Queensland Government
Department of Main Roads

ENGINEERING BOREHOLE

FOR GEOTECHNICAL TERMS AND SYMBOLS REFER FORM F:GEOT 017/2-2004

BOREHOLE No BH3
SHEET 1 of 2
REFERENCE No H9552

PROJECT GATEWAY UPGRADE PROJECT - GATEWAY BRIDGE FOUNDATION INVESTIGATION
LOCATION PIER 1 - DOWNSTREAM/RIGHTHAND SIDE
COORDINATES 10536.1 E; 167314.6 N
PROJECT No FG5388
SURFACE R.L. 8.60
DATE STARTED 21/4/05
DATUM SETP
JOB No 0405
DATUM AHD
DATE COMPLETED 20/4/05
DRILLER GEO DRILLING 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	8.60				**SILT (TOPSOIL)** - Grey									
	8.10				**SILTY SAND** - Pale Grey, fine grained.									
	7.80													
1			(100)		**SANDSTONE** **PALE GREY MEDIUM TO COARSE GRAINED SEDIMENTARY ROCK** MW - SW : Pale grey to prange brown, massive to slightly laminated, mainly medium to coarse grained, low to medium strength Minor orange iron staining and thin carbonaceous interlaminations parallel to bedding in parts. Defects : Bedding/lamiantion partings 10-20°. Occasional joints 70-90° Defect surfaces are mostly planar, smooth - slightly rough, clean or with a thin clayey film.		XW SW MW SW MW				Carbonaceous laminations parallel to bedding.	Is(50)=0.08 MPa Is(50)=0.06 MPa	o x
2													Is(50)=0.19 MPa Is(50)=0.20 MPa	x o
												JT, 10°, PL, SM, iron stained	Is(50)=0.16 MPa Is(50)=0.41 MPa	x o
3			(100)										Is(50)=0.19 MPa Is(50)=0.22 MPa	x o
													Is(50)=0.12 MPa Is(50)=0.32 MPa	x o
4			(100)									Partings on carbonaceous laminations, 0-10°, rough. Partings on Carb Lams 0-10°, Rough JT, 0-10°, R, iron stained	Is(50)=0.30 MPa Is(50)=0.48 MPa	o x
													Is(50)=0.09 MPa Is(50)=0.17 MPa	x o
5													Is(50)=0.22 MPa Is(50)=0.23 MPa	x o
			(100)										Is(50)=0.52 MPa Is(50)=0.27 MPa	x o
6												JT, 80-90°, T, thin clay infill, minor iron stains.		
7			(100)		Minor yellow iron staining. Becoming coarse grained with minor fine gravel and wispy carbonerous interlaminations.		SW						Is(50)=0.61 MPa Is(50)=0.28 MPa Is(50)=0.05 MPa Is(50)=0.06 MPa	x o x o
	0.71													
8					**INTERBEDDED MUDSTONE& SANDSTONE (MUDSTONE DOMINANT)** SW : Pale grey to dark grey, laminated, fine grained, very low to low strength. Minor carbonerous interlaminations in parts.								Is(50)=0.36 MPa Is(50)=0.28 MPa Is(50)=0.56 MPa	x o o
												JT, 70°, PL, T, 5mm vertical displacement.	Is(50)=0.18 MPa	x
9			(100)		Defects: Bedding/lamiantion partings 10-20°. Occasional joints @ 30° or 70° Defects are mostly parallel to bedding (some may be lamination partings). Defect surfaces are mostly planar, smooth -		SW						Is(50)=0.01 MPa Is(50)=0.52 MPa	x o
												JT, 30°, PL, SR, CN.	Is(50)=0.04 MPa	x
													Is(50)=0.28 MPa	o
												2 Joints, 70°, PL, SM, CN.		
	-1.02												Is(50)=0.02 MPa	x
10	-1.40												Is(50)=0.03 MPa Is(50)=0.24 MPa Is(50)=0.23 MPa	o x o

BOREHOLE WITH LITHOLOGY 24_5_2005 - BORELOGS FOR SOUTHERN APPROACH PIERS AND ABUT A.GPJ ENGINEERING BOREHOLE 09_04.GDT 31/8/05

