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ENGINEERING BOREHOLE LOG

BOREHOLE No	BH180
SHEET	<u>1</u> of <u>3</u>
REFERENCE No	12121

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

PROJECT	Mackay Ring Road G	eotechnical Investig	ation - Stage	.1				
LOCATION	<u>Fursden Creek Overf</u>	low Bridge Abutmer	n <u>t B; CH: 8790</u>	<u>)m;</u>		COORDI	NATES 72143	0.7 E; 7661111.6 N
PROJECT No	p_ <u>FG6184</u>	SURFACE R.L.	7.90m	PLUNGE	DATE STARTED	14/10/14	GRID DATUM	<u>GDA 94 /MGA Zone 55</u>
JOB No		HEIGHT DATUM	_AHD	BEARING	DATE COMPLETED	16/10/14	DRILLER	Saxon Drilling

	R.L.	- (7)	RQD					INTACT	DEFECT			
Ê	(m)		()%		MATERIAL	≻	DN N	STRENGTH	SPACING (mm)	LOG	ADDITIONAL DATA	
DEPTH (m)				Щ	DESCRIPTION	DOG	THERING			HIC	AND	S
	7.00	AUGER CASING WASH BORING CORE DRILLING	CORE REC %	SAMPLE		гітногоду	USC	THE TETE	uoo m>o≥≥≥≥m	GRAPHIC LOG	TEST RESULTS	SAMPLES TESTS
0	7.90		NEO //		Clayey SILT (TOPSOIL) Dark brown, dry to moist, soft. Low plasticity.	<u>×1/</u>	(ML)			0		
	7.40				SAND (ALLUVIUM)							-
È,					Pale brown, moist, loose. Fine grained sand. Trace silt and clay.							-
- 1				А							2,2,4 N=6	SPT -
Ē				~							N=6	-
F												-
-2												-
Ē				В			(SP)				2,2,4 N=6	SPT -
E											11-0	-
Ē												-
-3												
22				С							2,3,4 N=7	SPT -
15 10:												-
3.70 02/20	4.20										+	-
G6f84 - BOREHOLES.GPJ <					Gravelly SAND (ALLUVIUM) Pale brown, moist, medium dense to dense. Fine to medium grained sand. Medium,	• • • • • • • • • •						-
gINt Ac				D	subrounded to subangular gravel.						4,6,5 N=11	SPT -
T T T T T T T T T T T T T T T T T T T												
gel CP						؞ ؞ ؞						-
											10,21,15	-
ngFile>				Е							N=36	SPT -
Drawi												-
° L						• • • • • • • • • •	(SW)				-
0TES.0				-							9,10,9	
REHC				F							N=19	SPT -
84 - B(
FG61												-
				G							8,7,13	SPT -
											N=20	
8 00 7.80	0.10											
TMR.JAN 15.GLB Log A ENGINEERING BOREHOLE LOG WLITHOLOGY F 					SAND (ALLUVIUM)						+	-
BORET				н	Pale brown, moist, medium dense. Fine to medium grained sand. Trace						9,8,10 N=18	SPT -
					medium gravel.						IN= 10	
GINEE												
P ENC							(SP)					-
B Log				J							8,8,9 N=17	SPT -
15.GLE												-
R JAN												
									<u>+ · · · · · · · · · · · · · · · · · · ·</u>			
F	REMARK										LOGGED BY	
					ng existing defect surface.	(-	

Rock Roller bit used 21.56m to 23.54m.

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ENGINEERING BOREHOLE LOG

BOREHOLE No	BH180
SHEET	<u>2</u> of <u>3</u>
REFERENCE No	12121

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

PROJECT	Mackay Ring Road	Seotechnical Investig	<u>ation - Stage</u>	.1				
LOCATION	Fursden Creek Over	fl <u>ow Bridge Abutmen</u>	n <u>t B; CH:</u> 8790)m;		COORDIN	IATES 721430	0.7 E; 7661111.6 N
PROJECT No	<u>FG6184</u>	SURFACE R.L.	7.90m	PLUNGE	DATE STARTED	14/10/14	GRID DATUM	<u>GDA 94 /MGA Zone 55</u>
JOB No		HEIGHT DATUM	_ <u>AHD</u>	BEARING	DATE COMPLETED	16/10/14	DRILLER	Saxon Drilling

