

SUMMARY

The Red Hills E129/94 is a joint venture partnership between Goldfields Exploration and Homestake Exploration. Homestake became owners of the EL after a take over of Plutonic Resources. Goldfields became operators of the EL on 4th February 2000.

Three principal mineralisation styles have been identified at Red Hills:

1. Stratabound gold/polymetallic VHMS
2. Disseminated and vein Cu-Au-Mt.
3. Silica-carbonate alteration and Qtz-Carb-Au-basemetal veining.

Work completed since September 2000 includes completion of C-horizon soil sampling, drilling of diamond drill hole RH20 and a review of the stratabound gold/polymetallic VHMS mineralisation.

C-horizon soil sampling by Plutonic Resources was successful in outlining the host sequence for the VHMS-Au mineralisation as well as a prominent (>1g/t Au) soil Au anomaly associated with silica-carbonate alteration and Qtz-Carb-Au veining. This anomaly was tested with drill hole RH20. Only low grade gold mineralisation was identified associated with pervasive silica-carbonate alteration and late quartz carbonate veins. No further work is recommended for this area.

The review of the stratabound gold/polymetallic VHMS mineralisation suggests it remains open at depth and has the potential to host economic mineralisation accessible from the Henty Gold Mine workings. A wide spaced deep drilling of this horizon is recommended.

In 2001-2002 drill hole RH22 tested the down dip potential of the VHMS mineralisation. Although the hole failed to intersect economic grades the alteration zone was shown to persist at depth. Two additional holes are recommended to fully test the prospective area.

A second hole RH23 tested a shallow target in the northern portion of the EL. No significant results were obtained.

CONTENTS

1	INTRODUCTION	1
1.1	Location and Access	1
1.2	Topography and Vegetation	2
1.3	Tenure	3
1.4	Exploration Model	3
2	PREVIOUS EXPLORATION	4
2.1	Exploration prior to 1994	4
2.2	Exploration completed 1994 to 1999	4
3	WORK COMPLETED	4
4	RESULTS	7
4.1	Drilling	7
4.1.1	RH21	7
4.1.2	RH22	7
4.1.3	RH23	7
4.2	Geochemistry	9
4.2.1	Drill Core Assays	9
4.2.2	C-O isotopes	9
4.3	Geophysics	10
4.3.1	DHEM Survey	10
4.4	2000-2001 Digital Data	10
5.	DISCUSSION and RECOMMENDATIONS	11
6.	REFERENCES	12

Figures

Figure 1	Red Hills EL 29/94 – Access and Land Tenure
Figure 2	Red Hills – Digital Terrain Model
Figure 3	Red Hills Long Projection
Figure 4	RH23 TMI Image
Figure 5	Delta 13C verses Delta 18O plot for MRV Carbonates

Tables

Table 1	Red Hills - exploration completed by Plutonic 1994 - 1999
Table 2	Red Hills - exploration completed by Goldfields since March 2000
Table 3	Average grades for RH22
Table 4	Beatrice – Red Hills C-O Isotope Data

Appendices

Appendix 1	Symbols and codes used in drill logs
Appendix 2	Diamond drill hole logs and summaries
Appendix 3	Analyses
Appendix 4	DHEM Survey

Plans

Plan 1	RH21 and RH22 Cross section
Plan 2	RH23 Cross section

Digital Report

1 INTRODUCTION

EL29/1994 – Red Hills is a Joint Venture between AurionGold Exploration Pty and Plutonic Operations Limited. The EL was granted to Plutonic on 22 October 1994. As at 31/12/1999 Plutonic had spent \$263765 on exploration. The Joint Venture Agreement was signed on 4 February 2000. It is a condition of the agreement that Goldfields must spend \$600,000 by at least the fifth anniversary of the commencement date to earn 60% interest.

On the 21 October 2000, there was a compulsory 50% relinquishment of the Red Hills EL (Vicary and Callaghan, 2000).

The Red Hills EL has a current area of 8 square kilometres. The lease will expire on 21 October 2004.

1.1 Location and Access

EL29/1994 – Red Hills is located adjacent to the eastern side of the Henty Mine Lease (7M/91). The Henty Mine Lease is accessed via the Howards Road and the Anthony Road. The major access to Red Hills is via a 4WD track that commences within the Henty Mine Lease (Fig 1). Additional foot access to the eastern parts of the EL can be made from the Anthony Road.

