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ENGINEERING BOREHOLE LOG

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

BOREHOLE No **BH156**
SHEET **1** of **3**
REFERENCE No **12097**

PROJECT Mackay Ring Road Geotechnical Investigation - Stage 1
LOCATION Sugarshed Road Overpass Abutment B; CH: 10047m; COORDINATES 721571.2 E; 7662356.3 N
PROJECT No FG6184 SURFACE R.L. 10.32m 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

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	10.32					Silty CLAY (ALLUVIUM) Dark grey, moist, soft to stiff. High plasticity.							
1					A		(CH)					2,1,3 N=4	SPT
2					B							2,6,15 N=21	SPT
2.30	8.02					Silty Sandy CLAY (ALLUVIUM) Brown and grey, moist, very stiff. Medium plasticity.		(CI)					
3					C		(SM)					3,6,13 N=19	SPT
3.30	7.32					Silty SAND (ALLUVIUM) Grey-brown, moist, medium dense. Fine to coarse grained sand.							
3.80	6.52				D							2,4,10 N=14	SPT
4					E	5.00m: Becoming very stiff.						5,6,15 N=21	SPT
5					F		(CI)					3,5,11 N=16	SPT
6					G	7.00m: Trace fine grained sand.						3,6,16 N=22	SPT
7													
7.80	2.52				H							9,12,25 N=37	SPT
8						Silty SAND (ALLUVIUM) Pale grey, moist, dense. Fine grained sand.							
9					J		(SM)					6,11,29 N=40	SPT
9.50m						9.50m: Becoming Silty CLAY.							
10.10	0.32												

REMARKS Kgwu - Wundaru Granodiorite;

Sample failed along existing defect surface.

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ME

ENGINEERING BOREHOLE LOG

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

BOREHOLE No **BH156**
SHEET **2** of **3**
REFERENCE No **12097**

PROJECT Mackay Ring Road Geotechnical Investigation - Stage 1
LOCATION Sugarshed Road Overpass Abutment B; CH: 10047m; COORDINATES 721571.2 E; 7662356.3 N
PROJECT No FG6184 SURFACE R.L. 10.32m 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

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	0.32												
11					K	GRANODIORITE (Kgwu) XW: Recovered as grey, white and black, hard, moist Clayey SILT.						6,11,19 N=30	SPT
11.70	-1.38				L			XW				10,20,30 N=50	SPT
12					M	GRANODIORITE (Kgwu) HW: Grey, white and black, medium to coarse grained, very low strength. Occasional Dolerite dykes.						14,30/100	SPT
13					N			HW				30/70	SPT
14					P							30/130	SPT
14.70	-4.38												
15			(58)			<<ListBuildSepTrim(<							
16			100					MW				15.22m-15.65m: HFZ;	
16.25	-5.93		(0)									Is(50) = 0.34MPa; #	A (15.85m)
17			100									16.00m-16.25m: CA and Cly;	
18			(21)			MICRODIORITE (Kgwu) SW: Grey, fine to medium grained, massive, high to very high strength. Strong alteration throughout. Defects: - Js; 0°-30° (20/m); Pl/Sm, TI; - Js; 30°-60° (5/m); Pl/Sm, TI; - Js; 60°-90° (2/m); Pl/Sm, TI;		SW				16.55m-16.91m: MW zone.	
19			100					MW				Is(50) = 2.11MPa Is(50) = 5.65MPa	A (17.75m) D (17.80m)
20			(0)										
20			100					SW				19.20m-19.35m: HFZ;	

REMARKS Kgwu - Wundaru Granodiorite;

Sample failed along existing defect surface.

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SYMBOLS REFER FORM F:GEOT 017/8-2014

BOREHOLE No **BH156**
SHEET 3 of 3
REFERENCE No **12097**

PROJECT Mackay Ring Road Geotechnical Investigation - Stage 1
LOCATION Sugarshed Road Overpass Abutment B; CH: 10047m; COORDINATES 721571.2 E; 7662356.3 N
PROJECT No FG6184 SURFACE R.L. 10.32m 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

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	-9.68												
20.50	-10.18		100		MICRODIORITE (Kgwu) SW: (Cont'd)		SW					Is(50) = 4.70MPa UCS=183MPa	A (20.27m)
21					Borehole terminated at 20.5m.								
22													
23													
24													
25													
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

Project Name	Mackay – Ring Road		
Project No	FG6184	Date	02/11/14
Borehole No	BH156	TMR H No	12097
Location	Sugarshed Road Overpass	Start Depth (m)	14.7
Detail	Abutment B	Finish Depth (m)	20.5
Chainage	10047m	Submitted By	M.Ensor
Remarks			

