ENGINEERING BOREHOLE LOG

Queensland Government

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

BOREHOLE No **BH16**
SHEET 1 of 2
REFERENCE No **H11026**

PROJECT Moreton Bay Rail Link
LOCATION Cut 6, Ch.6260 COORDINATES 503011.6 E; 6986682.7 N
PROJECT No FG5921 SURFACE R.L. 30.10m PLUNGE DATE STARTED 6/5/11 GRID DATUM MGA94 Zone 56
JOB No 250/120/3 HEIGHT DATUM AHD BEARING DATE COMPLETED 6/5/11 DRILLER R&D Drilling Pty Ltd

DEPTH (m)	R.L. (m)	AUGER / CASING / 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	30.10													
	29.90				**Silty CLAY (Topsoil)** Dark grey, moist, soft.							Based on Driller's logs only		
1				A	**Sandy CLAY (Residual)** Cream white with orange red mottles, fine to medium grained, moist, stiff to very stiff. High plasticity. Iron stained nodules.		(CH)					2,3,14 N=17	SPT	
2	28.10			B	**Quartz Feldspathic SANDSTONE** **Medium to coarse grained, massive, poorly cemented sedimentary rock mainly comprising sand-sized particles**							18,10/0mm,HB N>50	SPT	
3			(93)		**HW:** Red with white, black and red mottles, medium grained, very low to low strength. Exhibits engineering properties of silty sand.							Heavily FeSt zone Is(50) = 0.33MPa Is(50) = 0.30MPa	x o	
4			100 (100)		Becoming red and grey white, fine to medium grained, massive, slightly laminated, very low to low strength. Contains frequent thin bands of coarse grained sand sizing <2mm.							Is(50) = 1.95MPa	x	
5					Defects: - Drilling-induced partings @ 5-10° (2-9/m) - Subhorizontal joint @ 20° (1-2/m)		HW							
6			100 (93)		Defect surfaces are mainly wide to very widely spaced, irregular, planar, slightly rough, open, clean and iron stained. Becoming yellow below 5m.							Is(50) = 0.27MPa Is(50) = 0.38MPa Is(50) = 0.19MPa Is(50) = 0.29MPa	x o x o	
7			100 (71)											
8	22.10											Is(50) = 1.02MPa Is(50) = 0.91MPa	x o	
			100 (86)		**MW:**Green white with black, red brown, grey and white mottles, fine to coarse grained, massive, low strength. Coarse grained lithic sandstone below 9.8m.							Is(50) = 0.27MPa Is(50) = 0.15MPa	x o	
9							MW					Coarse grained lithic SSt 450mm thick **PROPOSED RAIL LEVEL**		
10			100		**(See over)**									

REMARKS

LOGGED BY
BW / JSM

QLD_DMR_LIB_01A.GLB Log A_ENGINEERING BOREHOLE LOG W LITHOLOGY FG5921 MORETON BAY RAIL LINK.GPJ <<DrawingFile>> Datgel CPT Tool gINT Add-In 06/10/2011 14:45

ENGINEERING BOREHOLE LOG

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

BOREHOLE No **BH16**
SHEET 2 of 2
REFERENCE No **H11026**

PROJECT Moreton Bay Rail Link
LOCATION Cut 6, Ch.6260 COORDINATES 503011.6 E; 6986682.7 N
PROJECT No FG5921 SURFACE R.L. 30.10m PLUNGE DATE STARTED 6/5/11 GRID DATUM MGA94 Zone 56
JOB No 250/120/3 HEIGHT DATUM AHD BEARING DATE COMPLETED 6/5/11 DRILLER R&D Drilling Pty Ltd

DEPTH (m)	R.L. (m)	AUGER / CASING / 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	20.10		(1)		**Quartz Feldspathic SANDSTONE** **MW:** (Cont'd) Grey white, red and yellow scattered, fine grained, clay matrix. Iron staining throughout. Defects: - Drilling-induced partings @ 5-10° (3/m)							Is(50) = 0.16MPa Is(50) = 0.14MPa DD = 1.97t/m^3; MC = 7.8%; UCS=1MPa	x o UCS	
11			100 (87)		Defect surfaces are medium to widely spaced, irregular and steeped, rough, open and clean, iron stained.									
12												Is(50) = 0.18MPa	o	
13			100 (100)											
14							MW					Is(50) = 0.16MPa Is(50) = 0.10MPa DD = 2.10t/m^3; MC = 6.3%; UCS=3.21MPa	x o UCS	
			100 (100)									Is(50) = 0.52MPa Is(50) = 0.75MPa	x o	
15												Is(50) = 0.27MPa Is(50) = 0.23MPa	x o	
16			100 (100)											
17	12.65		100									Fine grained SSt Is(50) = 0.33MPa Is(50) = 0.40MPa	x x	
18					Borehole terminated at 17.45m									
19														
20														

REMARKS

LOGGED BY
BW / JSM

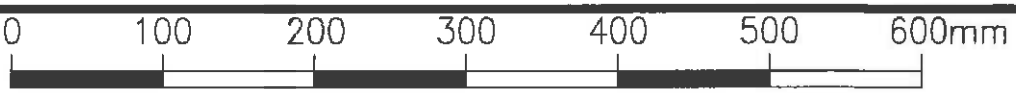
Project Name	**Moreton Bay Rail Link (MBRL)**		
Project No	FG5921	**Date**	06/05/11
Borehole No	BH 16	**TMR H No**	11026
Location	Cut	**Start Depth (m)**	2.50
Detail	Cut	**Finish Depth (m)**	17.45
Chainage	**Approx**	**Submitted By**	**BW**
Remarks			

SCALE 1:5

CORE PHOTO LOG **GEOT043/1**

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

Project Name	**Moreton Bay Rail Link (MBRL)**		
Project No	FG5921	**Date**	06/05/11
Borehole No	BH 16	**TMR H No**	11026
Location	Cut	**Start Depth (m)**	2.5
Detail	Cut	**Finish Depth (m)**	17.45
Chainage	**Approx**	**Submitted By**	**BW**
Remarks			



SCALE 1:5

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

GEOT043/1