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Project: \\global-arup-com\australasia\projects\231000\231518-00 Bruce Highway action\work\internal\design\geotech\gint\20130903 cattle-francis creek bh logs.gpj
Library: g:\int 220 geotech\7.0 software\gint2 library and template tris_p01 2011\bris library_p02.gb
Log: 1.0.1 AUSTRALIA GENERAL BOREHOLE LOG (rev 15Jun11 checked AB/ACP Feb 2006)
gINT output page 1 of 5. Made by RAS 18Sept13 15:46

ARUP		BOREHOLE RECORD					HOLE		SHEET 1				
							BH01		OF 5				
CLIENT		TMR					LOGGED BY		Robyn Shaw				
PROJECT		BHAP Cattle and Frances Creeks Upgrade Project Ground Investigation					CHECKED BY		Nathan Roberts				
							DRILLED DATE		26-Aug-13 to 27-Aug-13				
CONTRACTOR		Cairns Drilling Pty Ltd			ANGLE		GROUND LEVEL		409502 E 7928342 N				
DRILL MODEL		MST 1500			BEARING		LOCATION						
DRILLER		Mick Bacon (Cairns Drilling)			HOLE DIAMETER		ELEVATION DATUM		Australian Height Datum				
					()		COORDINATE SYSTEM		Map Grid of Australia (MGA				
							1994)						
DRILLING		STRATA			MATERIAL DESCRIPTION		CONDITION		OBSERVATION				
SAMPLE, TEST, BIT, SUPPORT, ETC.		R.L.		DEPTH	GROUP SYMBOL	LEGEND	SOIL TYPE Plasticity / Grain Size, Colour, Minor Components		WATER/ MOISTURE		CONSISTENCY		SOIL ORIGIN, STRUCTURE, ETC.
		mAHD									m			COHESIVE		NON COHESIVE
B				0.15		GP	PAVEMENT - CONCRETE with aggregate consisting of various igneous rock types - basaltic, rhyolitic, Dmax 60mm, dry.	D				FILL	
							Gravelly SAND with Clay (GP) medium grained, red-brown, gravel is fine grained, subrounded, with trace roots/plant material, moist, water added by driller.	M				FILL	
SPTLS		N=9 8;4,5		1			Gravelly ASH fine grained, black, gravel is fine grained, subangular, dry.	D				FILL	
				1.45		CH	CLAY trace Gravel (CH) high plasticity, black, gravel is fine grained, red, subrounded, quartz grains Dmax 4mm, with no odour, moist.	M				ALV	
B				2									
SPTLS		N=20 2;7,13		2.50		CI	CLAY with Sand trace Gravel (CI) intermediate plasticity, grey, sand is fine grained, gravel is fine grained, moist.	M				ALV	
				2.75		SP	Clayey Gravelly SAND (SP) fine to medium grained, grey, gravel is fine grained, moist.	M				ALV	
				3			.... 3.30m SAND, as above, fine to medium grained						
SPTLS		N=49 13;21,28		4		CI	CLAY trace Sand (CI) intermediate to high plasticity, grey mottled orange with green patches ~2mm, sand is fine to medium grained, moist.	M				ALV	
				5			.... 5.00m As above, pale grey, trace gravel Dmax 6mm, angular to subrounded						
SPTLS		N=129** 30/70s		6			.... 5.50m CLAY with gravel, intermediate to high plasticity, grey with orange-red staining, gravel is fine grained, subangular						
				7		SP	.... 6.20m As above, orange and red staining in discrete small patches Dmax 5mm						
SPTLS		N=19 13;10,9		7.00			Clayey Gravelly SAND (SP) fine to medium grained, grey, gravel is fine to medium grained, subangular to subrounded, moist.	M				ALV	
				8									
SPTLS		N=12 6;6,6		8.50		SP	SAND (SP) coarse grained, angular, quartz rich, grains are white, black and red, overall colour is grey, moist.					ALV	
				9									
NOTES										JOB		231518-07	

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ARUP		BOREHOLE RECORD					HOLE		SHEET 2		
							BH01		OF 5		
CLIENT		TMR					LOGGED BY		Robyn Shaw		
PROJECT		BHAP Cattle and Frances Creeks Upgrade Project Ground Investigation					CHECKED BY		Nathan Roberts		
							DRILLED DATE		26-Aug-13 to 27-Aug-13		
CONTRACTOR		Cairns Drilling Pty Ltd			ANGLE		GROUND LEVEL		409502 E 7928342 N		
DRILL MODEL		MST 1500			BEARING -		LOCATION				
DRILLER		Mick Bacon (Cairns Drilling)			HOLE DIAMETER ()		ELEVATION DATUM		Australian Height Datum		
							COORDINATE SYSTEM		Map Grid of Australia (MGA		
DRILLING		STRATA			MATERIAL DESCRIPTION		CONDITION		OBSERVATION		
SAMPLE, TEST, BIT, SUPPORT, ETC.		R.L.	DEPTH	GROUP SYMBOL	LEGEND	SOIL TYPE	Plasticity / Grain Size, Colour, Minor Components	WATER / MOISTURE	CONSISTENCY		SOIL ORIGIN, STRUCTURE, ETC.
