Queensland Government
Department of Main Roads

ENGINEERING BOREHOLE

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

BOREHOLE No BH7
SHEET 1 of 2
REFERENCE No H9556

PROJECT GATEWAY UPGRADE PROJECT - GATEWAY BRIDGE FOUNDATION INVESTIGATION
LOCATION PIER 4 - DOWNSTREAM/RIGHTHAND SIDE
COORDINATES 10436.5 E; 167502.9 N
PROJECT No FG5388
SURFACE R.L. 8.76
DATE STARTED 20/04/05
DATUM SETP
JOB No 0405
DATUM AHD
DATE COMPLETED 20/04/05
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	8.76				**PROBABLE SANDSTONE FINE TO MEDIUM GRAINED MASSIVE POORLY CEMENTED SEDIMENTARY ROCK** XW : Generally exhibits engineering properties of pink grey to mottled red, moist to mainly dry, medium dense silty sand. Fine to medium grained sand.		XW				Grey silt slope wash (200mm thick) on the surface above weathered bedrock	
1											4,7,7 N=14	SPT
2	6.56											
3	5.96		(100) 100		**INTERBEDDED SANDSTONE & MUDSTONE - FINE TO MEDIUM GRAINED INTERBEDDED / LAMINATED SEDIMENTARY ROCK (SANDSTONE DOMINANT)** HW : Dark grey to black, dry hard sandy silt rapidly grading into low strength rock.		HW				26,30/70 N>50	SPT
	5.36		(100)		SW: Grey to black banded, fine to medium grained, interbedded/laminated mainly low to medium strength.		SW				Is(50)=0.30 MPa Is(50)=0.10 MPa	o x
4	4.50				**SANDSTONE FINE TO MEDIUM GRAINED MASSIVE POORLY CEMENTED SEDIMENTARY ROCK** SW : Pale grey to white, fine to medium grained mainly laminated to slightly massive, low to mainly medium strength.		SW				Is(50)=0.51 MPa Is(50)=0.36 MPa Is(50)=0.26 MPa Is(50)=0.09 MPa	x o o x
			100								Is(50)=0.24 MPa Is(50)=0.02 MPa	o x
5	3.26		(100)		**INTERBEDDED SANDSTONE & MUDSTONE - FINE TO MEDIUM GRAINED INTERBEDDED / LAMINATED SEDIMENTARY ROCK (MUDSTONE DOMINANT)** SW : Dark grey to black banded, fine to medium grained, mainly medium strength.		SW				Is(50)=0.68 MPa Is(50)=0.47 MPa	x o
	2.93				**SANDSTONE (As above)** SW : Pale grey to grey, mainly laminated to slightly massive, fine to medium grained, low to mainly medium strength.		SW				Defects : - Drilling induced lamination partings <20° - Joints @ 70° to 90° (1-3/m) - Some irregular cracks in the area between 5.83 and 6.10m.	
6			100 (100)									
	2.31		100									
7	1.28		(100)		**SILTSTONE FINE GRAINED THINLY LAMINATED SEDIMENTARY ROCK** SW ; Pale grey, fine grained, thinly laminated mainly medium strength.		SW				Defects : Drilling induced lamination partings <10° (1-3/m)	
8			100 (100)		**INTERBEDDED SANDSTONE & MUDSTONE - FINE TO MEDIUM GRAINED INTERBEDDED / LAMINATED SEDIMENTARY ROCK (SANDSTONE DOMINANT)** SW : Dark grey to black banded, fine to medium grained, medium to high strength. Minor faulting features associated with near vertical (75°-90°) joints from 6.85m to 7.5m.		SW				Defects : Drilling induced lamination partings <10°(1-3/m) Joints @ 75° to 90° (1-2/m)	
											Is(50)=0.62 MPa Is(50)=0.31 MPa	x o
9			100 (100)		**SANDSTONE MEDIUM TO COARSE GRAINED MAINLY MASSIVE TO SLIGHTLY LAMINATED, WELL CEMENTED SEDIMENTARY ROCK** SW : Pale grey to white, medium to coarse grained, mainly massive to slightly laminated, low to mainly medium strength.		SW					
10	-1.24										Is(50)=0.52 MPa Is(50)=0.53 MPa	x o

BOREHOLE WITH LITHOLOGY 24_5_2005 - BORELOGS FOR SOUTHERN APPROACH PIERS AND ABUT A.GPJ ENGINEERING BOREHOLE 09_04.GDT 31/08/05

REMARKS

LOGGED BY
A. DISSANAYAKE (DISS)

Queensland Government
Department of Main Roads

ENGINEERING BOREHOLE

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

BOREHOLE No BH7
SHEET 2 of 2
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PROJECT No FG5388 SURFACE R.L. 8.76 DATE STARTED 20/04/05 DATUM SETP
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10	-1.24				**SANDSTONE**									
					SW : (As above).									
					Some carbonaceous and coal seams <20mm.		SW					Is(50)=0.30 MPa		x
					Core between 10.05m and 10.95m							Is(50)=0.62 MPa		o
	-2.19		100		appears to be erodable.							Is(50)=0.30 MPa		x
11					Borehole terminated at 10.95m							Is(50)=0.20 MPa		o
12														
13														
14														
15														
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 31/08/05

REMARKS

LOGGED BY
A. DISSANAYAKE (DISS)

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

Borehole No: **BH 7**

Start Depth: 2.80m
Finish Depth: 10.95m
Project No: FG 5388
H No: 9556