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~ ''	ECT	M'	(O) / Di	Deed						
					Geotechnical Investigation - Stage 1				OORDINATES 720899.9 E; 7657414	4.1 N
OJE					SURFACE R.L. <u>12.05m</u> PLUNG	ЭЕ				
ΒN	lo				HEIGHT DATUM <u>AHD</u> BEARIN	IG		DATE COMPLETED 22/9/	14 DRILLER <u>Saxon Drillin</u>	<u>ng</u>
Τ	R.L. (m)	رم ط	RQD ()%					INTACT DEFECT STRENGTH SPACING (1)	ADDITIONAL DATA	
	(11)	SORING	()/0		MATERIAL	PGY	RING	STRENGTH SPACING (mm) (mm) ロート ロート コーロート コーロート SAU SAU SAU SAU SAU SAU SAU SAU SAU SAU	AND	s
				SAMPLE	DESCRIPTION	ГІТНОГОБҮ	C	A SS COLL HH	TEST RESULTS	SAMPLES
	12.05	28≹8 1	REC %	SA			S N	m>⊥S⊐>mm>OSS>m R n		SAI
					Silty CLAY (ALLUVIUM) Dark brown, moist, firm.		(CH)			
)	11.55				High plasticity.				+	-
					Pale grey and orange-brown, moist, sti High plasticity.	ff.				
					With fine grained sand.				3,4,6	3
				A			(CH)		N=10	
	9.75			в	2.00m: Increasing in sand content.	//			3,5,3	3 s
	-				SAND (ALLUVIUM) Pale brown, moist, medium dense.	*** ***	•	: : : : : : : : : : : : : : : : : : :		-
					Fine to medium grained sand. Trace silt. Trace fine gravel.	*** *** ***	。 。			
					Trace sill. Trace line gravel.		•			
				С			• •		4,5,6 N=11	
						***	•			
						*** ***	(SW)			
							•		6,7,6	3
				D		۵ [°] ۵ [°] ۵°۵°	•		N=13	
							•			
						*** ***	• •			
				Е		۵ [°] ۵ [°] ۵°۵°	° °	<u>+</u>	8,10,11	
L	6.55						*		N=21	
					Gravelly SAND (ALLUVIUM) Pale brown, moist, medium dense.		(SW)			
	5.95				Fine gravel.		•			
				F	Silty CLAY (ALLUVIUM) Brown and grey, moist, stiff to very stiff				—————————————— 9,5,9 N=14	
					High plasticity.					
							(CH)			
									6,9,12	
				G					N=21	1 5
	4.35					//				
					Gravelly Clayey SAND (ALLUVIUM) Brown, moist, medium dense.					
		Ц		н	Medium to coarse grained sand. Fine gravel.		(SC)		4,6,9	
					graven				N=15	,
	3.25						2			
					Silty CLAY (ALLUVIUM) Pale grey and brown, moist, very stiff.					
				J	High plasticity.				5,8,12 N=20	
							(CH)			-
	2.05					//				

ENGINEERING

BORFHOLFLOG

BOREHOLE No

___<u>BH109</u>__

JAN SALE

Vicencland

Sample failed along existing defect surface.

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ENGINEERING **BOREHOLE LOG**

BOREHOLE No	BH109
SHEET	<u>2</u> of <u>3</u>
REFERENCE No	12055

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

PRO	IECI	<u>Ivia</u>	ска	iy Ring F	<u>koad</u>	Geotechnical Investigation - Stage 1							
LOCA	TION	_Stc	ott <u>s</u>	Road O	verpa	ass Abutment A; CH: 5055m;				·	COC	ORDINATES 720899.9 E; 7657414	<u>.1 N</u>
PRO	JECT N	<u> </u>	<u>618</u>	<u> </u>		SURFACE R.L. <u>12.05m</u> PLUNGE			DATE S	TARTED 2	<u>1/9/1</u>	4GRID DATUM _ <u>GDA 94 /MG</u>	<u>A Zone 55</u>
JOB I	No					HEIGHT DATUM <u>AHD</u> BEARING _			DATE COM	IPLETED 2	<u>2/9/1</u>	4 DRILLER Saxon Drillin	<u>g</u> _
DEPTH (m)	R.L. (m) 2.05	н С С С	CORE DRILLING	RQD ()% CORE REC%	SAMPLE	MATERIAL DESCRIPTION	ГІТНОГОСУ	USC		DEFECT SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
-	1.15				к	Sandy Silty CLAY (ALLUVIUM) Pale grey and brown, moist, very stiff. High plasticity. Medium grained sand. Trace fine gravel.		(CH)			7,11,12 N=23	SPT -
- 11 - - - -	1.10				L	Sandy SILT (ALLUVIUM) Pale grey, moist, very stiff. Low plasticity. Fine grained sand. Trace fine gravel.						6,7,10 N=17	SPT -
- - - - - - - - - - - - - - -	-0.85				м			(ML)			7,11,13 N=24	SPT -
12.90	-0.00					Silty CLAY (RESIDUAL)							

CH)

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

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Ρ

Q

R

S

Т

U

content.

hard

High plasticity.

fine gravel.