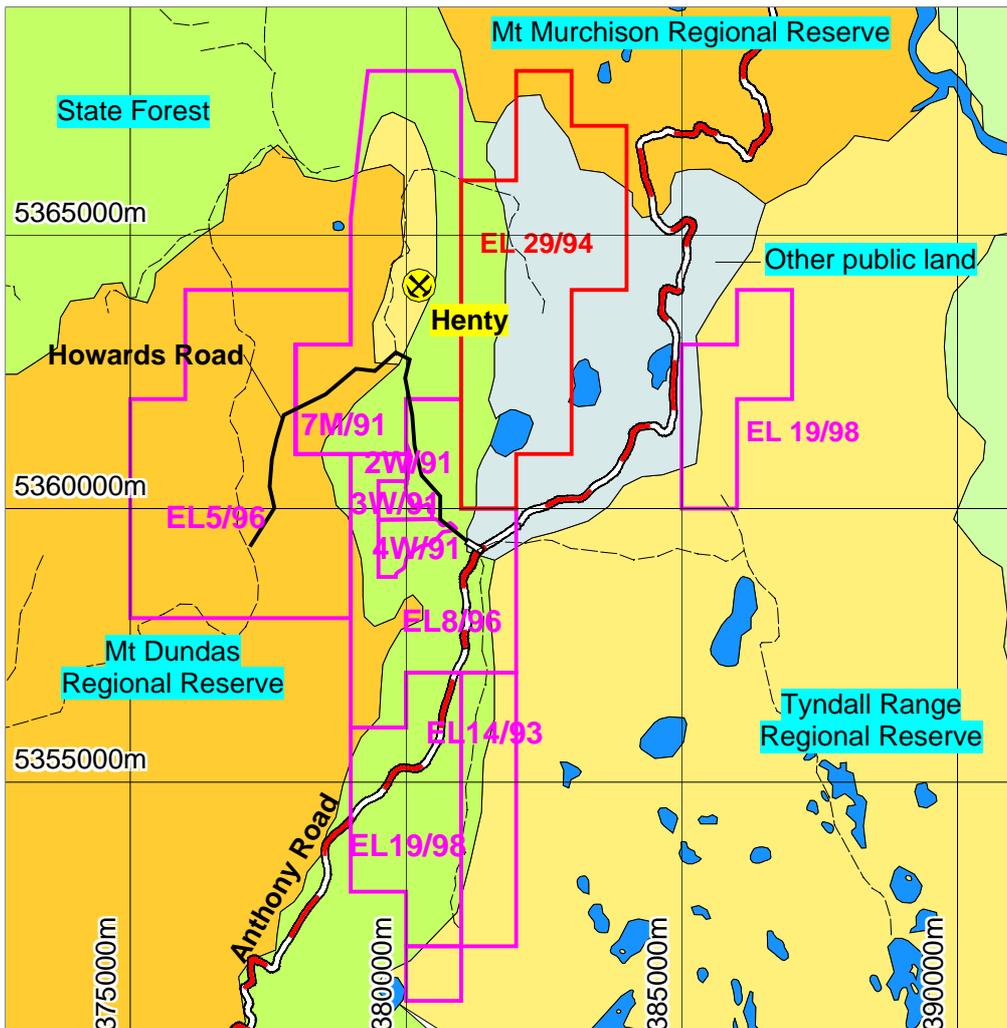


Figure 1. Red Hills EL 29/94 – Access and Land Tenure

1.2 Topography and Vegetation

The Red Hills EL is situated at the northern end of the West Coast Range. The elevation ranges from about 500m in the south near Lake Selina to 1040m at Moxon Peak. A digital terrain model of the Red Hills area is presented in Figure 2. The board saddle between the Gooseneck and Moxon Peak is at about 800m elevation. The area receives a high rainfall.

The principal vegetation type consists of extensive areas of button grass with some tea tree and banksia. This is the dominant vegetation in regions of poorly drained soils and is commonly developed over Owen Conglomerate, glacial deposits and glaciated Cambrian rock types with poor soil development. In more sheltered and fire resistant areas, the button grass is replaced by a low scrub consisting of eucalyptus, banksia, tea tree and bauera. Remnant rain forest species including King Billy Pine, Deciduous Beech and Myrtle are abundant in the sheltered gully immediately west of the Red Hills ridge.

