Connell Wagner

Borehole Number: BH-04

Commenced: 18/06/06
Completed: 18/06/06
Location: Barambah Creek - South Abutment
Easting: 407183.393
Northing: 7088112.818
Elevation: +315.816m (AHD)
Inclination: 90°

Client: QDMR
Project: ARRP Bridges
Project Number: A592-002-00
File Name: P:\WP\A592-002-00

Sheet: 1 of 2

Drilling Information				Soil Description				Testing		Strata Information		
Groundwater	Drilling Method	Sample Type	Elevation (m AHD)	USC	Material Type; Colour; Plasticity Or Particle Characteristics; Structure	Moisture Content	Consistency/ Relative Density (VS VL, S L, F MD, St D, VSt VD, H C)	Comments/ Test Results/ Origin	SPT Values	Graphic Log	Elevation (m AHD)	Depth (m)
					Start of Borehole @ +315.816m (AHD)						315.0	0.0
	AV		315.0		**FILL** Light brown, cobbles gravels and clay, low plasticity, angular to sub-rounded cobbles and coarse gravels, organics present, very stiff	D						
		SPT				M			SPT @ -1.00m to -1.45m 11, 11, 8 N = 19			1.0
				GC	**Gravelly CLAY** Dark brown, low plasticity, fine to medium sized, angular to sub-rounded, volcanic gravels, very stiff							
	RC				**Start NMLC Rock Log @ +314.116m (AHD)**						314.0	2.0
			313.0								313.0	3.0
			312.0								312.0	4.0
			311.0								311.0	5.0

Driller: North Coast Drilling
Drill Type: Pioneer 120
Remarks:
Support:
Logged By: DWL
Checked By: PK
Date Logged: 18/06/06
Date Checked: 10/12/06

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Drilling Information				Rock Description			Intact Strength			Rock Mass Defects		Strata Information		
Groundwater	Drilling Method	Core Recovery	Elevation (m LAT)	Weathering	Material Type; Colour; Plasticity Or Particle Characteristics; Structure	RQD (%)	Estimated Strength (VL L M H VH EL)	Is(50) A/Ir (MPa)	UCS (MPa)	Defect Spacing (m) (0.006 0.02 0.06 0.2 0.6)	Defect Description (depth, type, angle, roughness, infill, thickness)	Graphic Log	Elevation (m AHD)	Depth (m)
					Begin NMLC Rock Log @ +314.116m									
	NMLC	100	314.0	DW	**RHYOLITE** Light grey, stained orange and black, fractured, fine grained, distinctly weathered, high strength	0		D = 2.13 I = 3.10			1.73m Jo, 20°, Pl, Sm, Sn 1.75m Jo, 20°, Pl, Sm, Sn 1.75m to 1.82m, Gravel Infill, 70mm 1.90m Jo, 85°, Un, Sm, Cn 1.94m Jo, 30°, Pl, Sm, Cn 1.98m Jo, 30°, Pl, Sm, Cn 2.02m Jo, 30°, Pl, Sm, Cn 2.08m Jo, 20°, Ir, Ro, Cn 2.17m Jo, 60°, Pl, Sm, Sn 2.27m Jo, 50°, Ir, Ro, Sn 2.29m Jo, 50°, Pl, Sm, Sn 2.37m Jo, 60°, Pl, Sm, Cn 2.40m Jo, 50°, Pl, Sm, Cn 2.42m Jo, 60°, Pl, Sm, Cn 2.53m Jo, 35°, Pl, Ro, Clay - Grey & white 2.55m Jo, 55°, Ir, Sm, Clay Infill 2.61m Jo, 70°, Pl, Sm, Sn 2.65m Jo, 40°, Pl, Sm, Sn 2.69m Jo, 50°, Pl, Sm, Sn 2.72m Jo, 50°, Pl, Sm, Sn 2.79m Jo, 60°, Pl, Sm, Sn 2.84m Jo, 85°, Pl, Sm, Calcite 2.85m Jo, 70°, Pl, Ro, Cn 2.97m Jo, 40°, St, Ro, Cn 3.07m Jo, 60°, Pl, Sm, Calcite 3.17m Jo, 75°, Pl, Sm, Calcite 3.22m Jo, 60°, Pl, Ro, Cn 3.3m Jo, 20°, Pl, Ro, Cn 3.42m DI, 30° 3.50m DI, 50° 3.69m Jo, 25°, Pl, Sm, Clay Infill 3.85m Jo, 50°, Pl, Sm, Cn 3.93m Jo, 60°, Pl, Sm, Cn 4.01m Jo, 15°, Un, Sm, Cn 4.03m Jo, 60°, Pl, Sm, Clay 4.06m Jo, 30°, Pl, Sm, Cn 4.12m Jo, 60°, Pl, Sm, Gravelly Clay Infill 4.20m Jo, 70°, Pl, Ro, Cn 4.31m Jo, 30°, Pl, Sm, Cn 4.33m Jo, 40°, Pl, Sm, Cn 4.42m Jo, 60°, Pl, Sm, Cn 4.45m Jo, 40°, Pl, Sm, Sn 4.56m Jo, 75°, Pl, Sm, Cn 4.59m Jo, 40°, Pl, Sm, Cn 4.75m Jo, 20°, Ir, Ro, Sn		314.0	2.0
		100				0								
		100			Becoming reddish brown	10								
			313.0		Becoming light grey, healed microfracturing present, high to very high strength			D = 1.39 A = 3.97					313.0	3.0
		100			Becoming very high strength	27								
			312.0					D = 9.48 I = 8.97					312.0	4.0
				SW	Becoming slightly weathered, microfracturing absent, high strength			D = 1.60 A = 4.86						
			311.0		**End of Borehole @ +311.016m (AHD)**								311.0	5.0
			310.0										310.0	6.0
			309.0										309.0	7.0

