

773001

of M	A.O.	C.G.	E.O.	D.S.M.E
				Registrar
Received	15 JUN 1982			E & IL
Answered				
DEPT. OF MINES				
REF. No. 4455/82				

EXPLORATION LICENCE 8/79

MAYDENA, TASMANIA

REPORT FOR THE SIX MONTHS ENDED 30th APRIL, 1982

OPEN FILE

MICROFILMED

CONTENTS

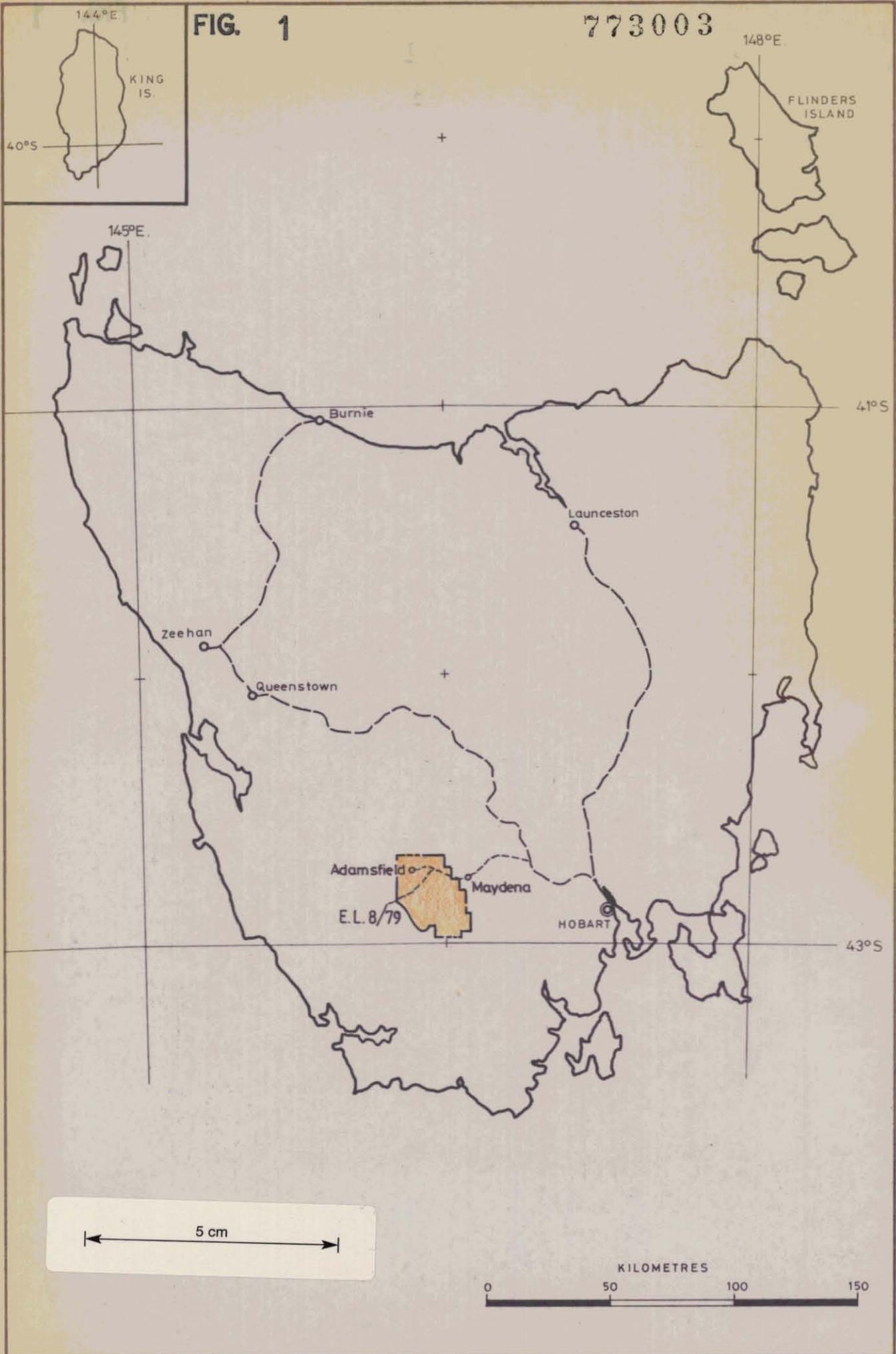
- 1. GENERAL
- 2. EXPLORATION PHILOSOPHY
- 3. SUMMARY OF PREVIOUS WORK
- 4. GEOLOGY
- 5. FIELD INVESTIGATIONS
 - 5.1 Geological Mapping
 - 5.2 Geophysics
- 6. SUMMARY OF WORK IN PROGRESS
- 7. WORK PROPOSED

