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BOREHOLE ENGINEERING LOG

BOREHOLE NO.

BH47

SHEET 1 OF 5

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

Date Commenced: 2/8/05
Date Completed: 3/8/05
Recorded By: AJF
Log Checked By: DA

Drill Model/Mounting: HYDRAPOWER SCOUT 250 Hole Angle: 90° Surface RL: 0.7 m AHD
Borehole Diameter: 100 mm Bearing: --- Co-ords: E 50930.9 N 86756.5 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		0.30						Sandy CLAY: medium plasticity, dark brown, fine grained sand.	VS	FB	TOPSOIL
			0					SP	SAND: fine grained, grey-light brown, with some silt.	VL	LD	ESTUARINE/ FLOODPLAIN/TIDAL DELTA DEPOSITS
WB			1.10		SPT 2,2,2 N=4	SPT		SP	Silty SAND: fine grained, grey.	SL	ST	
			-1						... becoming dark grey-brown.	SH	VD	
	M		-2		SPT 1,1,1 N=2	SPT			... becoming grey.			
			-3									
			-4		SPT 1,2,2 N=4	SPT			... becoming dark brown.			
			-5		SPT 2,3,3 N=6	SPT						
			-6									
			-7.00		SPT 6,6,10 N=16	SPT		SP	Slightly Cemented Silty SAND (Coffee Rock): fine grained, orange-brown and grey.			
			-7									
			-8		SPT 12,23,21 N=44	SPT						
			-9									

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



BOREHOLE ENGINEERING LOG

BOREHOLE NO.

BH47

SHEET 2 OF 5

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

Date Commenced: 2/8/05
Date Completed: 3/8/05
Recorded By: AJF
Log Checked By: DAN

Drill Model/Mounting: HYDRAPOWER SCOUT 250 Hole Angle: 90° Surface RL: 0.7 m AHD
Borehole Diameter: 100 mm Bearing: --- Co-ords: E 50930.9 N 86756.5 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			10.00		SPT 4,3,4 N=7	SPT		SP	SAND: fine grained, light grey-brown, with silt.	W		
			10									
			11									
			11.30		SPT 17,19,17 N=36	SPT		SP	Cemented Silty SAND (Coffee Rock): fine grained, brown-dark brown, indurated.			
			11									
			12									
			12									
			13									
			13									
			14									
			14		SPT 5,8,5 N=11	SPT						
			15									
			15									
			16									
			16									
			17									
			17		SPT 11,11,10 N=21	SPT						
			18									
			18									
			19									
			19									

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BOREHOLE ENGINEERING LOG

BOREHOLE NO.

BH47

SHEET 3 OF 5

Client: QUEENSLAND MAIN ROADS

Date Commenced: 2/8/05

Project: TUGUN BYPASS GEOTECHNICAL INVESTIGATION

Date Completed: 3/8/05

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: 0.7 m AHD

Borehole Diameter: 100 mm

Bearing: ---

Co-ords: E 50930.9 N 86756.5 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): fine grained, brown-dark brown, indurated (continued)	W		
			-20		SPT 10,8,4 N=12	SPT						
			21									
			-21									
			22									
			-22									
			23					CH	Sandy CLAY: high plasticity, grey, fine grained sand, interbedded with clayey sand and sand lenses.	MC>PL		
			-23		SPT 2.1,1 N=2	SPT						
			24									
			-24									
			25									
			-25									
			26									
			-26		SPT 1,1,1 N=2	SPT		SP	SAND: fine grained, grey, with high plasticity clay.	W		
			27					CH	Silty CLAY: high plasticity, grey, interbedded with sandy clay and sand lenses.	MC>PL		
			-27									
			28									
			-28									
			29									
			-29		SPT 0.0,2 N=2	SPT		CH	Silty CLAY: high plasticity, dark grey.			

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BOREHOLE ENGINEERING LOG

BOREHOLE NO.

BH47

SHEET 4 OF 5

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

Date Commenced: 2/8/05
Date Completed: 3/8/05
Recorded By: AJF
Log Checked By: DAW

Drill Model/Mounting: HYDRAPOWER SCOUT 250 Hole Angle: 90° Surface RL: 0.7 m AHD
Borehole Diameter: 100 mm Bearing: --- Co-ords: E 50930.9 N 86756.5 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
WB								CH	Silty CLAY: high plasticity, dark grey (continued)	MC>PL	VS FB VL SL FL ST VST D H VD		
				30									
				31									
				31									
				32									
				32.30				SP	Silty SAND: fine grained, grey, trace of clay.	W			
				32	SPT 8,11,14 N=25	SPT							
				33									
				33									
				34.00				SP	Clayey SAND: fine to medium grained, grey.				
				34									
				35									
				35	SPT 5,7,5 N=12	SPT			... medium to coarse grained, subangular, trace of wood fragments.				
				36									
				36.50				CH	Silty CLAY: high plasticity, light grey-white.	MC>PL			RESIDUAL SOIL
				37.00					ARGILLITE: pale grey, extremely weathered, extremely low strength, interbedded with silty clay.				WEATHERED ROCK
				37									
				38					... highly to moderately weathered, very low to low strength, banded dark grey, some orange staining.				SPT bouncing.
				38	SPT 17 150mm	SPT							
				39									
				39									

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BOREHOLE ENGINEERING LOG

BOREHOLE NO.

BH47

SHEET 5 OF 5

Client: QUEENSLAND MAIN ROADS

Date Commenced: 2/8/05

Project: TUGUN BYPASS GEOTECHNICAL INVESTIGATION

Date Completed: 3/8/05

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: 0.7 m AHD

Borehole Diameter: 100 mm

Bearing: ---

Co-ords: E 50930.9 N 86756.5 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	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY / CONSISTENCY	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
WB								ARGILLITE: pale grey, extremely weathered, extremely low strength, interbedded with silty clay. (continued)				
			40									
			41									
			41		SPT 12,15,24 /120mm	SPT						
			42					END OF BOREHOLE AT 41.92 m				SPT bouncing
			42									
			43									
			43									
			44									
			44									
			45									
			45									
			46									
			46									
			47									
			47									
			48									
			48									
			49									
			49									

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