



Henty Gold Mine
Howards Road
HENTY TAS 7467
PO Box 231
QUEENSTOWN TAS 7467
Australia

Telephone: + 61 3 6473 2444
Facsimile: + 61 3 6473 1857

HENTY GOLD LIMITED

A.C.N. 008 764 412

Final Report

2003

Anthony

EL 19/1998

HELD BY: AurionGold Exploration Pty Ltd

MANAGER & OPERATOR: AurionGold Exploration Pty Ltd

AUTHOR(s): Michael Vicary

24 March 2003

PROSPECTS: Basin Lake, Langdon Prospect, Bradshaws Road

MAP SHEETS: 1:250,000: 1:100,000:

**GEOGRAPHIC COORDS Min East: Max East:
Min North: Max North:**

COMMODITY(s): Au, Basemetals

KEY WORDS: Tyndall Group, Anthony Road Andesite, Central Volcanic Sequence,

Distribution:

- o AurionGold Exploration Information Centre Reference:**
- o AurionGold Exploration - Zeehan:**
- o Mineral Resources Tasmania:**

SUMMARY

This report documents the work completed on EL 19/1998 - Anthony by AurionGold Exploration.

In late 2002, AurionGold Exploration was acquired by Placer Dome Asia Pacific and a detailed review of Tasmanian exploration program completed. As a result of the review all non-mine lease exploration was suspended and several exploration tenements (including the Anthony EL) were recommended to be relinquished.

CONTENTS

SUMMARY	i
1 INTRODUCTION	1
1.1 Location and Access	1
1.2 Topography and Vegetation	1
1.3 Tenure	1
1.4 Aims	3
1.5 Exploration Model	3
2 PREVIOUS EXPLORATION	6
3 WORK COMPLETED	6
4 REHABILTIATION	8
5. DISCUSSION and RECOMMENDATIONS	9
6. REFERENCES	10

FIGURES

Figure 1	Location Map
Figure 2	Exploration Model

1 INTRODUCTION

EL 19/1998 - Anthony Road is held and explored by AurionGold Exploration Pty Ltd (formerly Goldfields Exploration Pty Ltd). It constitutes the relinquished area of the former EL 103/1987 by a joint venture between Aberfoyle Resources Limited, Acacia Minerals Pty Ltd and Resolute Limited (Figure 1). EL 19/1998 was initially granted on 25 September 1998 and comprised two separate blocks: Anthony Road (8 sq km) and Mount Selina (5 sq km). The Lake Selina block was relinquished in September 2001. The Anthony Road portion is located in western Tasmania, approximately 14 km north of Queenstown, and is situated on the flank of the Tyndall Range (Figure 1).

1.1 Location and Access

The major access to the EL is via the sealed Anthony Road, which runs alongside and dissects the tenement approximately 12 km east of the junction with the Zeehan Highway. Access from the eastern side of the tenement is provided by a gravel vehicular track that follows a HEC power line close to the eastern EL boundary. A series of grid lines and rehabilitated tracks provide access by foot within the tenement.

1.2 Topography and Vegetation

The Anthony EL lies along the peneplain between the steep, north - south trending Tyndall Ranges (1000m high) in the east and the 300m deep Henty Gorge to the west. The peneplain is between 450m and 550m ASL. The vegetation consists predominantly of button grass plains and light tea tree scrub with some patches of medium eucalypt forest and rainforest. The area has been extensively glaciated and reliable outcrop is restricted to road cuttings and topographic highs in the north and west of the EL. The EL is largely covered by glacial moraine and outwash.

1.3 Tenure

The EL comprises: Crown Land (Deferred Forest Land)
Crown Land
Land Vested in HEC.

The area is partly within the South West Tasmania Australian Heritage Act - Registered Entry (South West Conservation Area).

1.4 Aims

The AurionGold Tasmanian exploration program is targeted at the discovery of a Henty style gold mineralisation and polymetallic gold rich base metal mineral deposit in the Cambrian Mount Read Volcanics. The principal aim of the exploration program is to find additional Au resources to supplement production at the AurionGold owned Henty Mine or to define a resource that could be developed as a stand alone operation.

AurionGold has been actively exploring the southern Mount Read Volcanics for several years and has developed an integrated exploration model for Henty and Mt Lyell style mineralisation. Such deposits are considered to represent the submarine equivalents to porphyry copper - high sulphidation - epithermal deposits. Henty style deposits form in the highest levels and margins of the system and have the best potential for gold mineralisation. The high sulphidation - porphyry copper deposits general form at a deeper level and although generally base metal rich can still host significant Au resources.

