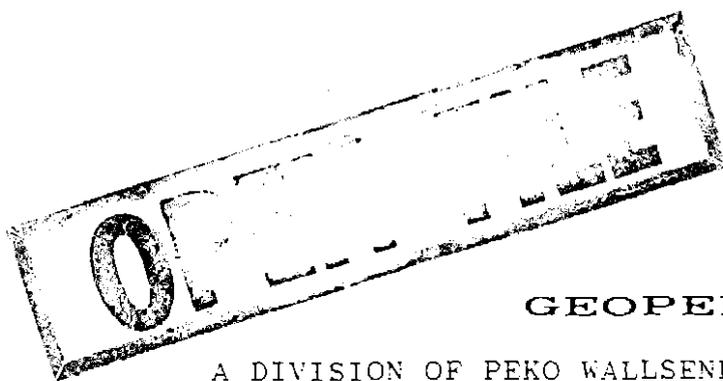


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GEOPEKO

A DIVISION OF PEKO WALLSEND OPERATIONS LIMITED

G.C.N. 000 081 434

MICROFILMED
FICHE No. 012386-

EL 41/89 MT BERTHA

REPORT ON

EXPLORATION ACTIVITY

DECEMBER 1990 TO NOVEMBER 1991

92-3329

MINES	
File Ref.	EL 41/89
12 FEB 1992	
Doc. Ref.	
Action Officer	Initials
Covering letter	
Folio 110-111	
Resubmit to	Date

MICROFILMED

Ian Mathison
December, 1991

T261

Distribution: Geopeko, Parkes
Geopeko, Devonport
DMMR, Hobart

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1.0 INTRODUCTION

1.1 Location and Access (Fig. 1)

EL 41/89, Mt Bertha, is located in NW Tasmania approximately 20 km north of the township of Savage River.

Access within the EL is very poor and is restricted to the Savage River Pipe Line Road and unsealed logging roads which run near the eastern and western EL boundaries respectively. The central portion of the EL is relatively inaccessible and access requires the cutting of walking tracks and helicopter support.

1.2 Tenure and Land Usage

EL 41/89 of 249 km² was granted to Peko Exploration Ltd in January 1990. The EL was reduced to 92 km² in December 1990. The EL schedule is appended as Appendix 1.

The EL consists predominantly of State Forest and Crown Land. The area encloses 6 km² of The Arthur-Pieman Protected Area and includes part of the "Savage River" and "Norfolk Range" Australian Heritage Commission Act, Registered Entries.

1.3 Regional Geology

Geopeko's block of Arthur River ELs lies within the Rocky Cape Region of NW Tasmania. The oldest 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.

Rocks assigned to the Oonah Formation and the Cleveland Waratah Association lie to the east of the Arthur Lineament. The Precambrian Oonah Formation is predominantly comprised of turbiditic quartz wacke and siltstone. The south eastern corner of the area is underlain by rocks of the Cleveland-Waratah Association that lie within the Dundas Trough. These rocks have been correlated with the Crimson Creek Formation and consist of basaltic, andesitic and tholeiitic lavas and volcanoclastic sediments.

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

1.4 Known Mineral Deposits/Occurrences

There are a number of metallic mineral occurrences adjacent to the western, eastern and southern 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 T248 (Virgoe and Mathison, 1990), summarizes previous exploration and describes the results of Geopeko's 1990 exploration program.

2.0 EXPLORATION ACTIVITY

2.1 Aims

The aim of Geopeko's exploration of EL 41/89, is to use water sampling, rock chip sampling, geological mapping and the results of previous exploration to delineate prospective and geochemically anomalous areas within the EL. Areas worthy of further investigation will be followed up with more detailed exploration.

Due to major problems with the DMHR's analytical techniques for stream water geochemistry, little work was carried out in EL 41/89 in the year. It was felt necessary to suspend exploration until these problems were corrected and consequently a waiver of expenditure commitment was sought and granted.

