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# BOREHOLE ENGINEERING LOG

BOREHOLE NO.

**UBH06**

SHEET 1 OF 4

Client: Department of Transport and Main Roads Date Commenced: 12/2/10  
Project: Gold Coast Rapid Transit Date Completed: 12/2/10  
Borehole Location: Proposed University Hospital Station, Parklands Drive, Ch: 19452.2 Recorded By: DS/NG  
Project Number: 2161016A Log Checked By: *LMCH*

Drill Model/Mounting: Drillpower Hydrapower Scout Hole Angle: 90° Surface RL: 25.04 m AHD\*  
Borehole Diameter: 75 mm Bearing: --- Co-ords: E 81430.53 N 62084.58 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	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY / CONSISTENCY	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
VS	FB	VL	ST	MD	VST	D	H					
TC	C			0.15			CH	Topsoil (Silty SAND): fine grained, grey brown	D			TOPSOIL
				0.70				Silty CLAY : high plasticity, pale brown	MC<PL			RESIDUAL SOIL
WB	M			24	1	SPT 21,30 /110mm		META-SILTSTONE: grey-white mottled orange, brown and red, extremely weathered extremely low strength				WEATHERED ROCK
				23	2							
				2.60		SPT 30,30 /90mm		... 2.6 m: pale orange staining, rootlets present				
				22	3							
				21	4	SPT 30 /140mm		REFER TO CORED BOREHOLE LOG				
				20	5							
				19	6							
				18	7							
				17	8							
				16	9							

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







# CORED BOREHOLE ENGINEERING LOG

BOREHOLE NO.

UBH06

SHEET 3 OF 4

Client: Department of Transport and Main Roads Date Commenced: 12/2/10  
Project: Gold Coast Rapid Transit Date Completed: 12/2/10  
Borehole Location: Proposed University Hospital Station, Parklands Drive, Ch: 19452.2 Recorded By: DS/NG  
Project Number: 2161016A Log Checked By: LMcK

Drill Model/Mounting: Drillpower Hydrapower Scout Hole Angle: 90° Surface RL: 25.04 m AHD\*  
Borehole Diameter: 75 mm Bearing: --- Co-ords: E 81430.53 N 62084.58 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
NMLC									EL 0.03 VL 0.1 L 0.3 M 1 H 3 VH 10 EH 10	10 30 100 300 1000 3000		
			100	85	10.00			INTERBEDDED META-SILTSTONE AND META-SANDSTONE: medium grained, white mottled pale yellow and orange, extremely to highly weathered	XW			
					11.00	11		... fine grained	HW			
			100	85	11.50			... fine grained sand, pale grey mottled orange and purple				foliation angle 45°, appears to be laminated bedding
					12.00	12			XW			
			100	100								
					13.00	13						
					13.57			... 13.57 m - 13.72 m: coarse gravel size quartz fragments in fine grained, grey meta-sandstone matrix	HW			
			87	67	14.00	14						foliation angle 60°
					14.50			CORE LOSS	XW			
			100	90	14.60	15		INTERBEDDED META-SILTSTONE AND META-SANDSTONE: fine grained sand, pale grey mottled orange and purple				14.95 m: J, 45°, P, S, Clean
			100	90		16			MW			16.3 m: bedding angle at 70°
									HW			
			100	75		17						17.4 m - 17.7 m: Non Intact Core
									MW			17.6 m: J, 60°, P, S, Fe stained
			94	70		18			HW			
									XW			
						19			HW			19.63 m: J, 45°, P, S, Fe Stained
			100	90								

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# CORED BOREHOLE ENGINEERING LOG

BOREHOLE NO.

UBH06

SHEET 4 OF 4

Client: Department of Transport and Main Roads Date Commenced: 12/2/10  
Project: Gold Coast Rapid Transit Date Completed: 12/2/10  
Borehole Location: Proposed University Hospital Station, Parklands Drive, Ch: 19452.2 Recorded By: DS/NG  
Project Number: 2161016A Log Checked By: LMC

Drill Model/Mounting: Drillpower Hydrapower Scout Hole Angle: 90° Surface RL: 25.04 m AHD\*  
Borehole Diameter: 75 mm Bearing: --- Co-ords: E 81430.53 N 62084.58 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
NMLC									EL 0.03 VL 0.1 L 0.3 M 1 H 3 VH 10	10 30 100 300 1000 3000		
			100	75		20.10		INTERBEDDED META-SILTSTONE AND META-SANDSTONE: fine grained sand, pale grey mottled orange and purple (continued)	XW			
						20.82		... 20.1 m - 20.4 m: meta-sandstone, fine grained, pale brown				
					4	21		... 20.82 m - 20.98 m: quartz vein, very high strength, fragmented, Fe stained	XW			20.82 m: foliation angle 30° 20.82 m - 20.98 m: Non Intact Core
			100	95		21.30		... 21.3 m - 21.35 m: meta-sandstone, fine grained				
					3	22						
			100	90		22.70		... 22.7 m - 23.05 m: trace of fine grained sand				
					2	23						
			100	100		23.20		... 20mm thick quartz vein				
						23.50		... 20mm thick quartz vein				
					1	23.90		... coarse grained quartz				
			65	10		24.27		... 24.27 m - 24.48 m: quartz vein				24.27 m - 24.48 m: Non Intact Core
						24.65		CORE LOSS				
					0	25		END OF BOREHOLE AT 25.00 m				
					-1	26						* Horizontal and vertical data determined by ground survey
					-2	27						
					-3	28						
					-4	29						

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



# REPORT OF PHOTOGRAPHS



Borehole number: **UBH06**

Sheet 1 of 1

Client:	Department of Transport and Main Roads	Coordinates:	E 81430.53 N 62084.58	Depth range:	4.1 m – 25.0 m
Project:	Gold Coast Rapid Transit	Surface RL:	25.04 m AHD	Inclined length:	-
Borehole location:	Ch: 19500	Hole angle:	90 °	Drill model/mounting:	Hydrapower Scout
Project number:	2161016A	Bearing:	-	Borehole diameter:	75 mm

