

Appendix4c
Diamond Drill Holes
NCT006, NCT007
Lithology Logs – (Scanned Paper Logs)
(See Digital File EL9_2005_200605_08_Appendix4c.pdf)

Survey Depth	Azimuth	Dip	Hole Co-ordinates	
50	80	-65	Easting_AMG	
75	80	-65	Northing_AMG	
			Elevation (m)	
			Azimuth_Mag	
			Dip	

PROJECT: <u>Queenstown</u>	<u>Red Hills</u>
PROSPECT: <u>Red Hills</u>	
DATE: <u>22/11/05</u>	
LOGGED BY: <u>M. Blake</u>	



$\alpha = 40^\circ / \text{VCA}$

HOLE DEPTH	CORE RECOVERY	RQD	SAMPLE NO PREFIX	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG	GEOLOGY NOTES	SUMMARY LOG
				%					STRUCT	ALT			
				.1	.3	1	3	5			mm 0.06 0.5 2 8 32 81		
40	100	25										40-40.8 oxidised, broken ground	
	80											AS ABOVE	
42		90										40.8 - 78.6	
	75	55										pink and creamy green mottled coarse	
44	100	80										fibromatous matrix supported juvenile	
		100										volcanic breccia	
46		90										clasts up to 4 cm on long axis are	
		100										sub angular and elongated in matrix	
48		90										flattened fabric	
		90											
50		90											
	100	90										44-58m distinct greyish colour change in core	
52	90	100										alteration	
	100	100										strongly spotted all clasts	
54		70										mod. pervasive sericite all matrix	
		100										carb all of phyllosilicates in matrix	
56		100										carb veining in clasts dominantly 0.5-5mm thick	
		100										vein creamy green apple green sericite assoc with veins	
58		90										Mineralisation strong silicification 44-58m	
		100										stone cp, 1-3% py fg euhedral 3-5% shreddy fg sulphide	
60	100	90										in silicified zone 50.3-51.3m	
		80										gn + sphulphite in qz vein @ 67-8m	
62		85										increasingly matrix supported	
		80										increasing sericite all silicified carbonate	
64		90										clast size decreasing	
		90										irregularly shaped veins with sphulphite 5%	
66	100	100										2-3mm thick in quartz sericite vein (20cm)	
		80											
68		95										69.9 qz-cb-sericite vein 1-2cm with 15%	
		95										1cm sphulphite euhedral	
70	75	50										70.8-73.5	
	100	80										Quartz-calcite-sericite-chlorite veining	
72	95	100										strong ab-cb-ser all of disseminated host	
	100	95											
74		100										75.6-76.1 qz veining as above	
		100										clast size decrease	
76		65										core greenish cream, strongly cb, ser, chl, ab	
		100										78.6 altered proximal to veins	
78		85										chilled margin	
		70											
80	95	70											

REMARKS

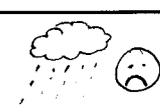
Survey Depth	Azimuth	Dip	Hole Co-ordinates	
100	78	-64	Easting_AMG	
			Northing_AMG	
			Elevation (m)	
			Azimuth_Mag	
			Dip	

PROJECT: <u>QUEENSTOWN</u>
PROSPECT: <u>RED HILLS</u>
DATE: <u>24/105</u>
LOGGED BY: <u>MB</u>

HOLE DEPTH	CORE RECOVERY	RQD	SAMPLE NO	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG					GEOLOGY NOTES	SUMMARY LOG	
				PREFIX	%					STRUCT	ALT	mm						
					1	3	1	3	5			0.06	0.05	2	8			32
80	100	80																
82	100	90																
84		60																
86		90																
88		90																
90		55																
92		30																
94		75																
96		100																
98		70																
100		85																
102		75																
104		90																
106		90																
108		100																
110		100																
112		100																
114		100																
116		100																
118		100																
120		100																



Core loss
Borehole
Mismatch



78.6 - 82.5
pinkish green grey dominant, feldspar porphyritic
dacitic lava phenos: feldsp 95% 5mm sub euhed
93 5% 1mm rounded
chilled margin
bedded, massive

82.5 - 108.1
pinkish brown to
brownish creamy green mottled
coarse fibrous matrix supported
sheared dominantly massive Dacitic Vld Bx
as at 40 m

Fe-breccias incorporating 93 vein
matrix.

Alteration
82.5-92.2 Strong Si, mod Ab, cb, ser
wk chl all phenos cbait.
92.2-99 Strong ser, cb, chl cream-brown
white calcite veins overprinted by Fe carb vns
Mineralisation
No significant mineralisation to 92.2

92+ sulphides assoc with 1-5mm stockwork-like
veins in clasts & silicified matrix
larger clasts less frequent
gn, py + blx grey metallic
possible Cu mineral

Alt
Mod silica-cb-ser-ab-chl

107.1 F

108.1 - 111.4 Dacitic vld bx as above

111.4 - 113.1 ⁹³ creamy grey feldspar seral breccia
vld sandstone/siltstone

113.7 - 117.7 reddish brown coloration

113.1 -
reddish purple to green brown feldspar > 93
phytic Dacitic lava silicified.
microporphyritic & occasional porphyritic textures evident
93 phenos 9-1mm fsp ~ 3mm

1
666m
fimbria

REMARKS
dark sulphide w
threadlike 93-cb veins in
matrix - suspect Galena

Survey Depth	Azimuth	Dip	Hole Co-ordinates	
150m	79.5	-63.5	Easting_AMG	
			Northing_AMG	
			Elevation (m)	
			Azimuth_Mag	77°
			Dip	65°

PROJECT: Red Hills EL9 2005
PROSPECT: Red Hills
DATE: 25/11/05
LOGGED BY: MB + NF



HOLE DEPTH	CORE RECOVERY	RQD	SAMPLE NO PREFIX	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG	GEOLOGY NOTES	SUMMARY LOG
				%	1	3	1	3	5	STRUCT			
120	100	85										Strong to intense silicification overprinting weak-mod sericite-chlorite	
122		80										Mineralisation: grey black → bluish black fine grained metallic sulphide in Qtz-Cb vns & sheets 1-3%	
124		95										126-128 - moderately vuggy	
126		100										129-131 m: almost stock work Qtz-Cb vns with >0.3% galena + trace py, vns ≤ 2mm	
128		95										Qtz-Kspar-chl-Cb vn marking change in alt ²	
130		90										• K-spar and/or He altered fld > Qtz phytic moderately foliated ← possible hyaloclastite.	
132		100										• Alt ⁿ mod. pervasive reddening, silicification and chlorite, + weak cb	
134		95										• Min: Sph + Gal + Py in Qtz-Kspar-Cb vns	
136		100										138-139.5 Irregular bifurcated Cb vn	
138		95										chl alt ⁿ becoming mod-strong	
140		100										lithic clasts → clastic texture	
142		95										144.9-145.3: Qtz-Kspar-Cb vn + sphalerite	
144		95										Alt ⁿ preferentially orientated along foliation i.e. chlorite bands	
146		100										subtle devitrification textures	
148		90										151.4m Qtz-Kspar-Cb-Galena-sphalerite vn	
150		85										152-153.1 Qtz-Kspar-Cb vns (suspect post-mineral i.e. Devonian)	
152		95										153.7-154 Qtz-Kspar-Cb vn	
154		100										154.6-154.7 Qtz-Kspar-chl-Cb vn	
156		95										154.8m Qtz-Kspar vn + He veinlets	
158		100										156-156.6 Qtz-Kspar + Cb vn	
160		90										157.8-158.8 Qtz-Kspar-chl-Cb vn	
		100										↓ increasing amount of clast downhole.	

REMARKS

Survey Depth	Azimuth	Dip	Hole Co-ordinates	
175m	79°	-63.5°	Easting_AMG	
200m	77°	-62°	Northing_AMG	
			Elevation (m)	
			Azimuth_Mag	
			Dip	

