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/



G

Н

J

dense.

-7

2.88

0.18

JAN 15.GLB Log A_ENGINEERING BOREHOLE LOG W LITHOLOGY

ENGINEERING **BOREHOLE LOG**

BOREHOLE No	BH157
SHEET	<u>1</u> of <u>3</u>
REFERENCE No	12098

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

PROJECT LOCATIO				Geotechnical Investigation - Stage 1					DINATES <u>721589</u>		
				verpass Abutment B; CH: 10043m; SURFACE R.L <u>10.18m</u> PLUNGE							
JOB No	1 110			HEIGHT DATUM <u>AHD</u> BEARING							
	-		 					2/11/14	- DRIELER		<u> </u>
R.L (m))) 9006ER	VASH BORING	MPLE	MATERIAL	LITHOLOGY	JSC VEATHERING	INTACT DEFECT STRENGTH SPACING (mm)	- ĔŴ GRAPHIC LOG	ADDITIONAL AND TEST RESU		SAMPLES TESTS
	0.68			Silty CLAY (TOPSOIL) Dark brown, moist, soft. Medium plasticity. Some tree roots.		(CI)					
- - - 1				Silty CLAY (ALLUVIUM) Grey-brown mottled orange, moist, stiff to very stiff. High plasticity. Trace fine grained sand.							
-			A			(CH)				3,4,6 N=10	SPT
-2 -2 2 	.78		в	2.00m: Sand content increasing.						3,5,10 N=15	SPT
				Clayey SAND (ALLUVIUM) Brown, moist to wet, loose. Fine to medium grained sand. Trace coarse grained sand.		(SC)					
3.50 6	.68		С							3,4,3 N=7	SPT
				Silty CLAY (ALLUVIUM) Dark brown, moist, stiff to very stiff. High plasticity.							
- - - - -			D							2,7,12 N=19	SPT
<u>3.50</u> 6 			E			(CH)				3,6,8 N=14	SPT
6			F							3,5,7 N=12	SPT
											-

Ŧ

(SC)

Γ U100 REMARKS Kgwu - Wundaru Granodiorite; # Sample failed along existing defect surface.

Clayey SAND (ALLUVIUM) Pale grey to pale brown, moist, medium

Fine to medium grained.

9.80m: Becoming Sandy CLAY

LOGGED BY MS/JA

4,8,12

-N=20

6,9,13 N=22

6,10,12 N=22

SPT

SPT

SPT

(c) State of Queensland (Department of Transport and Main Roads) 2020, CC BY 4.0. Please note copyright and limitation of liability notices on attached cover page.



ENGINEERING BOREHOLE LOG

BOREHOLE No	BH157
SHEET	<u>2</u> of <u>3</u>
REFERENCE No	12098

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

 PROJECT
 Mackay Ring Road Geotechnical Investigation - Stage 1

 LOCATION
 Sugarshed Road Overpass Abutment B; CH: 10043m;
 COORDINATES
 721589.7 E; 7662354.0 N

 PROJECT No FG6184
 SURFACE R.L.
 10.18m
 PLUNGE
 DATE STARTED
 2/11/14
 GRID DATUM
 GDA 94 /MGA Zone 55

 JOB No
 HEIGHT DATUM
 AHD
 BEARING
 DATE COMPLETED
 2/11/14
 DRILLER
 Saxon Drilling

