

Hole No. RHD27	Graphical Drill Hole Log		Logged by MB	Massive
Project: EL 8 2009	East: 382415.5	Azimuth: 89.3 degrees	Drilled by BLY	Pervasive
Prospect: Red Hills	North: 5365301.0	Declination: -69.2 degrees	Drill type LF90 DD	Disseminated
Grid:	RL: 427.5	Total Depth: 244.8m (to be confirmed)	Drill Date 14/02/2011	Narrow vein
	Proj: GDA94	Collar surveyed by TriTech Professional Services (19/02/2011)	22/02/2011	

From	To	Colour	Weathering	Structure	Foliation	Angle	Grain	Structure	Log name	Description	Alteration					Mineralization		
											Silice	sericite	chlorite	pyrite	pyrrhotite	1cm	2cm	5cm
0	1	CO								SURFICIAL CLAY: SOFT POORLY CONSOLIDATED, CREAM CLAY.	DEPTH OF CONTACT					UNCERTAIN; RECOVERED		
1	2	PO								CVC OXIDISED WEATHERED FOLIATED DACITIC VOLCANICLASTIC OR LAVA: PARTIALLY OXIDISED, MODERATELY TO STRONGLY WEATHERED, SOFT, CLAYEY TO MODERATELY HARD, IN PLACES STRONGLY FOLIATED, LIGHT TO MID ORANGE - BROWN, CREAM, LIGHT TO MID GREEN - GREY, MEDIUM - GRAINED, FELDSPAR - PHYRIC, VOLCANICLASTIC SANDSTONE. STRONGLY WEATHERED, CLAYEY, WEAKLY FERRUGINOUS TO 6.3m, WITH LITHOLOGY LARGELY UNCERTAIN.						SPARSE FINE PY. AS VEINLETS IN SERICITISED PATCHES.		
2	3																	
3	4																	
4	5																	
5	6																	
6	7																	
7	8																	
8	9	7.9m Breccia								MODERATELY TO STRONG FOLIATION THROUGHOUT, OBSCURED IN PATCHES BY OXIDATION, RELATIVELY FRESH FROM 6.9-8.9m, WITH STREAKY CHLORITIC PSEUDO-BRECCIA TEXTURES.						STRONGLY PYRITIC IN PATCHES, 5%+ PYRITE IN PLACES.		
9	10																	
10	11																	
11	12																	
12	13																	
13	14																	
14	15																	
15	16																	
16	17																	
17	18									16.7m FINER GRAINED GRADATIONAL INTO PARTIALLY OXIDISED, LIGHT GREEN, SERICITE + CHLORITE ALTERED, VOLCANICLASTIC SILTSTONE. MINOR VUGHY QUARTZ VEINS AND STRINGERS. 19.45m VEINED IRREGULAR CONTACT.								
18	19	VERY STRONGLY FOLIATED, SCHISTOSE																
19	20	PO COARSELY CRYSTALLINE VEIN CONTACT -> 55°								QUARTZ VEIN: PARTIALLY OXIDISED, WEAKLY WEATHERED, VUGHY WHITE QUARTZ MACROVEIN, MINOR CHLORITE, 26.75m INCLUSIONS. SHARP PLANAR CONTACT					80°	COMMON FE OXIDES IN VUGHY + ON FRACTURES		
20	21	PO BOPO=21.5m																
21	22	FR								21.5m CVC WEAKLY OXIDISED TO FRESH, FOLIATED DACITIC VOLCANICLASTIC OR LAVA: INITIALLY PARTIALLY OXIDISED, BECOMING FRESH, HARD TO MODERATELY HARD, VEINED, LOCALLY VUGHY, LIGHT TO MID GREEN - GREY, FINE TO MEDIUM - GRAINED, FELDSPAR - PHYRIC DACITE. VUGHY QUARTZ VEINS AT START, BECOMING MODERATELY FOLIATED. STRONG PERVASIVE SERICITE + SPARSE PYRITIC ALTERATION. 26.2m BROKEN AT CONTACT, APPEARS SHARP PLANAR.						SPARSE 1-2% PY. AS DISSEMINATIONS, AGGREGATES. WEAK PATCHY CREAM CARBONATE ACTIN. VUGHY, WITH PY. SPECKS.		
22	23																	
23	24	24.4m MODERATE FOLIATION 32°																
24	25	FRIPPLE, CRUMBLY FROM 25.55-25.7m																
25	26																	
26	27	FR 26.9m 5cm PUGGY FAULT @ 46°								CVC BLACK CARBONACEOUS SHALE: FRESH, MODERATELY HARD, JOINTED, BLOCKY, FOLIATED, LAMINATED, DARKEST BLACK, VERY FINE - GRAINED, CARBONACEOUS SHALE. SOME DARK GREY SILTSTONE INTERBEDS AND LAMINAE. SOFT GRAPHITIC COATINGS ON SOME JOINT SURFACES.						COMMON 5-10% PY. AS DISSEMINATIONS AND AGGREGATES.		
27	28																	
28	29	29.3m FOLIATION/ ?SG 45°																
29	30																	