PROJECT: <u>TASMANIA - QUEENSTOWN</u>
PROSPECT: <u>RED HILLS</u>
DATE: <u>28.11.2005</u>
LOGGED BY: <u>NF</u>

HOLE DEPTH	CORE RECOVERY	RQD	SAMPLE NO PREFIX	SULPHIDES %	PICTORIAL LOG		GRAPHIC LOG	GEOLOGY NOTES	SUMMARY LOG
					STRUCT	ALT			
160	95	85		Qtz - Cb vn	mod. foliation	Chl + Kspar	0.06	lithology as above ? almost gradational contact with vcc. clasts more foliated & finer grained (no coarse phenos) • Kspar - cb alt ^d Ad → Qtz phytic rhyo-dacitic lava with clasts of brown fine grained material. • Chlorine massive foliated pumiceous / fiamme-bearing pebble breccia Dark green to black • strong chl alt ^d , weak K-spar alt ^d of phenos	
162	100	100			mod. foliation	Kspar more matrix and vns	0.05		
164		70			Cb streak work vns	whispy foliated vn	2	• Chlorine massive foliated pumiceous / fiamme-bearing pebble breccia Dark green to black • strong chl alt ^d , weak K-spar alt ^d of phenos	
166		100		Qtz - Cb vn + Sph + Gal	whispy foliated vn	strong Chl + Cb + Red	8		
168		95		Sph - Gal in Cb spot	foliation	Red	22	• Pink to green coarsely fragmental juvenile volcanoclastic conglomerate, - Cb veins ↳ clasts of fine grained brown rhyolitic lava? • Pink to green feld > Qtz phytic rhyo-dacitic lava ± sst with subangular brown fine grained clasts - clastic • Moderate chl + Reddening (Kspar - Hc?) + silicification • Irregular disrupted Cb veinlets common	
170		85		171.5 - 171.6 Cb - chl breccia	foliation	mod-intense chl bands + Kspar + Qtz + Cb	81		
172	95	100		spec. Hc	foliated	mod-intense chl bands + Kspar + Qtz + Cb	0.06	175.7m END OF HQ suspected 30cm core loss when reaming casing	
174	100	90		blue sh-grey ? galena	subphite	mod-intense chl bands + Kspar + Qtz + Cb	0.05		
176	70	50			cb vns	pervasive Kspar	2	Irregular undulating Cb vns. subtle wash of cb alt ^d - bleaching colour of rock.	
178	95	90			foliated	T chl + Cb	8		
180	100	100			alteration oriented along foliation	Chl + Cb	22	181-181.7m Dark black foliated fine grained ash - fine grained matrix chlorite alt ^d - black - euhedral feld phenos K-spar alt ^d - subtle quenched margins	
182	95	95				Kspar	0.06		
184	100	100				Chl + Cb alt ⁿ	2	185-186m Qtz - Kspar - Chl - Ser vn Pink to green feld > Qtz phytic rhyo-dacitic lava ↳ as above - rare clasts - non-clastic textures. • moderate Kspar and lesser chl and Cb alt. • no sulphides	
186	90	80				Chl + Cb alt ⁿ	0.05		
188	100	100				Chl + Cb alt ⁿ	2	191-194 subtle clastic texture ie. irregular clasts, strongly foliated - alteration aligned along foliation ie. bands of chlorite dominant assemblage 192.5-192.8 Chl - Qtz - Cb vn + Irregular disrupted Cb-Qtz vns now common Kspar alt ^d destroying textures between 195-197m	
190	95	80			mod foliation	Chl + Cb alt ⁿ	8		
192	100	60				Chl + Cb alt ⁿ	22	Bluish grey sulphide - suspect galena - in strongly sheared, Kspar altered zone Moderate foliation - chl rich + Kspar rich alteration bands	
194	100	100				Chl + Cb alt ⁿ	0.06		
196	95	95		Qtz - Gal vn	mod foliation	Chl + Cb alt ⁿ	2	Bluish grey sulphide - suspect galena - in strongly sheared, Kspar altered zone Moderate foliation - chl rich + Kspar rich alteration bands	
198	100	80			mod foliation	Chl + Cb alt ⁿ	8		
200	50	40		sph + Gal in veinlets	foliation	Chl + Cb alt ⁿ	22		

HQ
+
NQ

Survey Depth	Azimuth	Dip	Hole Co-ordinates	
200	77	-62	Easting_AMG	
			Northing_AMG	
			Elevation (m)	
			Azimuth_Mag	
			Dip	

PROJECT: TASMANIA EL9 2005
PROSPECT: RED HILLS
DATE: 1-12-2005
LOGGED BY: NF

HOLE DEPTH	CORE RECOVERY	RQD	SAMPLE NO PREFIX	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG	GEOLOGY NOTES	SUMMARY LOG
				%					STRUCT	ALT			
				1	3	1	3	5			mm		
200	100	100							vns x cut foliation	Kspar (strong) + subtk chl + Cb	0.06 0.05 2 8 32 64		
202	110	100											
204	90	100							VERY strong foliation	chl > Kspar + Ser			
206	100	95											
208	100	100							irregular veinlets	Patchy strong Kspar			
210	95	85											
212	100	100											
214	80	100							foliated cleavage	chl > Kspar			
216	90	75											
218	100	90							subtle foliation	Mod Kspar + chl + Cb			
220	100	100							sharp contact	chl > Kspar			
222	85	70											
224	100	100							Mod-strong foliation	Ser > Kspar + chl			
226	80	40											
228	30	30							subtle foliation	Kspar + chl + trace Cb & Ser			
230	50	50											
232	100	100											
234	90	45											
236	100	85							sheeted Cb veinlets				
238	100	100											
240	100	100											

lithology as above - clast of fine grained brown material more common - clastic texture.

20.3m } Sheeted
 202.4m } Qtz-Cb-Kspar vns. no-sulphides.
 203.1m } - typical apparent thickness = +/-cm.
 203.2m }

Alteration contact + increase in foliation + clasts suspect lithology as above.

Black to dark green foliated feld. pheno. rich dacitic lava
 Matrix mod-strong chl alt^d, phenos -> Kspar and/or Kspar alt^d

Trace Sph + Cui in Cb vns + Py in Qtz vns

Brown-red foliated feld phytic rhyo-dacitic lava with rare clasts (monomictic)

Med to strong pervasive Kspar alt^d + lesser chlorite & ck alt^d

Trace disseminated Galena, Pyrite, sphalerite and chalcopyrite.

Vns of Cb + Qtz + Sphalerite, galena or pyrite

* 217.7 - Sphalerite-Galena + Cui + Cb vns.

Common irregular - disrupted Cb veinlets x-cutting.

Brown-black ? monomict juvenile clast supported volcaniclastic breccia.

Cream-green ? micaceous / flame bearing foliated pebble breccia.
 Mod-strong Kspar - Sericite - chl alteration.

Brown-red feld phytic foliated rhyo-dacitic lava with brown lithic clasts.

Kspar alt^d of matrix + clasts + chl alt^d of matrix.

Trace Cb veinlets

232m Vuggy Cb-Chl-Py vns
 vugs may represent relict sulphides?

236m feldspar megacrysts up to 10x2mm.

Almost gradational contact. coherent
 Cb vein controlled bleaching (? albite alt^d) clastic

vuggy texture

REMARKS Predominantly coherent rhyolite to dacite lavas - increasing clastic component - ? suggest moving closer to clastic depositional environment. Suspect increase in Pb-Zn values around 218m.

Survey Depth	Azimuth	Dip	Hole Co-ordinates	
250	76.5	-60.5	Easting_AMG	
			Northing_AMG	
			Elevation (m)	
			Azimuth_Mag	
			Dip	

PROJECT: TASMANIA EL 9 2005
PROSPECT: RED HILLS
DATE: 2-12-2005
LOGGED BY: NF

HOLE DEPTH	CORE RECOVERY	RQD	SAMPLE NO PREFIX	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG	GEOLOGY NOTES	SUMMARY LOG
				%					STRUCT	ALT			
				.1	.3	1	3	5			mm		
240	100	95							subtle foliation	Chl Ksp (clasts)	0.06 0.5 2 8 32 84		
242	90	100											
244	90	100							very weak foliation	Ksp chl + cb			Dark grey-black chlorite-Ksp altered? thinly bedded monomict juvenile clast supported volcanoclastic conglomerate/breccia. - unmineralized clasts of felsic felsic phytic volc lava? Grading? suggests 14th facing down hole
246	100	100											
248	90	100											
250	90	70							qtz chl cb Ksp vns	Si ?Ab			Pink-green Ksp-chl altered massive monomict juvenile clast supported volcanoclastic conglomerate/breccia. Rare irregular Qtz veinlets → milky Qtz - ? Dev. * 248-250 Vuggy Qtz-Chl-Cb-Ksp vns with traces of Sph, Py + Gal
252	100	65							Diss + vn Py + sph gal + vnlets	Ser ↓ strong			Cream-green strongly silica-albite-sericite altered foliated clast supported breccia
254	90	80											
256	100	95							Py in Cb vns	weak to mod Ksp - chl + cb			upto 1% disseminated Py + <0.5% Py veinlets + trace amounts of sphalerite and galena
258	100	100							subtle foliation				254-255 Milky Qtz + Cb + Ksp + Py vns alteration + textural change.
260	100	100							Py in Cb vns sph - Gal vn				Brown-green Ksp altered feld. phytic phenocryst rhyolitic lava?
262	100	100											Very fine grained groundmass 'silt' Undulating Cb vns + breccias. + Sphalerite + ? galena
264	95	80							Mod. foliated	Ksp + chl + increased Cb			As above - mod-strong foliation + ? devitification textures - nodular ± perlite. nodular-breccia texture.
266	100	40							Diss. Py				
268	90	90							Py diss + vns Py diss				Cross cutting Qtz-Cb-Ksp vns with Ksp halos Cb-Qtz vn. Vuggy texture.
270	100	85							Weak foliation	Weak to mod. Ksp			As above: Brown green Ksp-chl altered feld phytic rhyolitic lava phenocryst aligned along foliation
272	100	100											Well developed devitification textures - nodular textures - perlite
274	80	95							Chl Ser Cb				
276	85	90							Galena in veinlets	chl alt bands			Breccia zone - insitu Qtz vns - not Devonian?
278	85	90							Diss Py				Noctular texture. Vuggy texture
280	90												
REMARKS Suspect anomalous Au between 251-254 m													

