

EXPLORATION LICENCE 2436
PINE CREEK REGION

ANNUAL REPORT, 1985

EXPLORATION PROPOSAL, 1986

NORTHERN TERRITORY GEOLOGICAL SURVEY CR86/162

ANNUAL REPORT AND EXPLORATION

PROPOSAL FOR EXPLORATION LICENCE 2436

MARCH 1985 TO MARCH 1986

PINE CREEK REGION, NORTHERN TERRITORY

SUBMITTED BY COSTAIN AUSTRALIA LIMITED ON BEHALF OF MR. P.R. EVANS, DARWIN

Map Reference:

Pine Creek Sheet 5270,

1:100,000 Topographic Series

Copies To

The Director, Department of Mines and Energy, Darwin

Mr. P.R. Evans, Darwin

General Manager, Minerals,

Costain Australia Limited, Sydney

Development Manager, Minerals, Costain Australia Limited, Sydney

> C.K. Baker, Costain Australia Limited, P.O. Box 231, Sydney, N.S.W. 2061.

> > 15th May, 1986.

1. <u>INTRODUCTION</u>

Costain Australia Limited is currently formalising an agreement with Peter R. Evans, of Darwin to undertake exploration of an area located to the south west of Pine Creek, N.T. covered by Exploration Licence 2436 (See Figure 1).

During the period of these negotiations Costain was informed by the N.T. Department of Mines and Energy that certain reporting requirements had not been met by Mr. Evans. It was resolved that Costain Australia Limited should assume responsibility for E.L. 2436, and an application for the title transfer was lodged on 18 March, 1986.

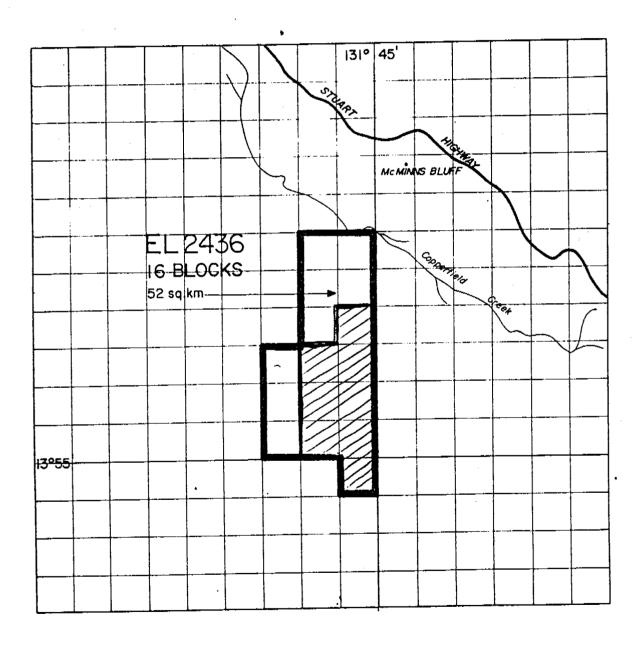
Costain has undertaken to conduct exploration activities within E.L. 2436 to a sufficient level to assess the prospectivity of the contained alluvials. This work will be conducted in association with exploration activities in E.L. 4774 (held by P.R. Evans) and E.L. 3262 (also transferred from P.R. Evans to Costain Australia Limited).

When finalised details of agreements between P.R. Evans (representing Geometal Resources Ltd.) and Costain will be forwarded to the Department of Mines and Energy.

This report includes the following:

- a) Annual report of exploration for E.L. 2436 and Statement of expenditure for 1985 by Peter R. Evans (included as Appendix 1).
- b) Proposed eploration programme and budget, for E.L. 2436, for 1986.

Plan of Area





AREA OF RENEWAL 1986 .

2. SUMMARY OF EXPLORATION ACTIVITIES

According to Mr. P.R. Evans the area is considered prospective for alluvial tin and, to a lesser extent, alluvial gold, within the catchments draining mineralisation associated with the Cullen Granite.

Owing to the depressed commodities market and the bleak outlook for tin, limited exploration activities were carried out in the area covered by E.L. 2436.

Exploration and evaluation activities were largely confined to reviews of existing data, and remote sensing studies, in addition to time spent attempting to finalise joint venture agreements.

It is understood from Mr. Evans that a limited field sampling has verified the prospectivity of the area. No specific information has been obtained. Extensive track clearing was undertaken in advance of the proposed sampling programme. The inability to secure a joint venture partner prior to the onset of "the wet" precluded completion of the programme.

In January, 1986 a verbal agreement was obtained with Costain Australia Limited to assess the potential for alluvial tin and gold in the area covered by $E_{\bullet}L_{\bullet}$ 2436.

3. STATEMENT OF EXPENDITURE

1.	Travel and time associated with the preparation of joint venture agreements		
	(Airfares and 100 man hours)	\$	3,194
2.	Field mapping and preliminary sampling (200 man hours)	\$	3,000
3.	Helicopter charter	\$	2,094
4.	Hire of motor vehicles	\$	500
5•	Aquisition of aerial photographs	\$	500
6.	Hire of earthmoving equiment (track clearing)	\$	1,520
7.	Office overheads	\$	500
		•	10,808

This compares to a proposed total expenditure of \$10,000.

PROPOSED EXPLORATION PROGRAMME AND BUDGET

As discussed above exploration activities will be carried out in the area covered by E.L. 2436. Exploration will be carried out simultaneously within E.L. 3262 and E.L. 4774.

It is anticipated that the pre-feasibility evaluation will be divided into 4 stages as follows:-

Further aerial photograph interpretation. STAGE I

Mineralogical assessment of heavy mineral

concentrates.

Regional inspection and track clearing.

alluvials; sampling οf Regional οf smallsample volumes: concentration of heavy mineral mineralogical assessment suite.

Preliminary survey of resources dimensions.

Excavation of 20 150 kg samples in key areas. STAGE II

Concentration of heavy mineral fraction; assay for Sn and other potentiall y economic mineral species.

Definition of resource dimensions and limits.

Excavation of 5 bulk samples of approximately 30 to 50m^3 volume. STACE III

Concentration of heavy mineral fraction using

pilot trommel/jig plant.

Excavation of bulk samples to establish a STAGE IV

"measured reserve" status for the deposit.

All exploration and testwork will be supervised by personnel from Costain Australia Limited, or their nominated consultants.

The following budget has tentatively been prepared for the above programme.

STAGE	I	***	5,000
STAGE	II	-	5,000
STAGE	III	_	10,000
STAGE	IV	_	10,000
			\$30,000

Results will be evaluated after each stage of the proposed programme. Exploration will be curtailed should preliminary results not confirm the earlier findings.

Approval will be sought from the department of Mines and Energy prior to any bulk sampling and testing work.