAY with gravel (Alluvium) Pale, grey brown, moist, hard. Fine grained sand, medium grained (CH) gravel, high plasticity. 18 R SPT 17, 22, 30/140 -9.18 GRANODIORITE (Kgwu) HW: Dark grey and grey, coarse grained, massive, very low strength. HW Continued on next sheet REMARKS: Kgwu = Wundaru Granodiorite **LOGGED BY REVIEWED BY** S.Foley C.Boyes TMR GEOTECHNICAL BOREHOLE LOG - CREATED WITH HOLEBASE SI

## Queensland Government

# GEOTECHNICAL BOREHOLE LOG

**FINAL** 18/03/2016

BOREHOLE No BH262

Sheet 3 of 4

FOR GEOTECHNICAL TERMS AND H12271 REFERENCE No SYMBOLS REFER FORM F:GEOT 017/8-2014 Mackay Ring Road PROJECT Pioneer River Bridge, Abutment B (CL) COORDINATES 721374.2 E; 7660682.2 N LOCATION FG6184 SURFACE RL 9.32m PLUNGE 90° DATE STARTED 28/06/2015 GRID DATUM GDA 94 / MGA Z55 PROJECT No 242/10G/906 DRILLER Saxon Drilling HEIGHT DATUM A.H.D. DATE COMPLETED 29/06/2015 JOB No BEARING USCS WEATHERING ADDITIONAL DATA AND TEST RESULTS INTACT DEFECT SPACING SAMPLES TESTS Ê LITHOLOGY SAMPLE STRENGTH RΙ DEPTH MATERIAL DESCRIPTION (m) CORE REC % ᇁᆂᆂᆂᅬᅿᅿᆿᅟᅴᇜᇰᄓॾᇂᆘᇹᄪ GRANODIORITE (Kgwu) HW: Dark grey and grey, coarse 30/95 grained, massive, very low to low 30/50 HW 22 30/40 (0) 23 -14.54 GRANODIORITE (Kgwu) MW 23.95m: J: 20°; PI/Ro; CD; Cn; 23.98m-23.99m: BZ; SW: Pale red, dark grey and grey, 24.04m-24.08m: BZ; 24.30m: DI Is(50)=10.00 MPa A (24.20m) coarse grained, massive, very high D (24.35m)strength. UCS=41.30 MPa (24.58m) Js: 10° to 20°; (<1/m): PI/Ro; CD; Cn; SW 25 (100) Is(50)=11.00 MPa D (25.26m)--16.12 MICRODIORITE (Kgwu) Is(50)=4.20 MPa A (25.66m) SW: Grey, fine to medium grained, crystalline, massive, very high 25.80m-26.15m: Granodiorite band 26 strength. Js: 30° to 60°; (1/m): PI/Sm; OP; Cn; Js: 0° to 30°; (<1/m): PI/Sm-Ro; OP; 100 27 Is(50)=8.00 MPa D (27.20m) Is(50)=0.41 MPa A (27.28m)-SW 100 (96) Is(50)=8.60 MPa Is(50)=8.20 MPa D (28.27m)-A (28.39m) (100) С 28.87m: J: 10°; PI/Ro; CA; Is(50)=9.10 MPa D (29.37m)-UCS=147.00 MPa (29.67m) Continued on next sheet REMARKS: Kgwu = Wundaru Granodiorite **LOGGED BY REVIEWED BY** C.Boyes S.Foley

TMR GEOTECHNICAL BOREHOLE LOG - CREATED WITH HOLEBASE SI

# **Queensland** Government

## **GEOTECHNICAL BOREHOLE LOG**

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

FINAL 18/03/2016

**BH262** BOREHOLE No

Sheet 4 of 4

H12271 REFERENCE No Mackay Ring Road PROJECT Pioneer River Bridge, Abutment B (CL) COORDINATES 721374.2 E; 7660682.2 N LOCATION DATE STARTED 28/06/2015 GRID DATUM GDA 94 / MGA Z55 FG6184 SURFACE RL 9.32m PLUNGE 90° PROJECT No 242/10G/906 BEARING ° DRILLER Saxon Drilling HEIGHT DATUM A.H.D. DATE COMPLETED 29/06/2015 JOB No USCS WEATHERING ADDITIONAL DATA AND TEST RESULTS INTACT STRENGTH DEFECT SPACING SAMPLES TESTS LITHOLOGY Ξ SAMPLE DEPTH ( RΙ MATERIAL DESCRIPTION CORE REC % ᇁᆂᆂᆂᅿᅿᅿᆿᆸᆔᇬᄓᄫᇂᇂᇦ MICRODIORITE (Kgwu) SW: (Cont'd) Js: 20° to 30°; (<2/m): PI/Ro; CD; Co; Is(50)=13.00 MPa Is(50)=10.00 MPa D (30.50m) A (30.57m)-31.00m: becomes medium grained. 100 (100) Is(50)=11.00 MPa A (31.57m)-SW 32 32.16m: J: 35°; PI/Ro; Cn, some CA 100 (100) 32.64m: CA VN: 70°; 32.68m: DI (32.90m) -UCS=210.00 MPa 33 Is(50)=15.00 MPa Is(50)=9.80 MPa D (33.64m)\_ 100 A (33.75m) -24.60 Borehole completed at 33.92m 35 37 REMARKS: Kgwu = Wundaru Granodiorite **LOGGED BY REVIEWED BY** C.Boyes S.Foley TMR GEOTECHNICAL BOREHOLE LOG - CREATED WITH HOLEBASE SI

### CORE PHOTO LOG

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



Project Name	Mackay – Ring Road (Stage 2)		
Project No.	FG6184	Date	02/07/15
Borehole No.	BH 262	TMR H No.	H12271
Location	Pioneer River Bridge	Start Depth (m)	22.70
Detail	Abutment B, centreline	Finish Depth (m)	33.92
Chainage		Submitted By	M.Ensor
Remarks			
STARTY CORP.	LOSS	SOLUTION SERVICE SERVI	RGOLGU
\$\frac{\darks}{2}\frac{\darks}	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	OX.2	ration -
	SH 262	Bak 3	46184
	Skon	NA CONTRACTOR OF THE PARTY OF T	300
0 100	) 200 300 SCALE	400 500 600	700

### **CORE PHOTO LOG**

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



Project Name	Mackay – Ring Road (Stage 2)		
Project No.	FG6184	Date	02/07/15
Borehole No.	BH 262	TMR H No.	H12271
Location	Pioneer River Bridge	Start Depth (m)	22.70
Detail	Abutment B, centreline	Finish Depth (m)	33.92
Chainage		Submitted By	M.Ensor
Remarks			