Survey Depth	Azimuth	Dip	Hole Co-ordinates
350	74.5	-56.5	Easting_AMG
			Northing_AMG
			Elevation (m)
			Azimuth_Mag
			Dip

PROJECT: TASMANIA EL9 2005
PROSPECT: RED HILLS
DATE: 13-12-2005
LOGGED BY: NF

HOLE DEPTH	CORE RECOVERY	RQD	SAMPLE NO	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG	GEOLOGY NOTES	SUMMARY LOG
				%	1	3	1	3	5	STRUCT			
320	95	90										as above	
322	50	10							Sz.			Shear zone in underlying unit. (contact).	
	100	85							mod. foliated	Ser		<u>Green Ser-Cb altered relict pumic rich volcaniclastic sandstone</u> ?recrystallised	
324	95	50							Cb			Flow banding, spherulites of calcite	
	95	100							Cbl			Galena-sphalerite & pyrite in Cb vns	
326	100	90							Kspar			graded to brecciated contact	
		85							+ Ser				
328		100							strong Kspar				
330													
332		90											
		90											
334		50											
		80											
336		100											
		100											
338		95											
		100											
340		85											
		100											
342		100											
		90											
344		95											
		90											
346		100											
		95											
348		95											
		100											
350		95											
		100											
352		100											
		100											
354		100											
		95											
356		100											
		100											
358		100											
		105											
360		100											

REMARKS

Survey Depth	Azimuth	Dip	Hole Co-ordinates	
			Easting_AMG	
			Northing_AMG	
			Elevation (m)	
			Azimuth_Mag	
			Dip	

PROJECT: TASMANIA EL9 2005
PROSPECT: RED HILLS
DATE: 16-12-2005
LOGGED BY: NF

HOLE DEPTH	CORE RECOVERY	RQD	SAMPLE NO PREFIX	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG	GEOLOGY NOTES	SUMMARY LOG			
				%	1	3	1	3	5	STRUCT				ALT		
360	100	80		Diss	Py											
362	90	70		Diss	Gal,	Sph,	Py									
364	100	85														
364	100	95														
366	80	80														
366	100	100		Diss+Py												
366	100	100		Diss	Py											
368	110	95		Diss	Gal											
368	100	75														
370	100	100														
370	100	90		Py in												
372	95	95														
372	100	95														
374	100	90														
374	100	100		Diss												
376	100	95														
376	100	95														
378	100	90		Diss												
378	110	85														
380	90	80														
380	100	100														
382	100	100		Diss												
382	95	85														
384	100	90		cb	vn + diss											
384	100	70														
386	80	0														
386	95	50														
388	90	30		Diss												
388	100	65														
390	100	60														
390	100	90														
392	95	95		Py in												
392	100	70														
394	100	75														
394	95	70														
396	95	85														
396	100	65														
398	100	55		Diss												
398	100	70														
400	100	70		Py in												

REMARKS Volcaniclastic conglomerates/breccias different to those intersected at top of hole: finer grained (smaller clasts), more clast supported, strongly foliated, alteration assemblage chl-Ser-Cb and rare weak Kspar. + possibly more Qtz phenocrysts?

Survey Depth	Azimuth	Dip	Hole Co-ordinates
400	76	-56.5	Easting_AMG
			Northing_AMG
			Elevation (m)
			Azimuth_Mag
			Dip

PROJECT: TASMANIA EL9 2005
PROSPECT: RED HILLS
DATE: 18-12-2005
LOGGED BY: NF

HOLE DEPTH	CORE RECOVERY	RQD	SAMPLE NO	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG	GEOLOGY NOTES	SUMMARY LOG	
				%	STRUCT	ALT	mm							
400	100	85												
402	100	100												
404	90	85												
406	100	45												
408	85	55												
410	25	65												
412	90	40												
414	100	40												
416	90	40												
418	90	60												
420	90	45												
422	80	25												
424	100	55												
426	50	0												
428	50	0												
430	60	15												
432	100	95												
434	100	55												
436	100	75												
438	100	80												
440	100	80												

REMARKS 426m change from Kspar-chl-Ser-Cb altered coarser grained volcaniclastic breccia to chl-Ser-Cb ± Ab altered finer grained volcaniclastic conglomerate. significant change.

Survey Depth	Azimuth	Dip	Hole Co-ordinates	
450	73.5	53	Easting_AMG	
			Northing_AMG	
			Elevation (m)	
			Azimuth_Mag	
			Dip	

PROJECT: TASMANIA EL9 2005
PROSPECT: RED HILLS
DATE: 12.1.2006
LOGGED BY: NF

HOLE DEPTH	CORE RECOVERY	ROD	SAMPLE NO	PREFIX	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG	GEOLOGY NOTES	SUMMARY LOG
					1	3	1	3	5	STRUCT	ALT			
440	100	85											Green-red chl-ser-Si-cb Kspar altered clast supported polymict volcaniclastic conglomerate. (PHOTO)	
442	100	80											clasts include Qtz, chl + cb altered material, mod. fractured	
	90	60											milky Qtz-Ch-Cb-Ser vn CONTACT-sharp	
444	100	90											Weak perv. Alb-spotty chl + ser altered weakly feld phytic (now chl) massive dacite. Devittrification textures	
	100	60											↳ perlite (fractures)	
446	90	40											Milky Qtz-ser vn CONTACT-sharp	
	100	90											Brown-green Ser-chl-Cb±Kspar altered ?matrix to clast supported polymict volcaniclastic conglomerate!	
448	100	100											clasts of Qtz-chl-Cb material - ?alteration.	
	90	75											Sharp to weakly brecciated contact. feld phytic	
450	100	100											Grey-black ?alb-chl altered massive dacite ?lava.	
	100	95											chlorite occurs as elongate spots in fractures	
452	110	105											oriented along foliation	
	100	75											Alteration weak to moderate. subtle devittrification textures.	
454	100	100											↳ perlite (fractures).	
	100	90											Qtz-cb-Ch-Kspar-ser-sph-Py vns x ~12	
456	100	100											Sericite vn of spherulitic texture ?devittrification	
	100	100											Qtz-chl-cb-Kspar vn - x cuts everything (Dev)	
458	100	100											Qtz-Kspar-chl-cb vns (Dev)	
	100	95											Slight increase in intensity of Kspar + chl alteration	
460	100	100											↳ ~ moderate	
	100	80											Qtz-Kspar-chl-cb vns (Dev)	
462	100	100											typically ≤ 1cm in apparent with rare > 2cm.	
	100	95											Qtz-Kspar-chl-cb - Sphalerite vn	
464	85	50											suspected Dev milky Qtz-Cb-Kspar-chl-Ser-sphalerite-cpy vns	
	100	100											x cutting Py veinlets (? cambrian).	
466	100	100											irregular-disrupted carbonate veins + veinlets	
	100	95											Irregular-disrupted Cb vn containing Py	
468	100	100											large zones/patches of strong pervasive chlorite alt [±] - typically ~ 1x1cm.	
	100	90											Increase in chlorite alteration	
470	100	100											Some minor insitu brecciation.	
	100	95											weakly fractured-chlorite along fractures	
472	100	100											disrupting x cutting Cb veinlets.	
	100	80											Chlorite spots - elongate along foliation	
474	90	80											typically < 1cm upto 2x2cm	
	100	90											Qtz-cb vn with chl selvage	
476	100	90											Py disseminated on as fracture fill (vn?) with chl + Cb	
	100	95												
478	100	95												
	100	100												
480	100	100												
REMARKS Major change at 449m from predominantly clastic facies to predominantly coherent facies - part of or analogous to the Red Hills lava dome ??														