1.5 Exploration Model

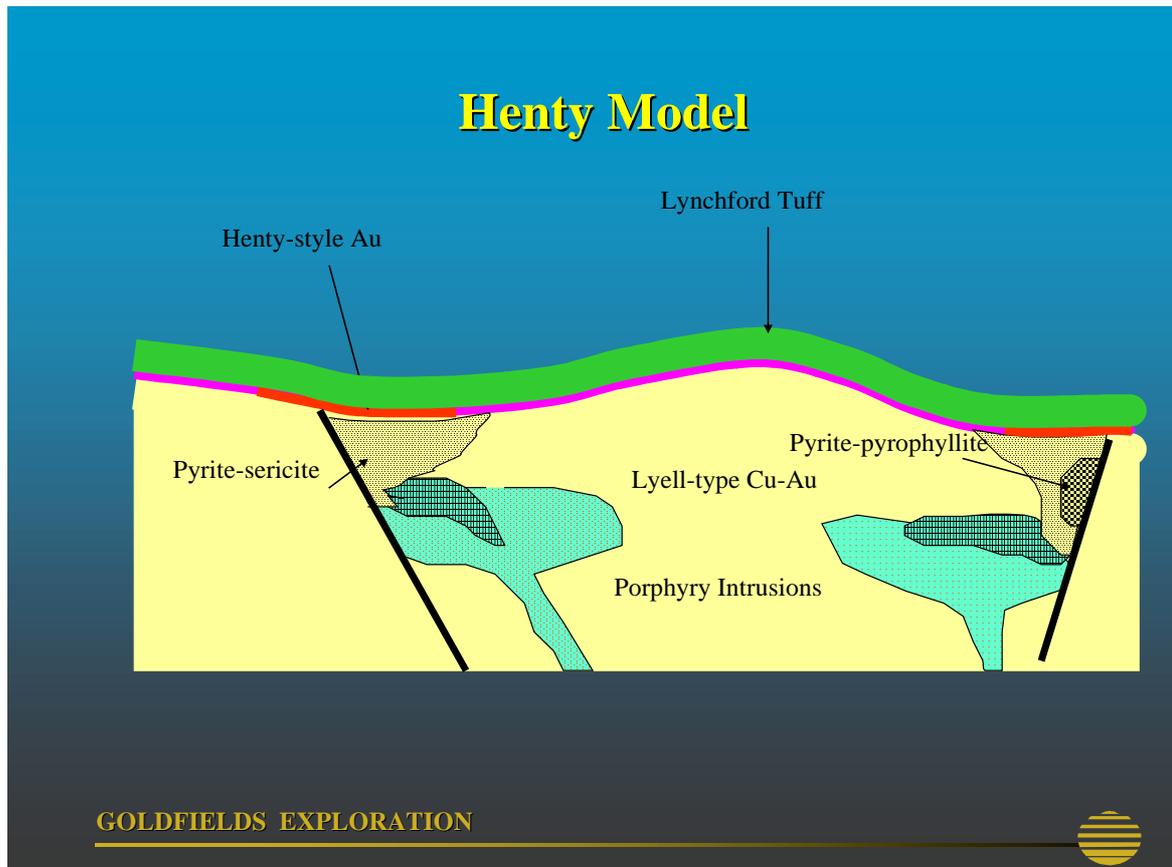
The Mount Read Volcanics are host to several world class gold rich base metal mineral deposits at Rosebery, Hellyer, Que River, Hercules, and Mount Lyell and to gold mineralisation at the Henty Mine. The Henty Mine is the only gold only producer in Western Tasmania, all the other deposits produce gold as a by-product of base metal treatment. In June 2000, the Henty Mine had an inferred Resource of 1,373,000 tonnes @ 10.3 g/t Au (452,900 ounces).

AurionGold Exploration is actively exploring the southern portion of the Mount Read Volcanics in the Henty, South Henty, Basin Lake and Red Hills areas. Exploration to date has focused on systematic drill testing the Henty Horizon, which is defined as a zone of mineralisation, alteration and carbonate developed at the contact between the basal Tyndall Group and the underlying Central Volcanic Sequence. The exploration program has been highly successful and an inferred gold resource of 731000 tonnes @ 7.6 g/t Au at Mount Julia in the south of the Henty Mine Lease has recently been delineated.

An integrated exploration model for Henty and Mt Lyell style mineralisation has been developed. Such deposits are considered to represent the submarine equivalents to porphyry copper - high sulphidation - epithermal deposits. Henty style deposits form in the highest levels and margins of the system and have the best potential for gold mineralisation. The high sulphidation - porphyry copper deposits general form at a deeper level and although generally base metal rich can still host significant Au resources.

An integrated exploration model for the genesis of Henty style Au and Mt Lyell style Cu - Au mineralisation is shown on Figure 2.

