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TMR JAN 15.GLB Log A_ENGINEERING BOREHOLE LOG W LITHOLOGY FG6184 - BOREHOLES.GPJ <<DrawingFile>> Datgel CPT Tool glNt Add-In 04/03/2015 10:52

ENGINEERING BOREHOLE LOG

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

BOREHOLE No __BH167__

SHEET __1_ of __1_

REFERENCE No __12108__

PROJ					Geotechnical Investigation - Stage 1					 ORDINATES 721179.4 E; 7663316	
LOCA											
PROJECT No <u>FG6184 SURFACE R.L. 22.81m</u> PLUNGE JOB No HEIGHT DATUM <u>AHD</u> BEARING											
JOB 1	NO				TILIGITI DATOM _AID _ BLAKING			DATE COMPLETED	11/	14 DIVILLEN SAXON DINNING	
1 (m)	R.L. (m)	R IG ROLLER DRILLING	RQD ()%		MATERIAL	37	THERING	INTACT DEFECT STRENGTH SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA	
DEPTH (m)				SAMPLE	DESCRIPTION	LITHOLOGY			PHIC	AND	SAMPLES
0	22 81	AUGE CASIN COKE	CORE REC %	SAM		Ę	USC	#\$\Z\\#\\\\#\\\#\\\#\\\#\\#\\#\\#\\#\\#\\#	GRA	TEST RESULTS	SAMPLI
0.20	22.61				Gravelly SILT (TOPSOIL): Dark brown,	<u>111/</u>	(ML)				-
-					moist, firm. Low plasticity. Fine gravel. Silty GRAVEL (COLLUVIUM)		(GM				-
0.70	22.11				Dark brown, moist, dense to very dense.		(Olvi,]
1.00	21.81				Cobbles <100mm, very high strength. MICRODIORITE (Kgwu) XW: Recovered	+ 	XW				-
- 1	21.01		(0)	_A_	as dark brown, moist, hard Silty CLAY.		sw			30/75	SPT
-					MICRODIORITE (Kgwu) SW: Dark grey, fine grained, massive,	+	XW		H	Is(50) = 10.47MPa	A (1.28m)
-			100 (16)		very high strength.	- - -	700			Sandy CLAY.	-
			(10)		Frequent XW zones with extremely low strength.		sw			L (50) 40 70MD]
-2					Highly fractured throughout.	[+]	XW			Is(50) = 10.70MPa 2.12m-2.23m: XW zone recovered as	A (1.95m)
			(0)		Defects: - Js; 20°-40° (4/m); Pl/Ro, Tl, Fe St, Cly Vr;	 				Sandy CLAY.]
-					- Js; 70°-85° (3/m); Pl/Ro, Tl, Cn or Fe St;	 	SW		H	- 2.23m-2.68m: BZ;	-
			(0)			 	XW			2.68m-2.84m: XW zone recovered as Sandy Gravelly CLAY.]
-3			(-)			+	SW		Ш		-
			100			+	HW		Щ	- 3.10m-3.32m: HW BZ;]
3.50	19.31		(0)		MICRODIORITE (Kgwu)	+					D _(3.45m)
			100		MW: Pale brown to grey, fine grained, massive, strength varies from low to high	+	XW			Sandy CLAY.]
-4			100		strength.	+ -	MW		\blacksquare	- 3.82m-4.33m: BZ;	
-			(0)		Highly fractured throughout. Defects:	 			Ш		-
			(0)		- Js; 20°-40° (4/m); Pl/Ro, Tl, Fe St, Cly Vr;	 - -	SW				-
-			100		- Js; 70°-85° (3-4/m); Pl/Ro, Tl, Cn or Fe St;	[+]	MW			7	-
- 5 -5.15	17.66		(0)			+				-4.75m-5.12m: BZ;]
5.15	17.00				CORE LOSS	\bigvee			M	5.15m-5.50m: Core Loss]
5.50	17.31		(0)		MICRODIORITE (Kgwu)		-		\square	0.10.11 0.00.1111 00.10 2.000	-
			100		XW: Pale brown-grey, fine grained,	+]
-6			(0)		massive, extremely low strength. Recovered as Silty CLAY with sand.	[+]	xw				-
			50	X	The second as only only on the second	 	-		X	6.10m-6.35m: Core Loss]
- 6.55	16.26		(0) 100			+					-
			(0)		MICRODIORITE (Kgwu) MW: Brown-grey, fine grained, massive,	+ 	+		Щ	6.55m-6.70m: BZ;]
-7					generally medium to high strength.	 +	MW				
7.31	15.50				Highly fractured throughout.	+]
					MICRODIORITE (Kgwu) HW: Pale brown, fine grained, massive,	+ -	-		H	7.50 7.70 0	-
			83 (0)		mainly very low strength.	- <u> </u>	HW		A	7.50m-7.70m: Core Loss]
-8			50	\geq	Broken throughout.	+			\times	7.90m-8.00m: Core Loss	_
8.18	14.63		(28)		MICRODIORITE (Kgwu)	+			\vdash	8.08m-8.18m: XW zone.	
			100		SW: Grey, fine grained, massive, very	[+]				Is(50) = 6.99MPa Is(50) = 6.30MPa	A _(8.33m) D _(8.35m)
			(26)		high strength. Defects:	 	-	Н. Д.]
9					- Js; 0°-20° (3/m); Pl/Ro, Tl, Fe St; - Js; 30°-60° (4/m); Pl/Ro, Tl, Fe St;	- - -	<u> </u>]
‡					25, 55 55 (1.11), 1 11.10, 11, 1 6 50,	-	SW				
<u> </u>					9.3m: Becoming dark grey.	[+]]
<u> </u>						<u> </u> +-	-			Is(50) = 6.63MPa	D _(9.75m) -
10 100	12.81		100			<u>-</u> +					(9.70M) =
RE	REMARKS Borehole terminated at 10m LOGGED BY										
		<u>Kgwu</u>	- Wunda	aru G	<u> </u>					JA	
		# San	nple faile	d alo	ng existing defect surface.						

DEPARTMENT OF TRANSPORT & MAIN ROADS Geotechnical Branch 35 Butterfield Street, HERSTON Qld 4006 Phone 07 3066 3336



Project Name	Mackay – Ring Road												
Project No	FG6184	Date	07/11/14										
Borehole No	BH167	TMR H No	12108										
Location	QR Port Rail Overpass	Start Depth (m)	1.00										
Detail	Abutment B	Finish Depth (m)	10.00										
Chainage	11091m	Submitted By	JA										
Remarks													
O. P. S.	Box 1	CORE ZOSS	CORE LOSS										
		a biodo	a Bad										
0 100	200 300	400 500 600	700										
0 100	200 300	400 500 600	700										