

THE ELECTROLYTIC ZINC COMPANY OF AUSTRALASIA LIMITED  
WEST COAST DEPARTMENT

**FINAL REPORT**

on

**AIRBORNE ANOMALY A5 / 1**

**ARTHUR AREA - E L 1 / 59**

by

I S Gregory & C J R Kingsbury

27 June 1961

**62\_332**

27th June, 1961.

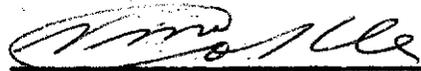
MEMORANDUM FOR:-

The Chairman,  
Control Committee,  
Lyell-E.Z. Explorations.

The report on the "follow up" work on Airborne Anomaly A5/1 of the Arthur Area is attached.

The I.P. survey results demonstrate that the conductor found by the R.E.M. method is not due to sulphide mineralisation. The probable cause of the E/M anomaly is a water filled shear or an overburden effect.

No further work on the Anomaly is justified.



V.M. COTTLE  
Chief Geologist  
E.Z. Co. of A'Asia Ltd.

VMC/JG

Dist: E.Z. Co. (3)  
Mt. Lyell (2)  
LEE House (1)  
Geol. (1)  
Gpvt. M.D. (1)

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- Refer Report G97 -

Introduction

The Airborne Anomaly consisted of response by both E/M and Magnetic methods.

The ground location was made by R.E.M. on one line of a 3 line grid when weather caused the abandonment of the work until the next field season. On the one line done, a good cross over was obtained for both frequencies and further work was recommended.

Access

This was improved since the previous field season and a muskeg tractor track from Clarke Dam now passes the prospect en route to Lake Pedder. This track is negotiable by Land Rover or Jeep during dry weather.

Geology

Further geological mapping was done during the 1960-61 field season but the environment of the anomaly remains unchanged from that decided last year. The rocks are Cambrian in age and have been designated the Boyd Formation. They consist of Micaceous Sandstones, purple shales and quartzites. They do not appear to be very favourable to mineralisation.

Geophysics - (see plate 1)

During 1959-60, lines 4N, 00, and 4S were prepared and Lines 4S was surveyed with R.E.M.

During 1960-61 season, good responses were obtained with the R.E.M. on lines 00 and 4N so the grid was extended.

Lines 8N, 8S, 12S were prepared and surveyed and conductor axes were located as shown on plan.

The Consultant Geophysicist, Dr. P.G. Hallof, was not impressed with the quality of the E/M cross overs and recommended an I.P. line along the conductor axis to test for a metal factor.

This line was prepared and surveyed during March, 1961, and plate 2 shows the results.

Dr. Hallof's report on the survey is as follows:-

"The resistivity results in this area indicate that the resistivities increase with separation, which is the influence of the more conductive overburden. There are some lateral variations in the apparent resistivities indicating an edge to the overburden, and this edge probably caused the E/M anomalies. There is no anomalous I.P. effect."

Conclusion

The absence of any anomalous I.P. effect along the line of the E/M anomaly suggests that the conductor found by the E/M method is not due to mineralisation. It is recommended therefore that no further work on the area is warranted.

.....  
I.S. Gregory

.....  
C.J.R. Kingsbury

Geologists,  
E.Z. Company of Australasia Limited

005

61-332

PLATE 1

61-332

# SOUTH - WEST TASMANIA

305005

SP 25

SCALE

16 miles to 1 inch



## LEGEND

Photo mosaic index

AMG REFERENCE POINTS ADDED

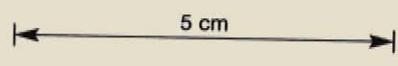
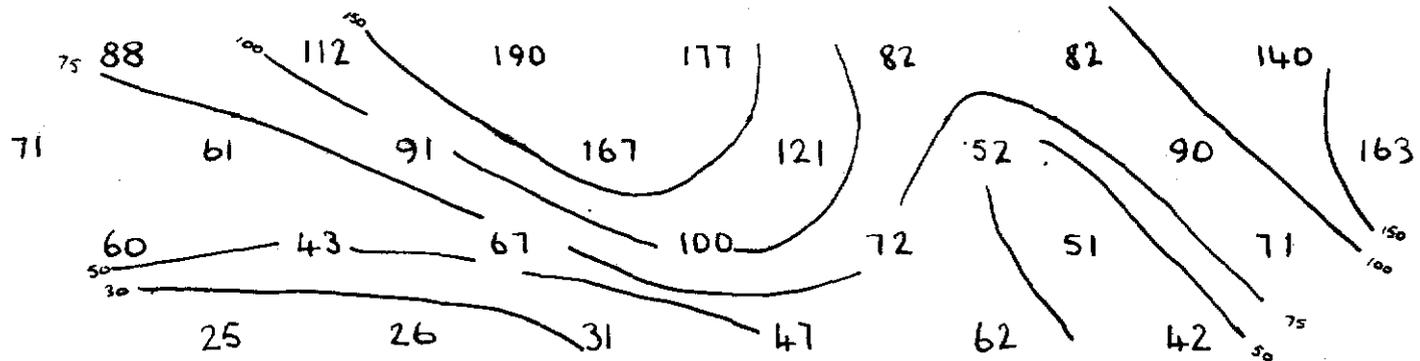


PLATE 2

305006



85

6

4

25

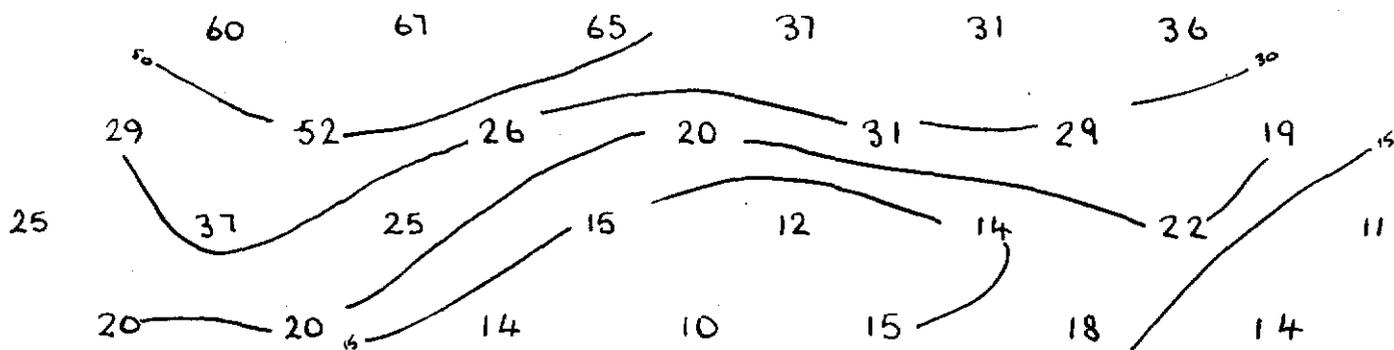
0

2N

4

6

8N



### I. P. SURVEY.

Arthur Area

Line Oblique Anomaly A5/I Grid  
200ft Spreads

Scale: 200ft to 1 inch

Frequency: 2 1/2 and 1/4 cps

Survey: B.H. N.J.

Traced: VT. Date: 3/61