2.2 Walking Tracks

A 4.5 km walking track was cut from the Savage River Pipeline Road to the Little Donaldson River. This track provides access to the southern spur of Mount Bertha. Mapping and sampling along this track are planned for 1992.

2.3 Geochemistry - Stream Sediment Compilation

Between 1968 and 1984, Comstaff collected over 1700 stream sediment samples from the Arthur River, Heazelwood River, Savage River, Luina and Waratah. These have been entered into a data base and sorting and plotting of this data is in progress. Twenty of those samples were collected from areas within EL 41/B9.(Appendix 1) None appears obviously anomalous.

3.0 CONCLUSIONS

- * Insufficient exploration has been conducted in this area.
- * The Arthur Lineament section of this EL includes at least three anomalous structures interpreted from aeromagnetic and gravity data.

4.0 RECOMMENDATIONS

The exploration program in this EL should be postponed until either the DMMR's problems with the Huminex analytical technique are resolved or an alternative method of analysing stream waters is developed.

5.0 ENVIRONMENTAL DISTURBANCE AND REHABILITATION

Exploration conducted by Geopeko during 1991 has caused minimal environmental disturbance. Semi permanent samples markers left at sample sites are considered to be valuable reference points for future exploration. Walking tracks were cut to DMMR guidelines and should regenerate naturally. No rehabilitation has been necessary.

REFERENCE:

GREEN, G.R., BOTTRILL, R.S., BACON, C.A., TURNER, N.J. (1988) -
Mineral Deposits and Metallogenic Map of Tasmania
1:50 000, Tas. DMMR

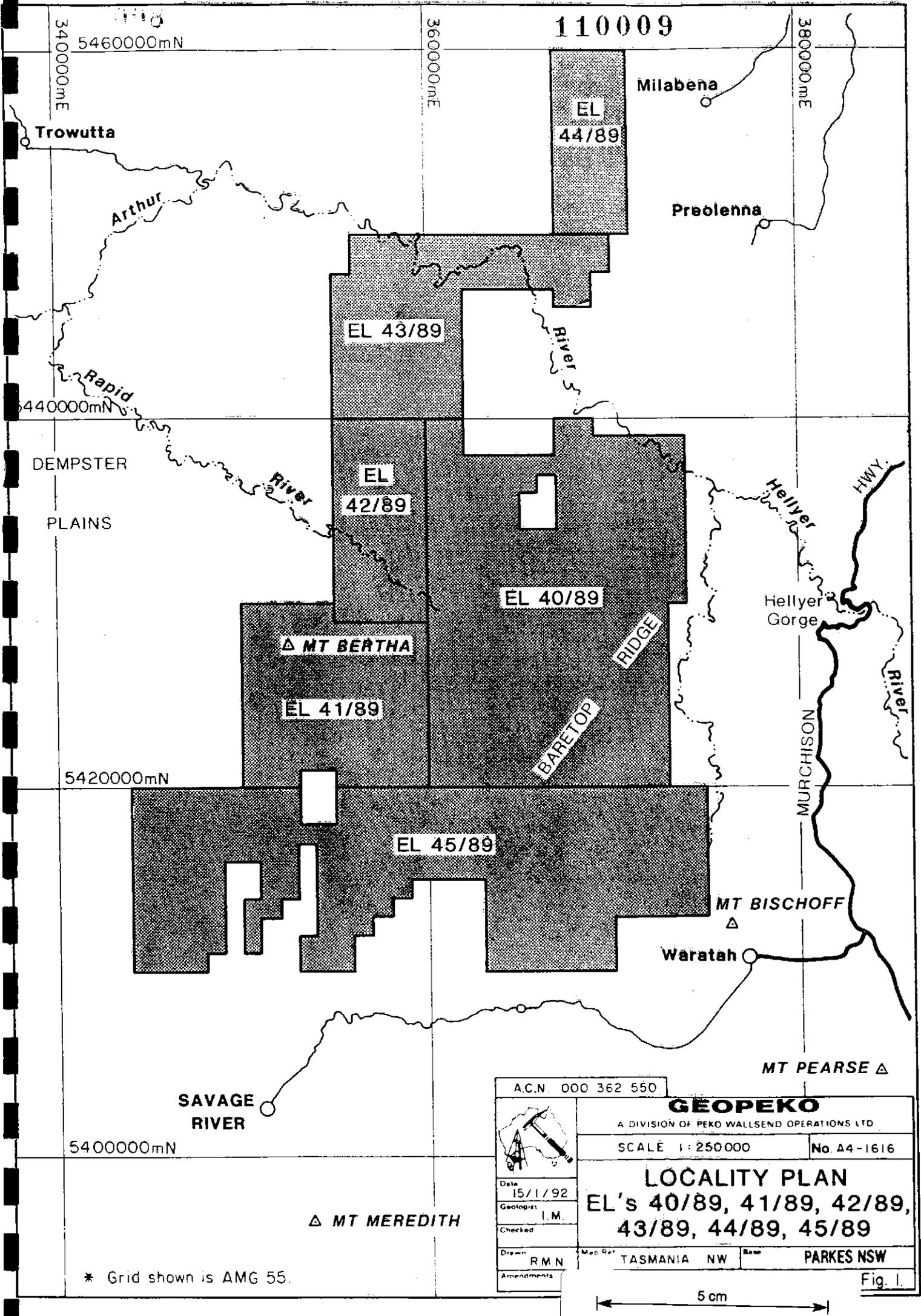
MATHISON, I.J., VIRGOE, K. (1990) - Mt Bertha EL 41/89 - Report
on Exploration Activity - January 1990 to November 1990.
Unpublished Geopeko report T248.

