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ENGINEERINGBOREHOLE LOG

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

PROJEC ⁻ LOCATIO					Geotechnical Investigation - Stage 1		NATES 720984.6 E; 7657968.2 N
		<u>G61</u>	84		SURFACE R.L. 12.81m PLUNGE	DATE STARTED <u>22/9/14</u> DATE COMPLETED <u>24/9/14</u>	GRID DATUM GDA 94 /MGA Zone 55
R.L (m))	SH BORING RE DRILLING	RQD ()%	SAMPLE	MATERIAL DESCRIPTION	INTACT DEFECT STRENGTH SPACING (mm) OSO OUT OUT OUT OUT OUT OUT OUT OUT OUT OU	ADDITIONAL DATA AND TEST RESULTS RESULTS
0 12	.81	2888 2888	CORE REC %	SAN			TEST RESULTS SAMPLE
- - -	2.21	ľ			Silty CLAY (TOPSOIL) Dark brown, dry, stiff. High plasticity.	<u>₹ ₹</u> <u>₹ ₹</u> (CH)	-
- - - - - 1 - -				А	Silty CLAY (ALLUVIUM) Orange-brown, moist, stiff. High plasticity.	(CH)	4,7,7 N=14 SPT -
	.01			В	Sandy Clayey SILT (ALLUVIUM) Pale brown, moist, stiff. High plasticity. Fine grained sand.	(MH)	3,3,5 N=8 SPT
- - - 2.80 10	0.01				Silty CLAY (ALLUVIUM)	-	
- 3 				С	Pale brown and grey, moist, stiff to very stiff. High plasticity. Occasional Sandy CLAY layers.		4,7,9 N=16
- - -4 - - - -				D			4,7,9 N=16
- - - - - 5 - -				Е	5.00-7.50m: Trace fine grained sand.		5,6,6 N=12 SPT
 				F			6,5,6 N=11 SPT -
- - - - - - - - -7				Г		(CH)	N=11 SF1 -
- ' - - - - -				G			5,6,11 N=17 SPT
				Н			5,6,7 N=13
- - - - - 9 -				J			4,5,7 N=12 SPT =
- - - - - 10							14-12
REMA	RKS_						LOGGED BY ME



ENGINEERINGBOREHOLE LOG

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

BOREHOLE No __BH119__

SHEET __2_ of __4__

REFERENCE No __12065___

	Geotechnical Investigation - Stage 1		 INATES <u>720984.6 E; 7657968.2 N</u>
PROJECT No_FG6184	SURFACE R.L. <u>12.81m</u> PLUNGE _ HEIGHT DATUM <u>AHD</u> BEARING _	DATE STARTED <u>22/9/14</u>	
R.L. (m) RQD () % (m) (m) RQD () % (m) RQD () % RQD (MATERIAL DESCRIPTION	USC C C C C C C C C C C C C C C C C C C	ADDITIONAL DATA AND TEST RESULTS RAWLES RAW
K	Silty CLAY (ALLUVIUM) (Cont'd) Trace fine grained sand.		5,5,7 N=12
-11			4,5,6 N=11
			6,6,8 N=14 SPT =
-13 -13 			6,7,12 N=19
			7,9,9 N=18
- 15 - 2 - 2 - 15 - 2	15.20m: Becoming Sandy Silty CLAY.	(CH)	5,6,10 N=16
			9,10,15 N=25
			8,11,15 N=26
			8,10,12 N=22
			6,8,10 N=18
REMARKS			LOGGED BY ME



