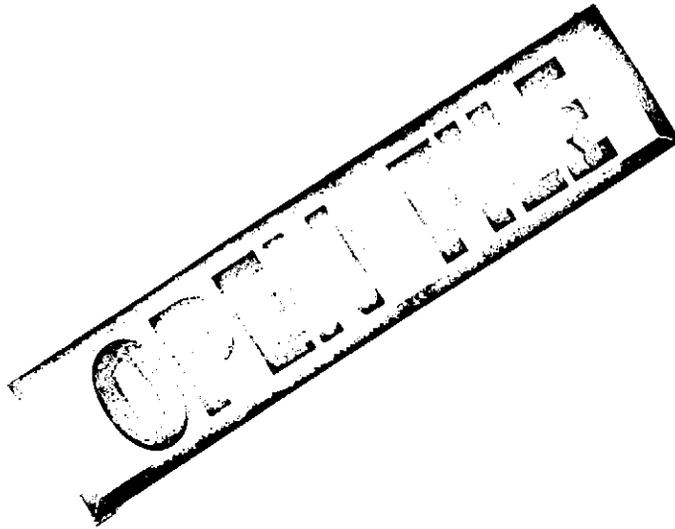


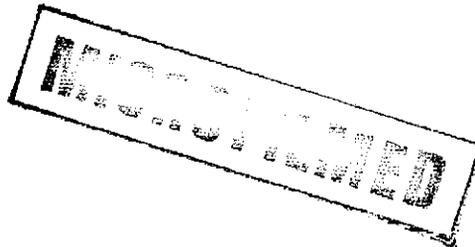
SOLORIENS MINING PTY. LTD.



11 Midland Highway,  
BRIGHTON 7030  
Tasmania

Ph : (002) 68 1222  
Fax: (002) 68 1349

EXPLORATION LICENCE 53/88 - MOUNT FRANKLAND



89-3058

PARTIAL RELINQUISHMENT REPORT

89-3058

MINES	
File Ref. EL 53/88	
- 6 DEC 1989	
Doc. Ref.	
Action Officer	Initials
LETTER	
4. 12. '89	
REFERS	
Resubmit to	Date

V. HOFTO

K.C. MORRISON

November 1989

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## INTRODUCTION & TENEMENT INFORMATION

Exploration Licence (EL) 53/88 is a 245 km<sup>2</sup> tenement in the region of Mt Frankland and the Norfolk Range, western Tasmania (Figure 1 & Plan 1). The licence is owned 100% by Soloriens Mining Pty. Ltd.

The area comprises (approximate only):

87%	Crown Reserve Arthur Pieman Protected Area
13%	State Forest

and is within the the Norfolk Range Australian Heritage Act Interim Listing and the Sumac Rivulet Australian Heritage Act Registered Entry.

Eight Mineral Leases are contained within EL 53/88. These leases are shown on the 1:25,000 base map (Plan 1).

The results of Year 1 work suggest that much of the southern and eastern parts of EL 53/88 are redundant and consequently, 120 km<sup>2</sup> of EL 53/88 is submitted for relinquishment (Plan 2).

## EXPLORATION PHILOSOPHY & OBJECTIVES

The major objective is to explore for Balfour type copper and tin mineralisation and possible Cambrian-sourced base metals along the Balfour mineralised trend.

The "Balfour Corridor" of Carey (1981) is a major fault-delineated NNW-SSE trending structure several kilometres wide containing all the known base metal (mainly copper, tin) mineralisation north of the Pieman River. The presence of mineralised quartz-porphyry dykes in the Balfour area suggests that mineralisation at Balfour is probably granite related.



Figure 1. Location Map, EL 53/88 - Mt Frankland.

As Soloriens' exploration concepts depend on a granitic mineral source or heat source, delineation of the depth to, and the detailed shape of, any granitic bodies present were the primary objectives of the Year 1 exploration programme.

#### SUMMARY OF WORK COMPLETED IN YEAR 1

##### GRAVITY SURVEY

The major component of Year 1 work was a gravity survey of EL 53/88 and the southwest portion of adjoining EL 21/87 (Figure 2) which is held by a related company, Placeco Australia Pty. Ltd.