	R.L.		RQE						INTACT	1	DEFECT			
Ê	(m)	ру И	() 9								-	g	ADDITIONAL DATA	
DEPTH (m)		AUGER CASING WASH BORING CORE DRILLING				MATERIAL	JGY				(mm)	GRAPHIC LOG	AND	S
DEPI			COR	_	SAMPLE	DESCRIPTION	ГІТНОГОGY				0 22	APHI		SAMPLES TESTS
10	0.18	NA CAN	REC	~	SAN		Ē	USU I	; 	ΠŬ	≍u≥≥≲ú	GR	TEST RESULTS	SAMPL TESTS
-					к	GRANODIORITE (Kgwu)	+			Ŧ			10,28,30/140	SPT -
È						XW: Recovered as grey-brown mottled orange, moist, hard, Silty Sandy CLAY. Low	 +			‡ !			10,26,30/140	- 3FT
-						plasticity. Fine grained sand.				+	· · · · ·			
F							+			†				-
- 11										Ŧ				
Ł					L		L+.	xw		1			15,30/130	SPT]
Ł							+			+				-
F										+ :				-
- 12							+			Ē				-
Ē				1	М			1		Ŧ			20,30/100	SPT _
12.50	-2.32						- ' -			+ -				-
-	-2.52					MICRODIORITE (Kgwu)	+			+				
F						HW: Recovered as dark grey-brown, moist	L+-			†	· · · · ·			-
- 13					Ν	to dry, very dense Clayey SAND. Fine to medium grained sand. Some fine gravel	+			Ŧ	· · · · ·		30/100	SPT
22						sized, angular rock fragments <15mm.	+		,	+	· · · · ·			-
15 10							+ + +	НМ		+	· · · · ·			-
03/20							- '- +	-		‡ :				-
5 - - - - - - - - - - -								1		Ē	· · · · ·			-
14.20	-4.02			-	P		+			- 1			30/90	<u>SPI</u>
NI ^g			(0)			GRANODIORITE (Kgwu)	+				· · · · · ·			-
1 1 1						HW: Brown, grey and white, fine to coarse grained, massive, generally very low to low	+	НМ						-
						strength.	⊦ ' -							-
						Defects: - Js; 15°-20° (3/m); PI/Ro, TI-OP, Cly;	+							-
E E						- Js; 35°-45° (2/m); Pl/Ro, TI-OP, Cly;		MV	1 · · · · T	+				-
awing						- Js; 50° (1/m); Pl/Ro, TI-OP, Cly; - Js; 80°-90° (2/m); Pl/Ro, TI-OP, Cly;	+ 	HW						_
Ş			(38				+	MV		-	· · · · · ·		ls(50) = 0.47MPa ls(50) = 1.95MPa	A (15.58m)
RE 16								HW	/ · · · L					(15.75m)-
OLES							L+.	xw	1		· · · · ·		15.95m-16.30m: XW zone, EL strength.	-
Ë -							+	ни		₽				-
4 M								ΜV						-
G618							+		,	\vdash				-
¹⁷	7.00		100				+	HW					ls(50) = 0.23MPa	
0 17.20 9 -	-7.02		(41	_		GRANODIORITE (Kgwu)	+			+			Is(50) = 0.50MPa	A (17.22m)
						MW: Grey, black and white with minor							ls(50) = 0.65MPa; # ls(50) = 2.51MPa; #	D (17.40m)
						pink, fine to coarse grained, massive, mainly medium to high strength.	+						UCS=40.2MPa	
TMR.JMN 15.GLB Log A ENCINEERING BOREHOLE LOG W LITHOLOGY FG6184-BOREHOLES GPJ - <pre>CD0awingFile>> Dargel CFT Tool gNN Add-in 040320315 10:52</pre>						Defects:	+	MV		-			ls(50) = 0.44MPa; # ls(50) = 1.08MPa	A (17.85m)-
바						- Js; 20°-25° (2/m); PI/Ro, TI-OP, Fe St; - Js; 45° (1/m); PI/Ro, TI-OP, Fe St;	⊦'-							D (17.90m)
NG B						- Js; 70°-85° (3/m); Pl/Ro, Tl-OP, Fe St;	+							
			100				 +	ни					ls(50) = 1.03MPa	A (18.50m)
			(66				-	F		Ŧ]
- 							+						ls(50) = 1.20MPa ls(50) = 0.91MPa; #	D (19.00m)
9- 8-													ls(50) = 0.91MPa, # ls(50) = 0.64MPa	A (19.05m) A (19.20m)
15.GL							+ 	MV		-				-
NAL 3							+]
														-
	REMARK	Տ <u>Kgw</u> ւ	<u>ı - Wu</u>	ndarı	<u>u G</u>								LOGGED BY	
		<u># Sa</u> i	nple fa	iled	alo	ng existing defect surface.							MS/JA	

(c) State of Queensland (Department of Transport and Main Roads) 2020, CC BY 4.0. Please note copyright and limitation of liability notices on attached cover page.



