

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: BH406

SHEET: 1 OF 3

DRILL RIG: Fox B40

CONTRACTOR: Schneider Drilling Pty Ltd

LOGGED: FHH DATE: 31/8/11

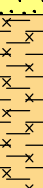
CHECKED: NK DATE: 26/9/11

CLIENT: McConnell Dowell Constructors (Aust) P/L COORDS: 85415.6 m E 60312.0 m N GCCC

PROJECT: Gold Coast Rapid Transit SURFACE RL: -3.22 m DATUM: AHD

LOCATION: Zone 4 INCLINATION: -90°

JOB NO: 117632047 HOLE DEPTH: 14.12 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	-3.22	SPT 1.20-1.65 m 1 N=0		SM	SAND fine to medium grained, sub-rounded to angular, dark grey, recovered with lenses/pockets/bands of dark grey soft clay and angular gravel		L													
			1																				
			2	2.00 -5.22								SPT 2.70-3.15 m 2, 7, 12 N=19		SM	SAND fine to medium grained, angular, pale brown	W	D - VD						
			3																				
			4																				
			5	5.20 -8.42														SPT 4.20-4.62 m 13, 19, 30/120 mm N>49		ML	Clayey SILT low plasticity, pale grey, recovered very closely fissured. Fissures stained brown, randomly oriented. Relict rock structure	M	St - VSt
			6																				
			7																				
			8																				
			9																				
10																							
11																							
12																							
13																							
14																							
15																							
16																							
17																							
18																							
19																							
20																							
21																							
22																							
23																							
24																							
25																							
26																							
27																							
28																							
29																							
30																							
31																							
32																							
33																							
34																							
35																							
36																							
37																							
38																							
39																							
40																							
41																							
42																							
43																							
44																							
45																							
46																							
47																							
48																							
49																							
50																							
51																							
52																							
53																							
54																							
55																							
56																							
57																							
58																							
59																							
60																							
61																							
62																							
63																							
64																							
65																							
66																							
67																							
68																							
69																							
70																							
71																							
72																							
73																							
74																							
75																							
76																							
77																							
78																							
79																							
80																							
81																							
82																							
83																							
84																							
85																							
86																							
87																							
88																							
89																							
90																							
91																							
92																							
93																							
94																							
95																							
96																							
97																							
98																							
99																							
100																							

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: BH406

SHEET: 2 OF 3

DRILL RIG: Fox B40

CONTRACTOR: Schneider Drilling Pty Ltd

LOGGED: FHH DATE: 31/8/11

CHECKED: NK DATE: 26/9/11

CLIENT: McConnell Dowell Constructors (Aust) P/L COORDS: 85415.6 m E 60312.0 m N GCCC

PROJECT: Gold Coast Rapid Transit SURFACE RL: -3.22 m DATUM: AHD

LOCATION: Zone 4 INCLINATION: -90°

JOB NO: 117632047 HOLE DEPTH: 14.12 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)	
				0										
				1										
				2										
				3										
				4										
				5										
				6										
				6.40			Continuation of Sheet 1							
				-9.62			SILTSTONE	EW						
				6.80			fine grained, pale brown to pale green, joints generally spaced 20-60 mm open (<20 mm) undulating and infilled with brown clay	HW						
				-10.02			ARGILLITE	MW						
				7			fine grained, grey to pale green, with quartz veining							
				8				DW						
				9										
				10										

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 BOREHOLE: BH406

SHEET: 3 OF 3

DRILL RIG: Fox B40

CONTRACTOR: Schneider Drilling Pty Ltd

LOGGED: FHH DATE: 31/8/11

CHECKED: NK DATE: 26/9/11

CLIENT: McConnell Dowell Constructors (Aust) P/L COORDS: 85415.6 m E 60312.0 m N GCCC

PROJECT: Gold Coast Rapid Transit SURFACE RL: -3.22 m DATUM: AHD

LOCATION: Zone 4 INCLINATION: -90°

JOB NO: 117632047 HOLE DEPTH: 14.12 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 0.03	JL 0.11	ML 0.3	HL 1	VLH 10	EH	
NMLC			100	10			ARGILLITE fine grained, grey to pale green, with quartz veining	SW FR					spaced jointing from 4 mm to 55 mm, open 0 mm-2mm infilled with brown clay 9.81 m: J, 0°, Pl, Ro 9.88 m: J, 55°, Un, Ro, Cn 9.90-10.00 m: recovered non intact 10.05 m: J, 85°, Un, Ro, Cn 10.25 m: J, 75°, Un, Ro, Cn 10.42 m: J, 65°, Un, Ro, Cn 10.50 m: J, 80°, Un, Ro, Cn 10.57 m: J, 40°, Un, Ro, Cn 10.70 m: J, 5°, Un, Ro, Cn 10.94 m: J, 75°, Un, Ro, Cn 11.10 m: J, 60°, Un, Ro, Sn, 1 mm, brown clay infill 11.35 m: J, 25°, Un, Ro, Vr, brown clay 11.45 m: DB 11.58 m: J, 55°, Pl, Ro, incipient 11.65 m: J, 5°, Un, Ro, Cn 11.74 m: J, 10°, Pl, Ro, Cn 11.80 m: CZ, 5°, 20 mm, associated with banding recovered non intact as gravel sized rock fragments in clay matrix 11.87 m: J, 55°, Un, Ro, Sn 12.12 m: J, 5°, Pl, Ro, Ct, pyrite coating <1 mm 12.14 m: J, 55°, Un, Ro, Ct, pyrite coating <1 mm 12.20 m: J, 45°, Un, Ro, Ct, pyrite coating <1 mm 12.25 m: J, 55°, Un, Ro, Ct, pyrite coating 12.46 m: J, 5°, Pl, Ro, Cn 12.53 m: VO, medium gravel sized void in core 12.80 m: J, 5°, Un, Ro, Cn 12.87 m: J, 5°, Un, Ro, Cn 13.00 m: J, 45°, Un, Ro, Cn 13.18 m: J, 5°, Un, Ro, Cn 13.35 m: J, 10°, Un, Ro, Cn 13.74 m: J, Un, Ro, incipient 13.88 m: J, 5°, Un, Ro, Cn 13.97 m: J, 5°, Un, Ro, Cn			
			66 (82)	11.70 -14.92			to 11.85 m with dark grey horizontal banding (1-5mm thick)									
				14	14.12 -17.34		END OF BOREHOLE @ 14.12 m DRILLED OVER WATER									
				15												
				16												
				17												
				18												
				19												

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: BH406

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

COORDS: 85415.6 m E 6032.0 m N
SURFACE RL: -3.22 m DATUM: AHD
INCLINATION: -90°
HOLE DEPTH: 14.12m

DEPTH RANGE: 6.40 – 14.12m
DRILL RIG: Fox B40
DRILLER: Schneider Drilling Pty Ltd
LOGGED: FHH DATE: 31/8/11
CHECKED: NK DATE: 25/9/11



6.40 – 14.12 m