

Hole No. RHD28
 Project : EL 8/2009 East : 382415 0
 Prospect : Red Hills North : 5365301 0
 Grid : RL : 828 1
 Proj. GDA94

Graphical Drill Hole Log
 Azimuth : 90.2 degrees
 Declination : -74.7 degrees
 Total Depth : 276.8m (to be confirmed)
 Collar surveyed by TriTech Professional Services (23/02/2011)

Logged by MB
 Drilled by BLY
 Drill type LF90 DD
 Drill Date 23/02/2011
 07/03/2011

Massive
 Pervasive
 Disseminated
 Narrow vein

From	To	Colour/Weathering	Structure type 1	Structure type 2	Angle CA	Graphic structure	Log grain size	Description	Alteration						Mineralization						
									Silica	Sericite	Albite	Carbonate	Chlorite	Hematite	Vein Qtz %	Mineralization Assemblage	Pyrite	Other	Other	Other	
CONTINUED FROM 145.35m																					
150	151	150-2 - QUARTZ 150-2m VEIN			40°			CVC ALTERED, ALBITISED DACITIC VOLCANICLASTIC													
151	152	0.25m			152-2			HARD VERY HARD, TOUGH, SILICEOUS, MASSIVE TO COARSELY FRAGMENTAL TEXTURED, LIGHT TO MID CREAM, GREY-CREAM, MOTTLED GREEN,													
152	153	QUARTZ VEIN (FIBROUS)			152-45			COARSE TO VERY COARSE-GRANED, ALTERED, DACITIC VOLCANICLASTIC SANDSTONE TO BRECCIA. FELDSPAR-PHYRIC WITH INCREASING													
153	154							RAGGED, ANGULAR CLASTS OF CHLORITE + SERICITE ALTERED VOLCANICS, UP TO 40-50mm IN LENGTH. INITIALLY STRONGLY BLEACHED,													
154	155							WITH SERICITE + ALBITE ALTERATION. WEAK TO MODERATE PATCHY CHLORITE ALTERATION.													
155	156	WEAK IRREGULAR ALIGNMENT OF LARGE CLASTS, ? FRAGMENTAL TEXTURES																			
156	157																				
157	158	OR ? ALTERATION PSEUDO-BRECCIA.																			
158	159							158.9m BROKEN AT CONTACT.													
CONTACT BROKEN. FAULT																					
159	160							159.3m CVC ALTERED DACITIC VOLCANICLASTIC SANDSTONE, MINOR BRECCIA: HARD TO VERY HARD,													
160	161	161.15-161.25 PUGGY CLAY FAULT						STREAKED WEAKLY FOLIATED, COARSE TO VERY COARSELY FRAGMENTAL TEXTURED, LIGHT TO MID CREAM, FAWN, VERY COARSE-GRANED,													
161	162	SHEAR 50°						ALTERED DACITIC VOLCANICLASTIC SANDSTONE WITH BRECCIA INTERMIXED. FELDSPAR + QUARTZ-PHYRIC SANDSTONE AND GROUNDMASS TO BRECCIA, MODERATELY TO STRONGLY													
162	163							SERICITE + PATCHY SILICA-ALBITE ALTERATION, INCREASINGLY CHLORITE ALTERED VERY COARSE GRANED BRECCIA FROM 165.3m.													
163	164	VERY COARSE RAGGED FRAGMENTAL TEXTURES, PROBABLY PRIMARY.						166.3m SHEARED ALTERED NEAR CONTACT. FAULT: SHEARED ROCK INFILL													
164	165																				
165	166	SHEARED CHLORITE.						166.55m CVC ALTERED DACITIC VOLCANICLASTIC BRECCIA/HYALOCLASTITE: HARD IN PLACES													
166	167							MODERATELY HARD, INITIALLY MODERATELY FOLIATED, VERY COARSELY FRAGMENTAL TEXTURED, MID GREY-BROWN, STREAKED AND MOTTLED GREEN,													
167	168	WEAK TO MODERATE FOLIATION, CLASTS STRETCHED, LOCALLY LENSOIDAL						VERY COARSE-GRANED, ALTERED VOLCANICLASTIC BRECCIA. ABUNDANT QUARTZ + SERICITE,													
168	169							FELDSPAR-PHYRIC GROUNDMASS SUPPORTING LARGE ANGULAR RAGGED GREEN FELDSPAR-PHYRIC VOLCANIC CLASTS, UP TO 50-60mm IN LENGTH. MODERATELY SERICITE ALTERATION													
169	170							PERVASIVE IN GROUNDMASS; MODERATE TO STRONG CHLORITE + SERICITE ALTERATION OF INTRACLASTS.													
170	171							PATCHY ALBITE ALTERATION, STRONGER NEAR LOWER CONTACT.													
171	172	172.35m 2cm PUGGY CLAY SHEAR			66°			GRADATIONAL INTO JIG-SAW FIT BRECCIA FROM 176.8m.													
172	173							177.35m SHARP IRREGULAR CONTACT.													
173	174																				
174	175	BECOMING INTENSELY MICROFRACTURED						CVC VARIABLY ALTERED DACITIC BRECCIA/HYALOCLASTITE: HARD VERY HARD FLECKED,													
175	176	JIG SAW FIT BRECCIA						MICRO-FRACTURED IN PATCHES MASSIVE, LIGHT TO MID BROWN-GREY, VERY COARSE-GRANED,													
176	177							ALTERED VOLCANICLASTIC BRECCIA DOMINANT.													
177	178	STRONG MICRO-FRACTURE AND VEIN OVERPRINT.																			
178	179																				
179	180																				

ALTERED VOLCANICLASTIC BRECCIA DOMINANT.

