Queensland Government
Department of Main Roads

ENGINEERING BOREHOLE

FOR GEOTECHNICAL TERMS AND SYMBOLS REFER FORM F:GEOT 017/3-2005

BOREHOLE No BH12
SHEET 1 of 2
REFERENCE No H9789

PROJECT Caboolture River Bridge Foundation Investigation
LOCATION Pier 1 - 15.1m right (along skew) of existing southbound bridge C/L
COORDINATES 497604.5 E; 7003492.6 N
PROJECT No FG5439 SURFACE R.L. 2.52 DATE STARTED 15/11/05 DATUM MGA94 Zone 56
JOB No 25/10A/60C DATUM AHD DATE COMPLETED 15/11/05 DRILLER Drillsure Pty Ltd

DEPTH (m)	R.L. (m)	AUGER / CASING / WASH BORING / CORE DRILLING	RQD ( )% CORE REC %	SAMPLE	MATERIAL DESCRIPTION	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	2.52				**Sandy CLAY (Alluvium):** Brown, moist, very soft to soft, medium plasticity, fine grained sand, some organic matter and small black charcoal fragments throughout, minor orange-brown mottling.	CH					1,1,1 N=2	SPT
					Soft to firm below 2.5m.						▽ 15/11/05 No SPT sample recovery. 2,2,2 N=4	SPT
	-0.59				Sandy CLAY (Alluvium): Dark grey-brown, moist, firm to stiff, high plasticity, fine grained sand, lots of black organic matter throughout, clayey sand interbeds below 3.3m.	CH					S_u = 50 kPa (PP)	U50
	-1.24				**Clayey Gravelly SAND (Alluvium):** Grey-brown, moist, loose, coarse grained, fine gravel, high plasticity grey clayey fines.	SP					1,2,4 N=6 Water loss at 4.4m	SPT
	-2.49				**Gravelly SAND (Alluvium):** Pale grey-brown, moist, loose to medium dense, coarse grained, fine gravel up to 5mm, trace of medium and coarse gravel up to 30mm.	SP					5,9,6 N=15	SPT
	-5.09										2,5,7 N=12	SPT
					SANDSTONE: HW: Orange-brown, ironstained throughout, medium grained, very low strength.	HW					30/110,-,- N>50	SPT
	-7.49										Pile Tip -7.5	

REMARKS

LOGGED BY A O'Rourke

ENGINEERING BOREHOLE CABOOLTURE R BRIDGE WIDENINGS.GPJ QLD MAIN ROADS.GDT 23/02/06

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BOREHOLE No BH12
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10	-7.49	1			**SANDSTONE:** As above. HW: Medium to coarse grained and light grey with only minor orange-brown ironstaining below 10.0m.		HW				30/90,-,- N>50		SPT
11													
	-9.14		(77)		MW: Pale grey, some orange-brown ironstained bands, medium to coarse grained bands interbedded with fine to medium grained bands, low-medium to medium strength. Defects: Numerous subhorizontal planar bedding partings. Rare 20-30° planar joints.						No sample recovery. 30/50,-,- N>50 11.70m: 30° joint, planar, rough, ironstained. Is(50)=0.28 MPa Is(50)=0.17 MPa Is(50)=0.44 MPa Is(50)=0.57 MPa		SPT o x x o
12													
13							MW				Is(50)=0.40 MPa 13.14-13.17m: Grey siltstone band. 13.39m: 2mm black vitreous coal. 13.70m: 20° joint, planar, smooth.		o
14	-11.92		100								Is(50)=0.25 MPa Is(50)=0.21 MPa		x o
					Borehole terminated at 14.43m								
15													
16													
17													
18													
19													
20													