Datgel CPT Tool gINt Add-In 04/03/2015 10:50

FG6184 - I 17

LOG W LITHOLOGY

JAN 15.GLB Log A ENGINEERING BOREHOLE L

TMR 20 Pale grey and brown, moist, very stiff to

Trace fine to medium grained sand. Trace

16.00m: Reducing in sand and gravel

LOGGED BY ME

9,14,16 N=30

10,14,16

11,14,15

10,15,18

N=33

9,13,18 N=31

8,13,14 N=27

8,12,14

N=26

N=29

N=30

SPT

SPT

SPT

SPT

SPT

SPT

SPT

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Queensland Government

PROJECT

ENGINEERING BOREHOLE LOG

BOREHOLE No	BH109
SHEET	<u>3</u> of <u>3</u>
REFERENCE No	12055

COORDINATES 720899.9 E; 7657414.1 N

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

Mackay Ring Road Geotechnical Investigation - Stage 1

LOC	ATION	_ <u>Stot</u> t	<u>s Road O</u>	verpa	ass Abutment A; CH: 5055m;				COO	ORDINATES <u>720899.9</u> E; 7657414	<u>.1 N </u>
PRC	JECT N	<u> </u>	<u>184</u>		SURFACE R.L. <u>12.05m</u> PLUNGE _			DATE STARTED _2	1/9/1	4GRID DATUM <u>GDA 94 /MG</u>	A Zone 55
JOB	No				HEIGHT DATUM <u>AHD</u> BEARING			DATE COMPLETED 2	2/9/1	4 DRILLER Saxon Drilling	1
05 DEPTH (m)	R.L. (m) -7.95	AUGER CASING WASH BORING	RQD ()% CORE REC%	SAMPLE	MATERIAL DESCRIPTION	ГІТНОГОСУ	USC WEATHERING	INTACT DEFECT STRENGTH SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
				V	Silty CLAY (RESIDUAL) (Cont'd)		(611)			10,14,19 N=33	SPT -
21.60	-9.55			W			(CH)			25,30/140	SPT]
- 22				X	GRANODIORITE (Kgwu) HW: Pale grey and orange-brown, medium to coarse grained, very low strength.	+ + + + + + + + + + + + + + + + + + + +	HW			16,30/140	SPT _
- 23 - 23.30	-11.25		(0)	Y		+ +				30/130	SPT -
DrawingFile>> Datgel CPT Tool gINt Add-in 04/03/2015 1(7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			(95)		GRANODIORITE (Kgwu) SW: Pale grey and pink, medium to coarse grained, massive, very high strength.	+ + + + + + + + + + + + + + + + + + + +	SW			Is(50) = 5.18MPa Is(50) = 2.75MPa; # Is(50) = 6.22MPa Is(50) = 7.87MPa Is(50) = 9.79MPa Is(50) = 9.94MPa Is(50) = 6.35MPa; # Is(50) = 8.05MPa	A (24.25m) A (24.39m) D (24.45m) A (24.97m) D (25.05m) A (24.97m) D (25.05m)
1× 126.20	-14.15		100			+				UCS=190MPa	U (25.57m)_ - - -
TMR JAN 15.GLB Log A ENGINEERING BOREHOLE LOG W LITHOLOGY F66184. BOREHOLES.GPJ v502079 F01901 AG102001 101000 1010 1010 1010 1010 1010					Borehole terminated at 26.2m						

REMARKS Kgwu - Wundaru Granodiorite; # Sample failed along existing defect surface. LOGGED BY ME

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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	21/09/14
Borehole No	BH 109	TMR H No	12055
Location	Stotts Road Overpass	Start Depth (m)	23.3
Detail	Abutment A	Finish Depth (m)	26.2
Chainage	5055	Submitted By	M.Ensor
Remarks		· · ·	
			700
0 100	200 300 400	500 600	700
	SCALE 1:5		

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