Hole No. RHD28	Graphical Drill Hole Log			Logged by MB	Massive
Project: EL 8/2009	East: 382415 0	Azimuth: 90 2 degrees	Drilled by BLY	Pervasive	
Project: Red Hills	North: 5365301 0	Declination: -74 7 degrees	Drill type LF90 DD	Disseminated	
Grid:	RL: 828 1	Total Depth: 276 8m (to be confirmed)	Drill Date 23/02/2011	Narrow vein	
	Proj. GDA94	Collar surveyed by TriTech Professional Services (23/02/2011)	Drill Date 07/03/2011		

From	To	Colour/Weathering	Structure type 1	Structure type 2	Angle CA	Graphic structure	Log grainsize	Description	Alteration						Mineralization				
									Silica	Sericite	Albite	Carbonate	Chlorite	Hematite	Vein Qtz %	Mineralisation Assemblage	%	Visible Discontinuities	Porphyry
CONTINUED FROM 189.9m																			
210	211	MASSIVE, WITH IRREGULAR VEIN AND RARE BRECCIA OVERPRINT.						CVC DACITE LAVA: HARD, FREQUENTLY VERY HARD MICRO-FRACTURED MASSIVE, APHYRIC TO SPECKLED, PORPHYRITIC, MID TO DARK GREEN, GREY-GREEN, LOCALLY LIGHT TO MID PINK-GREY, MEDIUM-GRAINED, WEAKLY ALTERED, DACITE LAVA.								TRACE PY. AS BLEBS.			
211	212							IRREGULAR PATCHES OF SEMI-PERVASIVE ALBITE + SILICA ALTERATION OF GROUNDMASS. ALBITE ZONES FREQUENTLY CUT BY THIN 1-2 CM VEINS OF FIBROUS QUARTZ + ALBITE.								TRACE QTZ. + ALBITE AS VEINS.			
212	213							DACITE BECOMES COARSER GRAINED WITH 3-5 MM FLECKS OF DARK GREEN CHLORITE + SERICITE, PROBABLY AFTER FERRO-MAGNESIUM PHENOCRYSTS.								TRACE CPY, ASSOCIATED WITH PY. VEINS.			
213	214							218.3 - 219.0m THIN 5mm IRREGULAR VEIN OF PYRITE + MINOR CHALCOPYRITE + TRACE GALENA SUB-PARALLEL TO CORE AXIS.											
214	215																		
215	216																		
216	217	BECOMING MASSIVE TO PORPHYRITIC																	
217	218																		
218	219																		
219	220																		
220	221																		
221	222																		
222	223	SOME 1-2 cm QUARTZ VEIN OVERPRINT.																	
223	224																		
224	225																		
225	226																		
226	227																		
227	228	GREY SILICA + ALBITE ALTERATION ZONE						STRONGLY ALBITE ALTERED GROUNDMASS, COMMON SMALL SPOTS AND FLECKS OF CHLORITE + SERICITE. 227.1 - 228.0m GREY SILICA + ALBITE ALTERATION ZONE WITH MINOR - COMMON CREAM CARBONATE, VERY HARD VEINED, MICRO-FRACTURED, HIGHLY SILICEOUS.								MINOR VEIN FORM PYRITE, SPARSE CPY, + TRACE GALENA.			
228	229	THIN 1-3 cm TECTONIC BRECCIA VEINS.																	
229	230																		
230	231																		
231	232							231.8m IRREGULAR GREY-CREAM SILICA VEIN WITH MINOR PYRITE, VEIN UP TO 1cm THICK. MICRO-FRACTURED, BECOMING VEINED.								SPARSE PYRITE.			
232	233																		
233	234																		
234	235	INCREASING QUARTZ VEIN OVERPRINT						DACITE TENDING TO FINE GRAINED, APHYRIC, WEAKLY CHLORITE + SERICITE ALTERED, WITH QUARTZ VEIN OVERPRINT. BLEACHED NEAR CONTACT. 236.5m BROKEN, DIFFUSE (ALTERATION) CONTACT.								TRACE PY. AS BLEBS IN QUARTZ VEINS			
235	236																		
236	237	ODD TEXTURES, PERLITIC FRACTURES, POSSIBLE SPHERULITES.						CVC ALTERED, DEVITRIFIED, PERLITIC, DACITIC LAVA OR VOLCANICLASTIC: SOFT TO RELATIVELY HARD, LEACHED, TENDING TO CLAYEY, SPOTTED, 238.7m LIGHT CREAM-GREY, CRYSTAL RICH								NO VISIBLE SULPHIDE MINERALISATION			
237	238																		
238	239	CHAOTIC TURBIDITIC APPEARANCE.						CVC STRONGLY ALTERED, CRYSTAL-RICH VOLCANICLASTIC: HARD, LOCALLY SILICEOUS, SPECKLED TO CRUDELY STREAKED.								COMMON SPHALERITE 10-15% + SPARSE GALENA.			
239	240																		

