

EL 22/2003

Lyndhurst

**Final (100% relinquishment) Report
- including exploration work conducted
August, 2004 to March, 2005**

**Grant MacDonald
on behalf of
Mr F. (Frank) C. Bardenhagen**

Table of Contents

Page

- 1. Summary and Recommendations**
- 2. Introduction**
- 3 Tenement Information**
- 4. Previous Work**
- 5. Work Done/Results**
- 7. Expenditure**
- 8. Conclusions**
- 9. References**

Appendices

- A Assay Result Sheets**
- B Letter from landowner**

Summary and Recommendations

Exploration work over the life of the licence has focussed on the eastern reef of the old Southern Cross mine and has consisted of:

- Trenching: Nine excavator trenches (for 169m) dug over the eastern reef of the old Southern Cross goldfield.
- Rock sampling: Fourteen rock samples were collected and assayed with best results 9.95g/t Au and 7.2g/t Au.
- Diamond drilling: Three diamond drill holes, LH 1 (125.9m), LH 2 (197.8m) and LH 3 (237.0m) were drilled to test this reef and to look for parallel reefs. Eastern reef intercepts were 0.275m @ 1.27g/t Au , 128ppm Sb and 4.0% As (downhole from 10.2m to 10.475m) in LH2 and 0.25m @ 2.38g/t Au, 15.5ppm Sb and 0.54% As (downhole from 15.3m to 15.55m) in LH3.

Further work would involve drill testing the eastern reef at depth, however, the size and nature of the auriferous veining intersected in the holes and exposed in trenches does not favour the development of an economic reef or orebody.

Introduction

This report is the final report on gold exploration carried out by Mr Frank Bardenhagen on the old Southern Cross mine prospect in EL 22/2003, and also includes the results of assaying and rehabilitation carried out in the period August, 2004 and March, 2005.

The old Southern Cross goldfield lies towards the northern end of the Lyndhurst-Alberton-Mathinna-Mangana gold lineament in Tasmania's northeastern gold province. The licence contains the old Southern Cross and North Southern Cross mines and it is the former which has been the focus of Frank Bardenhagen's work.

The author's role in this work has been to provide some geological assistance and to write this and last years annual reports. The bulk of the work has been carried out by Frank Bardenhagen and his prospecting colleagues Lloyd Davies and Joe Jensen.

Tenement Information

EL 22/2003 consist of 6 square kilometres in northeastern Tasmania in the Land District of Dorset, vicinity of Lyndhurst. The licence commences at the southwest corner at grid coordinates 551 000mE 5 464 000mN thence grid north to 5 468 000mN grid east to 552 500mE grid south to 5 464 000mN aforesaid thence grid west to the point of commencement (Coordinate datum – AGD 1966 AMG zone 55). The licence was granted to F.C Bardenhagen on 29th August 2003 and expires on 29th August 2008.

Previous Work

Previous exploration has been described in detail in Turner (1996) and the reader is referred to this report.

Briefly, the field was discovered in the latter part of the 19th century and worked for a short period of time with apparently only limited production.

More recently, Placeco carried out a Huminex soil sampling programme (Morrison and Hofto, 1990) in the area of the old Southern Cross mine. Herald Resources also carried out soil sampling at Southern Cross (Turner, 1996) with spotty values up to 1g/t Au reported. Herald dug 4 trenches for 374m with values up to 4m at 0.13g/t Au reported. Herald subsequently drilled 4 RC holes for 219 metres with a best result 1m @ 0.6g/t Au from massive, white, arsenopyritic quartz from the eastern reef.

Work Done/Results

August 2004 to March 2005

The work carried out by Frank Bardenhagen on EL 22/2003 between August 2004 and March 2005 consisted of:

- Submitting six core samples for assaying. Assay result sheets are in Appendix A.
- Rehabilitation of 9 trenches (169 metres) across the eastern reef of the old Southern Cross mine and drill sites.

The six core samples returned disappointing results:

DDH LH2

10.2m to 10.475m	quartz+arsenopyrite+stibnite reef	1.27g/t Au , 128ppm Sb and 4.0% As
10.475m to 10.85m	sandstone with thin quartz veins	1.43g/t Au (repeating at 1.68g/t Au), 3.1ppm Sb and 2370ppm As
10.85m to 10.9m	sandstone	0.68g/t Au, 2.9ppm Sb and 987ppm As

DDH LH3

15.3m to 15.55m	quartz+arsenopyrite+stibnite reef	2.38g/t Au, 15.5ppm Sb and 0.54% As
15.55m to 16.05m	sandstone between veins	<0.01g/t Au, 1ppm Sb and 84ppm As
16.05m to 16.11m	quartz+arsenopyrite vein	2.87g/t Au, 75ppm Sb and 2.35% As

The trenches and drill sites were rehabilitated to the landowners satisfaction. A copy of the landowners letter is attached.

