

ARTHUR RIVER → BANDY CAPE  
N.W. TAS

000

**RECEIVED**

May 23, 1989

Deputy Director of Mines  
Department of Mines  
Gardens Hill Rd  
PO Box 56  
ROSNY PARK TAS 7018

*NOT ACCEPTABLE  
AS AN ANNUAL  
REPORT  
⇒ FILE*

|                |          |
|----------------|----------|
| 89-2978        |          |
| MINES          |          |
| File Ref.      | EL 33/86 |
| 26 MAY 1989    |          |
| Doc. Ref.      |          |
| Action Officer | Initials |
| LETTER         |          |
| 23.5 '89       |          |
| REFERS         |          |
|                |          |
|                |          |
| Resubmit to    | Date     |

Attention: Mr P.K. Wrigley

ANNUAL REPORT YEAR 2 - E.L. 33/86

The coastal zone of Exploration Licence 33/86 in North-West Tasmania is extensively covered by sand dunes and was targeted as a potential heavy mineral bearing area.

*88-2796*

Exploration work carried out during the previous year consisted mainly of aerial photographic interpretation followed by hand auger drilling along strategic east-west lines to basement. Total heavy mineral contents were then determined by heavy liquid separation. This work has delineated at least one ancient shore line metres above the current shore line with associated wind blown dune formations of at least two generations. The highest heavy mineral concentrations were found within the ancient shore line.

Most of the exploration has been concentrated to the northern half of E.L. 33/86 and the southern half remains unexplored due to difficulties of access during the last field season.

The low grades of the samples generated during last field season did not justify quantitative analysis of all the samples.

Work carried out during the current reporting period consisted of the following:

450 samples were panned and the tails were examined optically. The aim of the examination was two fold -

1. To determine the approximate levels of Rutile and Zircon.
2. To examine the tail for precious metals to confirm and support the finding in Hole AR1 which showed optically identifiable gold and platinum alloy flakes.

*1) Need details of exploration work mentioned here.*

*% of what? → Heavy minerals  
→ whole sample*

Result and examination:

The panning of the 450 samples showed that all samples contained a fairly constant level of Rutile and Zircon. The combined Rutile and Zircon grade was estimated to be between 7 to 18 per cent. In the samples examined X-ray diffraction analysis showed that all samples contain high levels of Olivine (Fosterite), Hypersthene and Augite. The chemistry of the Olivine was determined by Scanning Electron Microscopy and is approximately Fosterite 80, Fayalite 20.

Heavy mineral concentrates from samples derived from the vicinity of the original AR1 hole contains very small flakes of gold but no visible platinum. Fire assay of these samples showed a maximum of 2.7 p.p.m. gold and 200 p.p.b. platinum.

Work programme for year 3 EL 33/86

A work programme similar to the work programme of year 1 and 2 is proposed to investigate the area south of Temma to Sandy Cape. Five east-west traverses are planned to cover the 10km coastal strip. Drilling along the traverses in intervals of 20 to 40 metres will again be carried out by hand auger and sledge pumping in an attempt to drill to basement.

The cost to complete this programme will be \$60,000.00 to 70,000.00.

The consulting geologist to carry out this work will again be P. Stitt & Associates.

Yours sincerely,

*A. Birkner*

A. BIRKNER

*2) more details of forward programme  
specific localities for environmental  
assessment.*

(5110ab.cms)

*fundament dropped  
due to lack of funds.  
June 1989  
PW*