		m	m								
		m	m								
SPTLS N=37 7;15,22			10.02	CI		Gravelly CLAY trace Sand (CI) intermediate plasticity, orange-brown mottled red-brown, gravel is fine to medium grained, rounded, sand is fine to medium grained, moist.		M			ALV
			11								
SPTLS N=44 10;16,28			12			.... 11.50m CLAY trace Sand, intermediate plasticity, grey heavily mottled red, sand is fine to medium grained					
			12.30			.... 11.78m Relict joint surface or Fissure ~45deg, smooth, surface softened, no staining					
			13.00	SP		Silty SANDSTONE recovered as Gravel, medium grained, sandstone is fine to medium grained, pale grey, moist, chippings are low strength.	M				ALV
SPTLS N=25 13;13,12			14			SAND trace Clay (SP) medium to coarse grained, grey mottled/stained orange-brown moist.					ALV
			15			.... 13.30m Becomes less dense, coarser grained					
			16			.... 13.90m As above, quartz grains Dmax 4mm					
SPTLS N=27 10;14,13			17			.... 14.50m SAND, as above Dmax 2mm, quartz					
			18								
SPTLS N=40 10;15,25			19		 16.00m SAND trace Clay, coarse grained, grey, quartz grains Dmax 2mm	M				
			20		 16.40m Becomes dark grey with black staining/colouration					
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ARUP		BOREHOLE RECORD					HOLE BH01		SHEET 3 OF 5								
CLIENT TMR		PROJECT BHAP Cattle and Frances Creeks Upgrade Project Ground Investigation					LOGGED BY Robyn Shaw		CHECKED BY Nathan Roberts 26-Aug-13 to 27-Aug-13								
CONTRACTOR Cairns Drilling Pty Ltd																	
DRILL MODEL MST 1500		ANGLE BEARING -					GROUND LEVEL LOCATION 409502 E 7928342 N		ELEVATION DATUM Australian Height Datum								
DRILLER Mick Bacon (Cairns Drilling)		HOLE DIAMETER ()					COORDINATE SYSTEM Map Grid of Australia (MGA 1994)										
DRILLING		STRATA			MATERIAL DESCRIPTION			CONDITION		OBSERVATION							
SAMPLE, TEST, BIT, SUPPORT, ETC.		R.L.	DEPTH	GROUP SYMBOL	LEGEND	SOIL TYPE Plasticity / Grain Size, Colour, Minor Components	WATER/ MOISTURE	CONSISTENCY				SOIL ORIGIN, STRUCTURE, ETC.					