The inaccessibility of the region by vehicle, combined with the large area to be surveyed, suggested that helicopter survey was the most feasible and economic method of data collection. As this survey represented a potential extension of the existing state gravity coverage, the Mines Division, Department of Resources and Energy, agreed to conduct the survey in joint venture with the licencees. Soloriens Mining Pty. Ltd. met all costs associated with helicopter hire and terrain correction. The Mines Division supplied labour, equipment, vehicles, maps, data processing and plotting. It was agreed that the data so collected would be incorporated within the state TASGRAV data base to be available to the public 3 months after processing.

The survey was subsequently conducted in March 1989 utilising an Aerospatiale UH-SRB helicopter provided by Helicopter Resources Pty. Ltd. The nominal area of the survey is indicated in Figure 2. An almost complete coverage of the area at a station density standard of one station per square kilometer was achieved in all but the wooded northern portions of the the survey area. Where helicopter access was impeded due to terrain difficulties and/or canopy cover, access was achieved, where possible, by 4WD vehicles on existing forestry roads e.g. Sumac Road. Data was collected at a total of 538 stations.

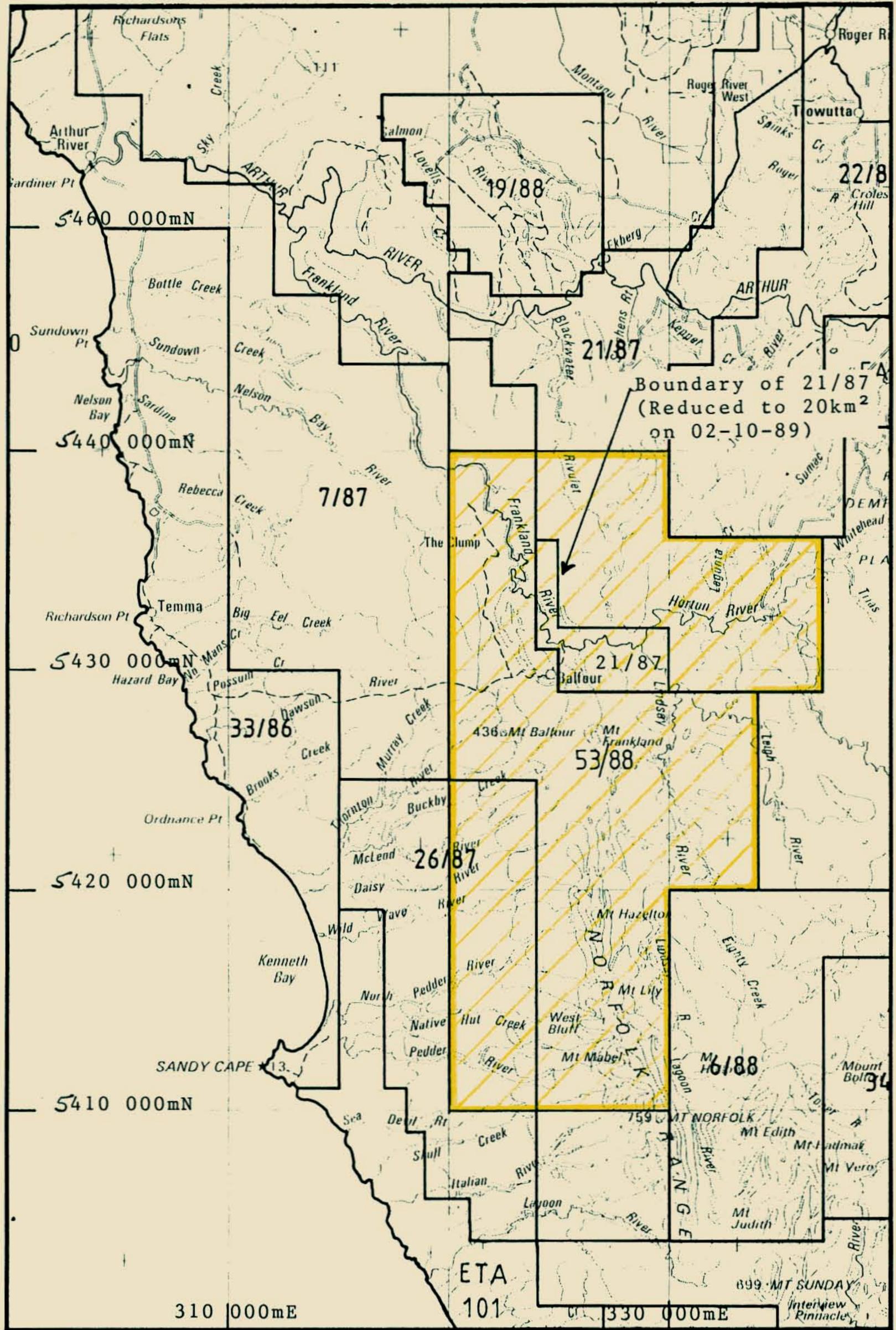


Figure 2. Nominal area of 1989 gravity survey, EL 53/88 - Mount Frankland and EL 21/87 - Balfour.

5 cm

Terrain correction was carried out in April 1989 by Leaman Geophysics using MANTLE-88 (Leaman, 1988a) to remove deep crustal effects. Processing of the data was completed by the Mines Division, Department of Resources and Energy, in May 1989. This data has subsequently been incorporated within the Mines Division's TASGRAV data base, stored under the following files:

BALF183A.GRV

BALF183B.GRV

and is now available to the public.

#### CONCLUSIONS

Soloriens' interpretation of the gravity data suggests that future exploration should focus on the most accessible targets north of 5 418 000mN where evidence of a shallow granitic body was obtained.

As a consequence of the above, Soloriens Mining Pty. Ltd. is submitting 120 km<sup>2</sup> of EL 53/88 for relinquishment (Plan 2).

