

**AUREOLE RESOURCES PTY LTD**  
Incorporated in Tasmania

418001

90-3206

MINES	
File Ref E.L. 21/87	
20 DEC 1990	
Doc.	
Action Officer	Initials
REFER	TO
CORRES	18.12.90
Resubmit to	Date

11 Midland Highway  
Brighton TAS 7030 AUSTRALIA  
Ph: 61-02-681222  
Facs: 61-02-681349  
Tlx: AA 33427

EXPLORATION LICENCE 21/87 - BALFOUR

ANNUAL REPORT : YEAR 3

(20 January, 1990 - 19 January, 1991)

**OPEN FILE**

**MICROFILMED**

90-3206.

K.C. MORRISON

V. HOFTO

December 1990

00-

## CONTENTS

	PAGE
INTRODUCTION & TENEMENT INFORMATION	1
EXPLORATION PHILOSOPHY & OBJECTIVES	1
SUMMARY OF WORK COMPLETED PRIOR TO CURRENT TERM	3
SUMMARY OF WORK COMPLETED IN YEAR 3	3
PROPOSED FUTURE EXPLORATION	3

## LIST OF FIGURES

	PAGE
Figure 1.      Location Map - EL 21/87, Balfour.	2

## LIST OF PLANS

Plan 1.        Location Map - EL 21/87, Balfour (1:25,000).	
---	--

**TENEMENT INFORMATION**

Exploration Licence (EL) 21/87 is a 20km<sup>2</sup> tenement in the vicinity of Balfour, western Tasmania (Figure 1 & Plan 1).

The licence was originally granted on 13 January 1987 for an area of 231km<sup>2</sup>. A review of previous data undertaken in the first two quarters of Year 2 resulted in the EL being submitted for partial relinquishment in July 1989. The reduction in area to 20km<sup>2</sup> was approved by the Minister for Mines on 2 October 1989.

The area comprises (approximate only):

80% State Forest  
20% Arthur-Pieman Protected Area

and includes part of the Norfolk Range Australian Heritage Act Registered Entry and the Sumac Rivulet Australian Heritage Act Registered Entry.

The licence is owned by Aureole Resources Pty. Ltd. (70%), Winston Resources Pty. Ltd. (25%) and Sierra Nevada Resources Pty. Ltd. (5%). Aureole Resources is operator.

**EXPLORATION PHILOSOPHY & OBJECTIVES**

Copper and tin mineralisation are known in the Balfour area and work done to date suggest an association between the mineralisation and the location of major linear structures and a shallow sub-surface granite spine.

The current objective is to determine the age of base metal mineralisation exposed in the old Balfour copper mines and to explore primarily for base metals, following either a model of zoned mineralisation around a granite body, fault emplaced Cambrian mineralisation or Sedex-type Late Proterozoic mineralisation.

The work will be done in conjunction with exploration on EL 53/88.