		mAHD	m					COHESIVE		NON COHESIVE							
				CH		CLAY trace Sand (CH) high plasticity, grey mottled orange, sand is fine to medium grained, moist. (continued)		VS	SL	ST	VST	IL	VL	LD	MD	VD	ALV
SPTLS N=60** 30/150s			21			.... 21.00m CLAY trace Sand, intermediate plasticity, grey mottled orange, sand is fine to medium grained											
			22														
SPTLS N=68* 15;52/230						.... 22.50m As above, with trace coarse quartz grains Dmax 3mm											
B			23.10	SP		Clayey SAND (SP) medium to coarse grained, grey with red staining/colouring, quartz grains Dmax 4mm, angular, red colour comes from clay content, moist.	M										ALV
SPTLS N=100** 30/90s			24			.... 24.00m As above, quartz grains size Dmax 2mm											
B			24.70	CI		Sandy CLAY (CI) intermediate to high plasticity, grey, sand is medium grained, with minor quartz, coarse grained Dmax 2mm, moist.	M										ALV
SPTLS N=51 15;21,30			25			.... 25.50m CLAY trace Sand, intermediate plasticity, grey, sand is fine grained											
			26														
SPTLS N=150** 30/60s			27			.... 27.00m As above, sand is medium to coarse grained											
			28														
SPTLS N=113* 26;30/80			29		 28.50m Sandy CLAY, intermediate plasticity, grey, sand is medium to coarse grained, quartz rich, very hard											
NOTES										JOB 231518-07							

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ARUP		BOREHOLE RECORD					HOLE BH01		SHEET 4 OF 5										
CLIENT TMR		PROJECT BHAP Cattle and Frances Creeks Upgrade Project Ground Investigation					LOGGED BY CHECKED BY DRILLED DATE		Robyn Shaw Nathan Roberts 26-Aug-13 to 27-Aug-13										
CONTRACTOR Cairns Drilling Pty Ltd		DRILL MODEL MST 1500		DRILLER Mick Bacon (Cairns Drilling)		ANGLE BEARING - HOLE DIAMETER ()		GROUND LEVEL LOCATION 409502 E 7928342 N ELEVATION DATUM Australian Height Datum COORDINATE SYSTEM Map Grid of Australia (MGA 1994)											
DRILLING		STRATA			MATERIAL DESCRIPTION			CONDITION		OBSERVATION									
SAMPLE, TEST, BIT, SUPPORT, ETC.		R.L.		DEPTH		GROUP SYMBOL		LEGEND		SOIL TYPE Plasticity / Grain Size, Colour, Minor Components		WATER / MOISTURE		CONSISTENCY				SOIL ORIGIN, STRUCTURE, ETC.	
		mAHD		m										COHESIVE		NON COHESIVE			
SPTLS N=64** 30/140s				30.00		SP				Clayey SAND (SP) coarse grained, grey, high quartz content, moist.		M		VS SL ST VST H VL J MD VD				ALV	
SPTLS N=129** 30/70s				31								M							
SPTLS N=130** 26/60s				32															
SPTLS N=75** 30/120s				33						.... 34.50m As above, with red-brown mottling of clay									
SPTLS N=60** 30/150s				34															
SPTLS N=300** 30/30s				35															
SPTLS N=100** 30/90s				36						.... 36.00m As above, Clayey SAND, coarse-grained, grey with orange-brown staining, sand grains are angular, high quartz content									
				37															
				38					 38.00m As above, denser, below this depth driller used roller bit due to hard ground									
				39															
NOTES										JOB		231518-07							

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Log: 1.0.1 AUSTRALIA GENERAL BOREHOLE LOG (rev 15Jun11 checked AB/CP Feb 2006)
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ARUP		BOREHOLE RECORD					HOLE BH01		SHEET 5 OF 5																					
CLIENT TMR					LOGGED BY Robyn Shaw					CHECKED BY Nathan Roberts																				
PROJECT BHAP Cattle and Frances Creeks Upgrade Project Ground Investigation					DRILLED DATE 26-Aug-13 to 27-Aug-13																									
CONTRACTOR Cairns Drilling Pty Ltd		ANGLE			GROUND LEVEL		LOCATION 409502 E 7928342 N																							
DRILL MODEL MST 1500		BEARING -			ELEVATION DATUM Australian Height Datum																									
DRILLER Mick Bacon (Cairns Drilling)		HOLE DIAMETER ()			COORDINATE SYSTEM Map Grid of Australia (MGA 1994)																									
DRILLING		STRATA			MATERIAL DESCRIPTION			CONDITION			OBSERVATION																			
SAMPLE, TEST, BIT, SUPPORT, ETC.		R.L.		DEPTH		GROUP SYMBOL		LEGEND		SOIL TYPE Plasticity / Grain Size, Colour, Minor Components			WATER / MOISTURE		CONSISTENCY				SOIL ORIGIN, STRUCTURE, ETC.											
		mAHD		m											COHESIVE		NON COHESIVE													
SPTLS N=225** 30/40s				40.54		SP				Clayey SAND (SP) coarse grained, grey, high quartz content, moist. (continued)			VS		SL		ST		VST		H		VL		LD		VD		ALV	
				41					 40.50m As above, very/extremely dense Borehole completed at 40.54m depth																				
				42																										
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