COPYRIGHT NOTICE

This geotechnical log and its associated data (the Document) is licensed by the Queensland Department of Transport and Main Roads under the <u>Creative Commons Attribution 4.0 Licence</u> (CC BY 4.0). When reusing the Document, in whole or in part, please attribute the Department as follows: "(c) State of Queensland (Department of Transport and Main Roads) 2020, licensed under the CC BY 4.0 Licence". This licence does not apply to the Queensland Government logo or trademarks.

LIMITATION OF LIABILITY

The CC BY 4.0 Licence contains a comprehensive Disclaimer of Warranties and Limitation of Liability. In addition, please note that this Document was prepared for Departmental use only. Reuse of the Document by anyone for any other purpose could result in error and/or loss. You should obtain professional advice before making decisions based on the contents of the Document.

When reproducing any part of this Document, you must also reproduce this limitation of liability notice in addition to the italicised attribution statement above.

Retrieved from the Queensland Geotechnical Database http://qgd.org.au/



ENGINEERINGBOREHOLE LOG

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

PROJE	ECT	Moreton Bay Rail Link											
LOCA											OORDINATES _	500580.0 E; 6985405.	.9 <u>N</u>
PROJE	ECT No	o_FG5921			SURFACE R.L. <u>11</u> .40m PLUNGE		DATE STARTED _11/7/11 GR					TUM MGA94 Zone	56
JOB N	lo	<u>250</u> /	120/3		HEIGHT DATUM <u>AHD</u> BEARING		DATE COMPLETED _11/7/11					LLER R&D Drilling I	Pty Ltd _
o DEPTH (m)	R.L. (m)	AUGEK CASING WASH BORING	RQD ()% CORE REC%	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USC	INTACT STRENGTH ボデェミュラゴ	DEFECT SPACING (mm)	GRAPHIC LOG		ONAL DATA AND RESULTS	SAMPLES
-	11.40				Gravelly CLAY (Non-engineered Fill) Mottled grey red yellow, moist, very stiff.						Based on Driller'	s logs only	-
					Gravel fraction is subangular, high strength sizing <60mm.								- - - -
-1 -	9.90			Α	Quartzitic rock fragments in parts.							5,10,16 N=26	SPT :
-2					Silty CLAY (Residual) Mottled grey red, moist, stiff. Medium plasticity.								-
14:46				В	Contains iron concretionary nodules throughout.		(CI)					3,5,7 N=12	SPT =
-In 06/10/2011				С								5,7,10	SPT
INt Add	7.90			Ü								N=17	3P1
AAY RAIL LINK GFJ < CDrawingFile> Datge CPT Tool glikt Add-in 06/10/2011 1446				D	Interbedded SILTSTONE and CLAYSTONE Fine grained sedimentary rock mainly comprising of silt and clay sized particles XW: Generally exhibits engineering properties of grey yellow, moist, laminated,							6,8,10 N=18	SPT
C < CrawingF				L	very stiff silty clay. Medium to high plasticity.		xw						-
RAIL LINK.GP				Е	Relict rock texture visible throughout; minor iron concretionary nodules in parts.							4,8,10 N=18	SPT
	5.40												-
OLD DMR_LIB_01A.GLB_Log_A_ENGINERRING BOREHOLE.LOG W LITHOLOGY F05921 MORETON				F	SANDSTONE Fine to medium grained, massive, poorly cemented sedimentary rock mainly comprising of sand sized particles XW: Generally exhibits engineering properties of grey, moist, fine grained, medium dense silty sand.							3,5,8 N=13	SPT
ELOGWUTF				G	Minor clay fraction throughout.		xw					2,7,10 N=17	SPT
EERING BOREHOL				Н								5,7,12 N=19	SPT
og A_ENGINI	2.90				Interbedded SILTSTONE and MUDSTONE YM. Consolly exhibits engineering								-
Z LIB 01A GLB L				J	XW: Generally exhibits engineering properties of dark grey to black with yellow bands, moist, fine grained, laminated, very stiff to mainly hard silty clay.		xw					5,14,15 N=29	SPT
ID DMI					(See over)								
	MARK	3	I		(555 6161)	1		<u> </u>	L::::::	1		LOGGED BY	
114											_	BW	



