#### **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 Government

# GEOTECHNICAL BOREHOLE LOG

**FINAL** 18/03/2016

BOREHOLE No BH264

Sheet 1 of 3

FOR GEOTECHNICAL TERMS AND H12273 REFERENCE No SYMBOLS REFER FORM F:GEOT 017/8-2014 Mackay Ring Road PROJECT Fursden Creek Bridge, Pier 2 (LHS) COORDINATES 721480.0 E; 7661443.4 N LOCATION FG6184 SURFACE RL 5.39m PLUNGE 90° DATE STARTED 02/08/2015 GRID DATUM GDA 94 / MGA Z55 PROJECT No 242/10G/906 DRILLER Saxon Drilling HEIGHT DATUM A.H.D. DATE COMPLETED 03/08/2015 JOB No BEARING USCS WEATHERING ADDITIONAL DATA AND TEST RESULTS INTACT DEFECT SPACING SAMPLES TESTS Ê LITHOLOGY STRENGTH RΙ DEPTH SAMP MATERIAL DESCRIPTION CORE REC % Silty CLAY trace sand (Topsoil) Dark brown, dry, firm. Fine grained sand, medium plasticity. trace roots and rootlets. (CI) 1.10m: becomes stiff to very stiff SPT 5. 7. 7 N=14 3.29 Sandy SILT (Alluvium) SPT Brown, dry, very stiff. (ML) Fine grained sand, low plasticity. 2.59 SAND trace clay (Alluvium) Pale orange grey, dry, medium С SPT dense. N=16 Fine to medium grained sand. (SW) 4.00m: becomes medium grained D sand. SPT 6, 9, 12 5.00m: becomes fine to coarse SPT 0.09 grained sand. 11, 10, 11 N=21 Silty SAND (Alluvium) Grey, wet, medium dense to dense. Fine to medium grained sand. (SM) SPT N=3: -1.41 Sandy CLAY (Alluvium) Mottled orange brown and grey, SPT moist, very stiff. N=27 Fine grained sand, medium plasticity. (CI) 8.00m: sand content increasing. Becomes clayey sand trace gravel. Fine grained gravel, rounded SPT N=20 -3.61 CLAY trace sand (Residual) SPT Pale grey, moist, stiff. N=14 Fine grained sand, medium to high (CI) plasticity. 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 BH264

Sheet 2 of 3

FOR GEOTECHNICAL TERMS AND SYMBOLS REFER FORM F:GEOT 017/8-2014 H12273 REFERENCE No Mackay Ring Road PROJECT COORDINATES 721480.0 E; 7661443.4 N Fursden Creek Bridge, Pier 2 (LHS) LOCATION DATE STARTED 02/08/2015 FG6184 SURFACE RL 5.39m PLUNGE 90° GRID DATUM GDA 94 / MGA Z55 PROJECT No DATE COMPLETED 03/08/2015 242/10G/906 DRILLER Saxon Drilling HEIGHT DATUM A.H.D. JOB No BEARING USCS WEATHERING ADDITIONAL DATA AND TEST RESULTS INTACT STRENGTH DEFECT SPACING SAMPLES TESTS Ξ LITHOLOGY SAMPLE DEPTH ( RΙ MATERIAL DESCRIPTION (m) CORE REC % ᇁᆂᆂᆂᅬᅿᅿᆿᅟᅴᇛᇰᄓᄫᇂᆘᇂᄪ CLAY trace sand (Residual) (CI) -4.91 8, 10, 13 (Cont'd) 10.00m: sand content increasing GRANODIORITE XW: Recovered as speckled pink, grey and dark grey, moist, medium dense, silty clayey sand. Fine to 9, 11, 14 medium grained. N=25 12.00m: becomes very dense. 18, 21, 30/140 SPT 16, 28, 30/100 xw SPT 30, 30/90 15 0 SPT 28, 30/110 16 SPT -11.11 GRANODIORITE HW: Pink, brown and white, coarse grained, massive, very low strength. 30/105 19 19.00m: becomes orange brown speckled pale and dark grey. 30/60 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**

FINAL 18/03/2016

**BH264** BOREHOLE No

Sheet 3 of 3

FOR GEOTECHNICAL TERMS AND H12273 REFERENCE No SYMBOLS REFER FORM F:GEOT 017/8-2014 Mackay Ring Road PROJECT Fursden Creek Bridge, Pier 2 (LHS) COORDINATES 721480.0 E; 7661443.4 N LOCATION FG6184 SURFACE RL 5.39m PLUNGE 90° DATE STARTED 02/08/2015 GRID DATUM GDA 94 / MGA Z55 PROJECT No 242/10G/906 DRILLER Saxon Drilling HEIGHT DATUM A.H.D. DATE COMPLETED 03/08/2015 JOB No BEARING USCS WEATHERING ADDITIONAL DATA INTACT DEFECT SPACING SAMPLES TESTS Ê LITHOLOGY AND TEST RESULTS STRENGTH RΙ DEPTH SAMP MATERIAL DESCRIPTION (m) CORE REC % ᅾᆂᆂᆂᆋᆛᅿᆲᅵᇊᆼᇅᄛᇂᇂᇕ GRANODIORITE HW: (Cont'd) HW 30/50 -16.61 (31) GRANODIORITE 22.10m: VN: 80°; CA HW SW: Speckled grey, dark grey and A (22.27m)-22.30m-22.34m: BZ: pink, medium to coarse grained, MW A (22.56m)-Is(50)=1.80 MPa Is(50)=3.10 MPa massive, high to very high strength. 100 1 22.75m-22.94m; VN: 90°; CA Js: 5° to 10° (<2/m); PI/Ro; OP; some (79) 23 A (23.05m) Is(50)=0.39 MPa Js: 20° to 35°; (<3/m); PI/Sm; OP; CA Is(50)=5.70 MPa D (23.15m) VN <1mm; Js: 70° to 80°; (<2/m); PI/Sm; OP or CD; Fe St; 23.70m: Total Water Loss 02/08/2019 (93) (23.89m) UCS=59.10 MPa 24.00m: becomes dark grey D (24.40m) 24.51m: BZ: 5°; 10mm; 25 Is(50)=11 00 MPa D (25.18m)-100 Is(50)=6.70 MPa A (25.25m)\_ (39) 26 26.08 to 26.52m: MICRODIORITE 26.11m-26.15m: BZ: 5°; some Sinf; (MW): Grey, fine grained, massive, high strength. Calcite veinlets MW 26.33m-26.52m: BZ: Js: 70° to 80°; and 5° to 10°; CA VN: 80°; PI/Sm; <5mm; 26.52m-26.70m: VN: 80° to 90°; <2mm throughout. Locally fractured. Upper contact: 70°; PI/Sm; OP; CA VN <4mm; Un/Ro; CD; CA; 27 Is(50)=6.50 MPa D (27.00m) Lower contact: 70°; PI/Sm; CD; Is(50)=4.50 MPa 27.15m-28.00m: VN: 90°; Un/Ro; A (27.10m)-SW М 28 UCS=110.00 MPa (28.00m) -23.01 100 Borehole completed at 28.40m 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	03/08/15
Borehole No.	BH 264	TMR H No.	H12273
Location	Fursden Creek Bridge	Start Depth (m)	22.00
Detail	Pier 2, LHS	Finish Depth (m)	28.40
Chainage		Submitted By	M.Ensor
Remarks			