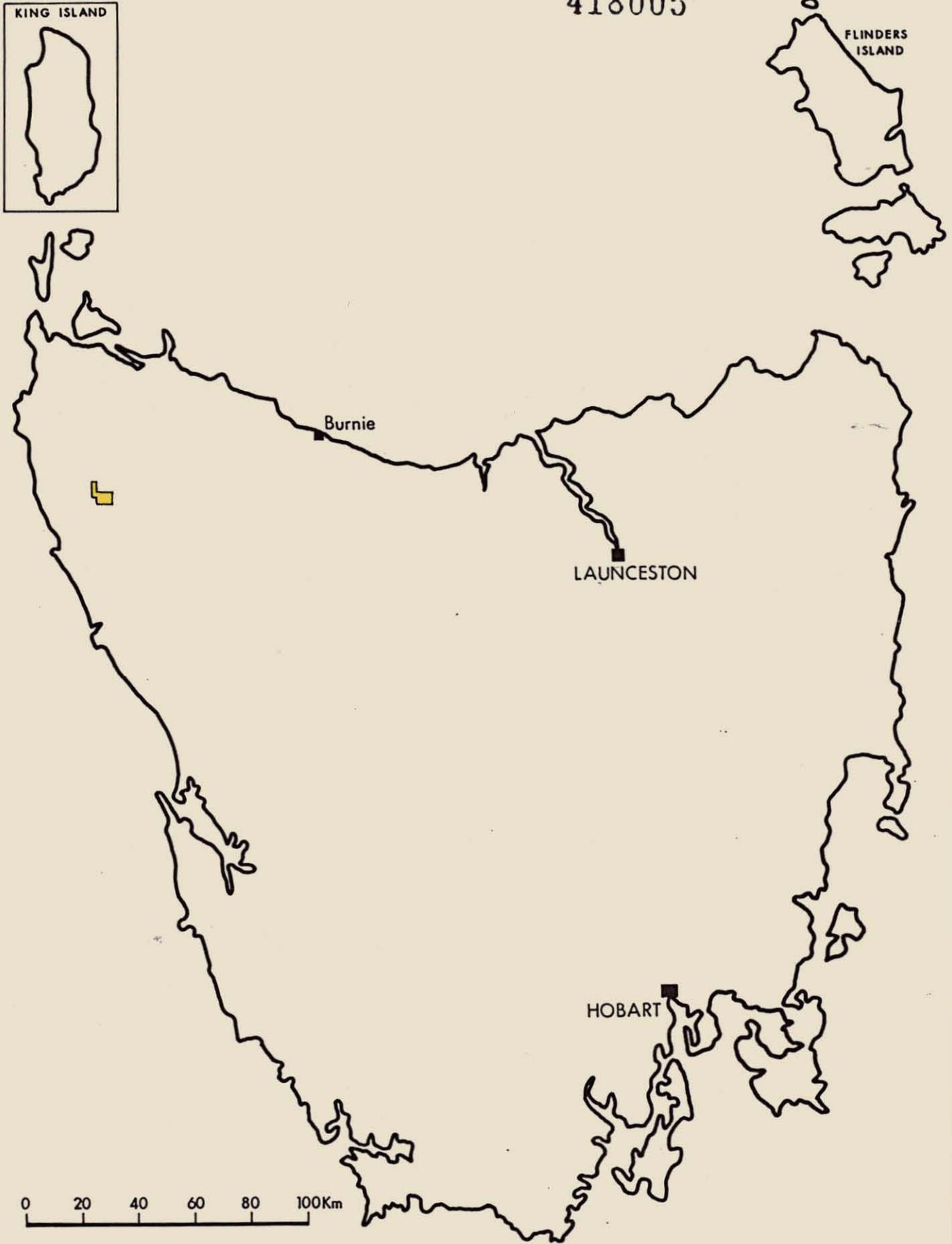


Figure 1. Location Map - EL 21/87, Balfour.

5 cm

418000

**SUMMARY OF WORK COMPLETED PRIOR TO CURRENT TERM**

The interpretation of existing aeromagnetic and gravity data by Dr D.E. Leaman highlighted the potential of the 20km<sup>2</sup> southern part of the tenement where there is untested prospectivity for Balfour-style copper-tin mineralisation associated with a buried extension of the Pieman Granite.

A reappraisal of Year 1 work resulted in the July 1989 partial relinquishment.

The major component of Year 2 work was a gravity survey of the tenement to test for the presence of a granite body. Results of this survey reinforced the prospectivity of the remaining 20km<sup>2</sup> of EL 21/87 for Balfour style copper-tin mineralisation.

**SUMMARY OF WORK COMPLETED IN YEAR 3**

No exploration was conducted in Year 3. Farmout negotiations to date have not resulted in a joint venture.