FIGURES

- 1. EL 8/79 Maydena, Tasmania Location Map A4-2040
- 2. Geology (1:50,000)

773003

FIG. 1



Centre
Melbourne

Date
17-11-80

THE BROKEN HILL PROPRIETARY CO LTD

E.L. 8/79 MAYDEN, TASMANIA

LOCALITY MAP

Project No.

Drawing No
A4-2040

MAYDNA, TASMANIA

REPORT FOR THE SIX MONTHS ENDED 30th APRIL, 1982

1. GENERAL

Exploration Licence 8/79 of 176 square kilometres was first granted to The Broken Hill Proprietary Company Limited on 30th April, 1980 (see Figure 1). The current expiry date is 31st October, 1982.

2. EXPLORATION PHILOSOPHY

Our principal target within the licence area is a skarn or massive sulphide hosted tin-tungsten deposit. The area, including that part still under application as licence area EL 12/79, was chosen for exploration on the following basis:

- 1) the presence of unexplained airborne magnetic and arsenic in stream anomalies in the Mt. Mueller area;
- 2) the presence of extensive sequences of carbonate rocks which could form potential hosts to mineralisation;
- 3) the reported presence of tin in the Styx River.

3. SUMMARY OF PREVIOUS WORK

Prior to the six months under review, the following work was completed:

1. Literature review and assessment of available data;
2. 1:50,000 scale reconnaissance geological mapping;
3. Stream sampling;
4. Rock chip and soil sampling;
5. Preliminary evaluation of the Humboldt prospect (see Figure 2);
6. An airborne electromagnetic (Dighem II) and magnetics survey over approximately 50 square kilometres in the northern part of the licence area.

cont./..

4. GEOLOGY

Sedimentary rocks in the licence area range in age from Precambrian to Permian. (see Figure 2) The Precambrian rocks include dolomite, dolomitic shale, black and chocolate shales and ortho-quartzite, which have been tightly folded around WNW to NW trending axes. Brown to red lithicwackes with a tuffaceous component derived from basic volcanism crop out in the Maynes Hill - Fourteen Mile Creek area. These rocks are similar to those making up the Cambrian sequences in the Boyd River area. South of Mt. Mueller, similar Cambrian (?) sediments include dolomite and carbonaceous dolomite units. Ordovician conglomerate, quartzite, shale and limestone crop out in the northern part of the licence area from Maydena to the Florentine valley. The Ordovician rocks are generally folded about open folds with NW to N-S axes. The Permian rocks include a basal tillite or pebbly mudstone with minor varve units overlain in turn by dark grey mudstone and siltstone, limestone and fossiliferous yellow-brown mudstone and shale. The Permian rocks dip gently to the east.

The only intrusive rocks located to date in the area include minor Jurassic dolerite at Wherrett's Lookout and an alkaline dyke rock (porphyritic microsyenite) of presumed Cretaceous age in the Maynes Hill area. The latter is similar to alkaline dyke rocks exposed on the Gordon Road west of Frodsham's Pass.

5. FIELD INVESTIGATIONS

5.1 Geological Mapping

Regional geological mapping was carried out north-east of Mount Mueller (see Figure 2).

