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ENGINEERING BOREHOLE LOG

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

BOREHOLE No **BH105**
SHEET **1** of **3**
REFERENCE No **12052**

PROJECT Mackay Ring Road Geotechnical Investigation - Stage 1
LOCATION Schmidtke's Road Overpass Abutment B; CH: 3850m; COORDINATES 720725.9 E; 7656222.3 N
PROJECT No FG6184 SURFACE R.L. 11.24m PLUNGE _____ DATE STARTED 17/9/14 GRID DATUM GDA 94 /MGA Zone 55
JOB No _____ HEIGHT DATUM AHD BEARING _____ DATE COMPLETED 18/9/14 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	11.24												
1					A	Silty Sandy CLAY (ALLUVIUM) Brown-orange mottled grey, moist, firm to stiff. Medium to mainly high plasticity.	(CI-CH)					4.4,6 N=10	SPT
1.70	9.54											▽ 17/9	
2					B	Silty SAND (ALLUVIUM) Brown, moist, medium dense. Fine grained.	(SM)					3.5,7 N=12	SPT
3					C	3.00m: Becoming loose.						1.1,1 N=2	SPT
3.70	7.54												
4					D	Silty CLAY (ALLUVIUM) Brown, moist, stiff. High plasticity. Trace sand.	(CH)					4.5,7 N=12	SPT
5					E	5.00m: Colour becoming brown-orange mottled grey.						2.4,6 N=10	SPT
6.10	5.14												
6					F	Clayey SAND (ALLUVIUM) Grey, moist, medium dense to dense. Fine to medium grained.	(SC)					8.8,9 N=17	SPT
7					G							7,10,15 N=25	SPT
8					H	8.00m: Colour change to brown and grey.						6.8,21 N=29	SPT
9					J							10,21,18 N=39	SPT
9.80	1.44												
10						Silty CLAY (RESIDUAL) (See over)	(CH)						

REMARKS Kgwu - Wundaru Granodiorite;

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ENGINEERING BOREHOLE LOG

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

BOREHOLE No BH105
SHEET 2 of 3
REFERENCE No 12052

PROJECT Mackay Ring Road Geotechnical Investigation - Stage 1
LOCATION Schmidtke's Road Overpass Abutment B; CH: 3850m; COORDINATES 720725.9 E; 7656222.3 N
PROJECT No FG6184 SURFACE R.L. 11.24m PLUNGE _____ DATE STARTED 17/9/14 GRID DATUM GDA 94 /MGA Zone 55
JOB No _____ HEIGHT DATUM AHD BEARING _____ DATE COMPLETED 18/9/14 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	1.24												
11					K	Silty CLAY (RESIDUAL) (Cont'd) Brown-orange mottled grey, moist, mainly very stiff to hard. Mainly high plasticity, medium plasticity in parts.	(CH)					8,12,18 N=30	SPT
12					L							6,8,11 N=19	SPT
13					M							5,8,12 N=20	SPT
14					N							12,17,18 N=35	SPT
15					P							7,9,12 N=21	SPT
16					Q							6,9,12 N=21	SPT
17					R							5,12,21 N=33	SPT
18					S	Sandy Silty CLAY (RESIDUAL) Brown mottled grey, moist, hard. Medium plasticity. Fine to medium grained sand.	(CI)					19,15,23 N=38	SPT
19					T							12,15,25 N=40	SPT
20					U	19.00m: Colour change to dark brown-grey mottled orange. Low Plasticity. Fine to coarse grained sand.						19,27,30/110	SPT
21						Clayey SAND (RESIDUAL) Brown, moist to dry, very dense. Fine to coarse grained.	(SC)						

REMARKS Kgwu - Wundaru Granodiorite;

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ENGINEERING BOREHOLE LOG

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BOREHOLE No BH105
SHEET 3 of 3
REFERENCE No 12052

PROJECT Mackay Ring Road Geotechnical Investigation - Stage 1
LOCATION Schmidtke's Road Overpass Abutment B; CH: 3850m; COORDINATES 720725.9 E; 7656222.3 N
PROJECT No FG6184 SURFACE R.L. 11.24m PLUNGE _____ DATE STARTED 17/9/14 GRID DATUM GDA 94 /MGA Zone 55
JOB No _____ HEIGHT DATUM AHD BEARING _____ DATE COMPLETED 18/9/14 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	-8.76												
-20.15	-8.91					Clayey SAND (RESIDUAL) (Cont'd)		(SC)					30/50 SPT
			(86)			GRANODIORITE (Kgwu) HW: White, grey and brown, medium to coarse grained, massive, very low strength. Defects: - Js; 5° (2/m); Pl-Un/Ro, OP, Cly Vr;						q _u =646kPa;	
21													
								HW				q _u =365kPa;	UCS
			100									21.60m-21.95m: XW-HW rock with EL strength.	
22			(0)										
			100										
			(53)										
-22.75	-11.51											22.25m-22.75m: XW-HW rock with EL strength.	
23			100			Borehole terminated at 22.75m .							
24													
25													
26													
27													
28													
29													
30													

REMARKS Kgwu - Wundaru Granodiorite;

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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	17/09/14
Borehole No	BH 105	TMR H No	12052
Location	Schmidke's Road Overpass	Start Depth (m)	20.1
Detail	Abutment B	Finish Depth (m)	22.75
Chainage	3850	Submitted By	J. Lopez
Remarks			



SCALE 1:5