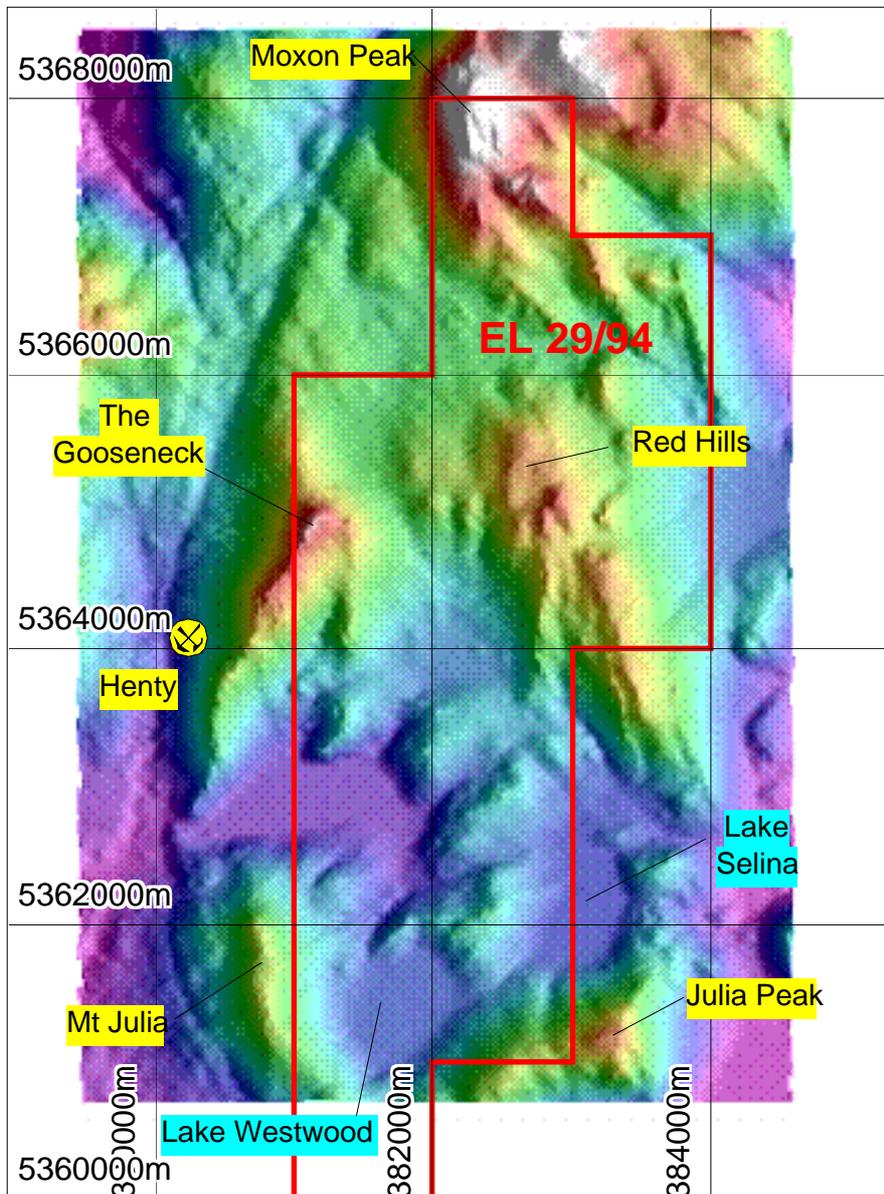


Figure 2. Red Hills – Digital Terrain Model

1.3 Tenure

The EL comprises: Crown Land
Crown Land – Deferred Forest
Mt Murchison Regional Reserve

It is partially within the South West Tasmania, Australian Heritage Commission Act, Registered Entry. 0.5 sq km of land vested in the HEC is excluded from the EL.

The land tenure in the Red Hills area is shown on Figure 1.

1.4 Exploration Model

The Mt Read Volcanics are host to world class polymetallic VHMS deposits such as Rosebery and Hellyer, volcanogenic Cu-Au deposits such as Mt Lyell and high grade volcanogenic gold deposits such as Henty. The Red Hills EL is prospective for all three styles of mineralisation. The principal target of the Tasmanian Gold Project is a Henty style high grade Au deposit.

High grade volcanogenic Au deposit

Recent drilling and mining at Henty has shown that the deposit consists of a series of low tonnage (100 000-500 000t) high grade (10-25 g/t Au) lenses hosted in an extensive tabular alteration package with dimensions of approximately 3.5 km length by 300m high by 40m thickness.

The deposit is hosted in volcanics of the Central Volcanic Complex at or near the contact of the overlying Tyndall Group .

Volcanogenic Cu-Au Deposits

The Mt Lyell field is the type model of the volcanogenic Cu-Au mineralisation found in the Mt Read Volcanics (117.1 million tonnes at 1.2 % Cu and 0.4 g/t Au). The Mt Lyell field consists of lenses of disseminated pyrite-chalcopyrite mineralisation hosted in intensely altered volcanics. The deposits are hosted in the Central Volcanic Complex, extending up to the Tyndall Group contact. It has been suggested that there is a genetic link between this deposit style and Henty style high grade Au mineralisation (Huston and Camprad, 1999, Callaghan, 1998).

Polymetallic VHMS deposits

The Mt Read Volcanics are host to world class gold rich volcanic hosted massive sulphide deposits. The deposits are typically high grades (~20% Pb + Zn, 2.5 to 3.5 g/t Au) and range in size from about 3.3 million tonnes (Que River) to greater than 30 million tonnes (Rosebery).