Survey Depth	Azimuth	Dip	Hole Co-ordinates	
550	73	-49	Easting_AMG	
			Northing_AMG	
			Elevation (m)	
			Azimuth_Mag	
			Dip	

PROJECT: TASMANIA EL9 2005
PROSPECT: RED HILLS
DATE: 15-1-2006
LOGGED BY: NF

HOLE DEPTH	CORE RECOVERY	RQD	SAMPLE NO	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG	GEOLOGY NOTES	SUMMARY LOG		
				%	1	3	1	3	5	STRUCT				ALT	
520	105	80													
522	100	100													
524	100	85													
526	100	80													
528	95	85													
530	100	85													
532	100	70													
534	85	75													
536	90	20													
538	105	85													
540	80	45													
542	100	65													
544	105	85													
546	100	100													
548	100	75													
550	70	35													
552	~60	35													
554	100	80													
556	100	65													
558	100	75													
560	100	75													

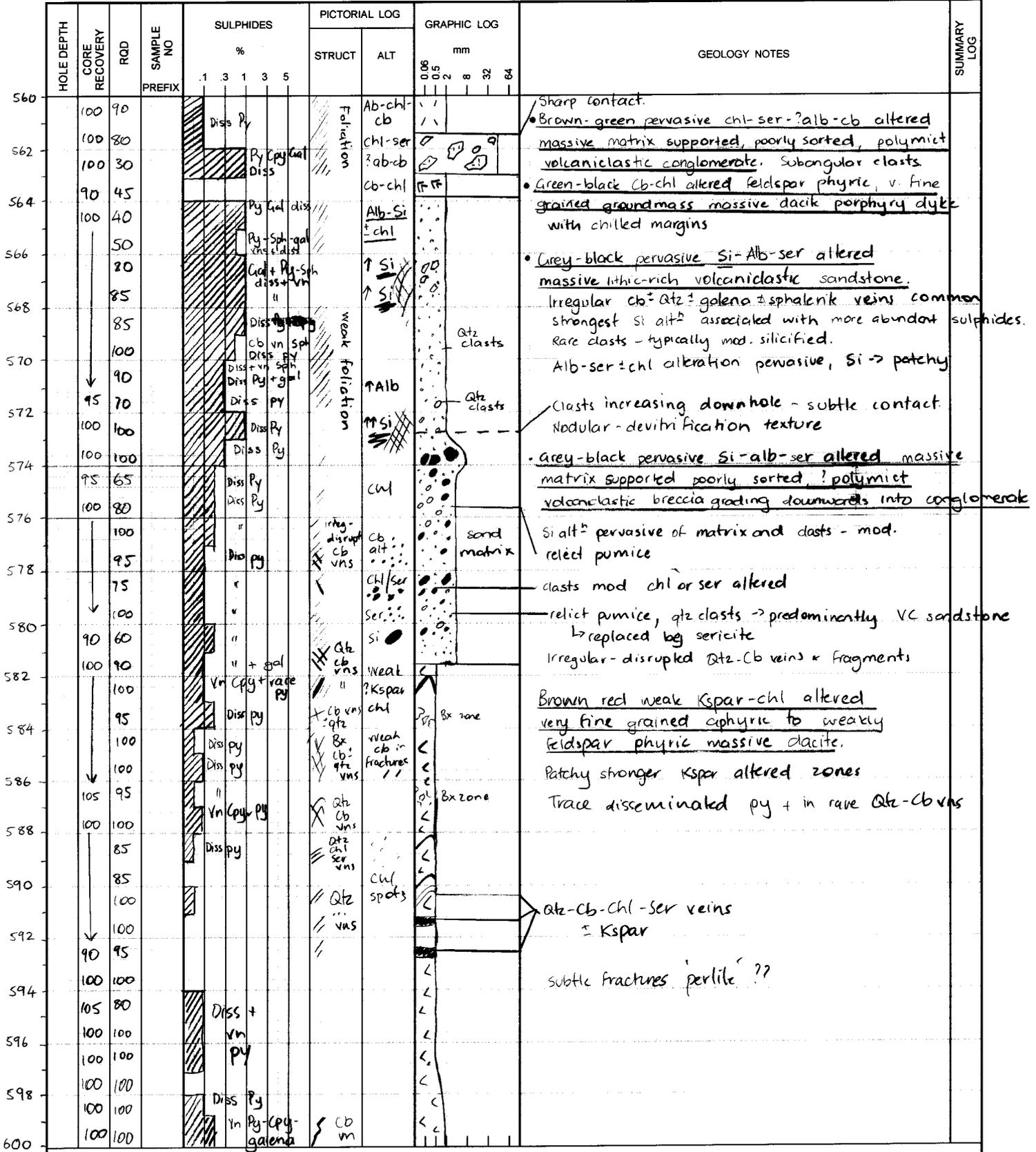
Core loss 1/m →

REMARKS

Survey Depth	Azimuth	Dip	Hole Co-ordinates	
			Easting_AMG	
			Northing_AMG	
			Elevation (m)	
			Azimuth_Mag	
			Dip	

SHEET 15 OF

PROJECT: <u>TASMANIA EL9 2005</u>
PROSPECT: <u>RED HILLS</u>
DATE: <u>18-1-2006</u>
LOGGED BY: <u>NF</u>



REMARKS

Survey Depth	Azimuth	Dip	Hole Co-ordinates	
600	70		Easting_AMG	
			Northing_AMG	
			Elevation (m)	
			Azimuth_Mag	
			Dip	

PROJECT: TASMANIA EL9 2005
PROSPECT: RED HILLS
DATE: 25-1-2006
LOGGED BY: NF

HOLE DEPTH	CORE RECOVERY	RQD	SAMPLE NO	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG					GEOLOGY NOTES	SUMMARY LOG	
				1	3	1	3	5	STRUCT	ALT	0.06	0.5	2	8	32			64
600	100	100															as above	
602																	Brown-black chlorite - ksparr altered massive matrix supported poorly sorted lithic-rich ? volcaniclastic conglomerate or brecciated dacitic lava	
604		95																
606		100															Matrix identical to surrounding coherent dacite lava	
608		90																
610		100															Clasts subangular red ? juvenile lava clasts. sharp weak brecciated contact	
612		90																
614		100															Brown chlorite - Hematite - carbonate altered very fine grained aphyric massive dacite lava	
616		90																
618		100															Chlorite spots/clasts orientated along foliation Foliation ~ moderate to weak Irregular brecciated carbonate veins ± sulphides	
620		90																
622		100															Moderately developed nodular devitification textures, sphenulites - giving brecciated appearance to rock.	
624		100																
626		80															Pyrite veinlets subparallel to foliation. Sheeted Cb-chl vns ± py	
628		100																
630		100															Increasing Cb alteration downhole	
632		85																
634		100															Moderate weak foliation - obvious from chl alteration.	
636		100																
638		90															No chl Cb alt ² Ser Chl spotty + Weak Ksparr	
640		100																

REMARKS Massive very fine grained volcanics (dacite) suspect not Red Hills lava due to absence of Hc-Cpy veins and intense pervasive chl alteration.

Survey Depth	Azimuth	Dip	Hole Co-ordinates	
			Easting_AMG	
			Northing_AMG	
			Elevation (m)	
			Azimuth_Mag	
			Dip	

PROJECT: TASMANIA EL9 2005
PROSPECT: RED HILLS
DATE: 25-1-2006
LOGGED BY: NF

HOLE DEPTH	CORE RECOVERY	RQD	SAMPLE NO	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG	GEOLOGY NOTES	SUMMARY LOG	
				1	3	1	3	5	STRUCT	ALT				
640	100	100												
642	95	90		Diss py-sph										
644	90	100		Diss py										
646	100	100		Diss py										
648	85	100		Diss + rn py										
650	85	100		Diss py										
652	100	85		Diss py										
654	100	100		Diss py										
656	85	100		Diss py										
658	100	85		Diss py										
660	85	100		Diss py										
662	100	100		Diss py										
664	80	100		Diss + vn py										
666	100	100		Diss py										
668	75	100		Diss + vn py										
670	100	100		Diss py										
672	95	100		Diss py										
674	100	100		Diss py										
676	90	100		Diss gal										
678	70	100		Diss py										
680	70	100		Diss py										
REMARKS														
Expect anomalous Zn+Pb associated with visible sulphides ± Au?														

Survey Depth	Azimuth	Dip	Hole Co-ordinates	
700	71	-43.5	Easting_AMG	
			Northing_AMG	
			Elevation (m)	
			Azimuth_Mag	
			Dip	

