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GEOTECHNICAL BOREHOLE LOG

FOR GEOTECHNICAL TERMS AND SYMBOLS REFER FORM F:GEOT 017/8-2014 FINAL 17/03/2016

BH220

Sheet 1 of 3

BOREHOLE No

REFERENCE No

H12229

PROJECT Mackay Ring Road									
LOCATION Pioneer River Bridge, Pie	er 6 (CL)					CC	DORDINATES 721307.0	E; 766021	2.1 N
PROJECT No FG6184	SURFACE RL 7.67m	PLUNGE 90° DATE STARTED 08/09/2015			GRID DATUM GDA 94 / MGA Z55		1GA Z55		
JOB No 242/10G/906	HEIGHT DATUM A.H.D.	BEAR	ING		DATE COMPLE	ETED 09/09/2015	DRILLER C	airns Drill	ing
(u) HLG BACK STATE SWINGER SWING BACK SWING BACK SWING SWING BACK SWING BACK SWING BACK SWING BACK SWING BACK SWING SWIN	MATERIAL DESCRIPTION	ГІТНОГОGY	USCS WEATHERING	INTACT STRENGTH 표분보호그로교	DEFECT SPACING ₩♀♀ぇ≷ゑ		DDITIONAL DATA AND TEST RESULTS		SAMPLES TESTS
a a b b b b c Silty SAT b b b b c c c c c <	ND (Alluvium) dry, very loose to loose. <u>ained sand.</u> <u>becomes</u> loose <u>comes</u> moist <u>race silt (Alluvium)</u> pown, dry, very loose. <u>ained sand.</u> <u>become loose.</u> SAND (Alluvium) own, wet, loose. medium grained sand, low <u>ty.</u> Alluvium) pown, moist, loose. medium grained sand. <u>becomes</u> medium dense. <u>race gravel (Alluvium)</u> pown, wet, loose. <u>race gravel (Alluvium)</u> pown, wet, loose. <u>coarse grained sand.</u> <u>to becomes</u> medium dense. <u>trace sand (Alluvium)</u> ey and brown, wet, medium		(SM) (SP) (SP) (SP) (SP) (SP)					3, 4, 4 N=8 3, 2, 3 N=5 2, 1, 2 N=3 4, 4, 3 N=7 1, 2, 3 N=5 2, 3, 3 N=5 2, 3, 3 N=6 3, 4, 4 N=8 3, 5, 6 N=11 4, 4, 5 N=9 4, 5, 7 N=12 13, 13, 12 N=25 10, 8, 7 N=15 6, 4, 6 N=10 11, 12, 8 N=20 11, 6, 9 N=15	3 F SPT - SPT - SPT -
	SAND trace silt and gravel			-	-			12, 12, 14 N=26	SPT
Pale gre	ey, wet, medium dense. medium grained sand. h: trace gravel		(SC)					15, 14, 13 N=27	SPT
REMARKS Kawa - Musica	Continued on next sheet					I	100055		
REMARKS: Kgwu = Wundarı	u Granodiorite					-	LOGGED BY		WED BY
	τινο σεο)TFCH	NICAL RC	REHOLE LOG - CREATED V	VITH HOLERASE SI		T.Goosey	S.F	oley

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							_		FINAL 1	7/03/2016
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	Q	ue	ensland		BC	REHOLE LOG		Sheet	2 of 3	
N.S.	Kr G	000	ernment	SYI		GEOTECHNICAL TERMS AND REFER FORM F:GEOT 017/8-2014		REFERENCE No	H1	12229
PROJECT	Mackay Ri	ing Rc	ad							
LOCATION	Pioneer R	iver B	ridge, Pier 6 (CL)					COORDINATES 721307.0	E; 766022	L2.1 N
PROJECT No	FG6184		SURFACE RL 7.67m	PLU	INGE S	DO° DATE STA	RTED 08/09/2015	GRID DATUM	GDA 94 / N	/IGA Z55
JOB No	242/10G/	906	HEIGHT DATUM A.H.D.	BEA	RING_	DATE COMPL	ETED 09/09/2015	DRILLER	Cairns Dril	ling
(m) R.L. (m)	AUGER AUGER WASHBORING CORE DRILLING CORE DRILLING CORE DRILLING	SAMPLE	MATERIAL DESCRIPTION	ГІТНОГОGY	USCS WEATHERING	INTACT DEFECT STRENGTH SPACING 표,북,파,파,국,쿄 입유,아,파,주,주,조		ADDITIONAL DATA AND TEST RESULTS		SAMPLES TESTS
		U	Clayey SAND trace silt and gravel (Alluvium) Pale grey, wet, medium dense.						8, 8, 13 N=21	SPT
- 11		V	Fine to medium grained sand.						12, 8, 10 N=18	SPT
		W			(SC)				10, 13, 16 N=29	SPT
- 12		X							8, 12, 14 N=26	SPT
-4.63	-	Y	CLAY trace sand (Alluvium) Grey, moist, very stiff.						10, 10, 12 N=22	SPT
- 13		-	Medium plasticity.						6, 10, 14 N=24	SPT
		AA				- - -			12, 13, 15 N=28	SPT
- - - 14 -		AB			(CI)				8, 14, 18 N=32	SPT
-		AC					14.50m-14.95m: No recovered	sample	9, 15, 23 N=38	SPT
- - 15 -		AD			-		15.00m-15.43m: No recovered		12, 19, 25 N=44	SPT SPT
-7.83			GRANODIORITE (Kgwu	Ŧ	-			1	4, 22, 30/130 hb 22, 30/90	SPT
- 16		AG) XW: Recovered as grey brown,	F.		÷			22, 30/90 hb	SPT
			moist, very dense, clayey sand trace gravel. Fine to medium grained sand.	* + + + + + + + + +					30/130 hb	
- 17 		AH		* + + + + + + + * +	xw				30/100 hb	
- 18 - 18 		AI		* * *					30/50 hb	
- 11.33 - 19 		AJ	MICRODIORITE (Kgwu) XW: Recovered as brown, moist, hard, sandy clay. Fine grained sand, low to medium plasticity.	+	xw				10, 30/120 hb	
REMAR	KS Kau	ı — \A	Continued on next sheet						00.01	
NEIVIAK	ura. KRMr	и — VV	/undaru Granodiorite					LOGGED BY		WED BY
			TMR	GEOTECI	HNICAL B	DREHOLE LOG - CREATED WITH HOLEBASE SI		T.Goosey	5.1	Foley

