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# ENGINEERING BOREHOLE LOG

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

BOREHOLE No **BH126**  
SHEET **1** of **3**  
REFERENCE No **12072**

PROJECT Mackay Ring Road Geotechnical Investigation - Stage 1  
LOCATION Gibsons Road Overpass Abutment B; CH: 6485m; COORDINATES 721097.0 E; 7658831.2 N  
PROJECT No FG6184 SURFACE R.L. 10.42m PLUNGE \_\_\_\_\_ DATE STARTED 20/9/14 GRID DATUM GDA 94 /MGA Zone 55  
JOB No \_\_\_\_\_ HEIGHT DATUM AHD BEARING \_\_\_\_\_ DATE COMPLETED 20/9/14 DRILLER ND Drilling Pty Ltd

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	10.42					<b>Sandy CLAY (TOPSOIL)</b> Dark brown, moist, soft. Medium plasticity. Some plant roots.		(CI)					
0.80	9.62				A	<b>Sandy CLAY (ALLUVIUM)</b> Black and orange, moist, firm. Medium plasticity. Fine to coarse grained sand.		(CI)				Su <sub>(pp)</sub> =52kPa;	U50
2.20	8.42				B	<b>Clayey SAND (ALLUVIUM)</b> Orange-brown mottled grey, moist, medium dense. Fine to coarse grained.						5.6,8 N=14	SPT
3					C	3.20m: Colour change to brown and black.		(SC)				4.7,8 N=15	SPT
4.10	6.32				D	Sandy Gravelly CLAY bed <300mm.							U50
5					E	<b>Silty SAND (ALLUVIUM)</b> Brown-orange, wet, medium dense. Fine to coarse grained sand. Trace fine to medium, rounded to subrounded gravel.						11,11,12 N=23	SPT
6					F							12,10,8 N=18	SPT
7					G			(SM)				4.5,6 N=11	SPT
8					H							6,6,7 N=13	SPT
9					J							10,8,9 N=17	SPT
9.80	0.62					<b>Sandy Silty GRAVEL (ALLUVIUM)</b>		(GM)					

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 **BH126**  
SHEET **2** of **3**  
REFERENCE No **12072**

PROJECT Mackay Ring Road Geotechnical Investigation - Stage 1  
LOCATION Gibsons Road Overpass Abutment B; CH: 6485m; COORDINATES 721097.0 E; 7658831.2 N  
PROJECT No FG6184 SURFACE R.L. 10.42m PLUNGE \_\_\_\_\_ DATE STARTED 20/9/14 GRID DATUM GDA 94 /MGA Zone 55  
JOB No \_\_\_\_\_ HEIGHT DATUM AHD BEARING \_\_\_\_\_ DATE COMPLETED 20/9/14 DRILLER ND Drilling Pty Ltd

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	0.42												
10.90	-0.48				K	<b>Sandy Silty GRAVEL (ALLUVIUM)</b> (Cont'd) Grey and orange, wet, dense. Fine to medium, rounded to subrounded gravel. Fine to coarse grained sand.	(GM)					19,13,23 N=36	SPT
11					L	<b>Silty CLAY (ALLUVIUM)</b> Grey-brown, moist, very stiff. High plasticity. Trace fine to coarse grained sand.						9,8,12 N=20	SPT
12					M		(CH)					Su <sub>(PP)</sub> =112kPa;	U50
13					N							6,10,13 N=23	SPT
14.00	-3.58				P	<b>Sandy CLAY (ALLUVIUM)</b> Grey-orange mottled black, moist, very stiff. High plasticity. Fine to coarse grained sand.						8,12,16 N=28	SPT
15					Q		(CH)					7,8,10 N=18	SPT
16					R							8,10,15 N=25	SPT
16.90	-6.48				S	<b>Clayey SAND (RESIDUAL)</b> Grey-orange mottled black, dry, very dense. Fine to coarse grained.	(SC)					16,27,33 N=60	SPT
17.30	-6.88				T	<b>MICRODIORITE (Kgwu)</b> XW: Grey-orange mottled black, fine to medium grained, extremely low strength.						23,34,37 N=71	SPT
18					U							40/100	SPT
19	-8.81		(0)			<b>MICRODIORITE (Kgwu)</b> HW: Grey-brown, fine to medium grained, massive, low strength. Broken throughout.						19.32m-19.42m: BZ; 19.49m-19.72m: BZ; 19.80m-20.06m: BZ;	
20			100 (0)										

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 BH126  
SHEET 3 of 3  
REFERENCE No 12072

PROJECT Mackay Ring Road Geotechnical Investigation - Stage 1  
LOCATION Gibsons Road Overpass Abutment B; CH: 6485m; COORDINATES 721097.0 E; 7658831.2 N  
PROJECT No FG6184 SURFACE R.L. 10.42m PLUNGE \_\_\_\_\_ DATE STARTED 20/9/14 GRID DATUM GDA 94 /MGA Zone 55  
JOB No \_\_\_\_\_ HEIGHT DATUM AHD BEARING \_\_\_\_\_ DATE COMPLETED 20/9/14 DRILLER ND Drilling Pty Ltd

DEPTH (m)	R.L. (m)	AUGER CASING WASH BORING CORE DRILLING	RQD ( ) %	CORE REC %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USC	WEATHERING	INTACT	DEFECT	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES	TESTS
										STRENGTH	SPACING (mm)				
20	-9.58									EH VH H M L J VL EL EC VC C W VW EW					
20.06	-9.64														
				100		GRANODIORITE (Kgwu) HW: Pink to brown and white, fine to coarse grained, massive, very low strength. Defects: - Js; 0°-20° (3/m); Pl-Un/Ro, TI, Cly Vr; - Js; 45° (3/m); Pl-Un/Ro, TI, Cly Vr;	+								
				(22)			+	HW							
				100			+								
21	-10.68			(0)			+								
21.05							+								
				81		MICRODIORITE (Kgwu) MW: Grey-brown, fine grained, massive, low to medium strength. Defects: - Js; 30°-40° (3/m); Pl/Ro, TI, Cly Vr;	+								
				(14)			+	MW							
22	-11.78			71			+								
22.20						Borehole terminated at 22.2m. .	+								
23															
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	<b>Mackay – Ring Road</b>		
Project No	FG6184	Date	20/09/14
Borehole No	BH126	TMR H No	12072
Location	Gibsons Rd Overpass	Start Depth (m)	19.15
Detail	Abutment B	Finish Depth (m)	22.2
Chainage	<b>6485</b>	Submitted By	DC
Remarks			



Scale (mm)