Figure 2 Henty Model



The critical components of the model are outlined below:-

A. Position underlying the Lynchford Tuff

The Lynchford Tuff (or Lynchford Formation) is the basal unit of the Tyndall Group. The dominant facies is a feldspar rich volcanoclastic sandstone with subordinate basalt, carbonate horizons and quartz feldspar phyric intrusives / lavas. It overlies and can be interbedded with dacitic pumice breccias and lavas of the Central Volcanic Sequence.

The base of the Lynchford Tuff represents a major exhalite horizon (the Henty Horizon) as indicated by mineralisation at Henty, Comstock, Lynchford, Red Hills, Howards Anomaly and Beatrice.

B. Proximity to major faults

There is a close spatial association between exhalitive mineralisation at the Henty Horizons and major faults. The Henty, Howards Anomaly and Comstock deposits are located near the intersection of the Henty Horizon with the regional (N-S) Henty and Great Lyell Faults. The intersection of second order (E-W) faults with the Henty Horizon is a primary control on mineralisation at Lynchford and Comstock.

The regional (N-S) and second order (E-W) faults were active growth structures during Cambrian volcanism and mineralisation and focused the ascent of deep seated hydrothermal fluids to the inferred seafloor position at the Henty Horizon.

C. Proximity to "Suite 2" porphyries and other related rock types.

Exploration at Mt Lyell, Garfield, Basin Lake, Anthony and South Henty has highlighted the close spatial association of "Suite 2" quartz feldspar porphyry intrusives and feldspar hornblende phyric andesites. These subvolcanic intrusives and their eruptive equivalents are considered to be the source of the magmatic dominated fluids which characterise Henty and Mt Lyell type deposits (Halley, 1996, Callaghan, 1998, Street, 1999 and Williams, 2000).

They range in composition from medium to high calc-alkaline to highly evolved shoshonitic and tholeiitic compositions (Crawford, Corbett and Everard, 1992).

There is good field evidence in the Henty - South Henty area that intrusion of the Suite 2 rock types is synchronous with the deposition of the Lynchford Tuff.

D. Associated Footwall Style Alteration.

Sub-seafloor alteration in the Central Volcanic Sequence is wide spread in the southern Mount Read Volcanics and hosts mineralisation at Mt Lyell, Basin Lake, Anthony and South Henty. There are two principal types:- pyrite-sericite and pyrite-pyrophyllite. The latter forming under more acid conditions.

These alteration zones represent the feeder zones to the overlying exhalative mineralisation at the Henty Horizons or seafloor position.

Deposits of this type commonly display features that are typically associated with High Sulphidation porphyry style mineralisation (Low $\delta^{34}\text{S}$ values, pyrophyllite-kaolinite-alunite, enargite-tennantite etc). They are usually Cu rich in contrast to mineralisation forming at the overlying seafloor position, which generally have epithermal characteristics (Au and Ag rich).

2 PREVIOUS EXPLORATION

Exploration prior to 1997 is comprehensively set out in Lewis (1995) and MacDonald & Ikstrums (1998).

During 1997-1998, Resolute Samantha Ltd, who held the ground in joint venture with Acacia Metals Pty Ltd and Aberfoyle Resources Limited, completed three short (~50m each) Diamond drill holes for a total of 170.5m. These holes, LHD 1-3, were drilled to test a single anomalous Cu wacker sample (0.34% Cu) associated with a structure interpreted by Aberfoyle to be a WNW-ESE trending Cambrian growth fault - the *Pyrite Corner Fault* (see MacDonald & Ikstrums, 1998). Pyritic alteration was only intersected in LHD1 where it was most intense (~3% Pyrite) from 25.5m to 30.0m and apparently associated with shearing at 28.2 and 30.0m. Coherent to hyaloclastic Anthony Road Andesite was the only rock type intersected and assay results were disappointing throughout with all Au <0.10g/t and all Cu <946ppm. As, Ag, Pb and Zn results are all low (i.e. background).

3 WORK COMPLETED

The exploration completed by Goldfields on EL 19/1998 to December 2002 is summarised on table 1. No additional exploration was completed on the tenement since the September 2002.

Table 1. Work completed on EL 19/1998. 1990-2002			
	1998-1999	1999-2000	2000-2001
General	1:5000 mapping and compilation Literature Review	1:5000 mapping and compilation 24.7 km of grid re-established	Relinquishment of Lake Selina area
	Mt Selina Review	Nick Williams (BSc(Hons) Project	
Drilling	Relog old holes	TYND17 (305.4m) TYND18 (339.6m)	TYND21 (350.8m)
Geochemistry			
Soils			
Rocks	36 samples by AAS, XRF and NAA	19 samples by AAS, XRF and NAA	
Core	20 samples by AAS, XRF and NAA	164 samples by AAS. 46 samples by XRF and NAA	90 samples by AAS, 3 by NAA + XRF
Isotopes		1 XRD determination	67 samples by AAS
General	Compilation of soil + wacker data		
Geophysics	Compilation of 1986 gradient IP data Reprocessing of CSAMT data Helimag data processing	Inversion of 1967 dipole-dipole IP data Review of BL006-BL007 DHEM Review of IP Data from Bradshaws Road area Dipole – Dipole IP Survey (24.7 line km)	Dipole – Dipole IP Survey Technical Report DHEM of TYND17-TYND20
Reference	Hill and Vicary, 1999	Vicary, 2000. Williams, 2000	Vicary, 2001a and 2001b Vicary, 2002

4. REHABILITATION

The major environmental impacts and rehabilitation activities are summarised on Table 2.

