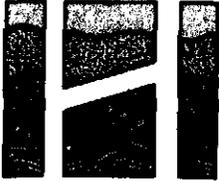


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	REF. No. 5973/85			

FINAL REPORT

E.L. 1/83, RINGAROOMA

TASMANIA

BY

A.C.A. HOWE AUSTRALIA PTY. LTD.

ON BEHALF OF

FEPESO PTY. LIMITED

December, 1984  
Report No. 143

Z. Telakowska  
Geologist

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SUMMARY

Exploration Licence 1/83 Ringarooma, Tasmania, was granted in May 1984, for a one year period (May 20, 1985) to Mineral Holdings Australia Pty. Ltd. of 2nd Floor, 100 Collins Street, Melbourne, Victoria. Through an agreement with Mineral Holdings, A.C.A. Howe Australia Pty. Ltd. could earn a 50% interest in the licence by completing an exploration programme. The licence covers an area where two 3 km long stretches of previously interpreted deep leads were the prime exploration targets.

However, detailed review of previous exploration work and photogeological interpretation of the area indicated very limited potential for future exploration as the deep lead deposits have been reworked by a progressive Tertiary sea which impoverished their tin content significantly. Tributary gutter deposits postulated to occur in an area of extensive flats south of the Boobyalla River - Little Boobyalla River junction are considered too small to be of economic interest being of a magnitude of 3-4 million cubic metres. On consideration of these facts, it is recommended the area be relinquished as not having potential for development of an economically exploitable tin deposit.

## 1.0 INTRODUCTION

Secondary tin deposits in the district occur in Tertiary and Quaternary sediments of alluvial, lacustrine, estuarine and marine origin. The primary source of tin in these sediments is a large area of tin-bearing granite and associated veinlets where they intrude quartzites and slates near the intrusive contacts. Alluvial tin has been worked from a number of areas along the course of the present day Ringarooma River. Mining has been almost continuous on a small scale since the 1870's. During the past thirty years, expectations of large dredgable deposits of alluvial tin have encouraged many companies to explore the tin potential of the area. In almost every case, the conclusion reached was that the tonnage and grade available were insufficient to support a large scale dredging operation.

## 2.0 SUMMARY OF WORK CARRIED OUT

Originally a much bigger area than the present E.L. 1/83 was applied for, including offshore areas in Ringarooma Bay known to have tin-bearing sediments, and onshore between Cape Portland and the Scoloch lead, thought to contain the possible extension of the Foster's Marsh deposit. However, this original application was refused by the Department of Mines who reduced the granted area. The E.L. 1/83 licence area was chosen as having deep lead tin deposit potential. This assumption was made on the basis of previous exploration which interpreted the deep leads to occur along the Boobyalla and Little Boobyalla Rivers and Hardwickes Creek. To estimate the potential of the area, literature research, photo-geological interpretation of coloured air photographs and field reconnaissance studies have been undertaken.

### 2.1 LITERATURE RESEARCH

Review of available Government and company geological reports has shown that in Tertiary times the licence area was located on the

