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# ENGINEERING BOREHOLE LOG

FOR GEOTECHNICAL TERMS AND SYMBOLS REFER FORM F:GEOT 017/6-2010 BOREHOLE No \_\_BH C41\_\_\_

SHEET \_\_1\_\_ of \_\_2\_\_

REFERENCE NO \_\_H11130\_\_\_

PROJ		Bruce Highway Upgrade (Cooroy to Curra) Section C											
LOCA.		_Cut 10								COORDINATES 471499.6 E; 7094901.8 N			
						SURFACE R.L 76.40m PLUNGE				STARTED .			
JOB No 232/10A/2 HEIGHT DATUM _AHD _ BEARING DATE COMPLETED _25/07/11 DRILLER _Drillsure Pty Ltd_							<u>td</u>						
o DEPTH (m)	R.L. (m) 76.40	AUGER CASING WASH BORING		, , , ,		MATERIAL DESCRIPTION	LITHOLOGY	USC	INTACT STRENGTH	(mm)	GRAPHIC LOG	ADDITIONAL DATA  AND  TEST RESULTS	SAMPLES TESTS
	76.20				- 6	TOPSOIL: Grey.	<u>37,</u>	_	<u> </u>	<del></del>			-
	75.50					Sandy SILT (Residual soil) Brown.		(ML	) -	<u> </u>		Based on driller's logs only	
F1		$\Box$		A		SANDSTONE (HW): Brown, medium grained.	: : :		]	Ŧ		24,28,30/100	SPT -
-					`			HW	,  :	‡		N>50	
-2	74.40		(0)			SANDSTONE (HW) Brown/grey, medium			- -	- - - - -		── XW Clay Seam	
			100			to coarse grained, massive, low to medium	: : :						-
3	72.98		(38)	$\overline{}$		strength. Defects: -Joint at 40°-45°(2/m) -Joint at 60-65° (1/m) Defects are close to medium spaced. Defects are planar, tight or open, slightly rough, clay infilled, iron stained. Pebbles throughout up to 50mm.		HW				□- J, 40°, PI, O, Cinf □- J, 65°, PI, T, Cinf Is(50) = 0.38MPa Is(50) = 0.40MPa	X .
						SANDSTONE (MW):	: : :						
4			(73)			Brown/grey, medium to coarse grained, massive, high strength, indurated and/or slightly metamorphosed.  Defects: -Joint at 20°-25° (1/m)						Is(50) = 1.03MPa -J, 45°, Pl, T, Cinf -J, 45°, Pl, T, Cinf -J, 60°, T, Cinf	0 -
						-Joint at 40°-45° (2/m) -Joint at 50° (<1/m)						DD = 2.48t/m³; MC = 1.4%; UCS=12.5MPa	UCS -
5						-Joint at 60°-65° (~1/m)  Defect spacing is generally medium.						J, 25°, PI, O, Cinf	-
		}	(77)	_	$\dashv$	Defects are planar, tight or closed, slightly rough, clay infilled, iron stained.						□ J, 50°, PI, O, SR, CInf	-
6						Pebbles throughout up to 50mm.		MV	,			Is(50) = 2.02MPa Is(50) = 3.14MPa	x -
ÉF												□- J, 50°, PI, O, Cinf	]
7			100										]
<b>!</b>			(26)										] :
<u> </u>			100				: : :						-
8			(59)									J, 55°, Pl, O, Clnf J, 55°, Pl, O, Clnf J, 55°, Pl, O, Clnf J, 55°, Pl, O, Clnf	-
-			100									Is(50) = 1.56MPa Is(50) = 3.02MPa	0 _
	67.64	ŀ	(60)			L	: : :			<u>F.</u> _		HW Band	] =
9						SANDSTONE (SW): Grey/brown, medium to coarse grained, massive, very high strength, indurated and/or slightly metamorphosed.		sw	:			J, 25°, PI, O, Clnf, FeSt	-
						(See over)	: : :					☐— J, 70°, PI, T, FeSt	
10							: : :				<u></u>	J, 40°, I, O, Cinf, FeSt	
RE	EMARK	3_==										LOGGED BY JA/DC	



