

EXPLORATION LICENCES

EL 10/2000, MONARCH FLATS

EL 11/2000, SOUTH MT CAMERON

EL 12/2000, PIONEER

N.E. TASMANIA

ANNUAL REPORT ON EXPLORATION

DECEMBER 2001 TO DECEMBER 2002

**For
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TABLE OF CONTENTS

	Page No
1.0 INTRODUCTION.....	4
2.0 EXPLORATION AND ASSESSMENT.....	4
3.0 RESULTS.....	5
4.0 CONCLUSIONS.....	5
5.0 ENVIRONMENT.....	6
6.0 EXPENDITURE.....	6
REFERENCES.....	6
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ELS 10/2000- Monarch Flats, 11/2000- South Mt Cameron, 12/2000- Pioneer Annual Report 2002

ABSTRACT

This combined report describes the second year's work carried out by Mineral Holdings Australia Pty Ltd on the evaluation of the residual alluvial tin resources in the Monarch, Endurance and Pioneer Deposits.

Calculations on the previous drill holes at Endurance have shown that if the overburden is taken out of consideration, the grades of tin in the wash increase by up to a factor of four along with an increase in the overall quantity of contained tin concentrates.

The revised Measured Resource figure for the Endurance Deposit (excluding the overburden) is 1,912,581 cubic metres of alluvial wash at an average grade of 1,080.56g/cu m equating to 2,067 tonnes of 70% tin concentrate.

Similar studies on the resource base at the Pioneer deposit are in process and will be reported in the near future.

These resources have been successfully promoted to a joint venture partner as part of the larger alluvial resource base of the Great Northern Plains and offshore Ringarooma Bay held under title by Mineral Holdings Australia Pty Ltd. The joint venture partner- Cedwin Pty Ltd of New South Wales- is currently conducting due diligence studies over the Ringarooma Joint Venture.

ELS 10/2000- Monarch Flats, 11/2000- South Mt Cameron, 12/2000- Pioneer

1.0 Introduction

ELs 10, 11 and 12/2000 were applied for by Mineral Holdings Australia Pty Ltd on 5th of May 2000 and granted on 8th December 2000. This is the annual report for the second year of the licences to December 2002. In the interests of economy, permission has been received from Mineral Resources Tasmania to lodge a combined annual report covering all three licences.

Each covers an area of 4 sq km in NE Tasmania (Plan 1) and secures the residual resources of cassiterite in the former alluvial tin mines at Monarch, Endurance and Pioneer respectively.

The licences were selected to allow exploration and evaluation of the alluvial resources and their contained heavy minerals particularly cassiterite, ilmenite, rutile, zircon, monazite, tantalite and gold. Gemstones particularly sapphire and topaz are held under SEL 22/99.

These licences are an integral part of Mineral Holdings' Ringarooma Tin Project of North East Tasmania which consolidates all of the potential tin resources in the region and allows exploration and promotion to proceed in a coherent manner with subsequent economies of scale.

2.0 Exploration and Assessment

Previous exploration activities carried out in year one on the licences, conducted on behalf of Mineral Holdings Australia Pty Ltd, are described in two project reports by Neil R Kinnane of Niugini Resources Pty Ltd, Canberra. These reports entitled- The Monarch Project (EL 10/2000), Mt Cameron, Gladstone District, North East Tasmania- Geological Assessment and Ore Resource Statement and The Endurance Project (EL 11/2000), Mt Cameron, Gladstone District, North East Tasmania- Reassessment- were submitted to Mineral Resources Tasmania at the same time as the annual report for year one (Duncan, 2002).

Field activity in year one centred on the Monarch deposit because its shallow resources, compared with its Endurance and Pioneer counterparts, allowed access by excavator. Exploration work involved the excavation of ten bulk samples of wash, their treatment through a mobile plant, the assaying of the mineral concentrates and the calculation of grades per cubic metre.

In addition, at both Monarch and Endurance, desk studies were carried out to recalculate the resources of the wash leaving out the barren overburden which could be removed by modern strip mining techniques. This approach led to an increase in grade in the wash of up to three times and an increase in contained tin concentrates.

Studies such as these taken along with commodity price parameters allow models of likely profitability to be run for possible development of the resources.

In year two, the focus of reassessment was on the Endeavour and Pioneer alluvial tin deposits.

Desk studies carried to completion at Endurance with the above approach of recalculating the resources without the overburden are described in a project report by Neil R Kinnane of Niugini Resources which accompanies this annual summary report into Mineral Resources Tasmania. The report also recommends further drilling particularly to increase the resource beyond the western end of the deposit.

An assessment report by the same author giving the same treatment to the Pioneer deposit is currently nearing completion and will be submitted to the Department by the end of January 2003.

3.0 Results

The above work reveals that at Endeavour the residual resources stated on an overburden-free basis show a marked increase in grade and in quantity of contained tin concentrate from 1692 tonnes to 2,067 tonnes. The Measured Resource figures are-

- Overburden Included – 10,245,828 cu m at an average grade of 242.10g/cu m of 70% Sn concentrate or 2,480 tonnes of 70% tin concentrate.
- Overburden Excluded – 1,912,581 cu m at an average grade of 1080.56g/cu m of 70% Sn concentrate or 2,067 tonnes of 70% tin concentrate.

These measured resources are subject to a cut-off grade of 100g/cu m SnO₂ and an overburden-stripping ratio of 4.35 to 1.

Towards the end of the year, efforts were at last successful in finding a joint venture partner to further develop these resources together with all of Mineral Holdings other tenements covering the alluvials in NE Tasmania and referred collectively as the Ringarooma Joint Venture. The joint venture partners and operational managers are Cedwin Pty Ltd of New South Wales and the agreement has been registered with Mineral Resources Tasmania. The project is currently undergoing due diligence studies.

4.0 Conclusions

- i At Endurance, by removal of the overburden layer from the grade calculations it is possible to increase average Sn grades by up to a factor of four and to increase the content of contained tin in concentrates to 2,067 tonnes. This approach is being carried out for Pioneer.
- ii Further exploration and assessment is required at Endurance, where the resource is open to the west, and at Pioneer and further drilling will be

required to increase the resource bases possibly by between 20 and 50% and to provide quantitative testing for accessory mineral contents.

- iii A joint venture partner- Cedwin Pty Ltd- has been found to develop the resources contained in these deposits at Monarch, Endurance and Pioneer either as individual entities or as part of a larger project covering the alluvial tin resources of the northeast region both onshore and offshore.

5.0 Environment

As all of the work involved desk studies, there was no surface disturbance and consequently no need for rehabilitation.

6.0 Expenditure

The year two exploration expenditures on the three ELs implicit in the September 2002 quarterly reports are as follows- EL 10/2000 Monarch Flats- \$4,964; EL 11/2000 South Mt Cameron-\$7,294 and EL12/2000 Pioneer-\$3,341. This gives a total of \$15,599 and reflects the focus on the Endurance deposit in the second year of exploration. The December 2002 quarter figures are not yet available and are expected to add a substantial amount to the account particularly to ELs 11/2000 and 12/2000 for resource recalculation and report compilation. When added to the year one total figure of \$48,442, the above year two figure gives a minimum combined expenditure for the first two years of at least \$64,041.

REFERENCES

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KEYWORDS: Monarch, Endurance, Pioneer, Alluvial Deposits, Cassiterite, Rutile, Ilmenite, Zircon, Monazite, Sapphire