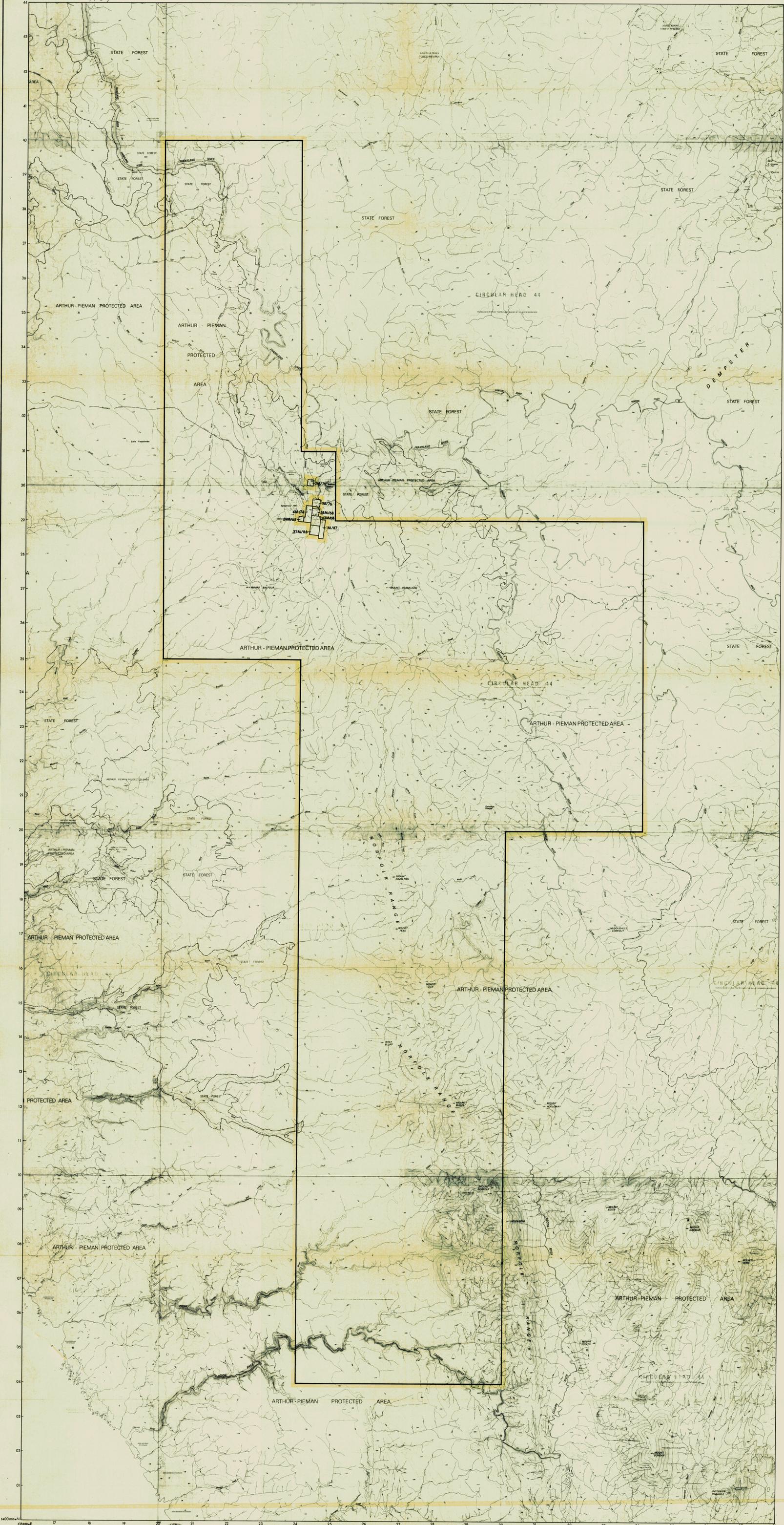
As the gravity survey was carried out using stations where helicopter access was readily available, no helipads were constructed or renovated. Similarly, where helicopter access was impeded, stations were accessed using existing forestry roads. These methods resulted in negligible disturbance to the environment and no rehabilitation is required.

