

COPYRIGHT NOTICE

This geotechnical log and its associated data (the Document) is licensed by McConnell Dowell under the [Creative Commons Attribution 4.0 Licence](#) (CC BY 4.0). When reusing the Document, in whole or in part, please attribute as follows: "(c) McConnell Dowell 2026, licensed under the CC BY 4.0 Licence, prepared by Golder Associates". This licence does not apply to logos 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 McConnell Dowell 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/>



REPORT OF BOREHOLE: BH409

SHEET: 1 OF 3

DRILL RIG: Fox B40

CONTRACTOR: Schneider Drilling Pty Ltd

LOGGED: FHH DATE: 1/9/11

CHECKED: NK DATE: 26/9/11

CLIENT: McConnell Dowell Constructors (Aust) P/L COORDS: 85438.8 m E 60220.1 m N GCCC

PROJECT: Gold Coast Rapid Transit SURFACE RL: -3.54 m DATUM: AHD

LOCATION: Zone 4 INCLINATION: -90°

JOB NO: 117632047 HOLE DEPTH: 12.85 m

Drilling				Sampling		Field Material Description									
METHOD	PENETRATION RESISTANCE	WATER	DEPTH (metres)	DEPTH RL	SAMPLE OR FIELD TEST	RECOVERED	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL DESCRIPTION	MOISTURE CONDITION	CONSISTENCY DENSITY	STRUCTURE AND ADDITIONAL OBSERVATIONS			
RT	L		0	-3.54	SPT 2.10-2.55 m 3, 1, 2 N=3 SPT 3.60-4.05 m 5, 9, 16 N=25 SPT 5.10-5.55 m 9, 18, 21 N=39 PP =500 kPa			ML	Sandy SILT medium plasticity, dark grey, organic odour	W	L	Casing pushed into material to secure before sample or test taken			
			1										VS		
			2	2.00 -5.54					SM				SAND fine to medium grained, angular, pale brown		
			3												
			4	3.80 -7.34					SC				SAND fine grained, angular, brown	MD - D	
			5	4.30 -7.84					ML				Clayey SILT medium plasticity, brown to pale grey, trace fine grained sand	St	
			6	5.00 -8.54 5.20 -8.74					ML				medium plasticity, pale grey, trace fine grained sand, clay in places Clayey SILT low plasticity, pale grey with pale brown staining, extremely weak rock, exhibiting fissuring randomly oriented stained pale brown smooth and slightly polished (SPT sample)	M	VSt - H
			7												
			8												
			9												
			10												
								For Continuation Refer to Sheet 2							

This report of borehole must be read in conjunction with accompanying notes and abbreviations. It has been prepared for geotechnical purposes only, without attempt to assess possible contamination. Any references to potential contamination are for information only and do not necessarily indicate the presence or absence of soil or groundwater contamination.

GAP gINT FN. F01a
RL3



REPORT OF BOREHOLE: BH409

SHEET: 3 OF 3

DRILL RIG: Fox B40

CONTRACTOR: Schneider Drilling Pty Ltd

LOGGED: FHH DATE: 1/9/11

CHECKED: NK DATE: 26/9/11

CLIENT: McConnell Dowell Constructors (Aust) P/L COORDS: 85438.8 m E 60220.1 m N GCCC

PROJECT: Gold Coast Rapid Transit SURFACE RL: -3.54 m DATUM: AHD

LOCATION: Zone 4 INCLINATION: -90°

JOB NO: 117632047 HOLE DEPTH: 12.85 m

Drilling					Field Material Description				Defect Information			
METHOD	WATER	TCR	RQD (SCR)	DEPTH (metres)	DEPTH RL	GRAPHIC LOG	ROCK / SOIL MATERIAL DESCRIPTION	WEATHERING	INFERRED STRENGTH $I_{s(50)}$ MPa	DEFECT DESCRIPTION & Additional Observations		AVERAGE DEFECT SPACING (mm)
								EL 0.03 VL 0.01 L 0.1 M 0.3 H 1 VH 3 EH 10				10 100 300 1000 3000
NMLC		100	70 (75)	10	10.10 -13.64		to 10.28 m with dark grey banding and associated increased horizontal jointing	SW		and fine gravel sized rock fragments		
				11				SW FR		9.35 m: J, 5°, Un, Ro, Sn 9.37 m: J, 50°, Un, Ro, Sn 9.39 m: J, 5°, Un, Ro, Sn 9.42 m: J, 10°, Un, Ro, Sn 9.57 m: J, 80°, Un, Ro, Cn 9.68 m: J, 10°, Un, Ro, Sn 9.82 m: J, 40°, Un, Ro, Vr, 1 mm, grey clay infill 9.90-10.00 m: J, 85°, Un, Ro, Ct, conjugate joints 10.10-10.28 m: jointing horizontal spaced 5-30 mm 10.34 m: J, 35°, Un, Ro, Cn 10.40 m: V, 70°, 2 mm, quartz 10.52 m: J, 45°, Un, Ro, Cn 10.70 m: J, 45°, Un, Ro, Cn 10.78 m: J, 45°, Un, Ro, Cn 10.83 m: J, 70°, Un, Ro, Cn 10.98 m: J, 70°, Un, Ro, Cn 11.25 m: J, 10°, Un, Ro, Cn 11.44 m: J, 10°, Pl, Ro, Cn 11.77 m: J, 5°, Pl, Ro, Cn 11.80 m: J, 70°, Un, Ro, Cn 12.10 m: J, 70°, Un, Ro, Cn 12.20 m: J, 70°, Un, Ro, Cn 12.44 m: J, 10°, Pl, Ro, Cn 12.70 m: J, 70°, Un, Ro, Cn 12.75 m: J, 5°, Pl, Ro, Cn		
				13	12.85 -16.39		END OF BOREHOLE @ 12.85 m DRILLED OVER WATER					
				14								
				15								
				16								
				17								
				18								
				19								
				20								