Polymetallic VHMS deposits commonly form in clusters on well-defined stratigraphic horizons. The principle favourable horizon in the Henty area is at the Tyndall Group – Central Volcanic Complex contact. It is possibly repeated by folding at Red Hills, where an uneconomic resource of 1 million tonnes @ 5.9% Pb + Zn and 2 g/t Au has been delineated by previous exploration (Purvis et al, 1983).

2 PREVIOUS EXPLORATION

2.1 Exploration prior to 1994

Mining at Red Hills dates back to the late 1890's with the development of several short adits to work small copper shows. All mineral rights were acquired by the Mount Lyell Mining and Railway Company in 1905, however by 1908 all mining activity had ceased.

Modern exploration commenced in the late 1950's by a Rio Tinto / EZ JV who conducted several geophysical surveys and completed four diamond drill holes.

From 1969 to 1985 the Red Hills area was part of EL 9/66 held by the Mount Lyell Mining and Railway Company. Numerous geophysical surveys and 21 diamond drill holes were completed in this period. A small massive sulphide lens was intersected in hole RH5.

From 1985 to 1993 a CRAE / Aberfoyle Joint Venture held Red Hills as EL 5/85. This exploration focused on the use of EM (UTEM and DHEM) to define targets. Two drill holes were completed.

2.2 Exploration completed 1994 to 1999

EL 29/1994 - Red Hills was granted to Plutonic Operations Limited on 22 October 1994. In 1994-95 the exploration completed consisted of a review of previous exploration and some reconnaissance mapping. An orientation soil survey showed that C horizon sampling was preferable to sampling of the B horizon.

18 line kilometres of grid was covered by additional soil sampling program between 1995 and 1997. A ground magnetic and a moving loop EM surveys were also conducted over the grid. Additional work completed in this period includes a review of the geology of the southern part of the tenement by Wally Herrmann, relogging of drill core and geological mapping.

No exploration was completed at Red Hills by Plutonic since 1997.

The exploration completed at Red Hills by Plutonic since 1994 is summarised in Table 1.

3 WORK COMPLETED

AurionGold Exploration has been exploring at Red Hills since March 2000. The exploration completed during the current reporting period is summarised in Table 2.

Table 1. Work Completed by Plutonic Operations Ltd within EL 29/94 - 1996 - 1999

	1994-95	1995-97	1997-98	1998-99
General	Review of previous exploration	Geological Mapping	Data Review	No work completed
	Reconnaissance mapping	Review by W Herrmann		
	9 line km grid established	Additional 9 line km grid cut		
Drilling		Drill core relogging		
Geochemistry				
Soils	Orientation Survey (B + C horizons)	688 samples (Cu, Pb, Zn, Fe, Mn, Ag, Au)		
Rocks		24 samples (Cu, Pb, Zn, Fe, Mn, Ag, Au)		
Core		18 samples (Cu, Pb, Zn, Fe, Mn, Ag, Au) 12 samples (WR XRF, Nb, Y, Zr)		
Isotopes				
Geophysics		Moving Loop EM Survey		
		Ground Magnetism Survey		
Report	Reid and Close, 1995	Reid and Close, 1997	Dare, 1998	

Table 2. Work Completed by Goldfields Exploration within EL 29/94 - 1999 - 2003

	1999-2000	2000-2001	2001-2002	2002-2003
General	15 line kilometres of grid cut 1:5000 geological mapping			
Drilling	Old core relogged	RH20 (295m)	RH21 (116.5m) RH22 (787.5m) RH23 (400.5m)	
Geochemistry				
Soils	Compilation of Plutonic soil data 68 samples (Cu, Pb, Zn, Au, Ag, As)	302 samples (Cu, Pb, Zn, Au, Ag, As)		
Rocks	Compilation of historical data 9 samples for (Cu, Pb, Zn, NAA, XRF)	8 samples (Ag, As, Au, Cu, Pb, Zn, P, Ti, V, Zr)		
Core	Compilation of historical data	29 samples (Ag, As, Au, Bi, Cu, Pb, Zn)	97 samples (Ag, As, Au, Cu, Pb, Zn, ± Ba)	
Isotopes	Compilation of historical data		3 C-O Isotopes	
Geophysics	Helimag Survey – 885 line km Compilation of historical data		DHEM Survey of RH22	
Report	Callaghan and Vicary, 2000	Callaghan and Vicary, 2001	This report	

4. RESULTS

4.1 Drilling

4.1.1 RH21

Drill hole RH21 was targeted about at the down plunge extension of a gold rich zone on the Red Hills VHMS Horizon. Due to excessive lift the hole was abandoned was at 116.5m.

4.1.2 RH22

Following the abandonment of RH21, a new hole (RH22) was recollared at the same location with a steeper dip to allow for the excessive lift.