SHEET 18 OF 20

PROJECT: TASMANIA EL9 2005
PROSPECT: RED HILLS
DATE: 2-2-2006
LOGGED BY: NF

HOLE DEPTH	CORE RECOVERY	RQD	SAMPLE NO	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG	GEOLOGY NOTES	SUMMARY LOG
				1	3	1	3	5	STRUCT	ALT			
682	100	100		Diss	py					chl		Brown-grey chl-He/Kspar altered aphy massive blocky variably brecciated dacite lava.	
	100	100		Diss	py-gal					He/Ksp		Mod. alt ² intensity	
	95	90		m	py					Cb		Trace disseminated py+gal.	
684	100	100		Diss	py					chl-cb-ser		Irregular-brecciated Cb veining: brecciating host.	
	100	95		"								Brecciation? and mod chl-cb-ser alteration	
686	100	85		"								Cradiational-weakly brecciated contact.	
	90	65											
688	100	95		Diss	py					chl-ser		Green-black pervasive chl-ser-He altered massive matrix supported poorly sorted monomict subangular lithic-rich volcanoclastic conglomerate.	
	95									He		Trace diss. sulphides, mod-strong alteration.	
690		85										Alteration / ~ faulted contact	
	90			Diss	py	cpy							
692		70		Vn	py	gal							
	85			Diss	py								
694	95	70		"						Alb-Si		Grey-green pervasive chl-ser-Sil altered massive matrix supported poorly sorted lithic rich ?pumiceous volcanoclastic granule conglomerate.	
	100	55		"						chl		mod. alteration intensity.	
696		100		"								Trace disseminated & lesser cb vein sulphides -> pyrite	
	75			"								clasts of pink He/Kspar altered ? rhyolite lava	
698		80		"								Number of clasts increasing and clast size decreasing downhole.	
	100			"								? reverse grading	
700		100		"									
	95	75		"									
702	100	45		"						He/Kspar			
	95			"									
704		100		"								Irregular-disrupted-?brecciated	
	90			"								Milky Qtz-chl-ser-Kspar-cb ± sulphide veins upto 50% of the rock.	
706		100		"						Kspar halos			
	85			"						chl-Alb		Hyaloclastite - subtle & brecciated	
708		90		"									
	80			"									
710	95	60		"						Alb		Increase in clast abundance, no little relict pumice. between 708-710m	
	100	75		"						He/Kspar			
712	100	100		"								Weak to mod brecciation	
	100	100		"						Ser		well preserved relict pumice	
714	100	100		Diss	py + cpy								
	100	45		Diss	py								
716	105	65		"						He/Kspar		Increasing He/Kspar alteration and brecciation	
	100	100		"									
718	100	90		"								Weak to mod brecciation	
	100	80		"						Ser			
720	100	100		"								Green-grey mod chl-ser-Kspar altered clast supported poorly sorted monomict subangular lithic rich volcanoclastic breccia	

REMARKS

Survey Depth	Azimuth	Dip	Hole Co-ordinates	
750			Easting_AMG	
			Northing_AMG	
			Elevation (m)	
			Azimuth_Mag	
			Dip	

PROJECT: TASMANIA EL9 2005
PROSPECT: RED HILLS
DATE: 8-2-2006
LOGGED BY: NF

HOLE DEPTH	CORE RECOVERY	RQD	SAMPLE NO	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG	GEOLOGY NOTES	SUMMARY LOG
				%	1	3	1	3	5	STRUCT			
722	100	100		Diss	py							relict pumice fragments	
		85											
		100		Diss	py+vn	gal							
724		100		Diss	py+gal							Weak-mod brecciation	
		90		Diss	py+sph								
		90		vn	gal								
726		90		Diss	vn	py+gal							
		100		Diss	vn	py+gal							
728		100		Diss	vn	py							
		100											
730		100		Diss	py								
		90											
732		100											
		100		Diss	vn	py+gal							
734		95		Diss	vn	py+gal							
		80		Diss	py+vn	cpy							
736		95		Diss	vn	py+cpy							
		90		Diss	py+cpy								
738		100		Diss	py								
		95		Diss	py								
740		90		Diss	py+cpy								
		100		Diss	py								
742		95		Diss	py+vn	gal							
		100		Diss	py								
744		95											
		65											
746		90		Diss	py+cpy								
		100		Diss	py								
748		100											
		100											
750		85		Diss	py+vn								
		100		Diss	py+cpy								
752		85		Diss	vn	py							
		100		Diss	py								
754		100											
		80											
756		100											
		100											
758		100		Diss	py+vn	py							
		100		Diss	py								
760		100											

REMARKS Alternating VCC & VC sandstone probably represents bedding - source of deposition changing. Typical contact very gradual not sharp. No significant mineralisation or alteration.

Survey Depth	Azimuth	Dip	Hole Co-ordinates
			Easting_AMG
			Northing_AMG
			Elevation (m)
			Azimuth_Mag
			Dip

SHEET 20 OF 20

PROJECT: TASMANIA EL9 2005
PROSPECT: RED HILLS
DATE: 8-2-2006
LOGGED BY: NF

HOLE DEPTH	CORE RECOVERY	ROD	SAMPLE NO	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG	GEOLOGY NOTES	SUMMARY LOG		
				%	1	3	1	3	5	STRUCT				ALT	
762	100	100													
764	100	100													
766	90	90													
768	75	75													
770	90	90													
772	100	100													
774	80	80													
776	90	90													
778	90	90													
780	100	100													
782	100	100													
784	95	95													
786	100	100													
788	90	90													
790	85	85													
792	95	95													
794	110	110													
796															
798															
800															

REMARKS

Survey Depth	Azimuth	Dip	Hole Co-ordinates	
26m	71	-71	Easting_AMG	381950
			Northing_AMG	5365200
			Elevation (m)	810
			Azimuth_Mag	72
			Dip	-70

SHEET 1 OF 18

PROJECT: TASMANIA EL9 2005
PROSPECT: RED HILLS
DATE: 14.2.2006
LOGGED BY: NF

Sample no.s : H216,005 ->

HOLE DEPTH	CORE RECOVERY	ROD	SAMPLE NO	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG	GEOLOGY NOTES	SUMMARY LOG	
				%					STRUCT	ALT				
				1	3	1	3	5						
0	-	-												
2	0	-										Start of core 2.85m		
4	15	10										3-5m mod-strong oxidation/weathering, remnant feld phenos		
6	100	70						Fractures				Dark green-red chlorite-Kspar/Hc altered massive clast supported poorly sorted sub angular juvenile clast rich monomict volcanoclastic pebble breccia.		
8	100	65						Wedge cleavage				• Red Kspar/Hc altered juvenile feld-phyric rhyolite lava clasts.		
10	100	80										• Matrix typically chl altered.		
12	95	60										• NO mineralisation.		
14	100	40						Qtz vns				Qtz veins - weathered mineral suspect chlorite.		
16	100	20										~18m - Qtz phenocrysts - rare		
18	100	100						mod. cleavage	chl Ser			relict pumice		
20	90	40										clast of rhyolite lava containing relict pumice altered to chl/Ser.		
22	100	100										subtle gradation contact		
24	100	60							chl Ser			Red-cream Kspar/Hc - chl altered medium grained moderately feld-phyric with fine grained matrix massive to blocky rhyolite lava.		
26	100	75										• Pervasive Kspar/Hc alteration		
28	100	85										• No mineralisation.		
30	100	90										Variable degrees of coherency: coherent to weak brecciation - autobreccia but not clastic.		
32	100	85										• rare Qtz phenocrysts		
34	100	90										31m ~ base of oxidation zone		
36	100	100										26-27m well developed vuggy texture alter? Cb? NB: sphalerite deep red colour.		
38	100	100										32-33m Disseminated gal + sph in Kspar/Hc altered non phyric rhyolite lava? clast.		
40	100	100										clasts chl alt Kspar alt feld phenos All feld phyric.		
												38-41m mod brecciation almost coarse clastic.		

REMARKS

Survey Depth	Azimuth	Dip	Hole Co-ordinates
101	72	-70	Easting_AMG
			Northing_AMG
			Elevation (m)
			Azimuth_Mag
			Dip

PROJECT: TASMANIA EL9 2005
PROSPECT: Red Hills
DATE: 23.2.2006
LOGGED BY: NF

HOLE DEPTH	CORE RECOVERY	RQD	SAMPLE NO	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG	GEOLOGY NOTES	SUMMARY LOG	
				1	3	1	3	5	STRUCT	ALT				
100	82													
82	120	91		Vn gal					Qz vn x7 Qz vn x5	Kspar He			Red-cream Kspar/He-chl±Cb altered m.g. mod. Feld phytic with f.g. matrix massive to blocky rhyolite lava.	
95	84									Jasper			• mod. perv alt [±]	
84	100	85											• Trace to no mineralisation.	
92	100									Ser			• Intervals of dark-green-black chl-Ser-cb alt ^d f.g. laminated crystal rich ?pumiceous volcaniclastic siltstone: occasionally squashed bedding or ?clasts.	
86	105	100		Vn gal						Ser Jasper			± cleavage or ?foliation.	
88	90	88		Dispy									subtle spherulitic texture.	
90	100	75		Vn py									• rare qtz pheos	
100	100			Vn sph gal						Jasper Ser			spherulitic texture? or bx? fragments very round	
92	110	100								Jasper Ser				
100	100	93								Jasper			Qtz vein + Cb	
94	100	100												
100	100	75		Vn gal sph py						Ser				
96	100	96								Jasper Ser			Dark green black chl-Ser alt ^d f.g. laminated xtal rich ?pumiceous VC siltstone intermixed with coherent rhyolite lava as above.	
100	100	92								Jasper				
98	75	94								Ser Jasper				
86	97													
100	93	92		Vn gal-sph						Jasper			Common ~2mm thick Qz-cb veinlets ± sulphide upto >10 per m.	
95	95									Si Cb			light grey ? altered v.f.g. laminated VC siltstone bedded or cleaved.	
102	100	95								Ser			Well developed spherulites + perthite devitrification textures.	
98	100	100											volcaniclastic silt/sandstone as above in small patches occasionally squashed may contain occasional pumice.	
104	110	55											Cb-ch-qtz veining ~ 5-10% irregular-bifurcated.	
100	91									Kspar patching Ser			Common irregular-disrupted Cb±qtz±chl±Kspar veinlets	
106	100	100											Qtz-Kspar-chl veins with cb halos. x ~ 6	
95	95												Degree of brecciation appears to be increasing down hole. Not fragmental, appears to be brecciated + altered lava rather than vc conglomerate	
108	100	100												
100	99													
110	100	89												
100	100													
112	700	100												
90	100													
114	85	88												
100	100													
116	100	65		Dispy										
100	100	95												
118	98	100												
100	78													
120	90	88												