# ENGINEERING BOREHOLE LOG

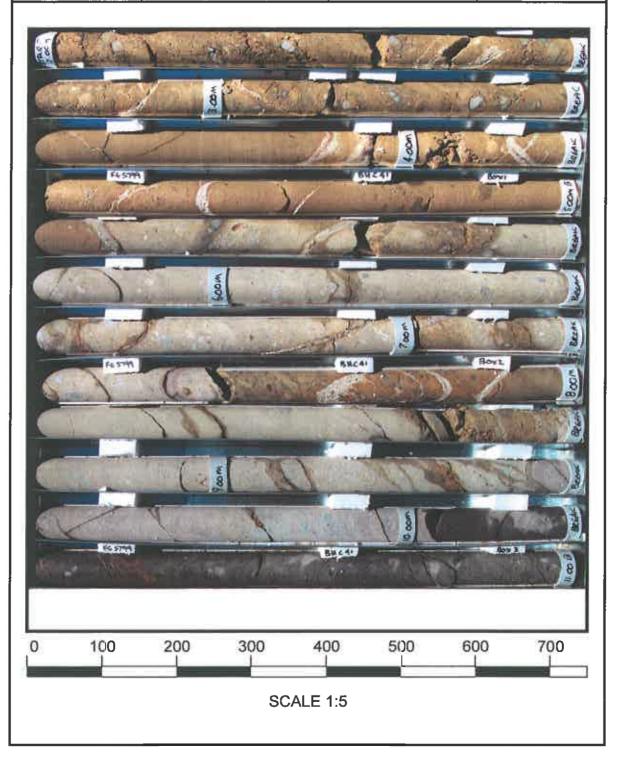
FOR GEOTECHNICAL TERMS AND SYMBOLS REFER FORM F:GEOT 017/6-2010

PROJECT LOCATION	Bruce Highway Upgrade (Coordy to Curra) Section C         COORDINATES         471499.6 E; 7094901.8 N												
								ED 25/07/11 GRID DATUM MGA94					
JOB No				HEIGHT DATUM _AHD BEARING							7/11 DRILLER Drillsure Pty L		
R.L.		QD )%	<u></u>	TEIGHT DATON DEANING			Τ	INTACT	DEFE	ECT		ADDITIONAL DATA	
DEPTH (m)	R IG BORING DRILLING	,		MATERIAL	λg			TRENGTH F±≥J√J	(mr	n)	GRAPHIC LOG	AND	S
DEPT	PSSN C	ORE	SAMPLE	DESCRIPTION	LITHOLOGY				200	88	APHI	TEST RESULTS	SAMPLES
10 66.40	R5≸S RE	EC %			5	S   <u>\$</u>		>=≥->ш <del> </del>	7.00	7	- GR		SA
—11		100 72)		SANDSTONE (SW): Cont'd Defects: -Joint at 20°-25° (<1/m) -Joint at 45° (~1/m) -Joint at 55°-60° (1/m) -Joint at 65°-70° (<1/m) -Joint at 85°-90° (<1/m) Defects are generally medium spaced. Defect surfaces are generally planar, open or tight, slightly rough, iron stained, clay infilled. Pebbles up to 25mm throughout.		sw						- J, 65°, PI, O, SR, Clnf, FeSt Is(50) = 4.04MPa Is(50) = 3.88MPa DD = 2.64t/m³; MC = 0.6%; UCS=45.9  - J, 70°, PI, O, SR, Clnf, FeSt - J, 40°, PI, O, Clnf, FeSt  Is(50) = 3.79MPa Is(50) = 3.53MPa	UCS -
-13 -13 -14		100 (63)										J, 85°-90°, I, C, FeSt  Is(50) = 3.73MPa Is(50) = 3.97MPa Is(50) = 3.97MPa J, 40°, Pl, O, SR, Clnf, FeSt J, 55°, Pl, O, SR, FeSt  Is(50) = 3.70MPa	x 0 -
60.55		100		Borehole terminated at 15.85m			t					13(05)	-
- 16 - 17 - 17 - 18 - 19 - 19 - 19 - 19 - 19 - 19 - 19													-
REMARK	s	-			= =	-		- T				LOGGED BY	
	6000000	-1-1-1-1	2025									JA/DC	



### **CORE PHOTO LOG - BH C41**

Project Name:	BRUCE HIGHWAY UPGRADE - SECTION C						
Project No.:	FG5799	Date:	08/09/2011				
Details:	Cut 10	Start Depth (m):	2.00				
Reference No.:	H11130	Finish Depth (m):	15.85				



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



### **CORE PHOTO LOG - BH C41**

Project Name:	BRUCE HIGHWAY UPG	RADE - SECTION C	
Project No.:	FG5799	Date:	08/09/2011
Details:	Cut 10	Start Depth (m):	2.00
Reference No.:	H11130	Finish Depth (m):	15.85

