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ENGINEERING BOREHOLE LOG

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

BOREHOLE No BH10
SHEET 1 of 2
REFERENCE No H11020

PROJECT Moreton Bay Rail Link
LOCATION Bridge over Bruce Hwy, Abutment A, Bridge 6, Ch.4732 COORDINATES 501815.5 E; 6985822.6 N
PROJECT No FG5921 SURFACE R.L. 10.30m PLUNGE DATE STARTED 10/5/11 GRID DATUM MGA94 Zone 56
JOB No 250/120/3 HEIGHT DATUM AHD BEARING DATE COMPLETED 10/5/11 DRILLER R&D Drilling Pty Ltd

DEPTH (m)	R.L. (m)	AUGER CASING WASH BORING CORE DRILLING	RQD (%)	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USC WEATHERING	INTACT STRENGTH	DEFECT SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
0	10.30		CORE REC %						20 60 200 600 2000			
0	10.30				Silty CLAY (Topsoil) Red, moist, soft.						Based on Driller's logs only	
1	9.30				Clayey Gravelly SAND (Residual) Red, moist, medium to coarse grained, loose. Gravel fraction is subangular, sizing <20mm.		(SM/SP)				1,3,4 N=7	SPT
2	8.30				Conglomeratic SANDSTONE Medium to coarse grained, massive, poorly cemented sedimentary rock mainly comprising of sand-sized particles XW: Generally exhibits engineering properties of yellow to brown red, moist, very dense, clayey gravel. Subangular quartzite fragments sizing <60mm.		XW				13,10/HB N>50	SPT
3				C							14,30/75mm N>50	SPT
4	6.30				HW: White grey to red iron staining, coarse grained, massive, very low strength. Contains high strength cobble-sized quartz fragments <70mm, up to 5m depth. Becoming more clayey with high iron enrichment below 5m. Defects: - Joints @ 40° (2/m) - Joint @ 70° (1-2/m) Defect surfaces are planar, slightly rough, closed, clay infilled or iron stained.		HW				J @ 40° J @ 70°	
5			100									
6			100									
7			100									
8	2.45				CLAYSTONE Fine grained sedimentary rock mainly comprising of clay-sized particles MW: Red brown to black, fine grained, laminated, very low to low strength. Contains mudstone interbeds in parts. Defects: - Bedding / lamination partings @ 5-10° (2-3/m) - Joint @ 30° (1/m) - Joint @ 90° (1/m)		MW				J @ 90° J @ 5-10° J @ 30° with CLy	Is(50) = 0.20MPa Is(50) = 0.45MPa
9			100									
10	0.30										FeSt CLy band	

REMARKS

LOGGED BY
BW



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REFERENCE No H11020

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LOCATION Bridge over Bruce Hwy, Abutment A, Bridge 6, Ch.4732 COORDINATES 501815.5 E; 6985822.6 N
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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					DEFECT SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES	TESTS
										EH	VH	IN	JL	EL					
10	0.30					MUDSTONE Fine grained sedimentary rock mainly comprised of mud-sized particles MW: Black, laminated, medium to mainly high strength.											J @ 20°		
11			100			Defects: - Bedding / lamination partings @ 5-10° - Joint @ 20° - Joint @ 80°											Is(50) = 0.95MPa Is(50) = 0.93MPa	o x	
12			100			Defect surfaces are mainly medium spaced, planar, smooth, closed, clay infilled or minor iron stained.	MW										J @ 80° Is(50) = 1.63MPa Is(50) = 1.26MPa	o x	
13			100														Is(50) = 3.07MPa Is(50) = 4.05MPa	o x	
14			100														Is(50) = 2.32MPa Is(50) = 1.44MPa	o x	
15	-4.30		100			SANDSTONE SW: Grey, medium to coarse grained, massive with slight laminations, high strength.											Is(50) = 1.29MPa Is(50) = 0.73MPa	o x	
16			100			Contains intermittent bands of mudstone and claystone in parts.											J @ 90° Is(50) = 1.59MPa Is(50) = 2.10MPa	o x	
17			100			Defects: - Bedding / lamination partings @ 5-10° - Joint @ 20° - Joint @ 85°	SW										CLystone band Is(50) = 1.25MPa Is(50) = 1.80MPa	o x	
18	-7.91		100			Defect surfaces are irregular, slightly rough, close and clay infill.											J @ 20° Is(50) = 1.86MPa Is(50) = 2.56MPa	o x	
19																	Is(50) = 1.91MPa Is(50) = 1.55MPa	o x	
20						Borehole terminated at 18.21m													

REMARKS _____

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Project Name	Moreton Bay Rail Link (MBRL)		
Project No	FG5921	Date	10/05/11
Borehole No	BH 10	TMR H No	11020
Location	Bridge over Bruce Hwy	Start Depth (m)	4.00
Detail	Structure	Finish Depth (m)	18.21
Chainage	473029 Approx	Submitted By	BW
Remarks			



0 100 200 300 400 500 600mm

SCALE 1:5

Project Name	Moreton Bay Rail Link (MBRL)		
Project No	FG5921	Date	10/05/11
Borehole No	BH 10	TMR H No	11020
Location		Start Depth (m)	4.00
Detail	Structure	Finish Depth (m)	18.21
Chainage	1030 Approx	Submitted By	BW
Remarks			

