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Queensland Government

GEOTECHNICAL BOREHOLE LOG

FOR GEOTECHNICAL TERMS AND SYMBOLS REFER FORM F:GEOT 017/8-2014 FINAL 18/03/2016

BH225

Sheet 1 of 3

BOREHOLE No

REFERENCE No

H12234

PROJE	CT	Mackay Ring Road												
LOCAT	ION	P	ione	eer Rive	er B	ridge, Pier 8 (LHS)						COORDINATES 721307.4	E; 766028	33.2 N
PROJECT No		F	FG6184			SURFACE RL 5.46m	plunge 90°		90°	DATE STARTED 06/10/2015		GRID DATUM GDA 94 / MO		/IGA Z55
JOB No		2	242/10G/906		6	HEIGHT DATUM A.H.D.	BEA	RING_		DATE COMPLI	ETED 08/10/2015	DRILLER (DRILLER Cairns Drilling	
DEPTH (m)	R.L. (m)	AUGER CASING	WASH BORING CORE DRILLING	RQD ()% CORE REC%	SAMPLE	MATERIAL DESCRIPTION	ГІТНОГОGY	USCS WEATHERING	INTACT STRENGTH 픽ુ녹,ㅗ,ས,ᅴ,>,텍			ADDITIONAL DATA AND TEST RESULTS		SAMPLES TESTS
	4.46					Silty SAND (Fill) Brown, dry, very loose to loose.				- - - - - - -	0.00m-1.00m: Road Track to bund. Bould cobbles throughout.			
- 1 						Silty SAND (Alluvium) Dark brown, dry, medium dense. Fine grained sand, rootlets.	x x x x x x x	2					3, 5, 5 N=10	SPT
- 2 					В	2.00m: becoming loos	x × x × x × x	(SM)		- 			2, 2, 4 N=6	SPT
- 3 - 3 	2.46	-			С	SAND trace gravel (Alluvium) Brown, wet, loose. Fine to coarse grained sand, fine grained gravel, subrounded grains.				- 			4, 4, 5 N=9	SPT
- - - - - - - -	0.46				D	4.00m: becoming medium dense, increase in gravel.		(SP)		- 			6, 8, 7 N=15	SPT
- 5 	0.40				E	Gravelly SAND (Alluvium) Dark brown, wet, loose. Fine to coarse grained sand, fine to medium grained gravel.		9 9 9 9					3, 4, 3 N=7	SPT
- 6 - - - - - - - - - 7					F	6.00m: becoming medium dense to dense		(SP)			6.00m-6.45m: No sai	mple	15, 20, 13 N=33	SPT
- 7 - - - - - - -					G								5, 6, 7 N=13	SPT
- 8 	-2.64					8.00m: becoming dense Silty SAND (Alluvium) Pale grey, moist, dense. Fine to medium grained sand.	XXXXX	(SM)					11, 14, 18 N=32	SPT
- - - - - - - - -	-3.54				I	Clayey SAND (Alluvium) Pale grey, moist, medium dense. Fine to medium grained sand, low plasticity.	<u>Artanta</u>	(SC)					5, 7, 9 N=16	SPT
	-4.04					Continued on next sheet	<u>r.</u>	1	J		1			
REMARKS: Kgwu = Wundaru Granodiorite									LOGGED BY	REVIE	WED BY			
												T.Goosey	S.I	oley
_		_				TMP.G								

