Queensland Government
Department of Main Roads

ENGINEERING BOREHOLE LOG

FOR GEOTECHNICAL TERMS AND SYMBOLS REFER FORM F:GEOT 017/5-2009

BOREHOLE No BH014
SHEET 1 of 1
REFERENCE No H10622

PROJECT BRUCE HIGHWAY (COOROY - CURRA) SECTION A GEOTECHNICAL INVESTIGATION
LOCATION At grade near beginning of Embankment 9. COORDINATES 487413.7 E; 7080651.9 N
PROJECT No FG5825 SURFACE R.L. 126.28m PLUNGE DATE STARTED 25/8/09 GRID DATUM MGA94
JOB No 128/10A/901 HEIGHT DATUM AHD BEARING DATE COMPLETED 25/8/09 DRILLER R & D Drilling

DEPTH (m)	R.L. (m)	AUGER / CASING / WASH BORING / CORE DRILLING	RQD ( )% / CORE REC %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USC	WEATHERING	INTACT STRENGTH (EH VH H M L VL EL)	DEFECT SPACING (mm) (20 60 200 600 2000)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES / TESTS
0	126.28				**Sandy SILT (FILL)** Brown to mottled red, moist, stiff.								
				A	Low plasticity, occasional fine gravels, sand is typically coarse grained.							6,6,7 N=13	SPT
1					Traces of organics.		(MLS)						
				B								5,5,6 N=11	SPT
2	123.78												
				C	**Sandy SILT (RESIDUAL)** Grey, moist, very stiff.							4,8,9 N=17	SPT
3					Intermediate plasticity; traces of organics; sand particles are fine grained.		(MLS)						
	122.78												
				D	**SANDSTONE (HW):** Pale grey to mottled orange-red, fine to medium grained, grading to coarse grained with depth. Weakly cemented.							11,30,30/100 N>50	SPT
4			(7)		Defects generally dip at 30°, 60° and are open or closed.								
					Defect surfaces are typically clean or iron stained.								
5							HW						
			100									Core left down BH.	
			(41)		**Detailed defect descriptions are shown on Form GEOT553/8 attached.**								
6					6.15m: Becoming conglomeritic and more clayey.							Picked up core from 5.37-5.5m.	
					6.57 - 6.95m: Patches of iron cementing.								
	119.33		100										
7				E	**SILTSTONE (XW):** Generally exhibits the engineering properties of pale grey, moist, very stiff, sandy Silt.		XW					8,11,16 N=27	SPT
					Intermediate plasticity, organics throughout.								
8	118.28			F	**MUDSTONE (XW):** Generally exhibits the engineering properties of grey to mottled red, moist, hard silty Clay.		XW					14,21,30 N>50	SPT
	117.83				Borehole terminated at 8.45m								
9													
10													

QLD_DMR_LIB_01.GLB Log A_ENGINEERING BOREHOLE LOG W LITHOLOGY FG5825 BRUCE HWY COOROY-CURRA SECTION A BHS.GPJ DWG95012.GDW Datgel CPT Tool gINt Add-in 12/05/2010 10:29

REMARKS **Detailed defect descriptions are shown on Form GEOT533/8 attached.**

LOGGED BY JA

Project: **Bruce Highway Upgrade (Cooroy – Curra) Section A**

Borehole No: **BH 14**

Start Depth: 4.00m
Finish Depth: 6.95m
Project No: FG5825
H No: 10622

0 100 200 300 400 500 600mm

SCALE 1:5

F:GEOT043/1

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DEFECT DESCRIPTIONS OF ENGINEERING BORELOGS

[CHARACTERISATION OF DEFECTS ARE IN ACCORDANCE WITH GEOTECHNIICAL TERMS AND SYMBOLS – FORM : GEOT 017/5 – 2009

BOREHOLE NO.:	BH 14
SHEET:	1 of 1
REFERENCE NO.:	H10622

PROJECT: Bruce Highway (Cooroy – Curra) Section A Geotechnical Investigation

LOCATION: Cut 9

PROJECT NO.:	FG5825	**SURFACE R.L.:**	126.27	**DRILLER:**	R & D Drilling
JOB NO.:	120/10A/901	**DATUM:**	MGA94	**DATE DRILLED:**	25/08/09

DEPTH	DEFECT TYPE	DIP°	PLANARITY	ROUGHNESS	APERTURE	WALL ALTERATION	OTHER
4.21	J	35	Un	S	C		Cn
4.40	J	35	Un	S	C		Cn
4.52	J	65	Un	SR	C		Cn
4.82	J	35	Pl	S	C		Cn
4.88	J	25	Un	S	C		Cn
4.94	J	55	Un	S	C		Cn
5.07	J	45	Pl	S	C		Cn
5.20	J	20	Un	S	C		Cn
5.24	J	20	Un	S	C		Cn
5.54	J	25	Un	S	C		Cn

Abbreviations *(as per F: GEOT 017/5 – 2009)*

ROUGHNESS		WALL ALTERATIONS		TYPE		OTHER	
R	Rough	FeSt	Iron Stained	J, Js	Joint, Joints	Cln	Clay Infill
Sr	Slightly Rough	W	Weathered	B	Bedding	CLy	Clayey
S	Smooth	Smn	Secondary Mineralisation	BP	Bedding Parting	Co	Coal Seam
SL	Slickensided	Cn	Clean	FP	Foliation Parting	Carb	Carbonaceous
PO	Polished	MnSt	Manganese Stained	LP	Lamination Parting	Sl	Sand Infill
PLANARITY		**APERTURE**		CLV	Cleavage	QZ	Quartz
Pl	Planar	C	Closed	Fr	Fracture	CA	Calcite
St	Stepped	O	Open	SZ	Sheared Zone	Chl	Chlorite
Un	Undulating	F	Filled	CZ	Crushed Zone	In	Incipient
Cu	Curved	T	Tight	BZ	Broken Zone	Int	Intersecting
Ir	Irregular			HFZ	Highly Fractured Zone	Lam (s)	Lamination (s)
				WS	Weathered Seam	Di	Drilling Induced
				Vn	Vein	H	Horizontal
						V	Vertical

NOTE: This sheet should be read in conjunction with appropriate Engineering Borelog. Defect angles were measured with respect to horizontal plane.