

## **COPYRIGHT NOTICE**

This geotechnical log and its associated data (the Document) is licensed by the Queensland Department of Transport and Main Roads under the [Creative Commons Attribution 4.0 Licence](#) (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/>

# ENGINEERING BOREHOLE LOG

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

BOREHOLE No **BH154**  
SHEET **1** of **3**  
REFERENCE No **12095**

PROJECT Mackay Ring Road Geotechnical Investigation - Stage 1  
LOCATION Sugarshed Road Overpass Abutment A; CH: 10011m; COORDINATES 721573.6 E; 7662320.7 N  
PROJECT No FG6184 SURFACE R.L. 10.88m PLUNGE \_\_\_\_\_ DATE STARTED 30/10/14 GRID DATUM GDA 94 /MGA Zone 55  
JOB No \_\_\_\_\_ HEIGHT DATUM AHD BEARING \_\_\_\_\_ DATE COMPLETED 31/10/14 DRILLER Saxon Drilling

DEPTH (m)	R.L. (m)	AUGER ROCK ROLLER WASH BORING CORE DRILLING	RQD ( ) %	CORE REC %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USC WEATHERING	INTACT STRENGTH	DEFECT SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
0	10.88					<b>Sandy Silty GRAVEL (FILL)</b>	(GM)						
0.50	10.38					<b>Silty CLAY (ALLUVIUM)</b> Dark grey to black, moist, soft to firm. High plasticity.	(CH)						
1					A							1,2,2 N=4	SPT
2					B							2,2,3 N=5	SPT
2.70	8.18					<b>Silty SAND (ALLUVIUM)</b> Brown, moist, loose to medium dense. Medium grained sand.	(SM)						
3					C							3,4,6 N=10	SPT
3.60	7.28					<b>Silty CLAY (ALLUVIUM)</b> Pale brown-grey, moist, firm to stiff. Medium plasticity. Trace fine gravel.	(CI)						
4					D							1,3,3 N=6	SPT
5					E	5.00m: Becoming stiff.	(CI)					3,4,7 N=11	SPT
6					F							3,6,8 N=14	SPT
6.80	4.08					<b>Clayey Silty SAND (ALLUVIUM)</b> Pale brown-grey, moist, medium dense. Fine to coarse grained sand.	(SM)						
7					G							5,8,12 N=20	SPT
7.70	3.18					<b>Silty SAND (ALLUVIUM)</b> Pale grey, moist, medium dense. Fine to medium grained sand.	(SM)						
8					H							7,12,14 N=26	SPT
9					J							9,11,15 N=26	SPT
10.10	0.88												

REMARKS Kgwu - Wundaru Granodiorite;

# Sample failed along existing defect surface.

LOGGED BY  
ME

# ENGINEERING BOREHOLE LOG

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

BOREHOLE No **BH154**  
SHEET **2** of **3**  
REFERENCE No **12095**

PROJECT Mackay Ring Road Geotechnical Investigation - Stage 1  
LOCATION Sugarshed Road Overpass Abutment A; CH: 10011m; COORDINATES 721573.6 E; 7662320.7 N  
PROJECT No FG6184 SURFACE R.L. 10.88m PLUNGE \_\_\_\_\_ DATE STARTED 30/10/14 GRID DATUM GDA 94 /MGA Zone 55  
JOB No \_\_\_\_\_ HEIGHT DATUM AHD BEARING \_\_\_\_\_ DATE COMPLETED 31/10/14 DRILLER Saxon Drilling

DEPTH (m)	R.L. (m)	AUGER ROCK ROLLER WASH BORING CORE DRILLING	RQD (%)	CORE REC %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USC	WEATHERING	INTACT STRENGTH	DEFECT SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
10	0.88													
11					K	<b>GRANODIORITE (Kgwu)</b> XW: Recovered as brown, grey and white, moist, very stiff to hard Clayey SILT. Occasional XW Andesite dykes.							5,9,15 N=24	SPT
12					L								7,12,15 N=27	SPT
13					M	12.00m: Becoming hard.							10,17,19 N=36	SPT
14					N								9,15,18 N=33	SPT
15					P								13,20,27 N=47	SPT
16	-4.02				Q	<b>GRANODIORITE (Kgwu)</b> HW: Grey, brown and white, medium to coarse grained, massive, very low to low strength. Defects: - Js; 0°-30° (4/m); Pl/Sm, CD, Cly, Fe St;							14,25,30/75	SPT
17					(0) 15								16.05m-16.33m: Core Loss	
18					(73) 100 (85)								q <sub>u</sub> =84kPa;	
19					100 (90)									
20	-8.72				100 (89)	<b>GRANODIORITE (Kgwu)</b> MW:								

REMARKS Kgwu - Wundaru Granodiorite;

# Sample failed along existing defect surface.

LOGGED BY  
ME

# ENGINEERING BOREHOLE LOG

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

BOREHOLE No BH154  
SHEET 3 of 3  
REFERENCE No 12095

PROJECT Mackay Ring Road Geotechnical Investigation - Stage 1  
LOCATION Sugarshed Road Overpass Abutment A; CH: 10011m; COORDINATES 721573.6 E; 7662320.7 N  
PROJECT No FG6184 SURFACE R.L. 10.88m PLUNGE \_\_\_\_\_ DATE STARTED 30/10/14 GRID DATUM GDA 94 /MGA Zone 55  
JOB No \_\_\_\_\_ HEIGHT DATUM AHD BEARING \_\_\_\_\_ DATE COMPLETED 31/10/14 DRILLER Saxon Drilling

DEPTH (m)	R.L. (m)	AUGER ROCK ROLLER WASH BORING CORE DRILLING	RQD (%)	CORE REC %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USC	WEATHERING	INTACT STRENGTH	DEFECT SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
20	-9.12													
21			100 (64)			<b>GRANODIORITE (Kgwu)</b> <b>MW: (Cont'd)</b> Grey, brown and white, medium to coarse grained, massive, generally low to medium strength. Defects: - Js; 0°-30° (4/m); Pl/Ro, CD, Fe St, CA;	+						Is(50) = 0.78MPa Is(50) = 0.51MPa Is(50) = 0.19MPa; # Is(50) = 0.37MPa	A (20.30m) A (20.35m) D (20.45m) A (20.47m)
22			100 (41)				+						Is(50) = 0.25MPa	A (21.80m)
23			100 (86)				+						Is(50) = 0.23MPa; # Is(50) = 0.33MPa Is(50) = 0.30MPa; #	D (22.70m) D (22.90m) A (22.92m)
24							+						Is(50) = 0.29MPa	A (23.70m)
25	-13.47					<b>GRANODIORITE (Kgwu)</b> <b>SW:</b> Grey and white, medium to coarse grained, massive, high to very high strength. Defects: - Js; 0°-30° (4/m); Pl/Ro, CD, Fe St;	+							
25.12	-14.24		100			Borehole terminated at 25.12m.	+							
26														
27														
28														
29														
30														

REMARKS Kgwu - Wundaru Granodiorite;

# Sample failed along existing defect surface.

LOGGED BY  
ME



# CORE PHOTO LOG

DEPARTMENT OF TRANSPORT & MAIN ROADS  
Geotechnical Branch  
35 Butterfield Street, HERSTON Qld 4006  
Phone 07 3066 3336



Department of  
Transport and Main Roads

