

COPYRIGHT NOTICE

This geotechnical log and its associated data (the Document) is licensed by the Queensland Department of Transport and Main Roads under the [Creative Commons Attribution 4.0 Licence](#) (CC BY 4.0). When reusing the Document, in whole or in part, please attribute the Department and author as follows: "*(c) State of Queensland (Department of Transport and Main Roads) 2020, licensed under the CC BY 4.0 Licence, prepared by WSP*". 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 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://ggd.org.au/>

This log has been contributed to the Queensland Geotechnical Database with the permission of WSP.



BOREHOLE ENGINEERING LOG

BOREHOLE NO.

RTBH26

SHEET 1 OF 5

Client:	Department of Transport and Main Roads	Date Commenced:	24/3/10
Project:	Gold Coast Rapid Transit	Date Completed:	25/3/10
Borehole Location:	Gold Coast Highway, Ch: 31316.4	Recorded By:	NG
Project Number:	2161016A	Log Checked By:	<i>L.M.C.</i>

Drill Model/Mounting:	Drillpower Hydrapower Scout	Hole Angle:	90°	Surface RL:	3.33 m AHD*
Borehole Diameter:	75 mm	Bearing:	---	Co-ords:	E 86105.82 N 58950.52 GCCC Grid*

Borehole Information						Field Material Description							
1	2	3	4	5	6	7	8	9	10	11	12	13	
METHOD	SUPPORT	WATER	RL(m) AHD*	DEPTH(m)	FIELD TEST	SAMPLE	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY / CONSISTENCY	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
										VS FB VL L MD ST D H VD			
TC	C			3					FILL (SAND and rock boulders):	D			FILL
				1				SP	SAND: medium grained, pale brown.				BEACH SEDIMENTS
				2									
				2									
				1									
				3	SPT 1,1,0 N=1	SPT							
				0									
				4									
				-1						M			
				5						W			
				-2									
				6	SPT 3,4,6 N=10	SPT			... 6.0 m: pale grey, trace shell fragments				
				-3									
				7									
				-4									
				8									
				-5									
				9	SPT 1,1,1 N=2	SPT			... 9.0 m: pale brown to pale yellow.				
				-6									

This borehole log should be read in conjunction with Parsons Brinckerhoff's accompanying standard notes.



BOREHOLE ENGINEERING LOG

BOREHOLE NO.

RTBH26

SHEET 2 OF 5

Client:	Department of Transport and Main Roads	Date Commenced:	24/3/10
Project:	Gold Coast Rapid Transit	Date Completed:	25/3/10
Borehole Location:	Gold Coast Highway, Ch: 31316.4	Recorded By:	NG
Project Number:	2161016A	Log Checked By:	<i>LMCL</i>

Drill Model/Mounting:	Drillpower Hydrapower Scout	Hole Angle:	90°	Surface RL:	3.33 m AHD*
Borehole Diameter:	75 mm	Bearing:	---	Co-ords:	E 86105.82 N 58950.52 GCCC Grid*

Borehole Information						Field Material Description							
1	2	3	4	5	6	7	8	9	10	11	12	13	
METHOD	SUPPORT	WATER	RL(m) AHD*	DEPTH(m)	FIELD TEST	SAMPLE	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY / CONSISTENCY	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
										VS FB VL L MD ST VST D H VD			
WB				-7				SP	SAND: medium grained, pale brown. <i>(continued)</i>	W			
				11					... 11.0 m: coarse sand, trace gravel to 5 mm and shell fragments.				
				-8									
				12	SPT 1,3,3 N=6	SPT			... 12.0 m: trace shell fragments.				
				-9									
				13									
				-10									
				14									
				-11									
				15	SPT 1,1,0 N=1	SPT							
				-12									SPT: 1 blow for 500 mm.
				16				SP	COFFEE ROCK (Cemented Sand): fine to medium grained, dark brown..				ESTUARINE SEDIMENTS
				-13					... 16.5 m: very dark brown coffee rock. ... 16.5 m: abundant shell fragment. ... 16.8 m: brown coffee rock.				
				17	SPT 9,22,30 /140mm	SPT							
				-14									
				18	SPT 6,12,16 N=28	SPT			... 18 m: brown to dark brown coffee rock.				
				-15									
				19				SP	SAND: medium grained, pale brown.				BEACH SEDIMENTS
				-16									

This borehole log should be read in conjunction with Parsons Brinckerhoff's accompanying standard notes.

© Parsons Brinckerhoff Australia Pty Ltd. Version 5.1 ENGINEERING BOREHOLE LOG GCRT_BOREHOLES.GPJ GEOTECH_24-2-2006.GDT 25/5/10



BOREHOLE ENGINEERING LOG

BOREHOLE NO.

RTBH26

SHEET 3 OF 5

Client:	Department of Transport and Main Roads	Date Commenced:	24/3/10
Project:	Gold Coast Rapid Transit	Date Completed:	25/3/10
Borehole Location:	Gold Coast Highway, Ch: 31316.4	Recorded By:	NG
Project Number:	2161016A	Log Checked By:	<i>LMK</i>

Drill Model/Mounting:	Drillpower Hydrapower Scout	Hole Angle:	90°	Surface RL:	3.33 m AHD*
Borehole Diameter:	75 mm	Bearing:	---	Co-ords:	E 86105.82 N 58950.52 GCCC Grid*

Borehole Information						Field Material Description							
1	2	3	4	5	6	7	8	9	10	11	12	13	
METHOD	SUPPORT	WATER	RL(m) AHD*	DEPTH(m)	FIELD TEST	SAMPLE	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY / CONSISTENCY	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
VS	FB	VL	L	MD	ST	VST	D	H	VD				
WB								SP	SAND: medium grained, pale brown. <i>(continued)</i>	W			
				17									
				21	SPT 8,22,25 N=47	SPT			... 21.0 m: brown silty sand, fine to medium grained.				
				18									
				22									
				19									
				23									
				20									
				24	SPT 12,27,30 /70mm	SPT							
				21									
				25									
				22									
				26									
				23									
				27									
				24									
				27.50				CH	CLAY: high plasticity, grey.	MC-PL			ESTUARINE DEPOSITS
				28									
				25									
				29	SPT 1,4,6 N=10	SPT							
				26									

This borehole log should be read in conjunction with Parsons Brinckerhoff's accompanying standard notes.