Drill hole RH22 was completed at 787.5m, approximately 300m deeper than previous drilling (Figure 3). The hole intersected a zone of epithermal style carbonate veins within a lava breccia from 527.3 to 558.9m. A thick unit of pumiceous volcanoclastic sediment underlies the lava breccia and is similar to the host tuffaceous sequence of the massive sulphide in RH5. It was only weakly altered with carbonate and chlorite spotting.

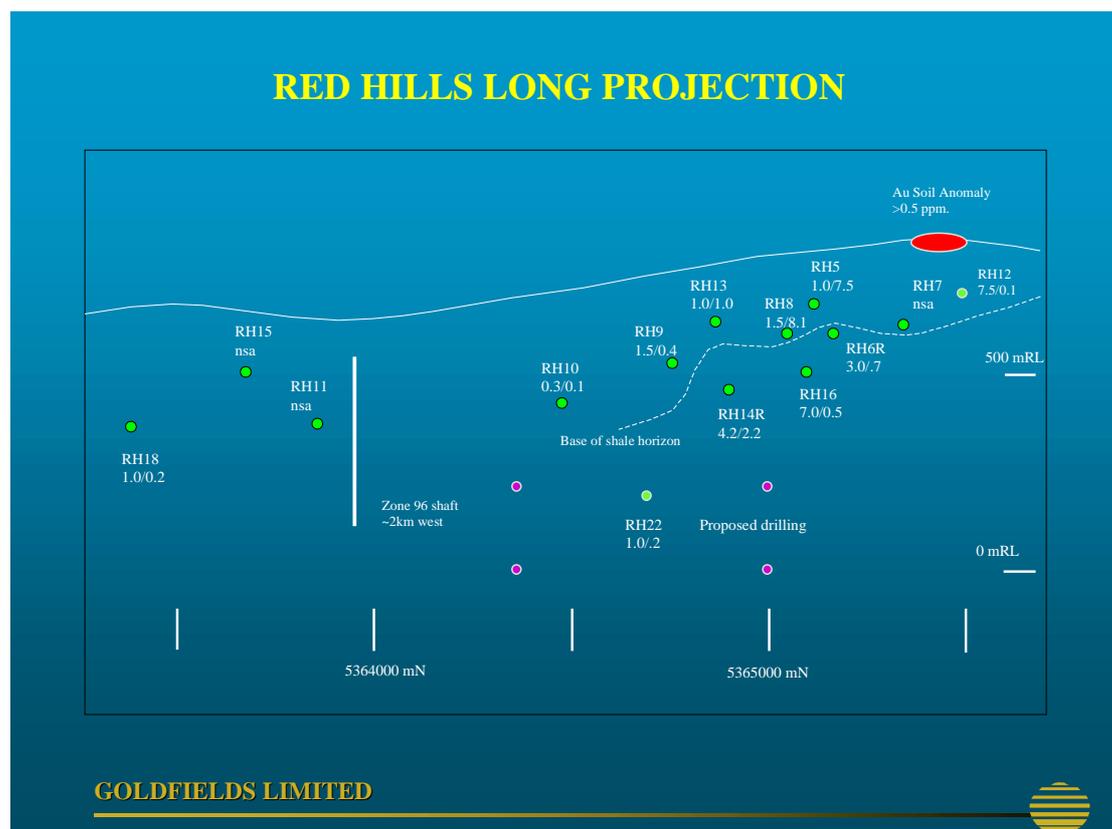


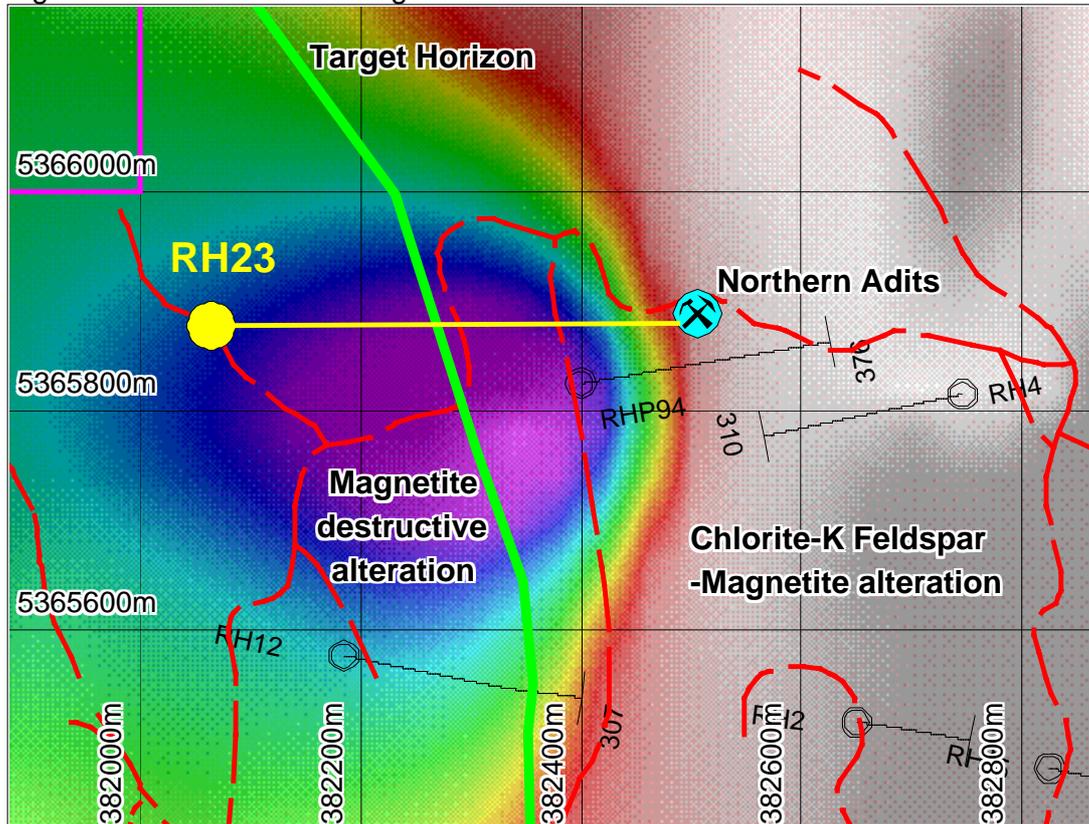
Figure 3. Red Hills Long Projection

4.1.3 RH23

Drill hole RH23 targeted the Red Hills VHMS horizon up-dip from a zone of intense

footwall alteration at Northern Adits. This target was not evaluated by earlier drilling in the area. A distinct magnetic low was coincident with the VHMS horizon and considered to result from magnetite destructive alteration (Figure 4). No significant alteration was intersected at the stratigraphic position of the Red Hills VHMS horizon (~212.8m). From 315 to 400.5m (EOH) intense chlorite – albite (K feldspar ?) with minor pyrite and chalcopyrite was intersected. This zone is considered to correlate with the down dip extrapolation of the Northern Adits alteration.