Work throughout life of licence

The work carried out by Frank Bardenhagen on EL 22/2003 between 2003 and 2005 has consisted of:

- Collection and assaying of 14 rock samples.
- Digging of 9 trenches for 169 metres across the eastern reef of the old Southern Cross mine.
- Drilling and sampling of 3 diamond drill holes for 560.7 metres. 44 samples were submitted for assay.

Rock Sampling

14 samples of quartz vein float in the vicinity of the eastern reef of the old Southern Cross mine were collected and assayed. Details are in MacDonald (2004). Best results were 7.20g/t Au and 9.95g/t Au.

Trenching

Nine trenches were dug by Bob Smith of Bridport by his excavator for a total of 169m. Trenches were examined and the position of the reef exposed noted. These trenches have been rehabilitated to the owners satisfaction.

Diamond Drilling

Three diamond drill holes (for 560.7 metres) were drilled to test the reef exposed in the trenches. Details are in MacDonald (2004). All holes intersected a similar sequence of folded, dark grey, generally thickly bedded sandstones and thinner interbeds of black shale of the Mathinna Group. LH 2 intersected some thin beds of tuff or reworked tuff with feldspar crystals and pumice. All three holes contained a number of generally thin (<20mm thick) quartz+/-chlorite+/-pyrite veins of two distinct types.

(1) Tension veins with often well developed fibrous growth perpendicular to vein orientation. Commonly contain clots of green chlorite and occasionally contain minor pyrite. These occur at varying densities but rarely even approach a density which might justify consideration of them as a potential orebody.

(2) Bedding parallel laminated veins. These are almost invariably hosted in the thin black shale interbeds and consist of finely laminated quartz and wallrock septa with occasionally minor pyrite. The reef intersected near the top of holes LH 2 and LH 3 is considered to be of this type.

Both LH 2 and LH 3 intersected a quartz+arsenopyrite+stibnite reef, LH 2 from 10.2m to 10.275m, LH 3 from approximately 15.3m to 15.55m. Whilst figure 3 in MacDonald (2004) suggests that the reef intersected in drilling is not that exposed in the trenches, it is considered that this may well be the case with either survey discrepancy or structural offset the reason for the separation. This reef assayed 0.275m @ 1.27g/t Au in LH2 and 0.25m @ 2.38g/t Au in LH3.

Expenditure

Earthmoving	\$935.55
Assaying	\$148.50
Total	\$1084.05

Conclusions

Trenching and drilling has successfully exposed/intersected a quartz+arsenopyrite+stibnite reef. Drilling has shown the reef to have subeconomic gold grades. Whilst potential may remain, the style of mineralisation and the results to date indicate that the potential is limited and the cost/risk of further drilling is not warranted.

References

- MacDonald, G.I., 2004, EL 22/2003 – Lyndhurst. Annual Report August 2003 to July 2004. F.C Bardenhagen [unpub. report for Mineral Resources Tasmania]
- Morrison, K.C. and Hofto, V., 1990, EL 27/86 – Lyndhurst. Annual Report, year 3. Placeco Australia Pty Ltd. [Mineral Resources Tasmania TCR 90-3190]
- Turner, N.J., 1996, EL 24/94 – Boobyalla. Annual Report 1994-95. Herald Resources Ltd. [unpub. Report for Mineral resources Tasmania]

Appendix A: Assay results



Our reference : BU020025
Your reference : **205194**
Project code :
Date received : 18/08/04
Date reported : 17/09/04

SGS Burnie
ABN 44 000 964 278
14 Thirkell St, Burnie
Tasmania 7320
Telephone: (03) 6431 6837
Facsimile: (03) 6431 8890

Frank Bardenhagen

Number of pages of results : 1
Number of Samples : 6
First Sample : LH2 10.2-10.475
Last Sample : LH3 16.05-16.4

Invoice to:
Frank Bardenhagen

Results to:

Results to:

Remarks :

Authorised by
On behalf of:

Mr. Ricky Gelston
Laboratory Manager

The results in the following analytical report pertain to the samples provided to this laboratory for preparation and/or analysis as requested by the client.

Appendix B: Landowners letter regarding rehabilitation

Broadlow Pastoral
2157 Waterhouse Road
Waterhouse Tas 7262

Phone 03 6355 2380
Fax 03 6355 2356

21st January 2005

Registrar of Mines
Hobart Tas 7001

To Whom It May Concern:

This letter is to confirm that Mr Frank Bardenhagen has completed mining excavation works on our property. The property has been rehabilitated satisfactorily and caused little disruptions to our farming practices whilst undertaking the works.

Yours sincerely

Michael Chugg



LYND HURST
GVEA