ENGINEERING BOREHOLE LOG

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

	JECT ATION					Geotechnical Investigation - Stage 1				ATES 720984.6 E; 7657968.	 2 N
	JECT N		3 <u>184</u>			SURFACE R.L. <u>12.81m</u> PLUNGE HEIGHT DATUM <u>AHD</u> BEARING			DATE STARTED <u>22/9/14</u>	GRID DATUM <u>GDA 94 /MG</u>	<u> Zone 55</u>
OEPTH (m)	R.L. (m)	AUGER CASING WASH BORING	DRILLING) H	RQD)%	SAMPLE	MATERIAL DESCRIPTION	LOGY	HERING	INTACT DEFECT STRENGTH SPACING (mm) UNITED TO THE PROPERTY OF	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
- - -					V	Silty CLAY (RESIDUAL) Pale brown and grey, moist, very stiff. High plasticity.				8,9,12 N=21	SPT =
 - - - - - - - - - - - -					W			(CH)		8,9,11 N=20	SPT -
- 22 - 22 	-9.89				Х					6,6,9 N=15	SPT -
- - - 23 - - - -					Υ	Sandy Silty CLAY (RESIDUAL) Pale grey and brown, moist, very stiff. High plasticity. Fine grained sand.				6,7,9 N=16	SPT -
- - 24 - - - - - - -					Z			(CH)		9,9,12 N=21	SPT -
24.90 - 25 - - - - -	-12.09				AA	MICRODIORITE (Kgwu) HW: Pale brown, fine to medium grained, very low strength.	+ + + + + + + + + + + + + + + + + + + +			30/100	SPT -
- - - - 26 - - - - - - -					AB.		+	HW		30/70 hb	SPT
	-14.24			(28) 100 (17)	AC	MICRODIORITE (Kgwu) MW: Pale brown, medium to coarse grained, massive, mainly medium strength.	+ + + + + + + + + + + + + + + + + + + +	MW		30/50 hb Is(50) = 0.46MPa	SPT
- - - 28 - - - - - 28.50	-15.69			100			+ + + + + + + + + + + + + + + + + + + +	HW			- - - - - - -
- - - - - - - - - -			((44)		MICRODIORITE (Kgwu) SW: Pale brown, medium to coarse grained, massive, very high strength.	+ + + + + +	SW		Is(50) = 2.76MPa	D (20 50 2)
- - - 30 30	-17.19						+			UCS=29.2MPa	(29.50m)_
R	REMARKS				LOGGED BY ME						



ENGINEERINGBOREHOLE LOG

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

BOREHOLE No __BH119 __

SHEET __4__ of __4__

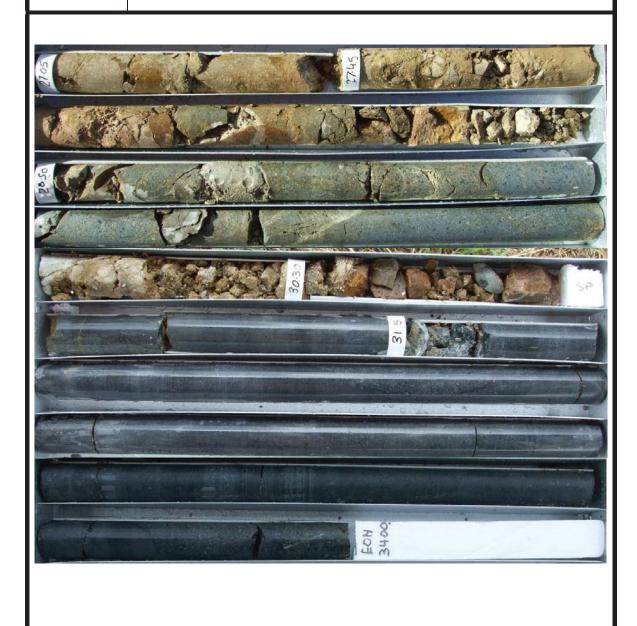
REFERENCE No __12065 ___

	d Geotechnical Investigation - Stage 1 Overpass Pier 2; CH: 5615m;		720984.6 E; 7657968.2 N		
	SURFACE R.L. <u>12.81m</u> PLUNGE HEIGHT DATUM <u>AHD</u> BEARING	DATE STARTED <u>22/9/14</u> GRID DA DATE COMPLETED <u>24/9/14</u> DRII	TUM <u>GDA 94 /MGA Zone 55</u> LLER <u>Saxon Drilling</u>		
R.L. (E) RQD (1)% (II) (II) (II) (II) (III) (III	MATERIAL DESCRIPTION	INTACT DEFECT STRENGTH SPACING (mm) OO	AND SAMPLES SA		
	MICRODIORITE (Kgwu) XW: Recovered as Sandy Clayey GRAVEL. MICRODIORITE (Kgwu) SW: Dark grey, fine grained, massive, very high strength. Defects: - Js; 5°-10° (2/m); PI/Sm, OP; Borehole terminated at 34m	STRENGTH SPACING (mm) STRENGTH SPACING (mm) TEST TEST TEST TEST TEST	RESULTS S(50) = 7.88MPa D (30.87m) A (30.93m) A (30.93m) B (50) = 5.56MPa A (32.27m) A (32.33m) B (50) = 6.18MPa D (33.95m) B (50) = 6.18		
			LOGGED BY		
REMARKS	REMARKS				

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	24/09/14
Borehole No	BH 119	TMR H No	12065
Location	Peak Downs Highway Overpass	Start Depth (m)	27.05
Detail	Pier 2	Finish Depth (m)	34.0
Chainage	5615	Submitted By	M.Ensor
Remarks			



0 100 200 300 400 500 600 700