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ENGINEERING BOREHOLE LOG

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

BOREHOLE No BH171
SHEET 2 of 3
REFERENCE No 12112

PROJECT Mackay Ring Road Geotechnical Investigation - Stage 1
LOCATION Fursden Creek Overflow Bridge Abutment A; CH: 8690m; COORDINATES 721429.5 E; 7661010.6 N
PROJECT No FG6184 SURFACE R.L. 7.60m PLUNGE DATE STARTED 21/10/14 GRID DATUM GDA 94 /MGA Zone 55
JOB No HEIGHT DATUM AHD BEARING DATE COMPLETED 22/10/14 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			
									EH	VH	H	M	J	L	VL	EL	EC	VC	C					W	WV	WV
10	-2.40				K	Silty CLAY (ALLUVIUM) (Cont'd) Pale brown, yellow and grey, moist, stiff to very stiff. High plasticity.	(CH)																		3,4,10 N=14	SPT
11					L																				5,9,11 N=20	SPT
12					M																				6,8,11 N=19	SPT
12.90	-5.30																									
13					N	Sandy Silty CLAY (ALLUVIUM) Brown, orange and grey, moist, very stiff. High plasticity.	(CH)																		9,13,14 N=27	SPT
14					P																				7,12,14 N=26	SPT
15					Q																				6,10,12 N=22	SPT
15.50	-7.90																									
16					R	Silty CLAY (RESIDUAL) Brown and grey, moist, very stiff to hard. Medium to high plasticity.	(CI-CH)																		13,11,15 N=26	SPT
17					S																				10,25,26 N=51	SPT
18					T																				12,30/120	SPT
18.50	-10.90																									
19					U	GRANODIORITE (Kgwu) XW: Recovered as grey, white and brown, moist, very dense Silty SAND. Fine to coarse grained sand. Trace fine angular gravel.	+																		30/100	SPT
20							+																			

REMARKS Kgwu - Wundaru Granodiorite;

LOGGED BY
MS



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BOREHOLE No **BH171**
 SHEET **3** of **3**
 REFERENCE No **12112**

PROJECT Mackay Ring Road Geotechnical Investigation - Stage 1
 LOCATION Fursden Creek Overflow Bridge Abutment A; CH: 8690m; COORDINATES 721429.5 E; 7661010.6 N
 PROJECT No FG6184 SURFACE R.L. 7.60m PLUNGE _____ DATE STARTED 21/10/14 GRID DATUM GDA 94 /MGA Zone 56
 JOB No _____ HEIGHT DATUM AHD BEARING _____ DATE COMPLETED 22/10/14 DRILLER Saxon Drilling

DEPTH (m)	R.L. (m)	AUGER CASING WASH BORING CORE DRILLING	RQD (%) CORE REC %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	WEATHERING											GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS		
							USC	EH	VH	H	M	J	VL	EL	EC	VC	W				VW	EW
20	-12.40			V	GRANODIORITE (Kgwu) XW: (Cont'd)	+																
21	-13.50			W	GRANODIORITE (Kgwu) HW: Grey, white and pink, fine to coarse grained, massive, very low to low strength.	+																30/140 SPT
22			(0)			+																
			100			+																
			(0)			+																
22			88			+																21.86m-21.92m: Core Loss
			(0)			+																
			100			+																22.60m-22.68m: Core Loss
			(0)			+																
23			87			+																
			60			+																
23.35	-15.75		(0)		GRANODIORITE (Kgwu) MW: Grey, white and pink, fine to coarse grained, massive, medium strength. Highly fractured rock.	+																23.26m-23.30m: Core Loss 23.30m-23.35m: Core Loss
			(22)			+																Is(50) = 0.39MPa A (23.60m)
24	-16.40				GRANODIORITE (Kgwu) SW: Grey, white and pink, fine to coarse grained, massive, very high strength. Defects: - Js; 0°-10° (1/m); Pl/Ro, OP, Cn; - Js; 30° (1/m); Pl/Ro, OP, Cn; - Js; 40°-45° (1/m); Pl/Ro, OP, Cn;	+																Is(50) = 5.52MPa D (24.05m)
			94			+																UCS=107MPa Is(50) = 7.00MPa A (24.40m)
			(78)			+																
			100			+																Is(50) = 3.61MPa A (25.25m)
			(100)			+																
26						+																
			100			+																
			(90)			+																Is(50) = 4.45MPa; # D (26.50m)
27						+																
			100			+																Is(50) = 4.27MPa A (27.35m)
			(90)			+																
28						+																
			100			+																Is(50) = 2.36MPa A (27.90m)
			(100)			+																
28.60	-21.00				Borehole terminated at 28.6m.																	
29																						

TMR JAN 15.GLB Log A_ENG ENGINEERING BOREHOLE LOG W LITHOLOGY FG6184 - BOREHOLES.GPJ <<DrawingFile>> Datget:CPT Tool gInt_Acc-In 04/03/2015 10:52

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	22/10/14
Borehole No	BH171	TMR H No	12112
Location	Fursden Creek Overflow Bridge	Start Depth (m)	21.1
Detail	Abutment A	Finish Depth (m)	28.6
Chainage	8690m	Submitted By	J. Lopez
Remarks			

