ENGINEERING BOREHOLE LOG

Queensland Government

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

BOREHOLE No BH C71
SHEET 1 of 2
REFERENCE No H11230

PROJECT Bruce Highway Upgrade (Cooroy to Curra) Section C
LOCATION Embankment 1/Traveston Creek Bridge Abut B
COORDINATES 473365.0 E; 7088048.5 N
PROJECT No FG5799 SURFACE R.L. 67.40m PLUNGE DATE STARTED 15/09/11 GRID DATUM MGA94
JOB No 232/10A/2 HEIGHT DATUM AHD BEARING DATE COMPLETED 15/09/11 DRILLER Drillsure Pty Ltd

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	67.40												
	67.30				**TOPSOIL:** Grey, moist, clayey silt.								
					Clayey SILT (Alluvium): Mottled grey/orange brown, soft, moist, gravelly clayey silt.		(ML)					Based on driller's logs only	
	66.70				**Silty CLAY (Alluvium):** Brown/grey, moist, firm and becomming very stiff with depth, intermediate to high plasticity.								
1				A	Minor organic content.							3,3,4 N=7	SPT
2				B	2.5m: Becoming stiff.							3,5,7 N=12	SPT
3							(CI-CH)						
4				C	4.0m: Becoming very stiff.							5,9,7 N=16	SPT
5													
	61.90			D								30/50 N>60	SPT
	61.80		(0) 100		**METASILTSTONE (HW):** Grey/brown, fine grained.		HW					XW Clay Seam	
6			(0) 100		**METASILTSTONE (MW):** Grey/brown, fine grained, subtly foliated, medium to high strength.							BZ	
			(0) 100									Clayey HW Zone	
			(0) 100		Defects: -Clayey HW zones up to 500mm. -Joint at 20° (>5/m) -Joint at 60° (1-2/m)							BZ	
7			(0) 100									Is(50) = 0.39MPa	x
			(0) 100		Defect spacing is generally very close to close. Defet surfaces are planar, slightly rough, tight or open, clay infilled and iron stained.								
			(19)				MW					Is(50) = 4.79MPa	x
8			100										
			(11)									CLy BZ	
9			84									HW CLy Zone	
			(0) 100										
			(61)									Is(50) = 0.86MPa	x
	57.60											HW CLy Zone	
10					**METASILTSTONE (SW):** (See over)		SW						

REMARKS

LOGGED BY JA/DC

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 16:30

Queensland Government

ENGINEERING BOREHOLE LOG

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

BOREHOLE No BH C71
SHEET 2 of 2
REFERENCE No H11230

PROJECT Bruce Highway Upgrade (Cooroy to Curra) Section C
LOCATION Embankment 1/Traveston Creek Bridge Abut B COORDINATES 473365.0 E; 7088048.5 N
PROJECT No FG5799 SURFACE R.L. 67.40m PLUNGE DATE STARTED 15/09/11 GRID DATUM MGA94
JOB No 232/10A/2 HEIGHT DATUM AHD BEARING DATE COMPLETED 15/09/11 DRILLER Drillsure Pty Ltd

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
10	57.40				**METASILTSTONE (SW):** Cont'd Grey, fine grained, subtly foliated, high strength. Defects: -Joint at **20°** (3/m) -Joint at **70°** (1-2/m) Defect spacing is mainly medium to wide. Defect surfaces are planar, open, smooth, iron stained. Foliation is disturbed throughout.		SW					J, 70°, Pl, S, T, FeSt J, 10°, Pl, T, R, FeSt J, 10°, O, SR, FeSt BZ J, 70°, Pl, T, FeSt J, 50°, Pl, T, S, FeSt J, 20°, Pl, S, O, FeSt J, 70°, Pl, S, O, FeSt J, 70°, Pl, S, O, Clnf		
11			100 (63)									Is(50) = 0.77MPa Is(50) = 1.05MPa	x o	
12	55.09		100									Is(50) = 1.67MPa Is(50) = 2.18MPa DD = 2.62t/m³; MC = 1.6%; UCS=11MPa	x o	UCS
					Borehole terminated at 12.31m									
13														
14														
15														
16														
17														
18														
19														
20														

REMARKS

LOGGED BY JA/DC

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 16:30

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

Queensland Government

CORE PHOTO LOG - BH C71

Project Name:	BRUCE HIGHWAY UPGRADE - SECTION C		
Project No.:	FG5799	Date:	15/09/2011
Details:	Structure	Start Depth (m):	5.60
Reference No.:	H11240	Finish Depth (m):	12.31

SCALE 1:5