5.2 Geophysics

A number of EM/magnetic anomalies located by the BHP Dighem II survey (see Progress Report to 31st October, 1981 for details) still require follow-up. These anomalies however lie within E.L. 12/79 (under application), part of the South West conservation area. Ground follow up is therefore subject to the granting of this licence area.

Nothing to do with E.L. 12/79

6. SUMMARY OF WORK IN PROGRESS

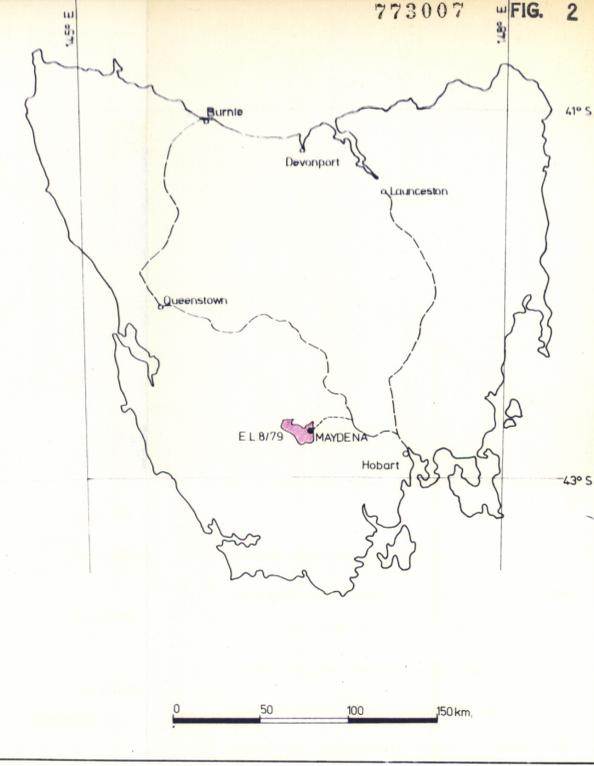
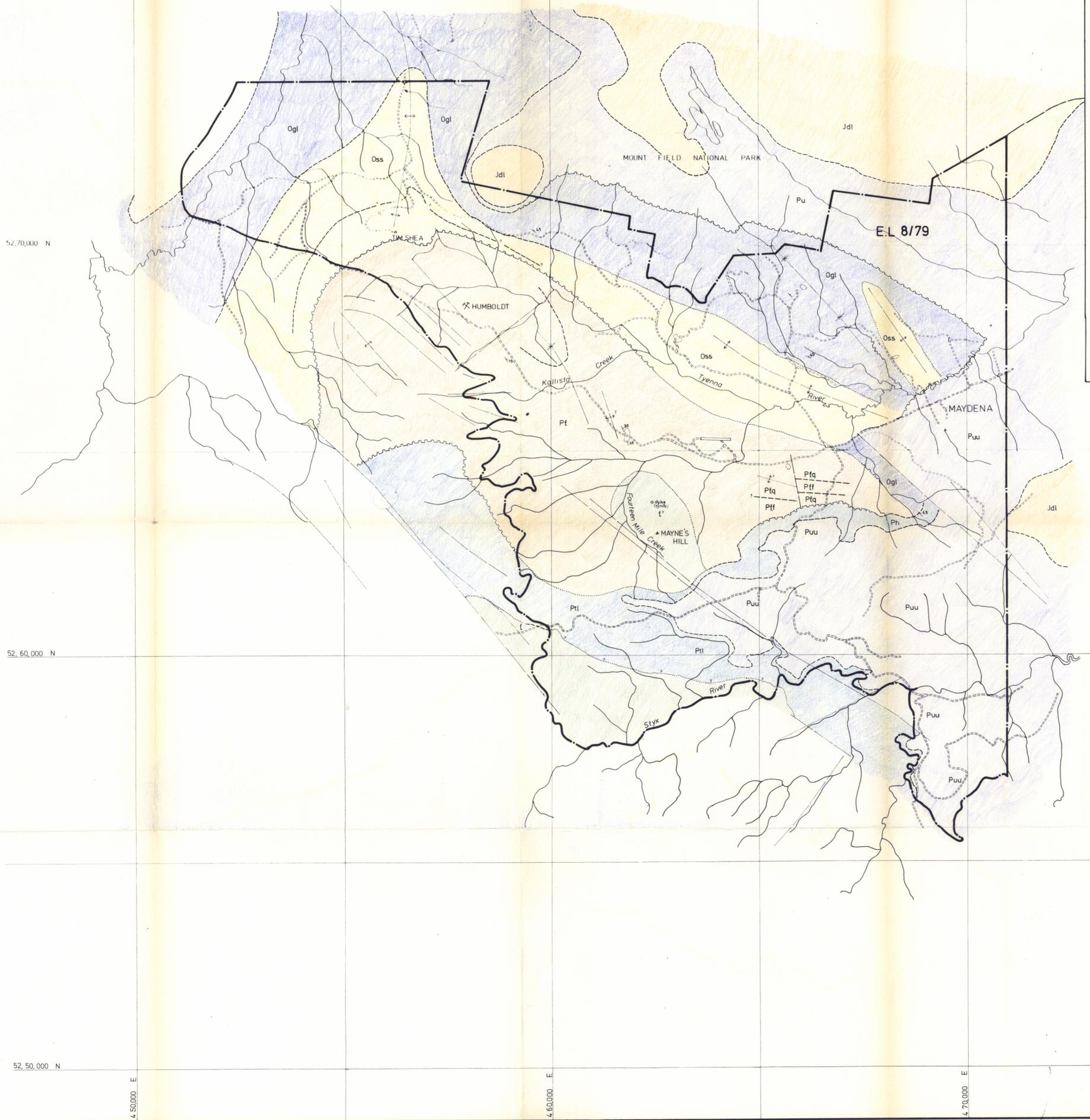
1. Appraisal of available data;
2. Evaluation of the Humboldt prospect.