* Split

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Prospect : Red Hills	North : 5365301.0	Declination : -69.2 degrees	Drill type LF90 DD	Disseminated
Grid :	RL : 827.5	Total Depth : 244.8m (to be confirmed)	Drill Date 14/02/2011	Narrow vein
	Proj. GD494	Collar surveyed by TriTech Professional Services (19/02/2011)	22/02/2011	

From	To	Colour / weathering	Structure type	Structure type	Angle (°)	Graphic structure	Log grain size	Description	Alteration					Mineralization					
									Silica	Sericite	chlorite	Carbonate	Sphalerite	Pyrite	Mercurite	Vein	Mineralization assemblage	Pyrite	Sphalerite
								SHARP CONTACT → 53°											
90	91							FAULT: BROKEN, TENDING TO CLAYEY INFILL											
91	92							90.85m CVC VARIABLY ALTERED, DACITIC LAVA:											
92	93	GENERALLY MASSIVE						FRESH HARD IN PATCHES SILICEOUS MASSIVE, STREAKED, LOCALLY SPECKLED LIGHT TO MID CREAM-GREY MID GREY FINE TO MEDIUM-GRAINED, FELDSPAR-PHYRIC DACITE. VARIABLE MODERATE TO STRONG, PERVASIVE SERICITE ALTERATION. PATCHY SERICITE + SILICA + SPARSE PYRITE ALTERATION.										VARIABLE SPARSE TO MINOR PYRITE AS STRINGERS AND AGGREGATES	
93	94	WITH LOCALISED WEAK FOLIATION.																	
94	95																		
95	96	TENDING TO LEACHED, VUGHY.						94.75 - 96.5m STRONGLY SERICITE ALTERED, VARIABLY SILICA ALTERED, LEACHED VUGHY, FELDSPAR-PHYRIC DACITE; 1-3% PYRITE + TRACE GALENA MINERALISATION.											INCREASING 2-4% PYRITE IN ALTERED SERICITE + SILICA ROCK. TRACE GALENA IN VUGHS.
96	97	96.55m																	
97	98	THIN 1-2cm PUGGY CLAY						STRONG SERICITE + PATCHY CHLORITE ALTERATION FROM 97.5m; SPARSE SPHALERITE + TRACE											SPARSE SPHALERITE.
98	99	FAULT / SHEAR → 27°						100.5m SHARP PLANAR CONTACT. GALENA.											
99	100	CONTACT → 32°																	
100	101							CVC DACITIC BRECCIA: FRESH HARD VARIABLY SILICEOUS, STREAKED, FRAGMENTAL TEXTURED, MID GREEN-GREY, CREAM-GREY COARSE TO VERY COARSE-GRAINED ALTERED, DACITIC AUTO-BRECCIA. INITIALLY FELDSPAR-PHYRIC WITH CREAM CARBONATE ALTERATION. BECOMING MODERATELY SERICITE + MINOR CHLORITE ALTERED.											TRACE TO SPARSE ?PYRRHOTITE AS CRUDE BANDS + STREAKS.
101	102	WEAK IRREGULAR STREAKY FOLIATION.																	
102	103	FRAGMENTAL TEXTURES																	
103	104	POSSIBLE DUE TO ALTERATION.						105.4m BROKEN, POSSIBLY FAULTED CONTACT.											
104	105																		
105	106	MASSIVE, RARELY FLECKED, ?MARLY.						CVC RHYOLITIC/DACITIC VOLCANICLASTIC SILTSTONE: HARD, LIGHT GREY, MASSIVE VERY FINE-GRAINED.											TRACE SPHALERITE IN CARBONATE VEINS
106	107							107.15m GRADATIONAL LITHOLOGICAL CONTACT.											
107	108	MODERATE 1-3mm BANDING, FOLIATION → 40°						CVC DACITIC NYALOCLASTITE BRECCIA: FRESH, HARD, INITIALLY STREAKED TO BANDED, BECOMING COARSE FRAGMENTAL TEXTURED, MID GREEN, GREY-GREEN, CREAM-GREY, COARSE-GRAINED, REWORKED LITHIC-RICH, RHYODACITIC, VOLCANIC BRECCIA.											THIN QUARTZ VEINS.
108	109	ASHY NEAR START OF INTERVAL.																	
109	110							MODERATE PERVASIVE SERICITE ALTERATION OF MATRIX. PATCHY MODERATELY STRONG CHLORITE ALTERATION AS STREAKS, STRINGERS AND OF CLASTS. QUARTZ + FELDSPAR + SERICITE GROUNDMASS THROUGHOUT WITH SERICITISED ?DACITE CLASTS COMMON, VARIABLE CHLORITE ALTERED CLASTS OR ALTERATION DOMAINS. SPARSE SCATTERED WHITE CARBONATE OVERGROWTHS AND AS IRREGULAR STRINGERS,											TRACE TO SPARSE SPHALERITE AS AGGREGATES, CLUSTERS IN CHLORITE PATCHES.
110	111																		
111	112																		
112	113																		
113	114																		
114	115																		
115	116																		
116	117																		
117	118																		
118	119																		
119	120							119.85m SHARP IRREGULAR CONTACT											TRACE PYRITE AS BLEBS.