REMARKS

Survey Depth	Azimuth	Dip	Hole Co-ordinates	
143	71.5	-69.5	Easting_AMG	
			Northing_AMG	
			Elevation (m)	
			Azimuth_Mag	
			Dip	

PROJECT: TASMANIA EL9/2005

PROSPECT: RED HILLS

DATE: 24-2-2006

LOGGED BY: NF

HOLE DEPTH	CORE RECOVERY	RQD	SAMPLE NO PREFIX	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG					GEOLOGY NOTES	SUMMARY LOG	
				%					STRUCT	ALT	mm							
				1	3	1	3	5			0.06	0.5	2	8	32	64		
87	91																	
122	96	100		Vn py-sph gal					Weak cleavage + common cb veins + Qtz	Si							spherulitic texture Red-Orange pervasive Kspar/He ± patchy chl-Ser altered med. mod. feld-phyrlic blocky to massive rhyolite lava	
100	100			Diss sph gal														
124	100	100		?						Si								
100	95																	
126	100	93																
100	100			Py + gal														
128	100	80		Cb vn Py gal						Chl-Cb								
90	100																	
130	90	77																
120	85			Diss gal-py														
132	95	85		Diss py					Weak cleavage	Chl-Ser								
90	40			"														
134	100	95		Cb vn py						FeCb								
100	90			Diss py						Chl-Ser								
136	100	80		"														
100	91																	
138	90	0		Diss py						Ser								
90	88									FeCb								
140	100	90		Vn py														
90	95																	
142	105	95		Vn/diss py														
105	90			Vn gal														
144	100	100		?														
100	95			Cb vn py														
146	75	100																
100	75			Diss py														
148	105	57		Diss + vn py														
100	15																	
150	70	61		Diss py														
90	66			"														
152	95	68		Diss py														
100	100																	
154	100	95																
100	100			Cb vn py														
156	80	87		"														
100	100			Cb vn + diss py														
158	100	100		Diss py														
100	90																	
160	100	100		Cb vn + diss py														

HR
NR

REMARKS Appears to becoming more fragmental downhole

Survey Depth	Azimuth	Dip	Hole Co-ordinates	
200	68	-67	Easting_AMG	
			Northing_AMG	
			Elevation (m)	
			Azimuth_Mag	
			Dip	

PROJECT: TASMANIA EL9 2005
PROSPECT: RED HILLS
DATE: 28.2.2006
LOGGED BY: NF

HOLE DEPTH	CORE RECOVERY	RQD	SAMPLE NO	PREFIX	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG	GEOLOGY NOTES	SUMMARY LOG	
					%					STRUCT	ALT				
					.1	3	1	3	5			mm			
100	100														
162	100	80													becoming subtly more foliated downhole.
100	95														small ~5cm layers of more fragmental/elastic material within the more dominant rhyolitic volcanics
164	50	40													Red-green mod. perv. Kspar-Hc-chl ± ser ± cb altered
50	60														med mod. feld-phyric massive rhyolitic volcanics
166	100	55													• clasts of fg. aphyric rhyolitic volcanics
90	45														• not convincingly fragmental
168	100	50													• mod. cleavage
95	26														• clasts from sub mm upto >>5cm.
170	100	80													• → brecciated/interworked coherent rocks.
100	65														Contacts marked by strong Kspar-Hc alt? + faulting
172	100	60													Dark-green-red mod. perv. chl-Kspar-Hc altered
95	30														massive subangular clast supported well sorted
174	100	100													lithic rich volcanoclastic pebble conglomerate monomict.
100	60														• Unmineralised
176	100	100													Massive rhyolite volcanics as above
100	100														• mod Kspar-Hc + weaker chl alt?
178	100	90													• unmineralised.
100	95														VCC as above
180	100	100													subtle gradational contacts
100	90														Massive rhyolite volcanics as above, trace sulphides
182	100	87													Qtz vein contact
95	88														Red-green pervasive Kspar-Hc-chl altered subangular
184	100	100													clast supported well sorted monomict massive
100	95														juvenile lithic rich volcanoclastic pebble conglomerate.
186	100	100													Gradational change down hole to...
100	85														Massive rhyolite volcanics as above.
188	100	90													• unmineralised
100	93														Qtz-Kspar-Chl-Cb vns x S - Devonian.
190	100	100													gradational change: presence of clasts + change in alteration.
100	95														Dark green - red pervasive chl-cb-(Kspar-Hc) altered
192	100	93													matrix supported well sorted? monomict
100	94														lithic rich juvenile volcanoclastic pebble conglomerate
194	100	75													• Mod. intensity alt?
100	98														• Trace diss ± vein py
196	100	100													• mod-strong cleavage preserved.
100	92														• weakly bedded?
198	100	100													
100	97														
200	100	100													

REMARKS lithological change from coherent rhyolite volcanics to fragmental volcanoclastic conglomerates ± breccias.

Survey Depth	Azimuth	Dip	Hole Co-ordinates
200	68	-67	Easting_AMG
			Northing_AMG
			Elevation (m)
			Azimuth_Mag
			Dip

PROJECT: TASMANIA EL9 2005
PROSPECT: RED HILLS
DATE: 28.2.2006
LOGGED BY: NF

HOLE DEPTH	CORE RECOVERY	RQD	SAMPLE NO	PREFIX	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG	GEOLOGY NOTES	SUMMARY LOG	
					%					STRUCT	ALT				
					1	3	1	3	5			mm			
100	100														
202	90	85													
	100	100													
204	100	95													
	100	95													
206	100	100													
	100	97													
208	100	99													
	100	97													
210	100	90													
	100	98													
212	100	100													
	100	85													
214	100	100													
	100	100													
216	100	88													
	100	91													
218	100	100													
220															
222															
224															
226															
228															
230															
232															
234															
236															
238															
240															

REMARKS Note presence of Henty style Si-Alb alt^o around 228-230m may be traceable to similar horizon in previous drill hole NCT006.

Survey Depth	Azimuth	Dip	Hole Co-ordinates	
304	65	-63.5	Easting_AMG	
			Northing_AMG	
			Elevation (m)	
			Azimuth_Mag	
			Dip	

PROJECT: TASMANIA EL9 2005
PROSPECT: RED HILLS
DATE: 6-3-2006
LOGGED BY: NF

HOLE DEPTH	CORE RECOVERY	RQD	SAMPLE NO PREFIX	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG	GEOLOGY NOTES	SUMMARY LOG					
				%	STRUCT	ALT	mm											
				.1	.3	1	3	5			0.06	0.25	2	8	32	64		
282				Diss py														lithology, alteration and mineralisation AS ABOVE
284				cb vn py														283 - <u>No VISIBLE SULPHIDE!</u>
286				Diss py														Rare irregular-disrupted Qtz-cb veins
288																		288m Increase to weak Kspar-Hc alteration - pervasive
290																		coinciding with increase in clasts, reduction in clast size
292																		rare to no Kspar/Hc alt ^s rhyolitic volcanics
294																		GRADATIONAL CHANGE
296				cb vn py														Green-red mod. pervasive chl-Kspar-Hc altered
298				Diss py														massive normal graded subangular clast supported
300				Diss py														lithic-rich polymict volcanoclastic pebble conglomerate
302				cb vn py														Kspar-Hc alteration in zones aligned with cleavage
304				Diss py														Predominantly unmineralised except for Kspar-Hc alt ^s zones
306				Diss py														fault contact: mm fault pug zone + little breccian core
308				cb vn py														Red mod. pervasive Kspar-Hc ± Si altered feld-phyric
310				Diss py														mod. abundant m.g. f.g. groundmass, massive
312				cb vn py														rhyolitic volcanics (lava?)
314				Diss py														Trace disseminated + rare Qtz vein py.
316				cb vn py														Green mod. pervasive chl-Ser altered massive matrix
318				Diss py														supported crystal rich polymict volcanoclastic
320				cb vn py														pebble conglomerate.
				Diss py														Green-gray mod. pervasive alb-cb-chl altered
				cb vn py														laminated normal graded f.g. volcanoclastic
				Diss py														sandstone.
				cb vn py														sharp contacts
				Diss py														Volcanoclastic conglomerate as above
				cb vn py														302.9m Massive py in clast ~1x1cm (Massive sulphide source?)
				Diss py														contact marked by strong Kspar-Hc-cb alt ^s
				cb vn py														Brown weak-mod perv. Kspar-Hc-cb altered
				Diss py														feld-phyric poorly abundant medium size very f.g.
				cb vn py														groundmass mass rhyolitic volcanics (lava).
				Diss py														little variation in lithology, alteration or mineralisation.
				cb vn py														possible perlitic eg. 314-315m - devitrification texture.
				Diss py														↳ evidence for coherency.
				cb vn py														Common irregular-disrupted cb±Qtz±py vms
				Diss py														Weak to no cleavage preserved.

