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A DIVISION OF PEKO WALLSEND OPERATIONS LIMITED

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**EL 44/89 WEDGE PLAINS****RELINQUISHMENT REPORT**

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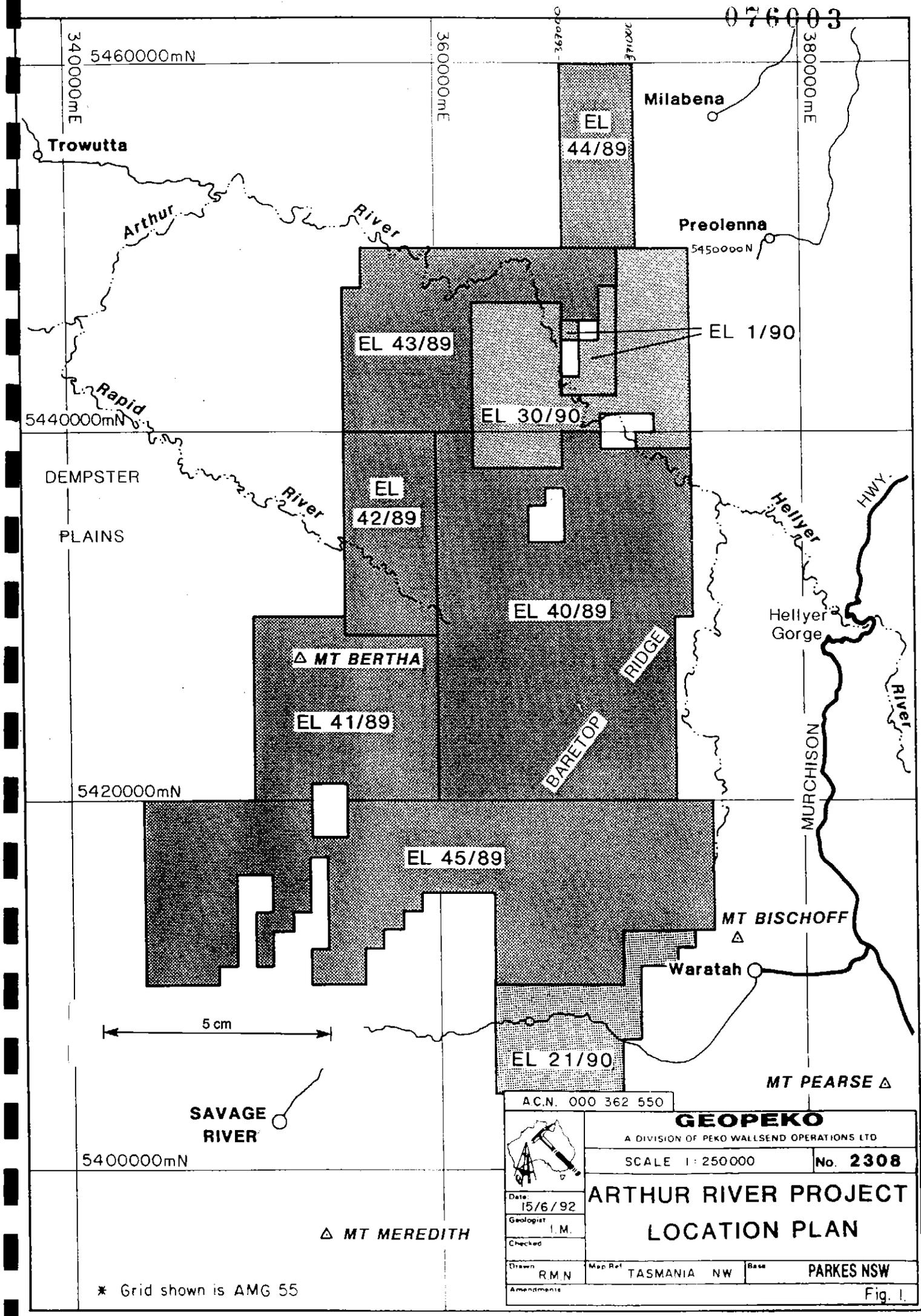
Ian Mathison  
June, 1992

T271

Distribution: Geopeko, Parkes  
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\* Grid shown is AMG 55

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		SCALE 1: 250000	No. 2308
<b>ARTHUR RIVER PROJECT</b> <b>LOCATION PLAN</b>			
Date 15/6/92	Geologist I.M.	Checked	
Drawn RMN	Map Ref TASMANIA NW	Base PARKES NSW	Amendments

Fig. 1.

## 1.0 INTRODUCTION

### 1.1 Location and Access (Fig. 1)

EL 44/89, Wedge Plains, is located in NW Tasmania approximately 30 km west of the coastal town of Wynyard.

Access within the EL is very good and is provided by a network of unsealed logging roads and by the Savage River Pipe Line Road. Secondary access is provided by 4WD and walking tracks.