CORE LOSS ZONE ? SHEAR

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 Prospect: Red Hills North: 5365301.0
 Grid: RL: 827.5
 Proj. GDA94

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 Azimuth: 89.3 degrees
 Declination: -69.2 degrees
 Total Depth: 244.8m (to be confirmed)
 Collar surveyed by TriTech Professional Services (19/02/2011)

Logged by MB
 Drilled by BLY
 Drill type LF90 DD
 Drill Date 14/02/2011
 22/02/2011

Massive
 Pervasive
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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 %	Mineralisation Assemblage	Pyrite	Galena
CONTINUED FROM 169.65m																		
180	181	MASSIVE,						CVC ALTERED ALBITISED/CHLORITISED DACITIC										
181	182	MICRO-FRACTURED						LAVA: EXTREMELY HARD, TOUGH, SILICEOUS,										
182	183	TO BRECCIATED.						MICRO-FRACTURED, IN PLACES BRECCIATED DARK										
183	184	? ALTERATION PSEUDOBRECCIA						PINK-GREY DARKEST GREEN FINE TO COARSE- GRAINED, ALBITE + SILICA + CHLORITE ALTERED LAVA. SOME CREAM CARBONATE MATRIX BRECCIA.										
184	185	CLAY SHEAR						184-2m SHARP IRREGULAR CONTACT.										
185	186	GENERALLY						CVC BLEACHED SILICA + SERICITE ALTERED										
186	187	MASSIVE TO						RHYO-DACITE LAVA: HARD TO VERY HARD,										
187	188	GHOST						MICRO-FRACTURED, BLEACHED, MOTTLED,										
188	189	PORPHYRITIC						MID CREAM, DARK GREEN, MEDIUM-GRAINED,										
189	190	TEXTURES.						STRONGLY HYDROTHERMALLY ALTERED,										
190	191	VERY STRONG						VARIABLY CHLORITISED, PUMICEOUS RHYO-DACITE.										
191	192	ALTERATION						REMNANT PORPHYRITIC TEXTURES. INCREASING										
192	193	OVERPRINT						RAGGED SPOTS AND WISPS OF MURKY KHAKI-										
193	194	THROUGH OUT.						GREEN SERICITE + CHLORITE, PROBABLY AFTER										
194	195							PUMICE. PROBABLY A DEVITRIFIED GLASSY										
195	196							RHYO-DACITE LAVA. VERY STRONG PERVASIVE										
196	197							SILICA + SERICITE ALTERATION, WITH PATCHY										
197	198							DARK GREEN CHLORITE ALTERATION LOCALLY										
198	199							SEMI-PERVASIVE. SOME IRREGULAR ALBITE +										
199	200							SILICA BANDING.										
200	201							SPARSE TO MINOR DISSEMINATED PYRITE										
201	202							AND TRACE SPHALERITE + GALENA BLEBS;										