* SPLIT

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									Silica	Sericite	Albite	Carbonate	Chlorite	Hematite	Vein Qtz %	Mineralisation Assemblage	Other	Vein Qtz %	Other
CONTINUED FROM 238.7m																			
240	241	LMH COMPLEX PATCHY ALTERATION OVERPRINT.						CVC STRONGLY ALTERED, CRYSTAL-RICH VOLCANICLASTIC: HARD TO VERY HARD, MASSIVE, STRONGLY INTERMIXED, ALTERED, MID GREY-GREEN, DARKEST GREEN, MID CREAM, MEDIUM TO COARSE-GRAINED, CRYSTAL-RICH, VOLCANICLASTIC SANDSTONE. STRONG CHLORITE AND PATCHY SILICA + SERICITE ALTERATION. 244.5m SHARP IRREGULAR CONTACT.											
241	242																		
242	243																		
243	244																		
244	245	WEAK LMH LENTICULAR FOLIATION 40°			40°			CVC VOLCANICLASTIC BRECCIA: HARD TO VERY HARD, WEAKLY FOLIATED, BECOMING VERY COARSELY FRAGMENTAL TEXTURED, DARK GREY-GREEN, MOTTLED CREAM-GREY, VERY COARSE-GRAINED, FELDSPAR AND LITHIC-RICH VOLCANICLASTIC BRECCIA. ABUNDANT QUARTZ + FELDSPAR GRUNDMASS; POLYHICTIC, DOMINANTLY DACITIC VOLCANIC CLASTS. DECREASING CHLORITE + SERICITE ALTERATION. INCREASING PINK-BUFF RHYOLITE LAVA CLASTS; CLOSE PACKED, MATRIX-SUPPORTED, WITH DULL GREEN? DEVITRIFIED GLASS FRAGMENTS. 251.8m SHARP PLANAR LITHOLOGICAL CONTACT.											
245	246																		
246	247	INCREASING VERY COARSE FRAGMENTAL TEXTURES.																	
247	248																		
248	249																		
249	250	INCREASING BLACK-GREEN DEVITRIFIED GLASSY CLASTS.																	
250	251																		
251	252																		
252	253	PORPHYRITIC TEXTURES IN PATCHES.						CVC ALTERED RHYOLITE LAVA: HARD TO EXTREMELY HARD, VERY TOUGH, SILICEOUS, PORPHYRITIC TO BRECCIATED, MID ORANGE-BUFF, MOTTLED DARK GREY, BLACK, FINE TO MEDIUM-GRAINED, FELDSPAR + QUARTZ - PHYRIC RHYOLITE LAVA. INTERMIXED VERY COARSE-GRAINED, IMMATURE, VOLCANOMICTIC RHYOLITE BRECCIA OR POSSIBLE RHYOLITE AUTOBRECCIA. MOST PROBABLY A VOLCANICLASTIC BRECCIA FROM 255.5-261.2m BECAUSE OF POLYHICTIC CLAST TYPES AND QUARTZ + FELDSPAR + DARK GREEN-BLACK DEVITRIFIED GLASS COMPOSITION OF GRUNDMASS.											
253	254																		
254	255																		
255	256	255.5 COARSE TO VERY COARSE FRAGMENTAL TEXTURES.																	
256	257																		
257	258																		
258	259																		
259	260																		
260	261																		
261	262	261.2 STRONG ALTERATION AND MINOR QUARTZ VEIN OVERPRINT TEXTURES.																	
262	263																		
263	264																		
264	265																		
265	266																		
266	267	WEAK STREAKY FOLIATION IN PLACES, VERY COARSE FRAGMENTAL TEXTURES.						265.75m DIFFUSE GRADATIONAL CONTACT. CVC ALTERED RHYOLITIC VOLCANICLASTIC BRECCIA OR RHYOLITE AUTO-BRECCIA: HARD TO VERY HARD, COARSE TO VERY COARSE FRAGMENTAL TEXTURED, MID TO DARK GREY, SPECKLED BLACK, VERY COARSE-GRAINED, IMMATURE, VOLCANOMICTIC, MATRIX-SUPPORTED, VOLCANICLASTIC BRECCIA. DARKEST GREEN-BLACK CHLORITISED DEVITRIFIED VITRICLASTS AND WISPS.											
267	268																		
268	269																		
269	270																		

* 238.7 - 251.8m LOWER MINERALISED HORIZON