DEPTH (m)	R.L. (m)	AUGER CASING WASH BORING CORE DRILLING	RQD ()%	PLE	MATERIAL DESCRIPTION	ГІТНОГОGY	THERING	INTACT STRENGTH ₩₩₽₽₽₩	DEFECT SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA AND	SAMPLES TESTS
10	-2.10	AUG CAS WAS COR	CORE REC %	SAMPLE		ГІТН	USC	╨╤┰ѯ┐╱╨	⊔>∪≥≥≥≦ □	GRA	TEST RESULTS	SAMPLI
	-2.70			к	SAND (ALLUVIUM) (Cont'd)		(SP)				9,9,8 N=17	SPT -
- 11				L	Silty CLAY (RESIDUAL) Pale grey and brown, moist, very stiff. High plasticity. Trace sand and gravel.						5,7,10 N=17	SPT
- - - 12 - -				М			(CH)				7,13,14 N=27	SPT -
5 10:52 1 1 1 1 1 1 1 1 1				Ν							8,10,13 N=23	SPT -
INt Add-In 04/03/2015	-5.90			P	GRANODIORITE (Kgwu) XW: Recovered as brown, grey and black, dry to moist, very stiff to hard Clayey SILT.	+ + +					10,12,15 N=27	SPT
ile>> Datgel CPT Tool g				Q		 + + 	xw				8,17,28 N=45	SPT -
DLES.GPJ < <drawingf 1 - 1 - 1 - 1 - 1 9 - 1 - 1 - 1 - 1 9 - 1 - 1 - 1 - 1</drawingf 	-8.00				MICRODIORITE (Kgwu) HW: Pale grey, fine grained, very low	 + - + + - + -	XIN				8,14,20	
7 FG6184 - BOREHC				R	strength.		XW				N=34	SPT -
г г г L г г г г т Г ГОС М ГШНОГОС				S							28,30/100	SPT -
GINEERING BOREHOI				Т		+ + + +	HW				17,30/135	SPT
TMR JAN 15.GLB Log A_ENGINEERING BOREHOLE LOG WLITHOLOGY FG6184 - BOREHOLES.GPJ < CatawingFiles> Datagel CPT Tool gINt Add-in 04:03/2015 10:3201				U							29,30/45	SPT -
	FMARK	s Kawu	- Wunda	aru G	ranodiorite;]			LOGGED BY	
					ng existing defect surface.						ME	

Rock Roller bit used 21.56m to 23.54m.

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ENGINEERING BOREHOLE LOG

BOREHOLE No	<u>BH180</u>
SHEET	<u>3</u> of <u>3</u>
REFERENCE No	12121

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

PRC	DJECT	<u>Macka</u>	ay Ring F	Road (<u>Geotechnical Investic</u>	<u>gation - Stage</u>	1	 							
LOC	CATION	<u> </u>	<u>en Creek</u>	Over	flow Bridge Abutmer	nt B; CH: 8790	<u>)m;</u>	 			CO	ORDINATE	s <u>72143</u>	0.7 E; 7661111.	<u>6 N</u>
PRC	DJECT No	D_F <u>G61</u>	84		SURFACE R.L.	7.90m	PLUNGE		DATE S	TARTED	<u>14/10</u>	0 <u>/14</u> GRI	D DATUM	<u>GDA 94 /MG/</u>	<u>A Zone 55</u>
JOE	8 No				HEIGHT DATUM	_ <u>AHD</u>	BEARING		DATE COM	PLETED	16/10	0/14	DRILLER	Saxon Drilling	L
	R.L.		RQD						INTACT	DEFECT					
1	1 / 1	1	() 0(0040040			DITIONAL		