202	203							SPARSE PYRITE IN VEINLETS AND STRINGERS.										
203	204																	
204	205	FRACTURES/ THIN 1mm						VERY STRONGLY ALTERED, BLEACHED,										
205	206	VEINING, WITH						PERVASIVELY SERICITISED AND SILICIFIED;										
206	207	SELVEDGES						PUMICEOUS, DEVITRIFIED, LOCALLY WITH										
207	208							PERLITIC MICRO-FRACTURING TEXTURES.										
208	209							SPARSE CREAM CARBONATE + ALBITE VEINS AND										
209	210							STRINGERS.										
								DOMINANTLY SEMI-PERVASIVE CHLORITE										
								ALTERATION, AS INTENSE SPOTTING TO										
								SEMI-MASSIVE REPLACEMENT. PATCHY BLEACHING,										
								WITH SILICA + SERICITE IN SELVEDGES AROUND										
								THIN VEINLETS AND AS 10-50 CM DOMAINS.										
								207.0m SPHALERITE + GALENA IN THIN										
								5-10 MM CARBONATE VEINS,										
								INTENSE DARK GREEN CHLORITE ALTERATION.										
								208.75m DIFFUSE IRREGULAR CONTACT.										
								209.35m CVC QUARTZ + BM SULPHIDES: GREY QTZ.										
								CVC CHLORITE + SILICA + PYRITE ALTERATION:										

SPARSE
0.5-1% PY.
AS VEINS AND
BLEBS.

BLEACHED
AROUND
FRACTURES.

LOCALLY
COMMON PY.
AGGREGATES.
NEAR SHEAR.

SPARSE TO
MINOR PYRITE
BLEBS
THROUGHOUT.

MINOR PY.
AS VEINLETS
AND IN
MICRO-
FRACTURES.

TRACE GALENA
+ SPHALERITE.
SPARSE QTZ
VEINING.

ABUNDANT 30%
SPHALERITE - SPARSE PY.
COMMON PY.

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									Silica	Serpentine	Albite	Carbonate	Chlorite	Hematite	Vein Qtz %	Mineralisation Assemblage	Other	Veined	Disseminated
CONTINUED FROM 228-25m																			
240	241	STREAKY TO VENED						CVC RHYOLITE LAVA : EXTREMELY HARD, TOUGH, SILICEOUS MICRO-FRACTURED, MID TO DARK ORANGE, BUFF, MOTTLED GREEN - BLACK, VERY FINE - GRAINED, NON-PORPHYRITIC RHYOLITE.											
241	242	CHLORITIC ALTERATION OVERPRINT.																	
242	243																		
243	244																		
244	245							EOH = 244.8m (confirmed)											
245	246																		
246	247																		
247	248																		
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249	250																		
250	251																		
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TRACE TO SPARSE PY. AS BLEBS, VENS. RAREST TRACE GALENA