**PROPOSED FUTURE EXPLORATION**

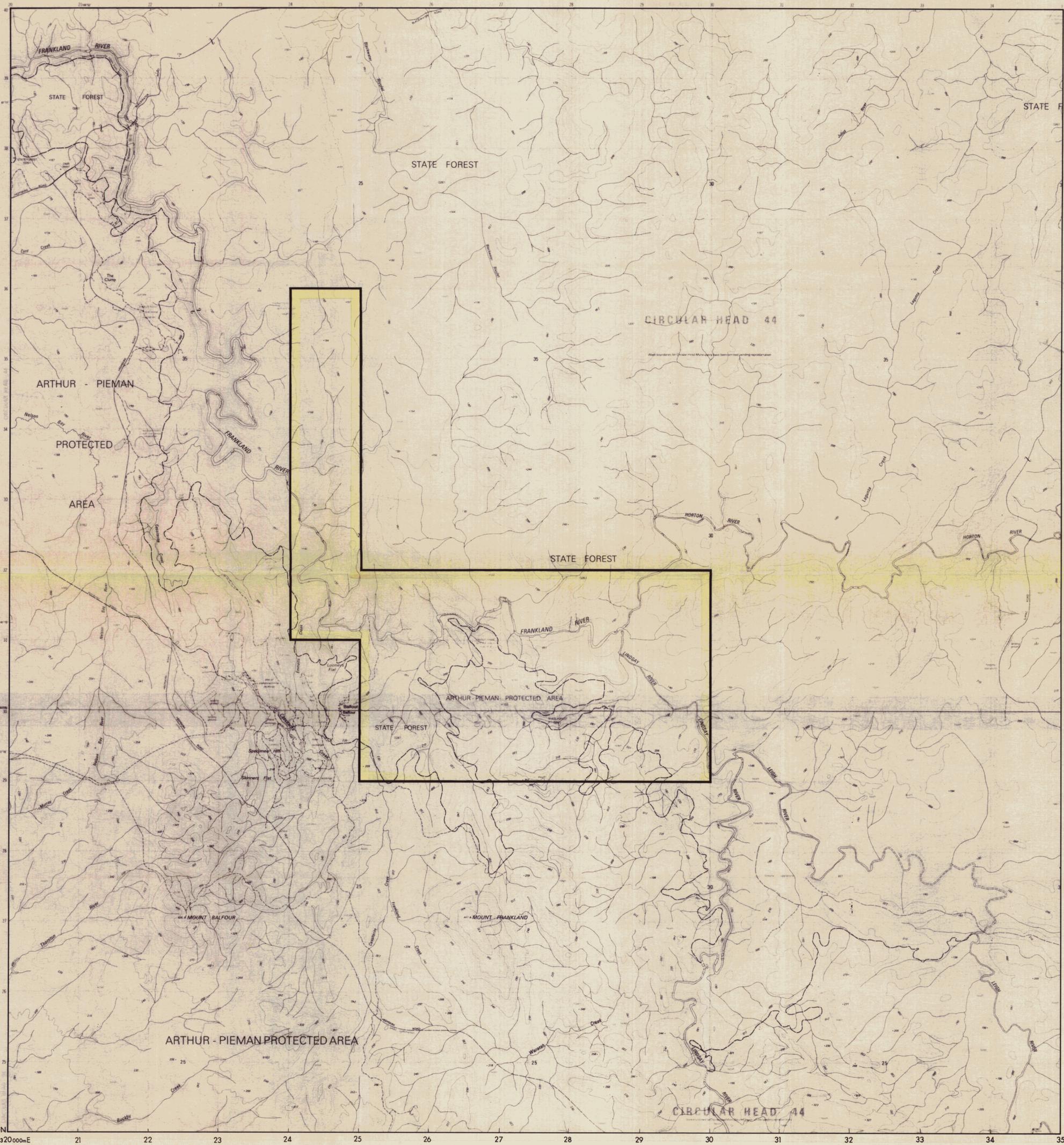
The proposed work programme for Year 4 will be run in conjunction with the licensee of the adjoining EL 53/88, Soloriens Mining Pty. Ltd.

Work has commenced on mineralisation age determination by the lead isotope and lead/zinc ratio technique. Samples collected from exposed mineralisation at the Murray's Reward workings will be analysed in Western Australia and interpreted by staff at C.O.D.E.S, University of Tasmania.

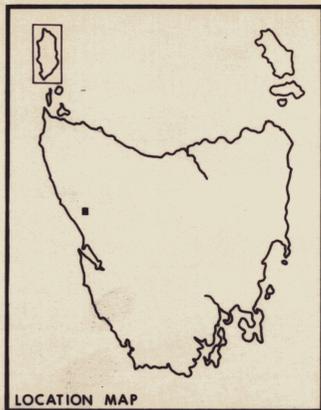
A 12 month evaluation programme of whole water stream geochemistry as an exploration method in the Balfour area will be undertaken. Samples will be taken fortnightly from Cassiterite Creek and analysed at Lucas Heights, using the ICP-MS technique.

During the year, drill core from the ACI copper exploration will be re-logged and re-sampled.

Mapping and sampling of old prospects between The Clump and Mt Hazelton will be carried out in the current Summer and joint venture negotiations will continue.



54 24000mN  
320000mE 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35



90-3206.

AUREOLE RESOURCES PTY LTD, WINSTON RESOURCES PTY LTD & SIERRA NEVADA RESOURCES PTY LTD	
EL 21/87 - BALFOUR, TASMANIA LOCATION PLAN	
Compiled	V.H.
Drawn	T.K.D. Contracting
Date	November 1989
Scale	1 : 25,000
PLAN No.	1