ENGINEERING BOREHOLE LOG

BOREHOLE No	BH157
SHEET	<u>3</u> of <u>3</u>
REFERENCE No	12098

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

PROJECT	Mackay Ring Road G	<u>Seotechnical Investig</u>	ation - Stage	.1				
LOCATION	Sugarshed Road Ove	erpass Abutment B;	<u>CH: 10043m;</u>			COORDI	NATES 72158	9.7 E; 7662354.0 N
PROJECT No	<u> </u>	SURFACE R.L.	<u>10.18m</u>	PLUNGE	DATE STARTED	2/11/14	GRID DATUM	<u>GDA 94 /MGA Zone 55</u>
JOB No		HEIGHT DATUM	<u>_AHD</u>	BEARING	DATE COMPLETED	2/11/14	DRILLER	<u>Saxon Drilling</u>

DEPTH (m)	R.L. (m)	AUGER CASING WASH BORING CORE DRILLING	RQD ()% CORE	AMPLE	MATERIAL DESCRIPTION	LITHOLOGY	SC EATHERING	INTACT STRENGTH	DEFECT SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
20	-9.82	2080	REC %	S	GRANODIORITE (Kawu)	+	≌ ≥ MW			Ū	ls(50) = 1.00MPa	る 単 A _{(20.00m)-}
	-9.82		CORE REC %	SAMPLE	GRANODIORITE (Kgwu) MW: (Cont'd) Borehole terminated at 20.2m	+ ГЦНОГС	Z USC Reart		SPACING (mm)	GRAPHI	TEST RESULTS	A AMPLE
R	REMARK				ranodiorite;						LOGGED BY MS/JA	

(c) State of Queensland (Department of Transport and Main Roads) 2020, CC BY 4.0. Please note copyright and limitation of liability notices on attached cover page.

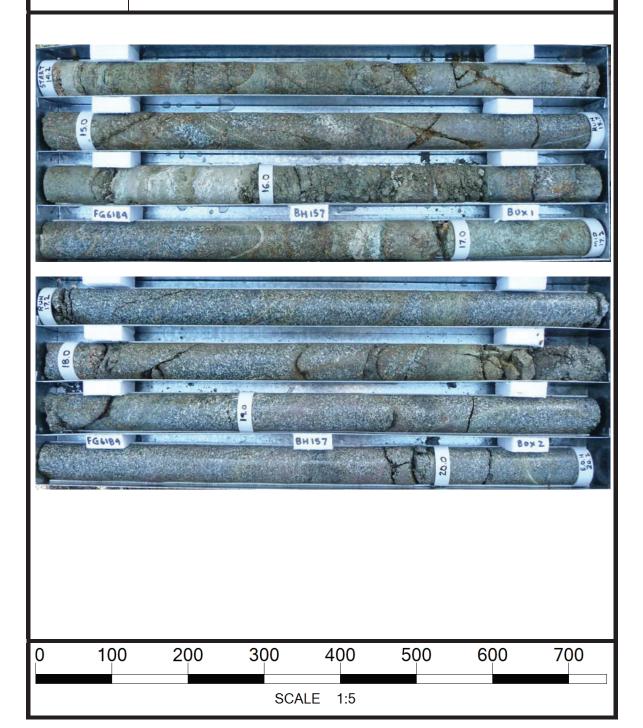
CORE PHOTO LOG

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



Department of Transport and Main Roads

Project Name	Mackay – Ring Road		
Project No	FG6184	Date	02/11/14
Borehole No	BH157	TMR H No	12098
Location	Sugarshed Road Overpass	Start Depth (m)	14.2
Detail	Abutment B	Finish Depth (m)	20.2
Chainage	10043m	Submitted By	J. Lopez
Remarks			



Page 1 of 1 GEOT043/1 (c) State of Queensland (Department of Transport and Main Roads) 2020, CC BY 4.0. Please note copyright and limitation of liability notices on attached cover page.