This report of borehole must be read in conjunction with accompanying notes and abbreviations. It has been prepared for geotechnical purposes only, without attempt to assess possible contamination. Any references to potential contamination are for information only and do not necessarily indicate the presence or absence of soil or groundwater contamination.

GAP gINT FN. F02a
RL3

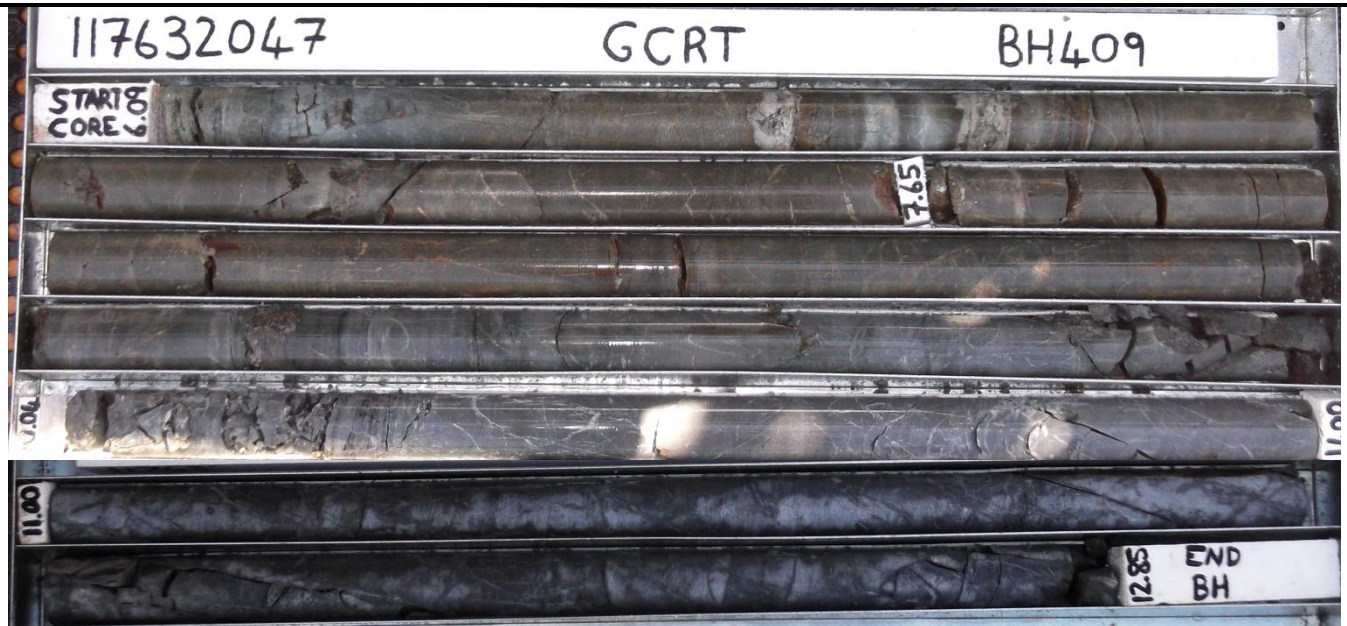


REPORT OF PHOTOGRAPHS: BH409

CLIENT: McConnell Dowell Constructors
PROJECT: Gold Coast Rapid Transit
LOCATION: Zone 4
JOB NO: 117632047

COORDS: 85438.8 m E 60220.1 m N
SURFACE RL: -3.54 m DATUM: AHD
INCLINATION: -90°
HOLE DEPTH: 12.85 m

DEPTH RANGE: 6.09 – 12.85 m
DRILL RIG: Fox B40
DRILLER: Schneider Drilling Pty Ltd
LOGGED: FHH DATE: 1/9/11
CHECKED: NK DATE: 25/9/11



6.09 – 12.85 m