ENGINEERINGBOREHOLE LOG

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

BOREHOLE No _____BH52___

SHEET __2__ of __3__

REFERENCE No ____H11091___

PROJECT	Moreton Bay Rail Link COORDINATES 500580.0 E; 6985405.9 N								
	Bridge 4, Ch.3	ORDINATES 500580.0 E; 6985405.							
	FG5921						11 GRID DATUM <u>MGA94 Zone</u> 11 DRILLER <u>R&D Drilling</u> F		
JOB No	OB No <u>250/120/3</u> HEIGHT DATUM <u>AHD</u> BEARING DATE COMPLETED <u>11/7/11</u>								Pty Ltd _
(E) HLL (M) 10 1.40	AND ROD ROD ROD ROD ROD ROD ROD ROD ROD RO	MATERIAL DESCRIPTION	LITHOLOGY	USC	INTACT STRENGTH ボチェミュラゴ	DEFECT SPACING (mm) 0000 0007 9 7	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
-		Interbedded SILTSTONE and MUDSTONE XW: (Cont'd) Relict rock fabric structure visible throughout.						8,17,30 N=47	SPT
- 11 - - - - - - -		Contains fine grained sandstone interbeds below 11m depth. Displays cracking and dessicated structure on drying.		XW				12,20,25 N=45	SPT
-0.60		HW: As above		HW				30/65mm_ N>50	SPT
-1.10 -1.10 -1.10	(70)	MW: Dark grey to black, fine grained, laminated, low to mainly medium strength. Contains very low strength bands below	1					Is(50) = 0.29MPa Is(50) = 0.49MPa	x 0
50	100 (65)	14.7m depth, approx 200mm thick. Displays cracking on drying. Claystone interbeds below 14.9m, approx.						Is(50) = 0.56MPa Is(50) = 0.23MPa DD = 2.22t/m ³ ; WD = 2.34t/m ³ ; MC = 5%; UCS - 11.4MPa	x o
-1.10	100 (50)	200mm thick. Defects: - Drilling-induced lamination partings @ 5° (3/m) - Joint @ 45° (<1/m) - Joint @ 80-90° (<1/m)		MW				— J, 45°, CA infill — Very low strength band	-
-16 -4.80		Defect surfaces are mainly medium spaced, planar, smooth, open, clean and clay or minor secondary mineral and iron stained infill.						Is(50) = 0.40MPa Is(50) = 0.33MPa	X 0
- 17	100 (45)	MUDSTONE Fine grained sedimentary rock mainly comprising of clay and mud sized particles SW: Dark grey to black, massive to laminated, medium strength.		sw				FZ —CLy seams 5mm thick (50) = 0.38MPa	x 0
-6.30		Contains interbeds of siltstone below 17m approx. 150mm thick. Defects: - Drilling-induced lamination partings and						_ Siltstone I/Bs	-
- 18 18 	(33)	irregular fracture @ 5° (3/m) - Joint @ 15-20° (<1/m) - Joints @ 45° (1-2/m) - Joint @ 80-90° (1/m) Defect surfaces are close to medium		SW				-FZ	-
	100 (68)	spaced, planar, smooth, open, clean or clay infilled. SANDSTONE SW: Grey to dark grey, fine to medium grained, massive and laminated, medium to high strength. (See over)		OVV				— CLy seams, approx. 20mm thick Is(50) = 1.24MPa Is(50) = 2.09MPa Is(50) = 1.18MPa Is(50) = 3.08MPa — Coal seam	x 0 - x 0
	S							LOGGED BY BW	