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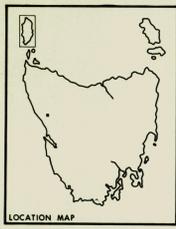
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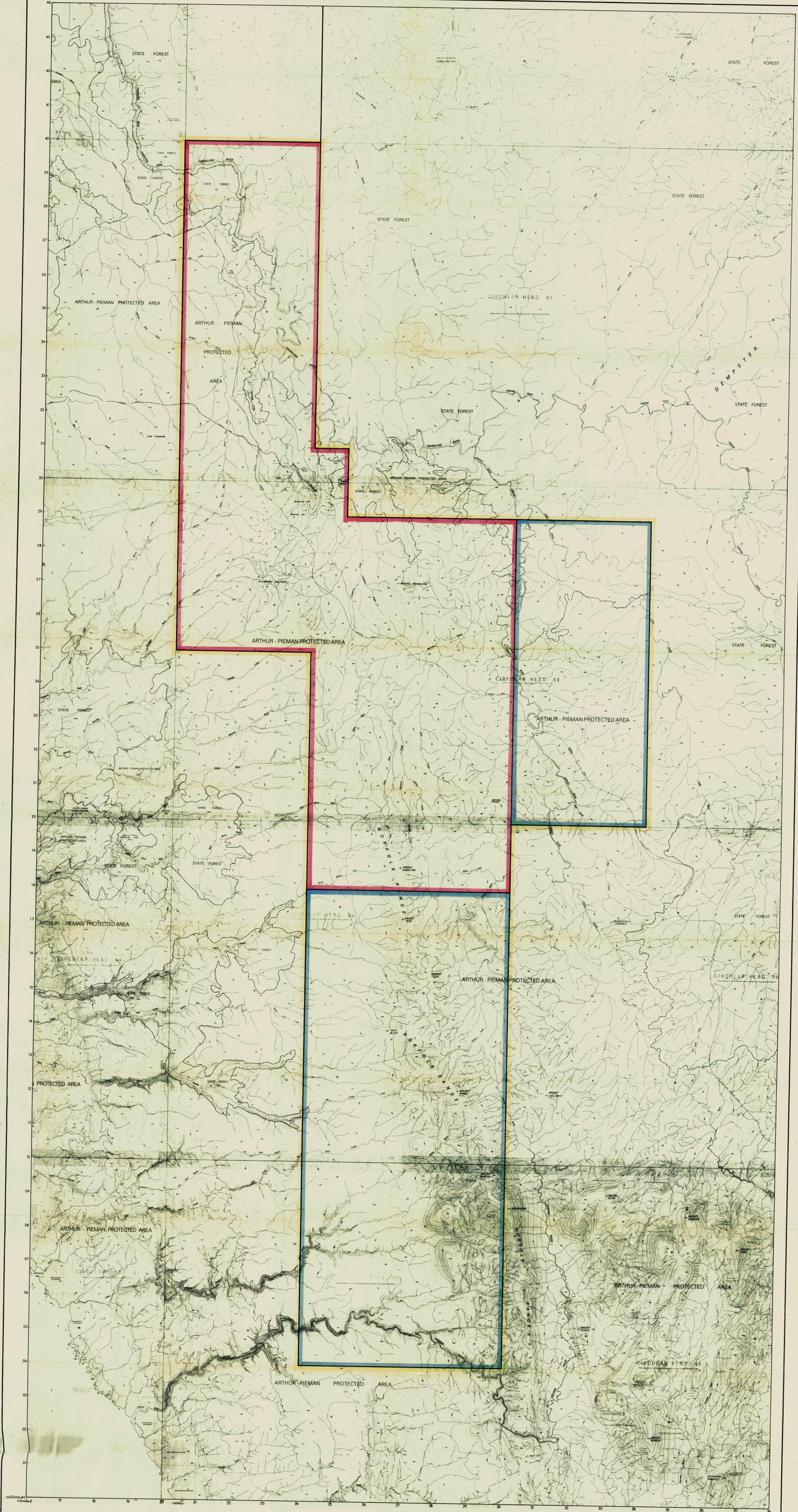


MINERAL LEASES - EL 53/88

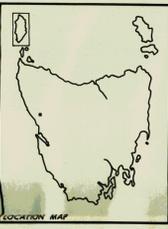
No.	Owner	Area
58M/78	S.A. TATLOW	4 ha
59M/78	J.H. HOLLOWAY & R.J. SOUTH	2 ha
63M/78	S.A. TATLOW, B.C. LING & R. LING	8 ha
64M/78	J.H. HOLLOWAY & R.J. SOUTH	9 ha
1M/76	M. LAAN & N.R. LANGSFORD	5 ha
2M/76	M. LAAN & N.R. LANGSFORD	3 ha
29M/86	B.C. & R. LING & S.A. TATLOW	8 ha
1M/87	P. COSMETTO & B.C. LING	8 ha

<b>SOLORIENS MINING PTY LTD</b>		COMPILED	V.H.
<b>EL 53/88 - MT FRANKLAND, TASMANIA</b>		DRAWN	T.K.D. Consulting
<b>LOCATION PLAN &amp; CONTAINED MINERAL LEASES (Competitor)</b>		DATE	November 1989
		SCALE	1:25,000
		PLAN No.	1

89-30581



EXISTING EL 53/88 245 km<sup>2</sup>  
 248 km<sup>2</sup> = 3 km<sup>2</sup>  
 AREAS FOR RELINQUISHMENT 120 km<sup>2</sup>  
 128 km<sup>2</sup> = 8 km<sup>2</sup>



**89-3058**

SOLORIENS MINING PTY LTD	
EL 53/88 - MT FRANKLAND, TASMANIA	COMPILED V.H.
PROPOSED PARTIAL RELINQUISHMENT	DRAWN T.G. Combering
	DATE November 1989
	SCALE 1:25,000
	PLAN No 2