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ENGINEERING BOREHOLE LOG

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

BOREHOLE No BH110
SHEET 1 of 3
REFERENCE No 12056

PROJECT Mackay Ring Road Geotechnical Investigation - Stage 1
LOCATION Stotts Road Overpass Abutment B; CH: 5080m; COORDINATES 720889.3 E; 7657440.9 N
PROJECT No FG6184 SURFACE R.L. 12.24m PLUNGE _____ DATE STARTED 19/9/14 GRID DATUM GDA 94 /MGA Zone 55
JOB No _____ HEIGHT DATUM AHD BEARING _____ DATE COMPLETED 20/9/14 DRILLER Saxon Drilling

DEPTH (m)	R.L. (m)	AUGER CASING 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	12.24												
0.50	11.74					Sandy SILT (ALLUVIUM) Brown, dry, firm. Low plasticity.	(ML)						
1					A	Silty CLAY (ALLUVIUM) Mottled orange-brown and grey, moist, firm. High plasticity. With fine grained sand.	(CH)					3,3,4 N=7	SPT
2					B							2,3,4 N=7	SPT
2.50	9.74					Silty SAND (ALLUVIUM) Pale orange-brown, moist, medium dense. Fine grained.	(SM)					5,6,8 N=14	SPT
3					C								
3.70	8.54					SAND (ALLUVIUM) Pale brown, moist, medium dense. Fine to coarse grained sand. Trace fine gravel.	(SW)					7,8,8 N=16	SPT
4					D								
5					E							8,8,10 N=18	SPT
6					F							9,12,13 N=25	SPT
6.70	5.54					Silty CLAY (ALLUVIUM) Grey-brown, moist, mainly very stiff to hard. High plasticity. Occasional lenses of medium to coarse grained SAND.	(CH)					4,10,20 N=30	SPT
7					G								
8					H							4,10,11 N=21	SPT
9					J							8,11,15 N=26	SPT
10.10	2.24												

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 BH110
SHEET 2 of 3
REFERENCE No 12056

PROJECT Mackay Ring Road Geotechnical Investigation - Stage 1
LOCATION Stotts Road Overpass Abutment B; CH: 5080m; COORDINATES 720889.3 E; 7657440.9 N
PROJECT No FG6184 SURFACE R.L. 12.24m PLUNGE _____ DATE STARTED 19/9/14 GRID DATUM GDA 94 /MGA Zone 55
JOB No _____ HEIGHT DATUM AHD BEARING _____ DATE COMPLETED 20/9/14 DRILLER Saxon Drilling

DEPTH (m)	R.L. (m)	AUGER CASING 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	2.24												
11					K	Silty CLAY (ALLUVIUM) (Cont'd) Becoming pale grey and orange.	(CH)					9,13,15 N=28	SPT
11.60	0.64				L							8,11,14 N=25	SPT
12					M	Clayey SAND (ALLUVIUM) Pale brown, moist, medium dense. Fine to medium grained.	(SC)					5,6,7 N=13	SPT
13					N							5,7,8 N=15	SPT
13.70	-1.46				P	Clayey Gravelly SAND (ALLUVIUM) Pale grey and orange-brown, moist, very dense. Medium grained sand. Medium gravel.	(SC)					17,25,29 N=54	SPT
14.90	-2.66				Q	Silty CLAY (RESIDUAL) Pale grey-brown, moist, mainly very stiff to hard. High plasticity.	(CH)					8,14,19 N=33	SPT
16					R							7,8,13 N=21	SPT
17					S							8,12,14 N=26	SPT
18					T							5,7,10 N=17	SPT
19					U							9,13,19 N=32	SPT
20													

REMARKS Kgwu - Wundaru Granodiorite;

Sample failed along existing defect surface.

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ENGINEERING BOREHOLE LOG

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

BOREHOLE No BH110
SHEET 3 of 3
REFERENCE No 12056

PROJECT Mackay Ring Road Geotechnical Investigation - Stage 1
LOCATION Stotts Road Overpass Abutment B; CH: 5080m; COORDINATES 720889.3 E; 7657440.9 N
PROJECT No FG6184 SURFACE R.L. 12.24m PLUNGE _____ DATE STARTED 19/9/14 GRID DATUM GDA 94 /MGA Zone 55
JOB No _____ HEIGHT DATUM AHD BEARING _____ DATE COMPLETED 20/9/14 DRILLER Saxon Drilling

DEPTH (m)	R.L. (m)	AUGER CASING 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	-7.76				V	Silty CLAY (RESIDUAL) (Cont'd)	(CH)					7,10,14 N=24	SPT
20.80	-8.56				W	Silty SAND (RESIDUAL) Pale grey, moist, medium dense. Medium grained.	(SM)					8,12,17 N=29	SPT
21.70	-9.46				X	Silty CLAY (RESIDUAL) Pale grey and brown, moist, hard. High plasticity. With medium grained sand.	(CH)					10,16,19 N=35	SPT
22.70	-10.46				Y	Silty Sandy CLAY (RESIDUAL) Pale blue-grey, moist, hard. Medium plasticity. Fine grained sand.	(CI)					12,17,20 N=37	SPT
23.90	-11.66				Z	GRANODIORITE (Kgwu) XW: Pale grey and white, medium grained, extremely low strength.	XW					24,28,30 N=58	SPT
25.00	-12.76				(0)	GRANODIORITE (Kgwu) HW: Pale grey and white, medium grained, massive, very low strength.	HW					hb	SPT
25.90	-13.66				100 (0) (88)	GRANODIORITE (Kgwu) SW: Pale grey and pink, medium to coarse grained, massive, very high strength.	SW					Is(50) = 7.86MPa; # D (26.30m) Is(50) = 4.94MPa; # A (26.35m) UCS=40.2MPa Is(50) = 3.26MPa; # A (27.15m) Is(50) = 6.87MPa D (27.20m) Is(50) = 6.88MPa; # D (27.75m) Is(50) = 1.37MPa; # A (27.80m)	
28.00	-15.86				96	Borehole terminated at 28.1m.						28.02m-28.10m: Core Loss	
29													
30													

REMARKS Kgwu - Wundaru Granodiorite;

Sample failed along existing defect surface.

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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	19/09/14
Borehole No	BH 110	TMR H No	12056
Location	Stotts Road Overpass	Start Depth (m)	25.0
Detail	Abutment B	Finish Depth (m)	28.02
Chainage	5080	Submitted By	M.Ensor
Remarks			



SCALE 1:5