Driller: North Coast Drilling **Remarks:** **Logged By:** DWL **Date Logged:** 18/06/06

Drill Type: Pioneer 120 **Support:** **Checked By:** PK **Date Checked:** 10/12/06

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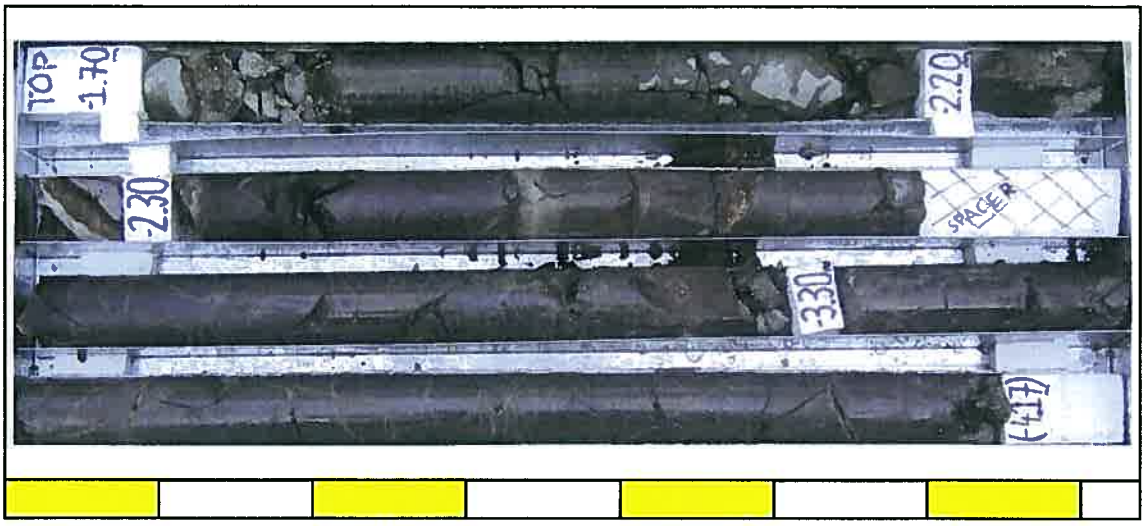
Grey Scale

Colour Scale

Location		Barambah Creek (South Abutment)	
Borehole Number		BH-04	
Box	1	of	2
Depth	-1.70 m	to	-4.17 m

Project	ARRP Bridges
Number	A592-002
Client	Queensland Department of Main Roads



Connell Wagner

Grey Scale

Colour Scale

Location		Barambah Creek (South Abutment)	
Borehole Number		BH-04	
Box	2	of	2
Depth	-4.17 m	to	-4.80 m

Project	ARRP Bridges
Number	A592-002
Client	Queensland Department of Main Roads