ENGINEERING BOREHOLE LOG

Queensland Government

FOR GEOTECHNICAL TERMS AND SYMBOLS REFER FORM F:GEOT 017/6-2010

BOREHOLE No BH C03
SHEET 1 of 2
REFERENCE No H11102

PROJECT Bruce Highway Upgrade (Cooroy to Curra) Section C
LOCATION Cut 1 COORDINATES 473312.3 E; 7087535.8 N
PROJECT No FG5799 SURFACE R.L. 84.70m PLUNGE DATE STARTED 05/09/11 GRID DATUM MGA94
JOB No 232/10A/2 HEIGHT DATUM AHD BEARING DATE COMPLETED 05/09/11 DRILLER Cairns Drilling Contract

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	84.70													
	84.55				**TOPSOIL:** Mottled dark grey, very soft.									
					Gravelly Silty CLAY (Residual): Mottled red/brown, firm, slightly moist. Minor organics. Gravel portion is is less than 6.7mm.		(Cl)					Based on driller's logs only		
	83.70													
1				A	**METASILTSTONE (XW):** Generally exhibits the engineering properties of a brown/grey, fine grained, moist, very stiff to hard, intermediate to high plasticity, silty clay.		XW					6,13,11 N=24		SPT
2														
				B								30/100 N>50		SPT
3	81.70		(0)		**METASILTSTONE (SHEAR ZONE) (HW):** Grey to brown, fine grained, sheared throughout, very low to low strength with occasional high strength bands, highly fractured throughout.		HW				CLy BZ		
			76 (20)									J, 70°, Pl, T, S, Clnf		
4			100 (0)		Defects: -Joints at 70° (1-2/m) -Broken clayey zones up to 300mm -Quartz infilled fractures throughout							CLy BZ		
												Clay Seam		
												Clay Seam		
												Clay Seam		
5			100 (11)		Defect spacing is generally very close. Defect surfaces are planar or irregular, tight, clay infilled.							Clay Seam		
												BZ, Drilling Induced?		
												Is(50) = 0.07MPa; *		x
	78.84											Subvertical Clay Seam		
6			100 (11)		**METASILTSTONE (MW):** Grey, fine grained, subtly foliated, high strength, closed quartz infilled fractures throughout.							CLy BZ		
												Is(50) = 1.24MPa		x
												Is(50) = 1.68MPa		o
7					Defects: -Joint at 50° (2/m) -Joint at 70°(2/m) -Closed fractures throughout with quartz infilling							CLy BZ		
												Clay Seam, 50°		
8			100 (0)		Defect spacing is generally close to medium. Defect surfaces are planar or irregular, close or tight, clay infilled, iron stained or quartz infilled.		MW					Is(50) = 0.66MPa		x
			100 (0)									J, 80°, Pl, T, Clnf, FeSt		
9			100 (10)									J, Subvertical, T, SR, Clnf, FeSt		
												BZ		
10												J, 70°, Pl, T, Clnf, FeSt J, 10°, Pl, S, O, Clnf		

QLD_DMR_LIB_01A.GLB Log A ENGINEERING BOREHOLE LOG W LITHOLOGY FG5799 - BRUCE HWY UPGRADE SECTION C.GPJ DWG46352.GDW Datgel CPT Tool gINt Add-In 12/12/2011 16:28

REMARKS *Point load failed along existing defects

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10	74.70		100 (19)		**METASILTSTONE (MW):** (Cont'd)							<= J, 80°, Pl, T, Clnf, FeSt Is(50) = 1.15MPa Is(50) = 2.33MPa		x o
11														
12			100 (0)				MW					J, Subvertical, T, Clnf, FeSt CLy BZ		
13			100 (10)									BZ BZ		
14												Clay Seam J, 50°, Pl, Clnf, FeSt		
	70.02		100									Is(50) = 4.06MPa Is(50) = 2.66MPa		x o
15					Borehole terminated at 14.68m									
16														
17														
18														
19														
20														

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DEPARTMENT OF TRANSPORT & MAIN ROADS
Geotechnical Branch
35 Butterfield Street, HERSTON Qld 4006
Phone 07 3115 3035 Fax 07 3115 3011

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CORE PHOTO LOG - BH C3

Project Name:	BRUCE HIGHWAY UPGRADE - SECTION C		
Project No.:	FG5799	Date:	06/09/2011
Details:	Cut 1	Start Depth (m):	3.00
Reference No.:	H11102	Finish Depth (m):	14.68

SCALE 1:5

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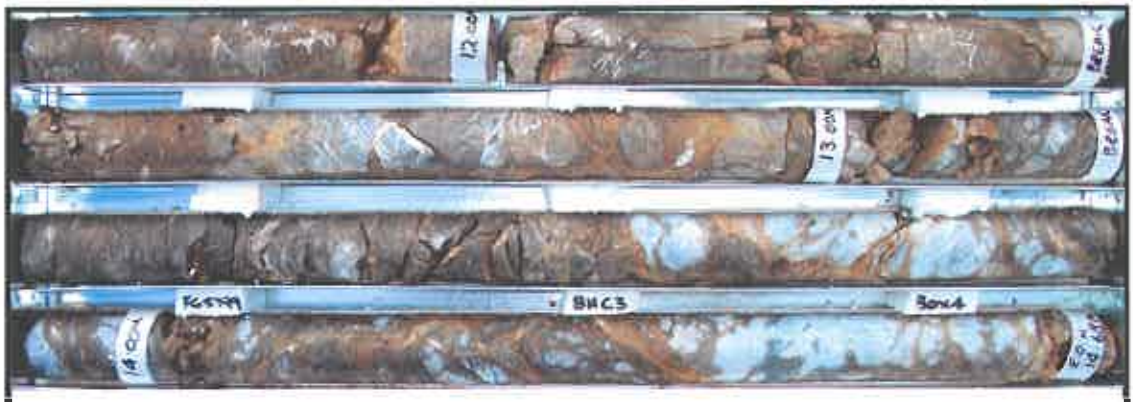

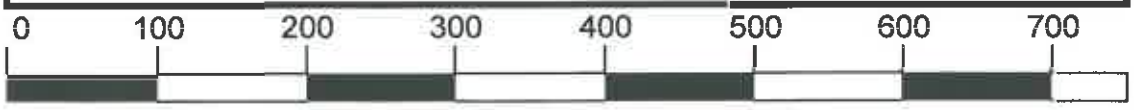

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