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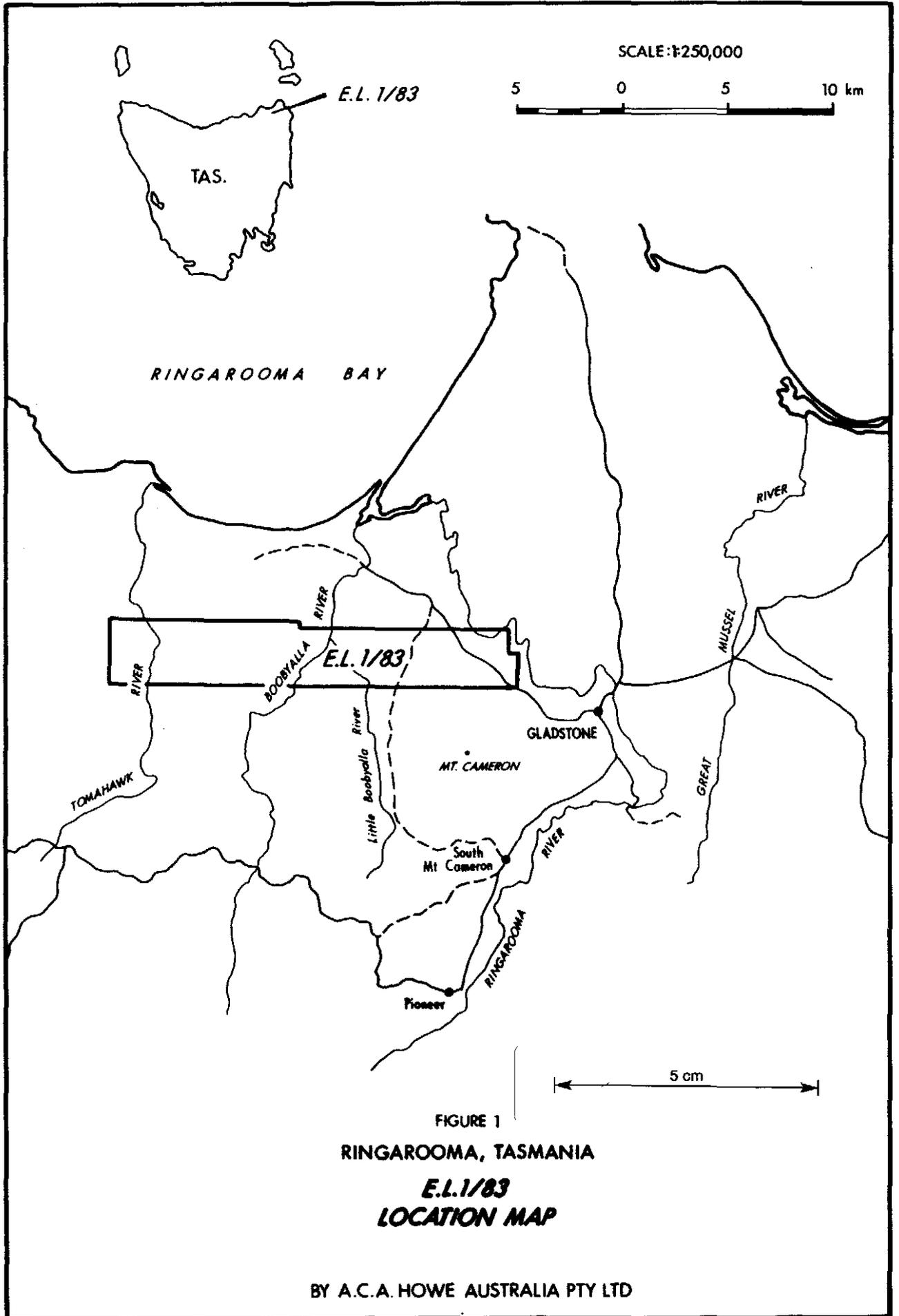


FIGURE 1  
RINGAROOMA, TASMANIA  
**E.L. 1/83**  
**LOCATION MAP**

BY A.C.A. HOWE AUSTRALIA PTY LTD

then sea shore. Drilling undertaken to check for deep lead potential in the Boobyalla River valley at its junction with the Little Boobyalla River revealed the presence of estaurine deposits and lack of stanniferous wash. Drilling further south, between Vicary and Shallamar Creeks, also was disappointing as the deepest zone of the valley was found to be filled with wash of marine origin, again lacking significant tin content. The Boobyalla River paleochannel was then concluded not to have economic potential.

Extensive flats along the Boobyalla River valley were found to represent a similar geological environment to the Shallamar flat south of the licence area where 3 million cubic metres of stanniferous material has been outlined by B.H.P. Here the deposit was interpreted to be contained in tributary gutters of a main paleochannel. The tributary gutters did not undergo marine reworking due to their being situated above the then sea level. A similar situation may have existed within the E.L. 1/83 licence area, south of the Boobyalla - Little Boobyalla junction. It has therefore, been postulated that a deposit of similar volume and grade ( $220.4 \text{ g/m}^3$ ) could be expected there.