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											_		FINAL 1	8/03/2016
								GE	OTECHN	ICAL	BOREHOLE No BH225			
Queensland								BO	REHOLE	LOG		Sheet 2 of 3		
Government			ernment	FOR GEOTECHNICAL TERMS AND SYMBOLS REFER FORM F:GEOT 017/8-2014					REFERENCE No	H	12234			
PROJEC	PROJECT Mackay Ring Road													
LOCATION Pioneer River Bridge, Pier 8 (LHS)												COORDINATES 721307 /	E: 76602	83.2 N
PROJECT No FG6184				.1 D	SURFACE RL 5.46m	DU				 RTED 06/10/2015	COORDINATES 721307.4 E; 7660283. eb 06/10/2015 GRID DATUM GDA 94 / MG			
		_	242/10G/906		16						ETED 08/10/2015		Cairns Dril	
	JOB No <u>242/10G/906</u> HEIGHT DATU			DEAI	-									
DEPTH (m)	R.L. (m)	AUGER SASING	RQD ()% III INTACT STRENGTH DEFECT STRENGTH SNLTHING SNLTHING SUBJENCE MATERIAL DESCRIPTION SO SO SO SO SO SO SO SO SO SO SO SO SO S			ADDITIONAL DATA AND TEST RESULTS		SAMPLES TESTS						
11	-8.54				K L M	Clayey SAND (Alluvium) Pale grey, moist, medium dense. Fine to medium grained sand, low plasticity. 12.00m: increasing clay content 13.00m: becomes brown, dense. Fine to coarse grained sand. CLAY (Alluvium) Mottled dark grey, pale grey and brown, moist, very stiff. Low to medium plasticity.		(SC)					4, 7, 12 N=19 9, 12, 13 N=25 6, 7, 12 N=19 8, 14, 20 N=34 5, 14, 14 N=28	SPT SPT SPT SPT SPT
- 15 	-10.54	-			0	15.00m: becomes green brown, hard.		(CI)		· 			6, 30/130 hb	SPT
	-11.39					GRANODIORITE (Kgwu) XW: Recovered as pale brown grey, moist, very dense, clayey sand. Fine to coarse grained sand.	- -						30/110 hb	<u>SPT</u>
- 17 - 17 -	-12.09			(31)		GRANODIORITE (Kgwu) SW: Pale red grey, coarse grained, porphyritic, high to very high strength. Js: 25° to 35°; (3-4/m); PI/Ro; TI; Fe St; Js: 50° to 60° (2-3/m); PI/Ro; TI; Fe \$t;	+ + + + + + + + + + + + + + + + + + +	SW SW	нчн	c	 16.85m-16.95m: Nili 16.85m: No sample 17.15m: Microdiorit Un/SI; Ti; Fe St, 10m 17.50m-17.55m: Mili 50°; Un/Ro; Ft; Cly; 17.55m-17.57m: Cor 	recovered e band: 70°; m; crodiorite band ls[30/0 hb 50)=5.30 MPa 50)=6.80 MPa	A (17.20m) D (17.25m) - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - -	<u>-13.59</u>			100 (21) 100 (78)		 St; MICRODIORITE (Kgwu) SW: Brown grey, fine to medium grained, massive, high to very high strength. Js: 5° to 20°; (7/m); PI/Sm-Ro; OP; Cn or CA; Is: 50° to 70°; (2/m); PI/Sm-Ro; OP; GRANODIORITE (Kgwu) 	+ + + + + + + + + + + + + + + + + + + +	SW	H-VH	c c	18.35m-18.67m: BZ: and Microdiorite cla]]]]]]]]]]]]]]]]]]]	sts throughout / zone, sand 5°; PI/Ro; FL;	50)=1.50 MPa 50)=1.30 MPa	D (18.76m) A (19.65m)
						Continued on next sheet								
RE	MAR	KS:	K	gwu =	= W	′undaru Granodiorite						LOGGED BY T.Goosey		WED BY Foley