REMARKS

Survey Depth	Azimuth	Dip	Hole Co-ordinates	
354	64.5	-62	Easting_AMG	
			Northing_AMG	
			Elevation (m)	
			Azimuth_Mag	
			Dip	

PROJECT: TASMANIA EL9 2005
PROSPECT: RED HILLS
DATE: 7-3-2006
LOGGED BY: NF

HOLE DEPTH	CORE RECOVERY	RQD	SAMPLE NO PREFIX	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG	GEOLOGY NOTES	SUMMARY LOG				
				%	STRUCT	ALT	mm										
				.1	.3	1	3	5			0.06	0.5	2	8	32	64	
322				Diss py													lithology and alteration as above
324				Diss py Diss gal													322-6m milky qtz-Kspar-ser-cb-chl-Sph vein irregular-disrupted cb veins/vein fragments. weak to mod. cleavage preserved
326																	Btchy chl alteration aligned in fractures with predominant cleavage
328																	→ unit seen common deeper in hole NCT006
330				Diss py													
332				Diss py Cb vn py													331.4 - 333 cb:chl:py veining: irregular-brecciated.
334																	
336				Diss py													
338																	337-340 well developed perlitic-dehydration texture. associated with weak Si alteration.
340				Diss gal-sph Diss py Cb vn py													→ alteration highlighting underlying volc. textures.
342																	
344				Cb vn py-gal													→ 347 → core very broken thus low RQD
346																	
348																	347.8 Irregular-disrupted cb vein
350				qtz vn sph py Diss ?													348.2m ~10cm thick x cutting qtz-chl-cb veins
352				qtz vn Cpy gal Diss gal													350.5 ~10cm thick qtz-cb-chl vein
354																	
356				Diss gal Diss py-gal													
358				Diss py													
360																	
REMARKS													Very hungry looking rocks!				

Survey Depth	Azimuth	Dip	Hole Co-ordinates	
			Easting_AMG	
			Northing_AMG	
			Elevation (m)	
			Azimuth_Mag	
			Dip	

PROJECT: TASMANIA EL9 2005
PROSPECT: Red Hills
DATE: 8-3-2006
LOGGED BY: NF

HOLE DEPTH	CORE RECOVERY	RQD	SAMPLE NO PREFIX	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG	GEOLOGY NOTES	SUMMARY LOG
				%	1	3	1	3	5	STRUCT			
362	100	70										lithology & alteration as above.	
	100	85											
	90	77											
364	100	95										364-366 Brown-red chl-cb-Ksp-He altered massive clast supported mod. sorted juvenile lithic-rich monomict volcanoclastic pebble breccia	
	100	95											
366	100	95											
	100	40											
368	100	65											
	95	52											
370	100	40											
	105	62											
372	110	81											
	100	100											
374	100	100											
	100	80											
376	100	90											
	100	85											
378	100	75											
	100	100											
380	100	100											
	100	90											
382	100	90											
	100	90											
384	105	100											
	100	85											
386	100	70											
	100	80											
388	100	100											
	100	95											
390	100	70											
	100	25											
392	100	80											
	100	80											
394	100	80											
	100	75											
396	100	75											
	100	70											
398	100	90											
	100	80											
400	100	50											

REMARKS

lithology & alteration as above.

364-366 Brown-red chl-cb-Ksp-He altered massive clast supported mod. sorted juvenile lithic-rich monomict volcanoclastic pebble breccia

366-367m Breccia common cb in fragments & chl suspect diagenic rather than hydrothermal.

Brown-cream patchy cb + pervasive alb altered weakly Fe-d-pyric poorly abundant medium size massive rhyolite volcanics / lava.

- mod. alteration + patchy weak Ksp-He alt?
- unmineralised to weak
- irregular-disrupted cb veins & vein fragments
- weak to no cleavage

Trace pyrite in cb vein fragment.

Sharp weakly brecciated / ? fault contact

Brown-red mod. patchy Ksp-He-chl-cb altered massive matrix supported poorly sorted lithic-rich monomict volcanoclastic pebble conglomerate with subrounded clasts.

- juvenile rhyolite volcanics (as above) clasts
- suspect sourced from surrounding coherent volcanics.

? nodular texture

alb-chl-ser vein: ~30cm surrounded by Si alt?

Survey Depth	Azimuth	Dip	Hole Co-ordinates
455	67.5	-59	Easting_AMG
			Northing_AMG
			Elevation (m)
			Azimuth_Mag
			Dip

PROJECT: TASMANIA EL9 2005
PROSPECT: RED HILLS
DATE: 9-3-2006
LOGGED BY: NF

HOLE DEPTH	CORE RECOVERY	RQD	SAMPLE NO	PREFIX	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG	GEOLOGY NOTES	SUMMARY LOG	
					%	1	3	1	3	5	STRUCT				ALT
100	100														
442	100	95													
100	100														
444	100	90													
100	100														
446	100	100													
100	80														
448	100	100													
100	100														
450	100	100													
100	75														
452	100	100													
100	92														
454	100	60													
100	80														
456	100	50													
100	100														
458	100	80													
100	70														
460	100	95													
100	95														
462	100	80													
100	85														
464	100	85													
100	85														
466	100	90													
100	90														
468	100	85													
100	100														
470	100	100													
100	80														
472	100	100													
100	100														
474	85	100													
100	100														
476	100	90													
100	100														
478	100	95													
100	90														
480	100	100													

REMARKS

Survey Depth	Azimuth	Dip	Hole Co-ordinates	
506	68.5	-57	Easting_AMG	
			Northing_AMG	
			Elevation (m)	
			Azimuth_Mag	
			Dip	

PROJECT: TASMANIA EL9 2005
PROSPECT: RED HILLS
DATE: 12-3-2006
LOGGED BY: NF

HOLE DEPTH	CORE RECOVERY	RQD	SAMPLE NO PREFIX	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG	GEOLOGY NOTES	SUMMARY LOG
				%	STRUCT	ALT	mm						
482	100	100		Diss	py				Qz vns (Dev)			as above...	
	100	90		Diss	py	cb	vn	py	weak			<u>Grey-black patchy mod chl-Ser-cb altered</u> <u>f.g. aphyric massive rhyolite/dacitic volcanics</u> <u>(lava).</u>	
	100	82		Diss	py				weak			• wk-mod alteration	
484	100	60							cleavage			• trace to no mineralisation	
	100	90										• wk brecciation and/or devitrification textures (eg. sphenulites).	
486	100	100		Diss	py								
	100	100											
488	97	94											
	100	80											
490	100	90		Diss	py								
	100	90											
492	100	90											
	100	95											
494	100	90		Qz	vn	sph	+py		Qz ⁺				
	100	100							cb				
496	100	100		cb	vn	py			cb				
	100	90											
498	100	85											
	100	88											
500	100	80											
	100	60											
502	100	100		vn	py								
	100	100		vn	+diss	py							
504	100	90											
	100	70		Diss	py								
	100	70		Diss	py								
506	100	90		Qz	vn	sph	+diss	py	Qz				
	100	85											
508	100	100		Diss	py								
	100	100		cb	vn	py			cb				
510	100	85		Diss	py								
	100	70		Diss	py								
512	100	100											
	100	90		Diss	py								
514	100	90		Diss	py								
	100	100		Diss	py								
516	100	93		cb	vn	rad	py		cb				
	100	95		cb	vn	rad	py						
518	100	100		Diss	py								
	100	100		cb	vn	gal	+diss	py					
520	100	70											

REMARKS Mineralisation slightly increasing downhole from 500m, no change in alteration.

Survey Depth	Azimuth	Dip	Hole Co-ordinates	
554	69	-54	Easting_AMG	
			Northing_AMG	
			Elevation (m)	
			Azimuth_Mag	
			Dip	

PROJECT: TASMANIA 09 2005
PROSPECT: RED HILLS
DATE: 12-3-2006
LOGGED BY: NF

HOLE DEPTH	CORE RECOVERY	RQD	SAMPLE NO PREFIX	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG	GEOLOGY NOTES	SUMMARY LOG		
				%	1	3	1	3	5	STRUCT				ALT	
100	100														
100	95														
100	100														
524	100	95													
100	93														
526	100	75													
100	90														
528	100	80													
100	70														
530	100	95													
100	97														
532	100	20													
100	57														
534	100	70													
100	100														
536	100	85													
100	75														
538	100	95													
100	100														
540	100	80													
100	90														
542	100	90													
100	85														
544	100	100													
100	100														
546	100	96													
100	100														
548	100	100													
100	100														
550	100	100													
100	100														
552	100	92													
100	90														
554	100	90													
85	100														
556	100	100													
100	95														
558	100	80													
100	40														
560	100	66													

REMARKS 541-547m (6m) strong Si alteration similar to Henty, thus expect Au grades, may relate to Si alt^a zone in NCT006 with anomalous gold (16m @ 0.2 g/t Au).