REMARKS

LOGGED BY
J. LESTER & A. DISSANAYAKE (DIS

Queensland Government
Department of Main Roads

ENGINEERING BOREHOLE

FOR GEOTECHNICAL TERMS AND SYMBOLS REFER FORM F:GEOT 017/2-2004

BOREHOLE No BH3
SHEET 2 of 2
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PROJECT GATEWAY UPGRADE PROJECT - GATEWAY BRIDGE FOUNDATION INVESTIGATION
LOCATION PIER 1 - DOWNSTREAM/RIGHTHAND SIDE COORDINATES 10536.1 E; 167314.6 N
PROJECT No FG5388 SURFACE R.L. 8.60 DATE STARTED 21/4/05 DATUM SETP
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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	-1.40				slightly rough and clean.									
			(98)		**SANDSTONE** SW : Pale grey to minor yellow iron staining (see next page).							Is(50)=0.35 MPa	x	
					SANDSTONE SW : Fine to medium grained, laminated, low to .medium strength. Defects : Bedding/lamination partings10-20°, occasionally @ 30°.		SW					Is(50)=0.43 MPa	o	
11												Is(50)=0.52 MPa	x	
	-3.20											Is(50)=0.74 MPa	o	
			(26)		**INTERBEDDED COAL& MUDSTONE** HW : Brown and dark grey. Fractured and sheared in parts. Contains some clay or extremely weathered bands.		HW					Clay band, yellow-brown, stiff.		
12			(42)									Clay band as above.		
	-3.80		(100)		**INTERBEDDED MUDSTONE& SANDSTONE** SW : Dark grey and grey, fine grained.							Clay band as above.		
	-4.40											JT, 30°, PL, R, CN. JT, 30°, PL, SM, CN. JT, 30°, PL, SM, CN, crushed. Sheared seam 2mm thick.		
13					**SANDSTONE** SW : Grey and dark grey, thinly laminated, fine grained, low strength. Frequent thin mudstone interbeds and some thin coal interlaminations. Defects : Lamination/bedding partings 10-20°. Defects mostly lamination partings parallel to bedding.		SW					Is(50)=0.03 MPa	x	
14												Is(50)=0.02 MPa	x	
	-6.12											Is(50)=0.24 MPa	o	
					Borehole terminated at 14.72m							Is(50)=0.04 MPa	x	
15												Is(50)=0.13 MPa	o	
16														
17														
18														
19														
20														

BOREHOLE WITH LITHOLOGY 24_5_2005 - BORELOGS FOR SOUTHERN APPROACH PIERS AND ABUT A.GPJ ENGINEERING BOREHOLE 09_04.GDT 31/8/05

REMARKS

LOGGED BY
J. LESTER & A. DISSANAYAKE (DI

Project: **Gateway Upgrade Project - Gateway Bridge**

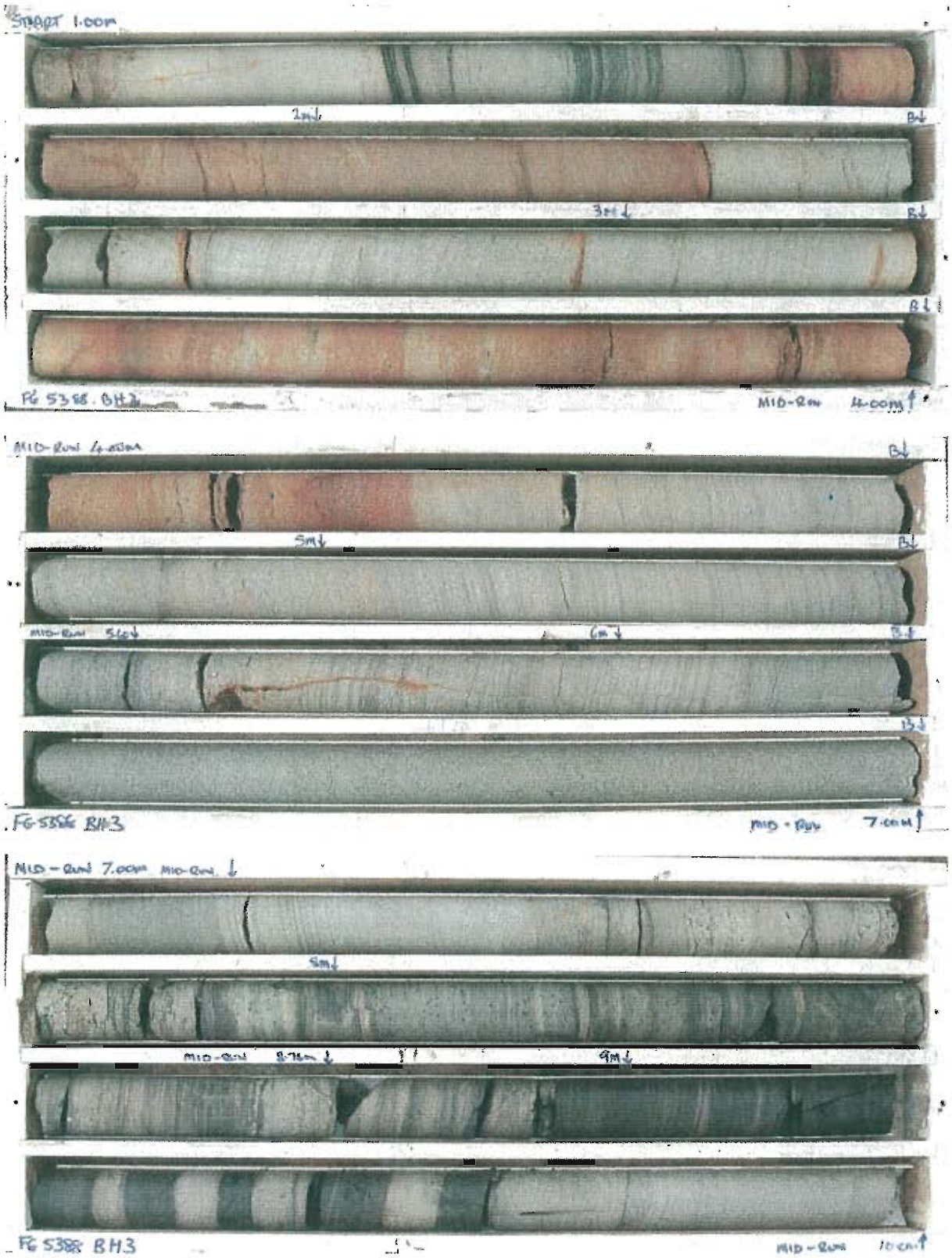
Borehole No: **BH 3**

Start Depth: **1.00m**

Finish Depth: 14.72m

Project No: FG 5388

H No: 9552



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