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					_		FINAL 1	8/03/2016
			GEC	DTECHNICAL	BOREHOLE No		H225	
	Queens		BOF	REHOLE LOG		Sheet 3 of 3		
1 Se	💥 Govern	iment		EOTECHNICAL TERMS AND EFER FORM F:GEOT 017/8-2014		REFERENCE No	H:	12234
PROJECT	Mackay Ring Road							
LOCATION	Pioneer River Bridge,	, Pier 8 (LHS)				COORDINATES 721307.4 E; 76602		83.2 N
PROJECT No	FG6184	SURFACE RL 5.46m	PLUNGE 90	DATE S	STARTED 06/10/2015	GRID DATUM	GDA 94 / M	MGA Z55
IOB No	242/10G/906	HEIGHT DATUM A.H.D.	BEARING	DATE CON	1PLETED 08/10/2015	TED 08/10/2015 DRILLER Cairns Drill		
Ê	RQD		NG	INTACT DEFECT		ADDITIONAL DATA		(0)
(m) R.L. (m)	ADDREP ANDRE WIXSH BORING WASH BORING CORE BEC % CORE CORE CORE CORE CORE CORE CORE CORE	MATERIAL DESCRIPTION	LITHOLOGY USCS WEATHERING EH	STRENGTH SPACING	Ē	AND TEST RESULTS		SAMPLES TESTS
- 21 -15.79	SW: I grain high 100 Js: 15 (97) Js: 40 Js: 5° MICF SW: I mass No de	Pale red, brown grey, coarse hed, porphyritic, high to very strength. 5°-30° (3/m); PI/Ro; TI; Fe St; 5° - 50° (1/m); PI/Ro; TI; Fe St; 6° - 20°(2/m); PI/Ro; OP; RODIORITE (Kgwu) Blue grey, fine grained, sive, very high strength. efects. Healed calcite veins	+ sw + sw	C M		Is(50)=8.60 MPa 50)=4.90 MPa	D (21.10m)
- 22	throu	ughout.	sw	w		is(50)=7.50 MPa	A (22.03m)
- 23 -17.94 - 24	100 SW: I (98) porpl stren	NODIORITE (Kgwu) Pale red grey, coarse grained, hyritic, mianly very high ngth. D° to 70°; (1/m); Pl/Ro; TI; Fe		VH M	23.40m: Contact: 70	"; PI; CD;	CS=88.00 MPa 0)=10.00 MPa	(23.05m)
- 25	Js: 5°	° to 15°; (2/m); Pl/Ro; TI; Fe Si	St; + + t; + + + + + + + + + + + + + + + + + + +	м			50)=4.70 MPa 0)=14.00 MPa	A (24.16m) - A (24.95m)
- 26 	100	Borehole completed at 26.70m	+ + + + + + + + + + + +	c			CS=64.70 MPa 50)=2.90 MPa	(26.05m) D (26.30m)
- 28								
				Ť				
REMARKS: Kgwu = Wundaru Granodiorite LOGGED BY REVIEWED								
						T.Goosey	S.	Foley
		יד	VR GEOTECHNICAL BORE	HOLE LOG - CREATED WITH HOLEBASE SI		•		

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CORE PHOTO LOG

DEPARTMENT OF TRANSPORT AND MAIN ROADS Geotechnical Section 35 Butterfield Street, Herston Qld 4006 Phone 07 3066 3336



Project Name	Mackay – Ring Road (Stage	2)		
Project No.	FG6184	-1	Date	14/08/15
Borehole No.	BH 225		TMR H No.	H12234
Location	Pioneer River Bridge		Start Depth (m)	16.85
Detail	Pier 8 (LHS)		Finish Depth (m)	26.70
Chainage			Submitted By	M.Ensor
Remarks				
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P40	184	Anna (1997)	M.K.R	
22.8	23.0 ⁴			
BH2	15 Bernelle Contraction of the		BOX'	3
	and the second second	24.04		
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	SCAL	E 1:5		

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Project Name	Mackay – Ring R	oad (Stage	e 2)							
Project No.										
Borehole No.	BH 225			TMR H N	H12234					
Location	Pioneer River Brid	Start Dep	tart Depth (m) 16.8							
Detail										
Chainage				Submittee	l By	M.Ensor				
Remarks										
ST CALL					M.R.R.	0.5				
0 100	200	300	400	500	600	700				
SCALE 1:5										