### 1.2 Tenure and Land Usage

EL 44/89 of 250 km<sup>2</sup> was granted to Peko Exploration Ltd in January 1990. The EL was reduced to 40 km<sup>2</sup> in December 1990.

### 1.3 Regional Geology

EL 44/89 lies within the Rocky Cape Region of NW Tasmania. The most interesting rocks in the area are those of the Precambrian Arthur Lineament. The Arthur Lineament is a north-east trending metamorphic belt consisting of highly deformed sediments, basic volcanics and dolomite. To the west of this belt lies the Rocky Cape Group, a thick shallow marine shelf sequence. The Rocky Cape Group contains Precambrian dolerite/gabbro dykes which have been emplaced into north-north west trending faults.

Previous explorers have assigned a sequence of interbedded sandstone and siltstone with associated basic volcanics and carbonates lying just west of the intensely deformed rocks of the Arthur Lineament to the Neasy Formation. Some workers question the validity of this formation. However, aeromagnetic maps show that the rocks of the Neasy Formation have a distinctive magnetic character. This unit has been retained for the purposes of this report.

The Precambrian rocks along the eastern edge of the area are in places overlain by Permian fluvio-glacial sediments and/or Tertiary basalt.

EL 44/89 is dominated by the Detention Quartzite of the Rocky Cape Group.

### 1.4 Known Mineral Deposits/Occurrences

There are a number of metallic mineral occurrences adjacent to the western, eastern and northern EL boundaries of Geopeko's Arthur River Project. (Green et Al 1988).

The deposits range from small, relatively insignificant workings, e.g. Victory Mine, Atlas Leases to large world class ore bodies e.g. Mt Bischoff, Savage River. In most cases, extensions of the prospective host formations can be continued into Geopeko's Arthur River EL's.

### 1.5 Previous Exploration

Geopeko report T253 (Virgoe and Mathison, 1990), summarizes previous exploration in the area and details results of Geopeko's 1990 exploration program. Report T264 (Mathison, 1991) details 1991 exploration activity.

## 2.0 EXPLORATION ACTIVITY UNDERTAKEN BY GEOPEKO

### 2.1 January 1990 - November 1990 (Virgoe & Mathison 1990)

#### *Water geochemistry*

Reconnaissance water samples were collected from streams across the EL. Base metals and arsenic were determined using carbon rod AAS of acidified samples by ANALABS in Melbourne. Gold was determined by Dr Bill Baker of the Tasmanian Department of Mines using the Huminex technique. Both of these techniques are now known to have limitations or analytical problems. Nevertheless base metal values responded to major lithological variations and an anomalous gold value on Exploration Creek was supported by an alternative method used by ANALABS.

#### *Compilation of Previous Exploration*

Results of previous exploration activity were reviewed. No indications of base metal or gold mineralization were detected by previous exploration.

#### *Geophysical Review*

A review of public domain aeromagnetic and gravity data was conducted by Dr.D.Leaman. Both sets of data indicate that the Arthur Lineament rocks lie at depth under the eastern third of the EL.

### 2.2 December 1990 to November 1991 (Mathison 1991)

#### *Exploration Creek*

The anomalous gold in water values were followed up by stream sediment sampling and rock chip sampling. Anomalous gold and base metal values were reported for the stream sediment sample and rock chip samples reported weakly anomalous gold. A check stream sediment sample and a BLEG sample failed to confirm the anomalous stream sediment geochemistry:

### 2.3 December 1991 to June 1992

No additional exploration was attempted. Exploration Creek was considered a low priority target to be followed up if time and budget were available.

### 3.0 CONCLUSIONS

- \* This project continues to be plagued by analytical problems and laboratory errors.
- \* Stream sediment samples in Exploration Creek were collected by different samplers using different sampling techniques. Nevertheless, a laboratory error is the most likely explanation for the stream sediment anomaly.

### 4.0 RECOMMENDATIONS

Even though the Exploration Creek gold anomaly has not been adequately checked, the area should be relinquished. Analytical problems and unlikely host geology continue to make this a relatively unattractive target.

### 5.0 ENVIRONMENTAL DISTURBANCE AND REHABILITATION

Exploration conducted by Geopeko between 1990 and 1992 has caused no environmental disturbance. Semi permanent samples markers left at sample sites are considered to be valuable reference points for future exploration. No rehabilitation has been necessary.

*Jan Mathis*

## REFERENCES:

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**MATHISON, I.J., VIRGOE, K.** (1990) - Wedge Plains EL 44/89- Report on Exploration Activity - January 1990 to November 1990. Unpublished Geopeko report T253.

**MATHISON, Ian** (1991) - EL 44/89 Wedge Plains - Report on Exploration Activity December 1990 to November 1991. Unpublished Geopeko report T264.