7. WORK PROPOSED

1. Evaluation of Mayne's Hill geochemical/magnetic anomalies;
2. Subject to the granting of application E.L. 12/79 (within the South West conservation area), ground follow-up of Dighem EM/magnetic anomalies, and magnetic anomalies indicated in the 1965-66 BHP aeromagnetic survey of the area.

*Not
E.L. 8/79*

This report is submitted to the
Mines Department as required by
Schedule A of Exploration Licence
8/79.



LEGEND

- QUATERNARY Q Alluvium, scree
- TERTIARY Tf Till, ferricrete (Fe), silcrete (Si)
- PERMIAN Ptl Pebbly mudstone, (tillite)
- Pu Permian undifferentiated siltstone, sandstone, shale
- Puu Upper Permian undifferentiated siltstone, sandstone, shale
- ORDOVICIAN Ogl Limestone (Gordon Limestone) calcareous mudstone.
- Oss Mudstone, siltstone, sandstone, conglomerate
- CAMBRIAN t Shale, conglomerate, minor acid volcanics.
- t Serpentinite, minor gabbro, pyroxenite (emplacement age).
- PRECAMBRIAN Pf Quartzite, slates, dolomite, dolomitic shales.
- JURASSIC Jdl Dolerite

- Lineament
- - - Geological Boundary (approx)
- Geological Boundary inferred
- ~ Unconformity
- Outcrops
- ↗ Dip and strike

Scale 1:50,000



82-1764

THE BROKEN HILL PROPRIETARY CO. LTD. EXPLORATION DEPARTMENT		
E.L. 8/79, MAYDNA, TAS.		
GEOLOGY 000		
Drawn: R.H.	Date: 27.10.81	Centre: Hobart
Traced: Hilary	Project No: T 620	Drawing No: A1-
Checked:		

52,50,000 N

4,50,000 E

4,60,000 E

4,70,000 E