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BOREHOLE ENGINEERING LOG

BOREHOLE NO.

BH48

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: AJF
Log Checked By: DAW

Drill Model/Mounting: HYDRAPOWER SCOUT 250 Hole Angle: 90° Surface RL: 0.9 m AHD
Borehole Diameter: 100 mm Bearing: --- Co-ords: E 51038.8 N 86755.1 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
TC	C								Silty SAND: fine grained, dark brown.	W	VS FB SL VL ST MD VST VD		TOPSOIL
				0.00				SP	Silty SAND: fine grained, grey, poorly graded.				ESTUARINE/ FLOODPLAIN/TIDAL DELTA DEPOSITS
				1	SPT 3.2,1 N=3	SPT							
				2									
				2.45	SPT 3.3,5 N=8	SPT		SP	Cemented Silty SAND (Coffee Rock): fine grained, dark brown-brown, trace of shell fragments, variable cementing, layers 50mm to 1.5m thick.				
WB	M			3									
				4	SPT 7.2,4 N=6	SPT							
				5									
				6	SPT 6.9,13 N=22	SPT							
				7	SPT 6.7,16 /90mm	SPT							
				8									Hammer bouncing.
				9	SPT 25 /150mm	SPT							Hammer bouncing

Parsons Brinckerhoff Australia Pty Ltd. Version 5.1 ENGINEERING BOREHOLE LOG LOGS 250505.GPJ GEOTECH/GUT 13/8/05

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

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BOREHOLE ENGINEERING LOG

BOREHOLE NO.

BH48

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:	AJF
Project Number:	2134070C	Log Checked By:	DAW

Drill Model/Mounting: HYDRAPOWER SCOUT 250

Hole Angle: 90°

Surface RL: 0.9 m AHD

Borehole Diameter: 100 mm

Bearing: ---

Co-ords: E 51038.8 N 86755.1 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 6,4,5 N=9	SPT		SP	Cemented Silty SAND (Coffee Rock): fine grained, dark brown-brown, trace of shell fragments, variable cementing, layers 50mm to 1.5m thick. (continued)	W		
				10								
				11								
				11.30	SPT 5,6,13 N=19	SPT		SP	Silty SAND: fine grained, brown.			
				12								
				13	SPT 3,5,8 N=13	SPT						
				14								
				15	SPT 5,7,7 N=14	SPT						
				16								
				17				SP	Cemented Silty SAND (Coffee Rock): fine grained, brown-dark brown, 200mm layers of variable cementing.			
				18	SPT 21,20 /90mm	SPT						
				19								

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BOREHOLE ENGINEERING LOG

BOREHOLE NO.

BH48

SHEET 3 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: AJF
Log Checked By: JAW

Drill Model/Mounting: HYDRAPOWER SCOUT 250 Hole Angle: 90° Surface RL: 0.9 m AHD
Borehole Diameter: 100 mm Bearing: --- Co-ords: E 51038.8 N 86755.1 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	FB	
										VL	ST	
										SL	MD	
										VS	FB	
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										SL	MD	
										VS	FB	
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BOREHOLE ENGINEERING LOG

BOREHOLE NO.

BH48

SHEET 4 OF 4

Client:	QUEENSLAND MAIN ROADS	Date Commenced:	3/8/05
Project:	TUGUN BYPASS GEOTECHNICAL INVESTIGATION	Date Completed:	4/8/05
Borehole Location:	Alrport Tunnel	Recorded By:	AJF
Project Number:	2134070C	Log Checked By:	DAW

Drill Model/Mounting: HYDRAPOWER SCOUT 250

Hole Angle: 90°

Surface RL: 0.9 m AHD

Borehole Diameter: 100 mm

Bearing: ---

Co-ords: E 51038.8 N 86755.1 PMG

Borehole Information						Field Material Description						
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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								CH	Silty CLAY: high plasticity, grey.(continued)	W		
				30.50								
				30					Silty CLAY: high plasticity, pale grey-white, trace of medium grained angular sand.			RESIDUAL SOIL
				31								
				31.50								
				31					ARGILLITE: fine grained, pale grey, extremely weathered, extremely low to very low strength, interbedded with 100mm to 300mm soft clay layers.			WEATHERED ROCK
				32								
					SPT 20	SPT						Hammer bouncing.
				32								
				33								
				33								
				34								High TC resistance Some orange staining.
				34								
				35								
					SPT 22	SPT			... fine to coarse grained subangular sand sized particles, highly to moderately weathered, very low to low strength.			
				35					END OF BOREHOLE AT 35.54 m			
				36								
				36								
				37								
				37								
				38								
				38								
				39								
				39								

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