Table 2. Environmental Impacts and Rehabilitation - EL 19/1998 - Anthony									
Company	Activity	Hole No.	Type of impact	Intensity of impact	Area disturbed (m ²)	Access track area (m ²)	Area rehabilitated (m ²)	Area to be rehabilitated (m ²)	Comments
Goldfields	Drill Hole	TYND17	Mechanical digging	Moderate	25	0	25	0	1
Goldfields	Drill Hole	TYND18	Mechanical digging	Moderate	25	0	25	0	1
Goldfields	Drill Hole	TYND19	Mechanical digging	High	25	1000	1025	0	
Goldfields	Drill Hole	TYND20	Mechanical digging	High	25	2600	2625	0	
Goldfields	Drill Hole	TYND21	Mechanical digging	High	25	400	425	0	2
Goldfields	Grid		Vegetation cutting	Low		24.7 line km		0	3
Goldfields	DHEM Loops		Vegetation cutting	Low		3 line km		0	3
Goldfields	Electrode pits		Manual digging	Low				0	3
	Notes:-	1	Helicopter supported hole						
		2	Rig dragged across button grass to reduce impact						
		3	Natural regeneration is expected						

5. DISCUSSION and RECOMMENDATIONS

The exploration completed on the Anthony EL focused on the evaluation of the Langdon Prospect a zone of intense pyrite – sericite – pyrophyllite alteration hosted in a Suite II quartz porphyry. The alteration assemblage is similar to that commonly associated with Mt Lyell Cu – Au mineralisation. Despite trace enargite – tetrahedrite mineralisation no economic mineralisation was intersected in the drilling completed.

Additional drilling at the Langdon Prospect could target the alteration zone south of the TYN021 intersection and to the east and down dip of BL004, and to the north of TYN019. Despite these potential targets the strike length of the Langdon Prospect has been well tested and any potential discovery may be limited in size. No additional exploration is recommended.

6. References

- Callaghan, T., 1998. Geology and Alteration of the Mt Julia Deposit, Henty Gold Mine, Tasmania. M.Econ.Geol.Thesis, University of Tasmania.
- Crawford, A.J, Corbett, K.D, and Everard, J.L, 1992. Geochemistry of the Cambrian Volcanic-Hosted Massive Sulfide-Rich Mount Read Volcanics, Tasmania, and some Tectonic Implications. *Econ Geol*, V87, pp 597-619.
- Halley, S.W., 1996 Geochemistry and genesis of the Garfield Prospect. *In Halley, Vicary, Corlett and Wyman, 1996. Annual Report 1995/96 Els 102/87, 55/89 and 12/92. RGC Exploration.*
- Hill, R and Vicary, M.J., 1999 1998-99 Annual Report. Tasmanian Gold Project. Anthony EL 19/98. Part 1 – Anthony Road area. Goldfields Exploration Pty Ltd.
- Lewis, R, 1995. Basin Lake EL 103/87, Tasmania. Technical report for the period April 1994 – March 1995. Aberfoyle Resources Limited. TCR 95-3716
- MacDonald, G and Ikstrums, J, 1998. Final Report EL 103/87, Basin Lake. May 1997 – May 1998. Resolute Limited. TCR 98-4175
- Street, M., 1999 Alteration of the South Henty Prospect. BSc(hons) thesis. University of Tasmania.
- Vicary, M.J., 2000 1999-2000 Annual Report. Tasmanian Gold Project. Anthony EL 19/98. Part 1 – Anthony Road area. Goldfields Exploration Pty Ltd.
- Vicary, M.J., 2001a 2000-2001 Annual Report. Tasmanian Gold Project. Anthony EL 19/98. Goldfields Exploration Pty Ltd.
- Vicary, M.J., 2001b Partial Relinquishment Report. Tasmanian Gold Project. Anthony EL 19/98. Goldfields Exploration Pty Ltd.
- Vicary, M, 2002 Annual Report 2001 – 2002 EL 13/2001 Landgon. AurionGold Exploration Pty Ltd
- Williams, N., 2000 The Basin Lake High Sulphidation Alteration System, Western Tasmania. BSc(Hons) thesis (unpubl.) University of Tasmania.