

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) 2026, 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://qgd.org.au/>



BOREHOLE ENGINEERING LOG

BOREHOLE NO.

BH49

SHEET 1 OF 4

Client: QUEENSLAND MAIN ROADS
Project: TUGUN BYPASS GEOTECHNICAL INVESTIGATION
Borehole Location: Airport Tunnel
Project Number: 2134070C

Date Commenced: 3/8/05
Date Completed: 4/8/05
Recorded By: DM/DAW
Log Checked By: JAW

Drill Model/Mounting: HYDRAPOWER SCOUT 250 Hole Angle: 90° Surface RL: 0.8 m AHD
Borehole Diameter: 100 mm Bearing: --- Co-ords: E 51020.8 N 86713.6 PMG

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	STRUCTURE AND ADDITIONAL OBSERVATIONS
TC	C											
				0.20				ML	Silty SAND: fine grained, dark brown.	M		TOPSOIL
				0				SP	SAND: fine grained, dark grey/pale brown	W		ESTUARINE/ FLOODPLAIN/TIDAL DELTA DEPOSITS
				1								
				1.2	SPT 1,2,1 N=3	SPT						
				2								
				2.2								
	M			2.4								
				3								
WB				3.2	SPT 1,2,3 N=5	SPT						
				3.4				SP	Cemented Silty SAND (Coffee Rock): medium grained, dark brown.			
				4								
				4.2	SPT 13,26,30 /100mm	SPT						
				5								
				5.2								
				5.4	SPT 5,5,9 N=14	SPT			SP	SAND: fine to medium grained, dark grey/pale brown		
				6								
				7								
				7.2	SPT 26,30 /95mm	SPT			SP	Cemented Silty SAND (Coffee Rock): medium grained, dark brown.		
				8								
				8.2								
				8.4	SPT 5,5,7 N=12	SPT			SP	SAND: fine to medium grained, brown to pale brown		
				9								

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



BOREHOLE ENGINEERING LOG

BOREHOLE NO.

BH49

SHEET 2 OF 4

Client: QUEENSLAND MAIN ROADS

Date Commenced: 3/8/05

Project: TUGUN BYPASS GEOTECHNICAL INVESTIGATION

Date Completed: 4/8/05

Borehole Location: Airport Tunnel

Recorded By: DM/DAW

Project Number: 2134070C

Log Checked By: JAW

Drill Model/Mounting: HYDRAPOWER SCOUT 250

Hole Angle: 90°

Surface RL: 0.8 m AHD

Borehole Diameter: 100 mm

Bearing: ---

Co-ords: E 51020.8 N 86713.6 PMG

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	STRUCTURE AND ADDITIONAL OBSERVATIONS
WB								SP	SAND: fine to medium grained, brown to pale brown (continued)	W		
				10	SPT 9,14,14 N=28	SPT			as above, becoming pale grey			
				11								
				12	SPT 5,8,8 N=16	SPT						
				13								
				14	SPT 10,9,8 N=17	SPT						
				15	SPT 3,3,6 N=9	SPT						
				16								
				17								
				18	SPT 18,8,8 N=16	SPT		SP	Cemented Silty SAND (Coffee Rock): medium grained, dark brown.			
				19								

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



BOREHOLE ENGINEERING LOG

BOREHOLE NO.

BH49

SHEET 3 OF 4

Client: QUEENSLAND MAIN ROADS

Date Commenced: 3/8/05

Project: TUGUN BYPASS GEOTECHNICAL INVESTIGATION

Date Completed: 4/8/05

Borehole Location: Airport Tunnel

Recorded By: DM/DAW

Project Number: 2134070C

Log Checked By:

Drill Model/Mounting: HYDRAPOWER SCOUT 250

Hole Angle: 90°

Surface RL: 0.8 m AHD

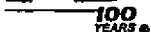
Borehole Diameter: 100 mm

Bearing: ---

Co-ords: E 51020.8 N 86713.6 PMG

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	STRUCTURE AND ADDITIONAL OBSERVATIONS
WB								SP	Cemented Silty SAND (Coffee Rock): medium grained, dark brown. (continued)	W		
				21.021	SPT 7.9, 13 N=22	SPT		SP	Silty SAND: fine to medium grained, pale grey to grey			
				22								
				23								
				24	SPT 7.8, 8 N=16	SPT						
				25								
				26								
				27	SPT 4.5, 10 N=15	SPT						
				28								
				29								

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



BOREHOLE ENGINEERING LOG

BOREHOLE NO.

BH49

SHEET 4 OF 4

Client: QUEENSLAND MAIN ROADS
Project: TUGUN BYPASS GEOTECHNICAL INVESTIGATION
Borehole Location: Airport Tunnel
Project Number: 2134070C

Date Commenced: 3/8/05
Date Completed: 4/8/05
Recorded By: DM/DAW
Log Checked By: 

Drill Model/Mounting:	HYDRAPOWER SCOUT 250	Hole Angle:	90°	Surface RL:	0.8 m AHD
Borehole Diameter:	100 mm	Bearing:	---	Co-ords:	E 51020.8 N 86713.6 PMG

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 (MPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
WB				30.00	SPT 6.13.11 N=24	SPT		CH	Silty CLAY: high plasticity, pale grey mottled brown, with a trace of sand sized angular rock fragments.	MC<PL			RESIDUAL SOIL
				30									
				31									
				31									
				32									
				32									
				33	SPT 14.23	SPT			ARGILLITE: fine grained, pale grey, extremely weathered, extremely low to very low strength.				WEATHERED ROCK
				33									
				34									
				34									
				35									
				36	SPT 23.24.30 /120mm	SPT							
				36									
				37									
				37									
				38									
				39	SPT 19.30 /120mm	SPT			END OF BOREHOLE AT 39.28 m				
				39									

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

Persons Binderhoff Australia Pty Ltd. Version 5.1 ENGINEERING BOREHOLE LOG LOGS 250505.GPJ GEOTECH.GDT 15/8/05