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 14:46

ENGINEERINGBOREHOLE LOG

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

BOREHOLE No ______BH52____

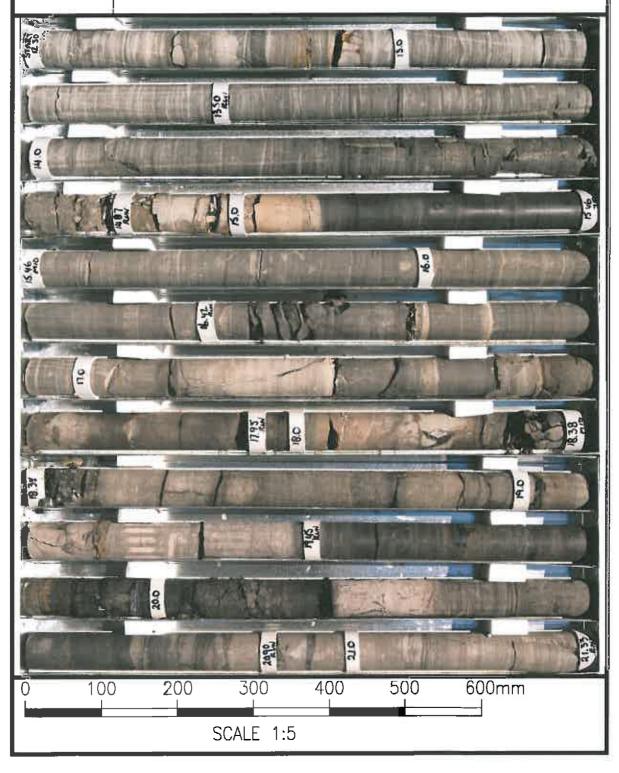
SHEET ____3__ of ___3___

REFERENCE No _____H11091____

	JECT				I Link						
					OUDEACE DI 44 40m DILINGE	OORDINATES 500580.0 E; 6985405.					
					SURFACE R.L. <u>11.40m</u> PLUNGE _ HEIGHT DATUM <u>AHD</u> BEARING _						
JOB	NO	_250/_	120/3		HEIGHT DATUM _AHD BEARING			DATE COMPLETED _	11///	11 DRILLER <u>R&D Drilling F</u>	Piy Lia _
DEPTH (m)	R.L. (m)	ORING RILLING	RQD ()%		MATERIAL	ĞΥ	CAIC	INTACT DEFECT STRENGTH SPACING (mm)	S LOG	ADDITIONAL DATA	S
20	-8.60	AUGER CASING WASH BORING CORE DRILLING	CORE REC %	SAMPLE	DESCRIPTION	LITHOLOGY	USC	STRENGTH SPACING (mm) UNITED STRENGTH (mm) ON O	GRAPHIC LOG	TEST RESULTS	SAMPLES
					SANDSTONE (Cont'd) SW: Contains black mudstone interbeds below 19.4m, approx. 400mm thick.					Is(50) = 5.80MPa Is(50) = 4.48MPa Is(50) = 0.63MPa	x - 0 - x -
- - - - 21			100 (50)		Defects: - Drilling-induced bedding lamination partings @ 5-10° (3/m)		SW	/ : : : : : : : : : : : : : : : : : : :		Is(50) = 1.93MPa Carbonaceous (coal seam) bands 19.8m, approx. 400mm thick.	0 -
	-9.95		100		- Joint @ 45° (1/m) - Joint @ 70° (<1/m)						
_ - - - - - 22					Defect surfaces are mainly medium spaced, irregular, slightly rough, open, clean, minor clay or carbonaceous infill.						- - - -
 - - -					Borehole terminated at 21.35m						- - - -
- - - -23											-
											-
- - - - 24											- - - -
-											- - - -
- - - - 25											- - - -
_											-
_ 26											-
- - -											- - - - -
- - - 27 -											-
- - - -											- - - -
- - 28 -											- - - - - -
- - -								<u> </u>			- - - - -
- 29 -											- - - - -
								<u> </u>			- - - - -
30								<u> </u>			
R	EMARK	s								LOGGED BY BW	



Moreton Bay Rail Link (MBRL)		
FG5921	Date	11/07/11
BH 52	TMR H No	
Bunbury Street Rail Bridge	Start Depth (m)	12.50
Structure	Finish Depth (m)	21.35
3430 Approx	Submitted By	BW
	FG5921 BH 52 Bunbury Street Rail Bridge Structure	FG5921 Date BH 52 TMR H No Bunbury Street Rail Bridge Start Depth (m) Structure Finish Depth (m)



Geotechnical Branch