Figure 4. RH23 TMI image.



4.2 Geochemistry

4.2.1 Drill Core Assays

97 approximately 1m half core samples were analysed from RH22 and RH23. The samples were analysed by Analabs in Burnie for Au, As, Ag, Cu, Pb, and Zn. RH22 was also analysed for Ba. No samples were analysed from RH21. The results are tabulated in Appendix 3.

4.2.1.1 RH22

The assays from RH22 were disappointingly low with a best intersection of 6m @ 0.6% Zn with Au up to 0.14 g/t Au and Ag up to 7 ppm from 540 to 546m. The table below summarises the average grades for each lithological unit.

Table 3. Average grades from RH22.

Unit	Cu	Pb	Zn	Ba	As	Ag	Au
Massive dacite lava with carb-pyrite veining 440-450m	68	326	145	2240	To 165	To 3	To 0.04
Volcaniclastic sandstone 515.5-527m	19.5	179.5	191.5	1021	To 290	To 2	0.06
Lava Breccia 527-559m	56.5	824	2728	1954	To 100	To 7	0.14
Black siltstone 559-560m	Low	Low	Low	Low	Low	Low	Low
Volcaniclastic sandstone 560-575m	54	1868	2029	706	To 405	To 13	To 0.18
Volcaniclastic siltstone 575-759	20.5	377	400	628	< DL	To 1	To 0.04

4.2.1.2 RH23

Basemetal and Au values from RH23 were generally low with scattered Au values up to 0.09 g/t and Cu values up to 2550 ppm. Pb and Zn were not anomalous.

