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BOREHOLE ENGINEERING LOG

BOREHOLE NO.

BH43

SHEET 1 OF 4

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

Date Commenced: 6/6/05
Date Completed: 8/6/05
Recorded By: SAM
Log Checked By: *DAW*

Drill Model/Mounting: HYDRAPOWER SCOUT 250 Hole Angle: 90° Surface RL: 1.0 m AHD
Borehole Diameter: 150 mm Bearing: --- Co-ords: E 50698 N 86898.9 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 (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
										VS FB VL L MD ST VST D H			
TC				0.20				SM	Silty SAND: fine to medium grained, dark brown-black, with organic matter.	M			TOPSOIL
				0				SM	SAND: fine to medium grained, grey-brown.	W			ESTUARINE/ FLOODPLAIN/TIDAL DELTA DEPOSITS
WB				1									
				2	SPT 2,3,5 N=8	SPT							
				3	SPT 0	SPT							
				4	SPT 1,0,1 N=1	SPT							
				5				SM	Cemented Silty SAND (Coffee Rock): fine to medium grained, dark brown.				
				6	SPT 6,8,9 N=17	SPT							
				7									
				8	SPT 5,10,11 N=21	SPT							
				9	SPT 13,18,24 N=42	SPT							

% passing 0.425mm=93%
% passing 0.075mm=4%
SPT sank 450mm under weight of hammer.

% passing 0.425mm=90%
% passing 0.075mm=5%

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



BOREHOLE ENGINEERING LOG

BOREHOLE NO.

BH43

SHEET 2 OF 4

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

Date Commenced: 6/6/05
Date Completed: 8/6/05
Recorded By: SAM
Log Checked By: *DM*

Drill Model/Mounting: HYDRAPOWER SCOUT 250
Borehole Diameter: 150 mm

Hole Angle: 90°
Bearing: ---

Surface RL: 1.0 m AHD
Co-ords: E 50698 N 86898.9 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												
					SPT 8,11,10 N=21	SPT			SM Cemented Silty SAND (Coffee Rock): fine to medium grained, dark brown. (continued)	W		
				10					SP SAND: fine to medium grained, pale brown-white.			
				11	SPT 8,11,12 N=23	SPT						
				12								
				13								
				13.50	SPT 23,19,18 N=37	SPT			SM Cemented Silty SAND (Coffee Rock): fine to medium grained, dark brown.			
				14								
				15	SPT 25,20 /80mm	SPT						
				16								
				17	SPT 7,10,10 N=20	SPT						
				18	SPT 7,14,18 N=32	SPT						
				19	SPT 7,10,4 N=14	SPT						

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BOREHOLE ENGINEERING LOG

BOREHOLE NO.

BH43

SHEET 3 OF 4

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

Date Commenced: 6/6/05
Date Completed: 8/6/05
Recorded By: SAM
Log Checked By: *DAW*

Drill Model/Mounting: HYDRAPOWER SCOUT 250 Hole Angle: 90° Surface RL: 1.0 m AHD
Borehole Diameter: 150 mm Bearing: --- Co-ords: E 50698 N 86898.9 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										VS FS VL L MD ST D H VD	HAND PENETROMETER (KPa)	
				20	21	SPT 0	SPT	CH	Sandy CLAY: high plasticity, grey, fine to medium grained sand.	W		SPT sank 450mm under weight of hammer.
				21	22							
				22	23	SPT 0	SPT					% passing 0.425mm=98% % passing 0.075mm=78% SPT sank 450mm under weight of hammer.
				23	24	SPT 4,6,8 N=14	SPT	SP	SAND: fine to medium grained, grey, trace of silt.			
				24	25							
				25	26	SPT 9,9,12 N=21	SPT					
				26	27	SPT 3,6,15 N=21	SPT	CL	Sandy CLAY: medium plasticity, grey, fine to medium grained sand.			
				27	28							
				28	29	SPT 0	SPT					% passing 0.425mm=97% % passing 0.075mm=53%

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



BOREHOLE ENGINEERING LOG

BOREHOLE NO.

BH43

SHEET 4 OF 4

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

Date Commenced: 6/6/05
Date Completed: 8/6/05
Recorded By: SAM
Log Checked By: *JAW*

Drill Model/Mounting: HYDRAPOWER SCOUT 250 Hole Angle: 90° Surface RL: 1.0 m AHD
Borehole Diameter: 150 mm Bearing: --- Co-ords: E 50698 N 86898.9 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												
					SPT 10,10,20 N=30	SPT			SAND: fine to coarse grained, grey, trace of low plasticity fines.	VS VL LL PL SH OH CH MH WH		
			-30	31								
					SPT 10,14,12 N=28	SPT						
			-31	32								
					SPT 8,12,16 N=28	SPT						
			-32	33								
					SPT 4,4,6 N=10	SPT						
			-33	34								
					SPT 14,18,20 N=38	SPT			ARGILLITE: white, extremely weathered, low strength.			
			-34	35								% passing 0.425mm=43% % passing 0.075mm=12% Hammer bouncing.
			-35	36					END OF BOREHOLE AT 36.39 m			WEATHERED ROCK Hammer bouncing.
			-36	37								
			-37	38								
			-38	39								

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