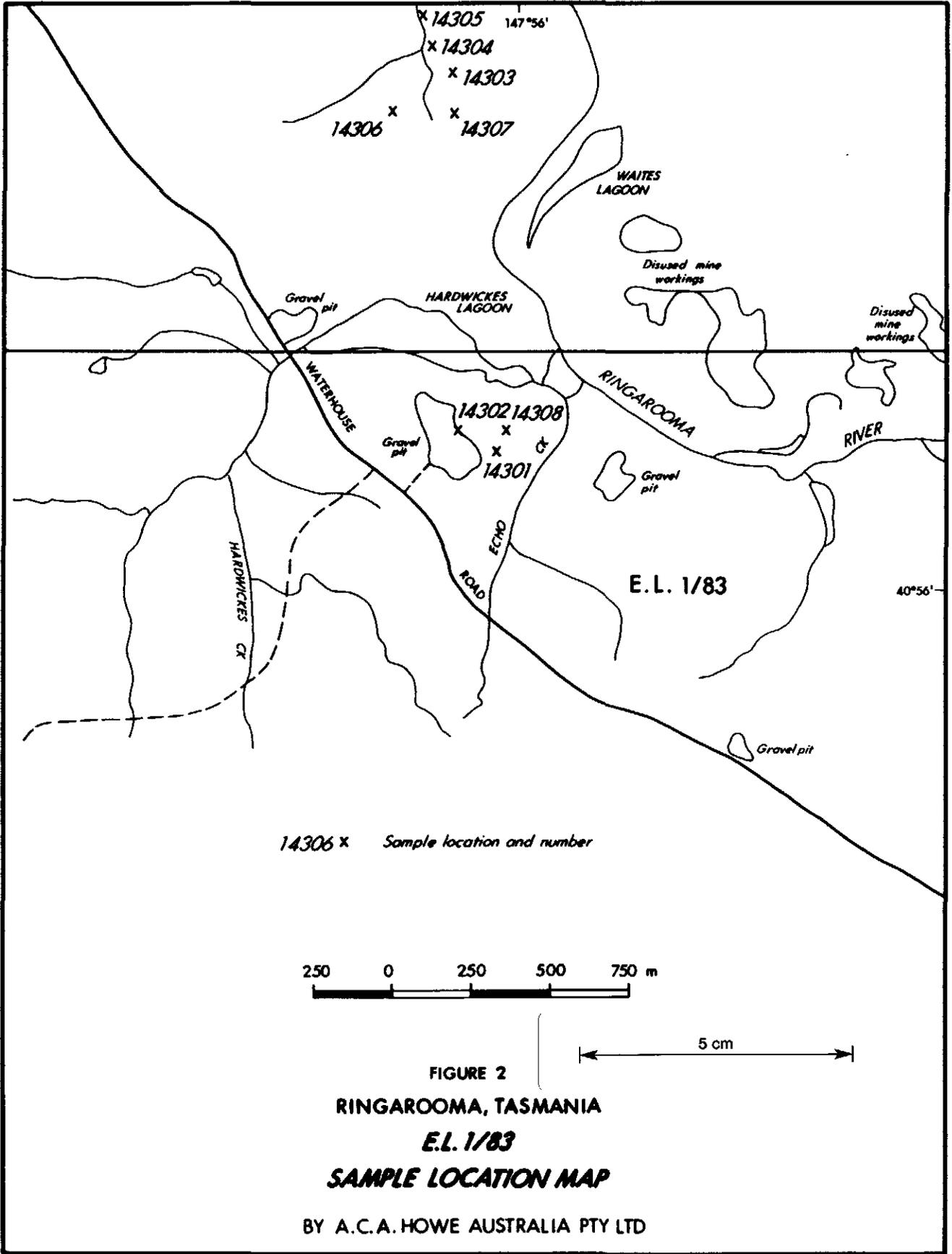
## 2.2 PHOTOGEOLOGICAL INTERPRETATION

The photogeological interpretation of colour air photographs at 1:20,000 scale failed to outline clearly the position of paleochannels. Although two paleochannels of the Boobyalla River and Hardwickes Creek have been outlined, apart from the southern section of Hardwickes Creek which is mostly outside the licence area, their position is doubtful.

## 2.3 FIELD RECONNAISSANCE

During field reconnaissance, a bentonite deposit was sampled as suggested by Mr. Neil Thomas of Mineral Holdings Pty. Ltd. Two areas were sampled (Figure 2), one within and the other outside the E.L. 1/83 boundary. All the samples taken from the E.L. 1/83 licence area were analysed and proved not to be bentonite.

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In addition to the above, several small tin workings on the western side of the Ringarooma River were also visited. All of these are blanket type deposits (1 m thick gravel overburden lying on weathered bedrock).

3.0 CONCLUSIONS

A detailed literature review and photogeological study indicated that there is no main deep lead deposit potential within the licence area. The potential for tributary gutter deposits exists south of the Boobyalla - Little Boobyalla junction, however, the potential deposit size of 3-4 million cubic metres magnitude and a grade of 220 g/m<sup>3</sup> is too small to be of economic interest on its own.

4.0 RECOMMENDATIONS

It is recommended to relinquish the area.

A.C.A. HOWE AUSTRALIA PTY. LTD.

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