4.2.2 C-O Isotopes

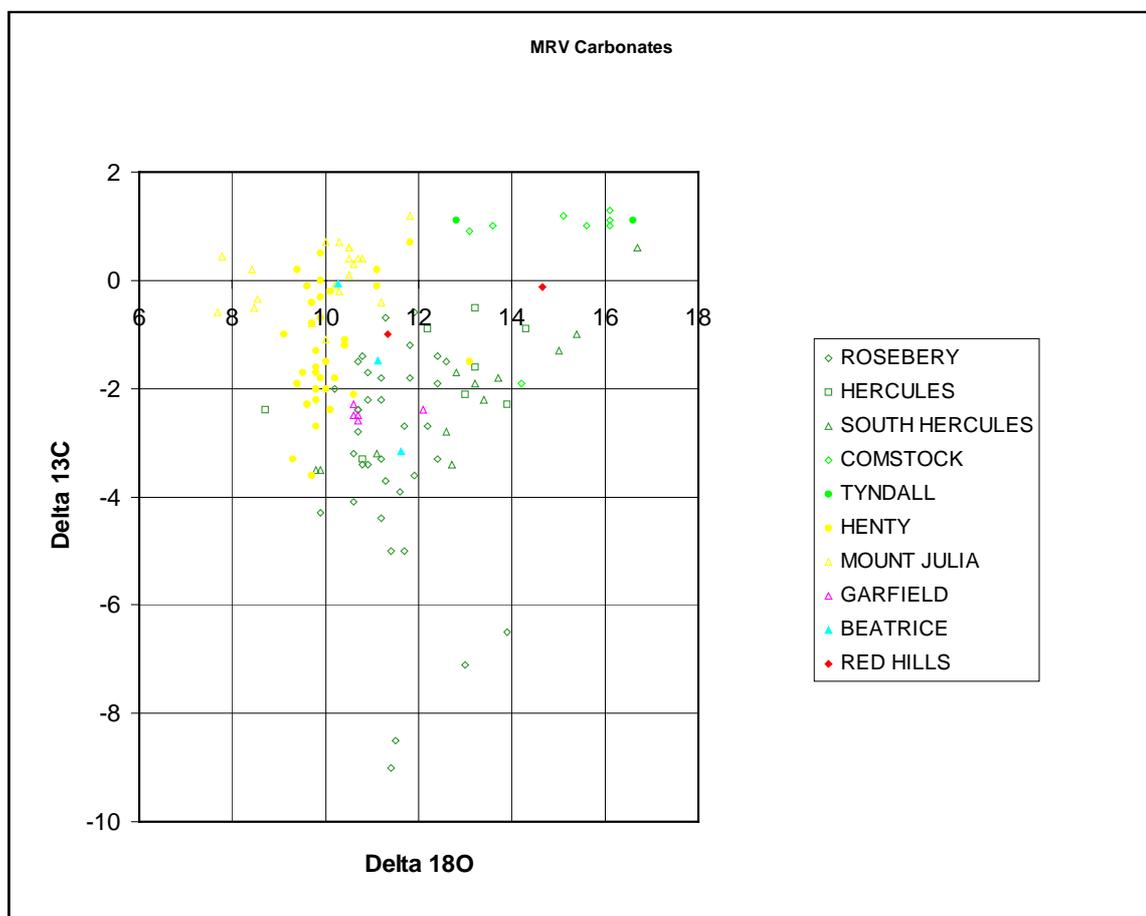
Three carbonate samples from the Beatrice Prospect and two from Red Hills were analysed for oxygen and carbonate isotopes at the Central Science laboratory at the University of Tasmania. Although the values of these samples show wide scatter (see Figure 5) the carbonates from the Beatrice and Red Hills Prospects are more similar to carbonates from the Rosebery area than from Henty. The negative trend defined by the Beatrice samples is similar to that displayed in the Lake Newton alteration system on the South Henty EL (Street, 1999).

The results are tabulated in Table 4.

Table 4. Beatrice – Red Hills C-O Isotope Data

DEPOSIT	SAMPLE NO.	DRILL HOLE	DEPTH	MINERAL	Delta 18O	Delta 13C
BEATRICE	255596	MS10	476.5	CALCITE	11.631	-3.17
BEATRICE	255597	MS13	261.4	CALCITE	10.28	-0.056
BEATRICE	255598	MS13	449	CALCITE	11.123	-1.485
RED HILLS	255599	RH11	33.8	CALCITE	14.662	-0.127
RED HILLS	255600	RH18	363.5	CALCITE	11.339	-0.996

Figure 5 Delta 13C versus Delta 18O plot for MRV Carbonates



4.3 Geophysics

4.3.1 DHEM Survey

Down-hole electromagnetic (DHEM) data were acquired on diamond drillhole RH22 at the Red Hills Project within EL29/1994. The data were acquired by Outer Rim Exploration Services during January 2002 using the CRONE three component DHEM system. The aim of the survey was to delineate conductive off-hole EM response for the purpose of gold exploration.

Specifications and profiles of the DHEM data are presented Appendix 4. The data exhibits a broad conductor response centred at approximately 400m down-hole. This is interpreted to be associated with current channelling along a weakly conductive black shale. This response is formational and not likely to be associated with economic mineralisation. No further work is recommended.

4.4 2000-2001 Digital Data

At the request of Mineral Resources Tasmania digital data from the 2000 – 2001 Annual report (Callaghan and Vicary, 2001) has been on the CD which accompanies this report.

5 DISCUSSION and RECOMMENDATIONS

The three principal mineralisation styles identified at Red Hills include:

Stratabound gold/polymetallic VHMS

Chlorite-silica-K feldspar alteration with vein and disseminated Cu-Au-Mt.