1 ÷				()%		MATERIAL		Q	STRENGTH	SPACING	g	ADDITIONAL DATA	
È		с G BORI	DRIL		щ	DESCRIPTION	LOGY	TERIN		(mm)	HIC L(AND	E R
DEPTH (m)	R.L. (m) -12.10	AUGEI SASIN VASH	ORE	CORE REC %	SAMPLE	DESCRIPTION	гітногоду	VEAT	STRENGTH	20 ⊔>0≥3≥∭	GRAPHIC LOG	TEST RESULTS	SAMPLES TESTS
	-12.10			KEC %	V	MICRODIORITE (Kgwu) HW: (Cont'd)	+ + + +					23,30/80 hb	SPT -
21			Ļ	(0)	W		+ + + +	HW]		30/100	SPT
- - - - - - - - - - - - - 	-14.10			50 100 (0)	\times					Γ	\times	- 21.30m-21.50m: Core Loss	
-					x	GRANODIORITE (Kgwu) HW: Grey and pink, medium to coarse grained, very low strength.	+ 					- 21.56m-23.54m: Rock Roller bit used 15,30/90	SPT -
-23 -23							+ + 	HW					
- <u>23.54</u> - - - 24	-15.64		I	(51)	- Y -	GRANODIORITE (Kgwu) MW: Grey and pink, medium to coarse grained, massive, low to medium strength. Defects:	+ + +	MW					SPT -
-						- Js; 0°-30° (2/m); Pl/Ro, Tl; - Js; 30°-60° (2/m); Pl/Ro, Tl;	 + +	HW					-
- 				100 (73)			 + +					Is(50) = 0.29MPa Is(50) = 0.57MPa Is(50) = 0.14MPa	A _(24.94m) D _(25.10m)
-24 24 25 26 	18 60							MW				Is(50) = 0.33MPa Is(50) = 0.35MPa; #	
26.50 - - - - 27	-18.60			100 (85)		MICRODIORITE (Kgwu) SW: Grey, fine grained, massive, high strength. Defects:						ls(50) = 0.59MPa; # ls(50) = 1.74MPa	D (26.84m)- A (26.90m)
						- Js; 0°-30° (5/m); PI/Sm, TI-OP; - Js; 60°-90° (1/m); PI/Sm, TI-OP;	+ _ + _ + _ + _	SW					
- 28 				100			+ - +					ls(50) = 0.91MPa; #	A (28.08m)
- 27 						Borehole terminated at 28.18m						Ts(50) = 0.90MPa	D (28.10m) (28.10m)
		s <u>Kg</u>	wu	- Wunda	iru G	ranodiorite;						LOGGED BY	
		<u># S</u>	Sam	ple faile	<u>d alo</u>	ng existing defect surface.						ME	

Rock Roller bit used 21.56m to 23.54m.

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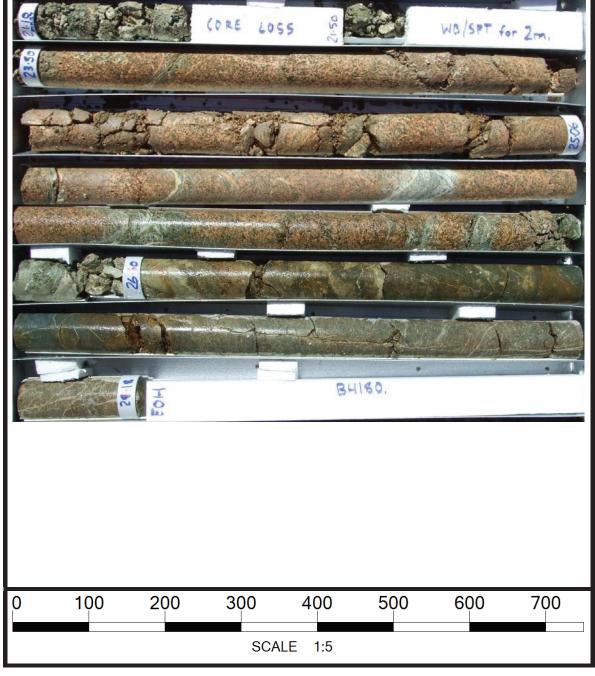
CORE PHOTO LOG

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	16/10/14
Borehole No	BH180	TMR H No	12121
Location	Fursden Creek Overflow Bridge	Start Depth (m)	21.1
Detail	Abutment B	Finish Depth (m)	28.18
Chainage	8790m	Submitted By	M.Ensor
Remarks			



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