APPENDIX 1

CONSTAFF STREAM SEDIMENT SAMPLES

COMSTAFF STREAM SEDS - BERTHA SHEET

EASTING	NORTHING		CU	NI	PB	ZN
353464	5420052	10	0	6	40	
353594	5420113	10	0	6	44	
353726	5420043	6	0	8	26	
353809	5420145	8	0	8	38	
354088	5420102	10	0	8	62	
354137	5420243	6	0	18	34	
354210	5420280	8	0	8	38	
354342	5421701	16	98	0	82	
354335	5421845	16	70	0	72	
354488	5421879	10	94	0	56	
354636	5421944	16	94	0	72	
354694	5422025	4	4	0	8	
354591	5422176	28	110	0	52	
354686	5422098	6	8	0	16	
354812	5422081	4	6	0	10	
354912	5422158	4	2	0	12	
355023	5422232	4	0	0	8	
355199	5422215	6	2	0	8	
355301	5422264	2	0	0	6	
355261	5422311	2	0	0	6	



110009

5460000mN

340000mE

360000mE

380000mE

Trowutta

Milabena

Preolenna

Arthur River

EL 44/89

EL 43/89

EL 42/89

EL 40/89

△ MT BERTHA

EL 41/89

EL 45/89

Hellyer HWY.

Hellyer Gorge

BARETOP RIDGE

MURCHISON

△ MT BISCHOFF

Waratah

△ MT PEARSE

SAVAGE RIVER

5400000mN

△ MT MEREDITH

A.C.N. 000 362 550		GEOPEKO	
A DIVISION OF PEKO WALLSEND OPERATIONS LTD		SCALE 1:250000	No. A4-1616
LOCALITY PLAN			
EL's 40/89, 41/89, 42/89, 43/89, 44/89, 45/89			
Date	15/11/92	Drawn	R.M.N.
Geologist	I.M.	Map Ref	TASMANIA NW
Checked		Base	PARKES NSW
Amendments			

* Grid shown is AMG 55.

5 cm

Fig. 1.