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									FINAL 1	7/03/2016
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		ensland	E	30	REHOLE	LOG		Shee	et 3 of 3	
13 S	🗶 Gov	ernment			GEOTECHNICAL TE REFER FORM F:GE			REFERENCE No	н	12229
PROJECT	Mackay Ring Ro									
LOCATION		Bridge, Pier 6 (CL)						coordinates 721307.	0 E: 76602	12.1 N
PROJECT No	FG6184	SURFACE RL 7.67	m PLUN	ge 90)°	DATE STAF	RTED 08/09/2015			
JOB No	242/10G/906	HEIGHT DATUM A.H.					ETED 09/09/2015		Cairns Dri	
(ju) HL R.L. (m)	AUGER CORE DRILLING CORE DRILLING CORE DRILLING CORE REC % REC %	MATERIAL DESCRIPTI		WEATHERING	INTACT STRENGTH ਜ਼,ਜ਼,ਜ਼,ਜ਼,ਜ਼,ਜ਼			ADDITIONAL DATA AND TEST RESULTS		SAMPLES TESTS
-	(80)	MICRODIORITE (Kgwu	X							-
- <u>-12.93</u>) SW: Blue grey, fine grainer massive, very high strengt Js: 5° to 10°; (6/m); PI-Un/ Fe St, some Cly Vr;	d, :h. /Sm; TI-FL; + s	sw sw		c	20.42m-20.45m: J: 5 Sm; FL; Cly; 20.60m: Contact: 65	;*; PI; CD;	s(50)=3.90 MPa s(50)=4.50 MPa s(50)=7.10 MPa	D (20.35m) A (20.45m)
		ls: 20° to 30°; (3/m); Pl/Sr St;	n; II; Fe			с	21.18m-21.20m: XW Cly, Sinf;	/ zone; Fe St,		
		GRANODIORITE (Kgwu) SW: Pale red grey mottled coarse grained, porphyriti			VH		21.90m: Contact: 45	5°; Pl; CD;	CS=198.00 MPa E=69 GPa v= 0.103 50)=11.00 MPa	 (21.63m) A (21.80m)
		high strength. Js: 5° to 15° (4/m); PI/Ro;	TI; Fe St;			м			s(50)=7.80 MPa s(50)=4.60 MPa	A (22.37m)-
23	100	J <u>s: 20° to 30°; (2/m); PI/Ro</u> MICRODIORITE (Kgwu)	o; TI; Fe St	sw					JCS=49.50 MPa E=32.9 GPa v= 0.031	D (22.50m) (22.57m) -
15.70		SW: Blue grey, fine graine massive, high to very high	strength.			C		ls	s(50)=9.30 MPa	D (23.25m)
		Js: 5° to 10°; (2/m); Pl-Un/ Js: 20° to 30°; (1/m); Pl/Sr		w	H-VH		23.56m-23.69m: BZ			
- <u>-16.28</u> 24		\$t; MICRODIORITE (Kgwu)	+++++++++++++++++++++++++++++++++++++++			M		l	s(50)=8.80 MPa	A (23.88m)-
		MW: Grey brown, fine to grained, massive, high stro J <u>s: 5° to 15°; PI/Ro; TI; Fe S</u> MICRODIORITE (Kgwu	ength. + +	sw	VH					
- 25) SW: Blue and brown grey, medium grained, massive	fine to			~			s(50)=7.50 MPa s(50)=5.10 MPa	D (25.10m) A (25.25m)
- 18.23 - 26	100	very high strength. Js: 20° to 30°; (2/m); Pl/Ro Js: 40° to 50°; (2/m); Pl/Ro	; TI; Fe St;			M		l	s(50)=3.20 MPa	A (25.63m)_ _
-		Borehole completed at 2								
-					-	-				
27 						-				
-					-					
-					-	-				-
- 28 -										-
-						-				
-						-				-
- 29 -					-	-				-
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					-					-
REMAR	KS: Kgwu = V	Vundaru Granodiorite						LOGGED BY		EWED BY
			TMR GEOTECHNI	ICAL BOR	REHOLE LOG - CREATED 1	WITH HOLEBASE SI		T.Goosey	S.	Foley

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	Date	08/09/15
, Borehole No.	BH 220	TMR H No.	H12229
Location	Pioneer River Bridge	Start Depth (m)	20.00
Detail	Pier 6, centreline	Finish Depth (m)	25.90
Chainage		Submitted By	M.Ensor
Remarks		- ,	
START	H220	B0X1	
	21.0-	1	
A CONTRACTOR		3 .0×	
C.			13.0M
	-FG6184	//.K.N.	N.
23.0m			
Charles and the state	BH220	Box2	
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