BOREHOLE ENGINEERING LOG

BOREHOLE NO.

RTBH26

SHEET 4 OF 5

Client:	Department of Transport and Main Roads	Date Commenced:	24/3/10
Project:	Gold Coast Rapid Transit	Date Completed:	25/3/10
Borehole Location:	Gold Coast Highway, Ch: 31316.4	Recorded By:	NG
Project Number:	2161016A	Log Checked By:	<i>LML</i>

Drill Model/Mounting:	Drillpower Hydrapower Scout	Hole Angle:	90°	Surface RL:	3.33 m AHD*
Borehole Diameter:	75 mm	Bearing:	---	Co-ords:	E 86105.82 N 58950.52 GCCC Grid*

Borehole Information						Field Material Description							
1	2	3	4	5	6	7	8	9	10	11	12	13	
METHOD	SUPPORT	WATER	RL(m) AHD*	DEPTH(m)	FIELD TEST	SAMPLE	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY / CONSISTENCY	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
										VS FB VL SL ST H	LD MD VD		
WB				-27				CH	CLAY: high plasticity, grey. <i>(continued)</i>	MC-PL			
				31									
				-28									
				32									
				-29									
				33									
				-30									
				34									
				34.20					META-SILTSTONE: dark grey, extremely weathered, extremely low strength.				WEATHERED ROCK
				-31									34.5 m: Resistance to wash bore. SPT not taken.
				35									
				-32									
				36									
				-33					REFER TO CORED BOREHOLE LOG				
				37									
				-34									
				38									
				-35									
				39									
				-36									

This borehole log should be read in conjunction with Parsons Brinckerhoff's accompanying standard notes.

© Parsons Brinckerhoff Australia Pty Ltd. Version 5.1 ENGINEERING BOREHOLE LOG GCRT_BOREHOLES.GPJ GEOTECH_24-2-2006.GDT 25/5/10



CORED BOREHOLE ENGINEERING LOG

BOREHOLE NO.

RTBH26

SHEET 5 OF 5

Client:	Department of Transport and Main Roads	Date Commenced:	24/3/10
Project:	Gold Coast Rapid Transit	Date Completed:	25/3/10
Borehole Location:	Gold Coast Highway, Ch: 31316.4	Recorded By:	NG
Project Number:	2161016A	Log Checked By:	<i>L.M.C.K.</i>

Drill Model/Mounting:	Drillpower Hydrapower Scout	Hole Angle:	90°	Surface RL:	3.33 m AHD*
Borehole Diameter:	75 mm	Bearing:	---	Co-ords:	E 86105.82 N 58950.52 GCCC Grid*

Borehole Information						Field Material Description						
1	2	3	4	5	6	7	8	9	10	11	12	
METHOD	SUPPORT	WATER	CORE RECOVERY	RQD	RL(m) AHD*	DEPTH(m)	GRAPHIC LOG	SOIL/ROCK MATERIAL FIELD DESCRIPTION	WEATHERING	INFERRED STRENGTH Is(50) MPa	AVERAGE DEFECT SPACING mm	STRUCTURE AND ADDITIONAL OBSERVATIONS
									EL VL L M H VH EH	0.03 0.1 0.3 1 3 10	10 30 100 300 1000 3000	
					-27							
						31						
					-28							
						32						
					-29							
						33						
					-30							
						34						
					-31							
						35						
					-32							
						36						
					-33			COMMENCE CORING AT 36.5 m				
NM/C			100	25		37		META-SILTSTONE: dark grey, quartz veining and chlorite alteration.	FR			36.5 m - 38.0 m: Numerous drill breaks and fracturing of core 36.8 m - 36.9 m: Non intact core 36.95 m - 37.0 m: Numerous quartz veinlets. 37.1 m: J, 50°, P, S, clean 37.4 m: J, 40°, P, S, clean 37.45 m - 37.7 m: Non intact core 37.75 m - 37.8 m: Silicification? 37.85 m: Igneous material
						38		END OF BOREHOLE AT 38.00 m				
						35						Limit of Investigation
						39						* Horizontal and vertical data determined by Ground Survey
						36						

This borehole log should be read in conjunction with Parsons Brinckerhoff's accompanying standard notes.

© Parsons Brinckerhoff Australia Pty Ltd. Version 5.1 ENGINEERING CORED BOREHOLE LOG GCRT_BOREHOLES.GPJ GEOTECH_24-2-2006.GDT 25/5/10

REPORT OF PHOTOGRAPHS



Borehole number: RTBH26

Sheet 1 of 1

Client:	Department of Transport and Main Roads	Coordinates:	E 86105.82 N 58950.52	Depth range:	36.5 m – 38.0 m
Project:	Gold Coast Rapid Transit	Surface RL:	3.33 m AHD	Inclined length:	-
Borehole location:	Ch: 31316.7	Hole angle:	90 °	Drill model/mounting:	Hydrapower Scout
Project number:	2161016A	Bearing:	-	Borehole diameter:	75 mm