ENGINEERING BOREHOLE CABOOLTURE R BRIDGE WIDENINGS.GPJ QLD MAIN ROADS.GDT 23/02/06

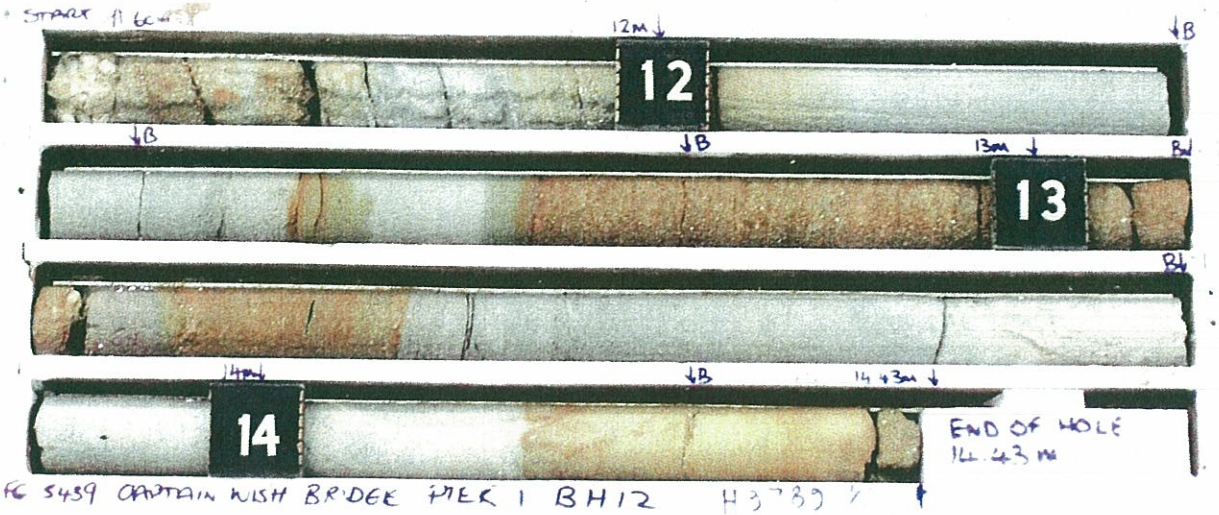
REMARKS

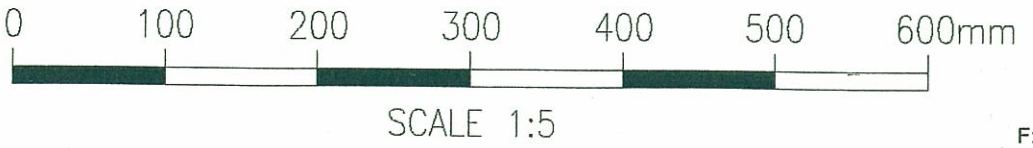
LOGGED BY
A O'Rourke

Project: **FOUNDATION INVESTIGATION FOR THE WIDENING OF THE CAPTAIN WHISH BRIDGES (NORTH AND SOUTHBOUND) – CABOOLTURE RIVER**

Borehole No: **BH12 Pier 1**

Start Depth: 11.60m
Finish Depth: 14.43m
Project No: FG5439
H No: 9789





SCALE 1:5

F:GEOT043/1

Queensland Government
Department of Main Roads

ROAD SYSTEM & ENGINEERING
Geotechnical Branch
Butterfield St
Herston QLD 4006

Point Load Strength Index - Test Report

Project: CABOOLTURE RIVER BRIDGE
Project No: FG 5439

Date Sampled 15/11/05
Feature: PIER 1
Sample Type: NMLC ROCK CORE

Date Tested 14/12/05

Report No. FG 5439/11/GS05/820AS4133.4.1

Sample Number	Sample Location	Depth (m)	Test Type D,A,B,I*	Is (MPa)	Is50 (MPa)	Strength Descriptor**	Lithology
GS05/820-A	BH12	11.80	A	0.30	0.28	L	Sandstone
GS05/820-B	BH12	11.89	D	0.17	0.17	L	Sandstone
GS05/820-C	BH12	12.10	D	0.44	0.44	M	Sandstone
GS05/820-D	BH12	12.14	A	0.64	0.57	M	Sandstone
GS05/820-E	BH12	13.08	A	0.42	0.40	M	Sandstone
GS05/820-F	BH12	13.91	D	0.25	0.25	L	Sandstone
GS05/820-G	BH12	14.03	A	0.23	0.21	L	Sandstone

Sample Remarks

* D - Diametral; A - Axial; B - Block; I - Irregular;

** EL - Extremely Low; VL - Very Low; L - Low; M - Medium; H - High; VH - Very High; EH - Extremely High (taken from AS1726 Table 8A)

Remarks / Variations to Test Procedures:

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Test Method: AS4133.4.1
Software Version 2.03 April 2005

Client Name: RS&E STRUCTURES DIVISION
Client Address: PO BOX 1412 SPRING HILL 4001

Signatory 19/12/05
(P.REYNOLDS)

NATA ACCREDITED FOR TECHNICAL COMPETENCE

Accreditation Number: 2302
Accredited for compliance with ISO/IEC 17025

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