Survey Depth	Azimuth	Dip	Hole Co-ordinates	
600	70	-51	Easting_AMG	
			Northing_AMG	
			Elevation (m)	
			Azimuth_Mag	
			Dip	

PROJECT: TASMANIA EL9 2005
PROSPECT: RED HILLS
DATE: 15-3-2006
LOGGED BY: NF

HOLE DEPTH	CORE RECOVERY	ROD	SAMPLE NO	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG	GEOLOGY NOTES	SUMMARY LOG		
				%	1	3	1	3	5	STRUCT				ALT	
562	100	75													
	100	47													
	90	44													
564	100	95													
	100	80													
566	100	100													
	100	94													
568	100	80													
	100	100													
570	100	95													
	100	100													
572	110	86													
	100	80													
574	100	70													
	100	70													
576	100	85													
	115	82													
578	100	65													
	100	85													
580	95	68													
	100	95													
582	100	75													
	95	79													
584	100	95													
	100	100													
586	110	95													
	100	100													
588	100	100													
	105	71													
590	100	100													
	100	100													
592	100	85													
	100	95													
594	100	95													
	100	100													
596	100	100													
	100	100													
598	100	80													
	105	90													
600	100	100													

REMARKS From 562m red Kspar-Hc altered clasts of suspect Red Hills lava in a grey coherent rock.

Survey Depth	Azimuth	Dip	Hole Co-ordinates	
700	65.5	-45	Easting_AMG	
			Northing_AMG	
			Elevation (m)	
			Azimuth_Mag	
			Dip	

PROJECT: TASMANIA EL9 2005
PROSPECT: RED HILLS
DATE: 5.4.2006
LOGGED BY: NF

HOLE DEPTH	CORE RECOVERY	RQD	SAMPLE NO	PREFIX	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG	GEOLOGY NOTES	SUMMARY LOG
					%	1	3	5	STRUCT	ALT				
682										Weak cleavage	Chl		lithology, alteration & mineralisation same as previously described.	
684													sharp contact: change in alteration & veining, and decrease in mineralisation.	
686										Qtz Cb Chl veins			<u>Red-black strong vein controlled Kspar-Hc-chl-Si?</u> <u>altered ophyric massive ? rhyolite.</u>	
688													mod brecciation	
690													<u>Alteration:</u> Kspar-Hc veins with strong Kspar-Hc alteration halos, Qtz-Cb-Chl veins with Kspar-Hc alt ^o halos, Chl-Kspar-Hc veins with Kspar-Hc alt ^o halos. Lesser pervasive chl > Kspar-Hc alteration zones.	
692													<u>Mineralisation:</u> Trace disseminated & lesser veinlet hosted pyrite.	
694													Well developed network of barren milky Qtz-Cb-Chl-Kspar-Hc veins from << 1cm to ~30cm thick ↳ suspect Devonian.	
696													+ lesser narrow <1cm Kspar-Hc veinlets ~20 per m.	
698													Common red Kspar-Hc altered clasts - in situ.	
700														
702														
704														
706														
708														
710													No veining below 709m, coupled with subtle decrease overall of Kspar-Hc alteration and mineralisation.	
712													suspect moving away from anomalous Cu zone & supporting contact related mineralisation model.	
714														
716														
718														
720														
													718.9m EOH	
REMARKS														

Survey Depth	Azimuth	Dip	Hole Co-ordinates	
			Easting_AMG	
			Northing_AMG	
			Elevation (m)	
			Azimuth_Mag	
			Dip	

SHEET 1 OF

PROJECT: <u>RED HILLS</u>
PROSPECT:
DATE: <u>5.2.2006</u>
LOGGED BY: <u>NF</u>

HOLE DEPTH	CORE RECOVERY	ROD	SAMPLE NO PREFIX	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG					GEOLOGY NOTES	SUMMARY LOG	
				%					STRUCT	ALT	mm							
				.1	.3	1	3	5			0.06	0.5	2	8	32	64		
2																		
4																		
6																		
8																		
10																		
12																		
14																		
16																		
18																		
20																		
22																		
24																		
26																		
28																		
30																		
32																		
34																		
36																		
38																		
40																		
REMARKS <u>0-40m majority weak-mod bx - vicinity to surface? ie weathering</u>																		

Core from 5m

Dark green-black ^{strong} pervasive chl- and patchy Mt-Kspar altered aphytic massive rhyolite? lava. (too altered to know composition)

Mineralisation typically py in chl=MT veins that typically constitute breccia -> cause brecciation?

upto and > 1% sulphides

Common chl-MT veining!
+ Chl-chl-Kspar ± Cb veining.

Weak-mod. brecciation

20-29m patchy mod Kspar alt^o with interstitial chl-MT alt^o (less dominant)



29-30 weak patch of bleached rock - alb alt^o?

↓ Less brecciated + less mineralisation with depth

Survey Depth	Azimuth	Dip	Hole Co-ordinates	
			Easting_AMG	
			Northing_AMG	
			Elevation (m)	
			Azimuth_Mag	
			Dip	

PROJECT: Red Hills
PROSPECT:
DATE: 5-2-06
LOGGED BY: NF

HOLE DEPTH	CORE RECOVERY	RQD	SAMPLE NO	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG	GEOLOGY NOTES	SUMMARY LOG	
				PREFIX	%	STRUCT	ALT	mm						
42														
44														
46														
48														
50														
52														
54														
56														
58														
60														
62														
64														
66														
68														
70														
72														
74														
76														
78														
80														
REMARKS														

Black-dark green strong pervasive Mt-Chl altered aphyric massive rhyolitic lava. mineralisation 0.3-1% disseminated x Vn ± qtz-chl hosted pyrite. No obvious visual chalcopyrite. Mt± strong Mt-Chl pervasive & patchy intense zones of Mt.

NB 49.5 - 57 : 7.5m @ 227 Cu - 352 Pb - 2900 Zn

↳ no obvious variation from rock immediately adjacent to possibly slightly more sulphide & Mt alteration.

No strong brecciation as observed from 0-40m

63-72m: Broken core suspect complex faulting. FAULT ZONE

Survey Depth	Azimuth	Dip	Hole Co-ordinates	
			Easting_AMG	
			Northing_AMG	
			Elevation (m)	
			Azimuth_Mag	
			Dip	

PROJECT: Red Hills
PROSPECT:
DATE: 5-3-06
LOGGED BY: NF

HOLE DEPTH	CORE RECOVERY	RCD	SAMPLE NO	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG	GEOLOGY NOTES	SUMMARY LOG	
				PREFIX	%					STRUCT				ALT
					1	3	1	3	5					
162														
164														
166														
168														
170														
172														
174														
176														
178														
180														
182														
184														
186														
188														
190														
192														
194														
196														
198														
200														

160-164 Breccia
 lithology, alteration + mineralisation as above.

/sulphides
 Mineralisation typically $\leq 0.3\%$
 rare occurrences upto 1%.

177-180 - Common Qtz-chl-Ksper cbvns
 $\leq 2cm$ wide.

Py veins commonly associated with
 Mt + Qtz veining & brecciation.

190-191 weak ?Ksper alteration.

190-195 Weak-mod. brecciation.

195-196m cbvns - breccia
 + Qtz.


 Ksper Chl+Mt.

REMARKS

Survey Depth	Azimuth	Dip	Hole Co-ordinates
			Easting_AMG
			Northing_AMG
			Elevation (m)
			Azimuth_Mag
			Dip

SHEET 6 **OF**

PROJECT: Red Hills
PROSPECT:
DATE: 4.3.06
LOGGED BY: NF

HOLE DEPTH	CORE RECOVERY	ROD	SAMPLE NO PREFIX	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG					GEOLOGY NOTES	SUMMARY LOG		
				%					STRUCT	ALT	mm								
				.1	.3	1	3	5			0.06	0.5	2	8	32	64			
202																			
204																			
206																			
208																			
210																			
212																			
214																			
216																			
218																			
220																			
222																			
224																			
226																			
228																			
230																			
232																			
234																			
236																			
238																			
240																			

REMARKS

lithology & alteration as above

mineralisation - pyrite predominantly in veins with or without Qtz-cb-Ksp or chl.

209-210 Ksp + chl - mt veins.

215-216 cb-Qtz-chl rn > 5cm thick surrounded by pyrite - similar in appearance to that at end of NCT006 but without cpy.

222-226 Qtz-ch-mt-py veins & breccia

222m ↓ sulphides appearing to increase downhole

± brecciation

± mt alteration.

233.5 - 241 Qtz-chl-py + py only veins

py < 1%