Silica-carbonate alteration and Qtz-Carb-Au-basemetal veining.

Although open to interpretation, spatial relationships suggest the three mineralisation styles formed from a common hydrothermal system. The stratabound gold/polymetallic VHMS horizon remains the most prospective horizon on the EL.

Mapping and relogging of drillcore confirms the host of the Au-VHMS horizon to be CVC volcanoclastic mass flow units (LMH) located just below the Tyndall Group boundary. The horizon has been well tested in the vicinity of RH5 (inferred resource 1Mt @ 5.9% Pb + Zn, 2g/t Au) which is coincident with the strongest soil anomalies. A review of these drillholes suggests the prospective zone is still open at depth.

Although primarily regarded as a basemetal prospect in the past largely due to one intersection (RH5 2.8m @ 34.5% Zn, 11.4% Pb, 0.3% Cu, 250 g/t Ag and 6.5 g/t Au), the mineralisation contains anomalous gold values to a maximum of 8.1 g/t in RH8.

Gold mineralisation is associated with sphalerite-pyrite mineralisation in intensely silica-sericite altered volcanics and is considered to have formed at or just below the seafloor. Although Au and Zn grades are spotty, mineralisation within the LMH is continuous with a zinc zone (Zn>0.1%) and gold zone (Au>0.1 g/t) being delineated over a strike length in excess of 500m (see level plans and section in Appendix 1). The Au zone is located at the top of the zinc zone.

The LMH directly overlies the extensively chlorite-magnetite-K-feldspar altered Red Hills Lava with the latter probably representing a footwall alteration zone. The extensive footwall alteration suggests large volumes of hydrothermal fluid were involved adding to the potential for the host horizon to contain significant deposits.

Mineralisation has been drill tested to a depth of 300m from surface (~500mRL) and is still open down dip. Fold axes within the EL plunge south and from the limited information available it is likely the LMH also plunges south.

The extent of the footwall alteration and similar stratigraphic position of the mineralised horizon to the Henty-Mt Julia deposits warrants further investigation of this zone. The Zone 96 shaft is located approximately 2km to the SW of the known mineralisation and could be used to access orebodies to a depth of -100m RL. This leaves an area of approximately 1.5km strike extent and 600m vertical of the mineralised zone that has never been explored. Any resources identified would have to be of sufficient size and grade to justify development. Because the LMH at Red Hills is untested at depth but potentially accessible from current development puts Goldfields in a unique position.

The results from the 2001 to 2002 exploration program at Red Hills have not adequately tested the down dip potential of the LMH. Drill hole RH22 has shown that the alteration at this contact although weak still persists at depth. Two additional drill holes along strike to the north and south of RH22 should be drilled to fully evaluate the down dip potential of the Lower Mineralised Horizon.

6. REFERENCES

- Callaghan, T J, 1998. Geology and Alteration of the Mt Julia Deposit, Henty Gold Mine, Tasmania. Unpublished Draft M.Econ. Geol. Thesis, CODES SRC, Geology Department, University of Tasmania.
- Callaghan, T.J., and Vicary, M.J., 2000. 1999-2000 Annual Report. Red Hills EL 29/94. Goldfields Exploration Pty Ltd.
- Callaghan, T.J., and Vicary, M.J., 2001. 2000-2001 Annual Report. Red Hills EL 29/94. Goldfields Exploration Pty Ltd.
- Dare, T., 1998. Annual report for the period October 1997 to October 1998. Exploration Licence 29/94 – Red Hills. Plutonic Operations Limited.
- Huston, D L and Kamprad J, 1998. Alteration Zonation and geochemical dispersion at the Western Tharsis deposit, Mt Lyell, Tasmania: a summary. Unpublished AMIRA final report P439, May 1998, v 2, pp. 105-128.
- Purvis, JG, Jones, MT, Fitzgerald, FG and Poltock, RA. 1983. A geological review of the Tyndall Exploration Licence 9/66, western Tasmania. Goldfields Exploration Pty Ltd. (unpub) [TCR 83-3477].
- Reid , R.O and Close, R.J., 1995. Red Hills EL 29/94. Annual Report to 21 October 1995. Plutonic Operations Limited.
- Reid , R.O and Close, R.J., 1997. Red Hills EL 29/94. Report on exploration during the period 20 October 1995 to 21 October 1997. Plutonic Operations Limited.
- Vicary, M.J., and Callaghan, T.J., 2000. Red Hills EL29/94 Partial Relinquishment Report. October 2000. Goldfields Exploration Pty Ltd.

APPENDIX 1

Symbols and Codes used in drill logs

APPENDIX 2

Diamond Drill Hole Logs and Summaries

APPENDIX 3

Analyses

APPENDIX 4

DHEM

PLANS