

935001

# Aberfoyle Resources Limited

EXPLORATION DIVISION

ACN 004 664 108

# OPEN FILE

## EXPLORATION LICENCE 39/85

### BULGOBAC RIVER

### TASMANIA

### RELINQUISHMENT REPORT

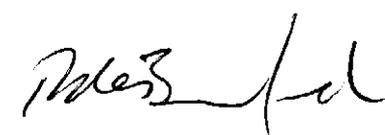
### FEBRUARY, 1994

### VOLUME 1 OF 1

**MICROFILMED**  
FICHE No.012903 -

<b>MINES</b>		
FILE REF. EL 39/85		
10 MAR 1994		
DOC. REF.		
PRICE	FOR	FOR
		INFO.
SEE COVERING		
LETTER FOLIO 10		
RESUBMITTED TO		DATE

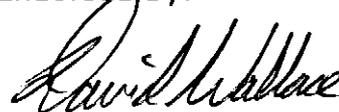
Compiled by:

*for*   
S. Richardson  
SENIOR GEOLOGIST

Distribution:

- Aberfoyle - Burnie (1/4)
- Aberfoyle - Hawthorn (2/4)
- Placer - Sydney (3/4)
- Mineral Resources Tas. (4/4)

Endorsed by:

  
D. B. Wallace  
REGIONAL EXPLORATION  
MANAGER

Internal Report No: Bulgobac 8

# 94-3544

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**FIGURES**

BR5           Bulgobac River EL 39/85 - Locality Map

## 1.0 SUMMARY

Exploration on EL 39/85 has been directed toward Volcanic Hosted Massive Sulphide deposits within the Que-Hellyer or Sock Creek Volcanics. Work to date indicated the most prospective part of the EL to be in the south where a thickened sequence of Que-Hellyer Volcanics is present at depth, possibly within a small sub-basin. However, two holes have now tested this area and although some potential remains there and elsewhere within the EL, a lack of quality drill targets has led to relinquishment of the licence.

## 2.0 INTRODUCTION

Exploration Licence 39/85, Bulgobac River, is located 60 km south south west of Burnie and 3 km west of the Que River and Hellyer Mines (Plate BR5).

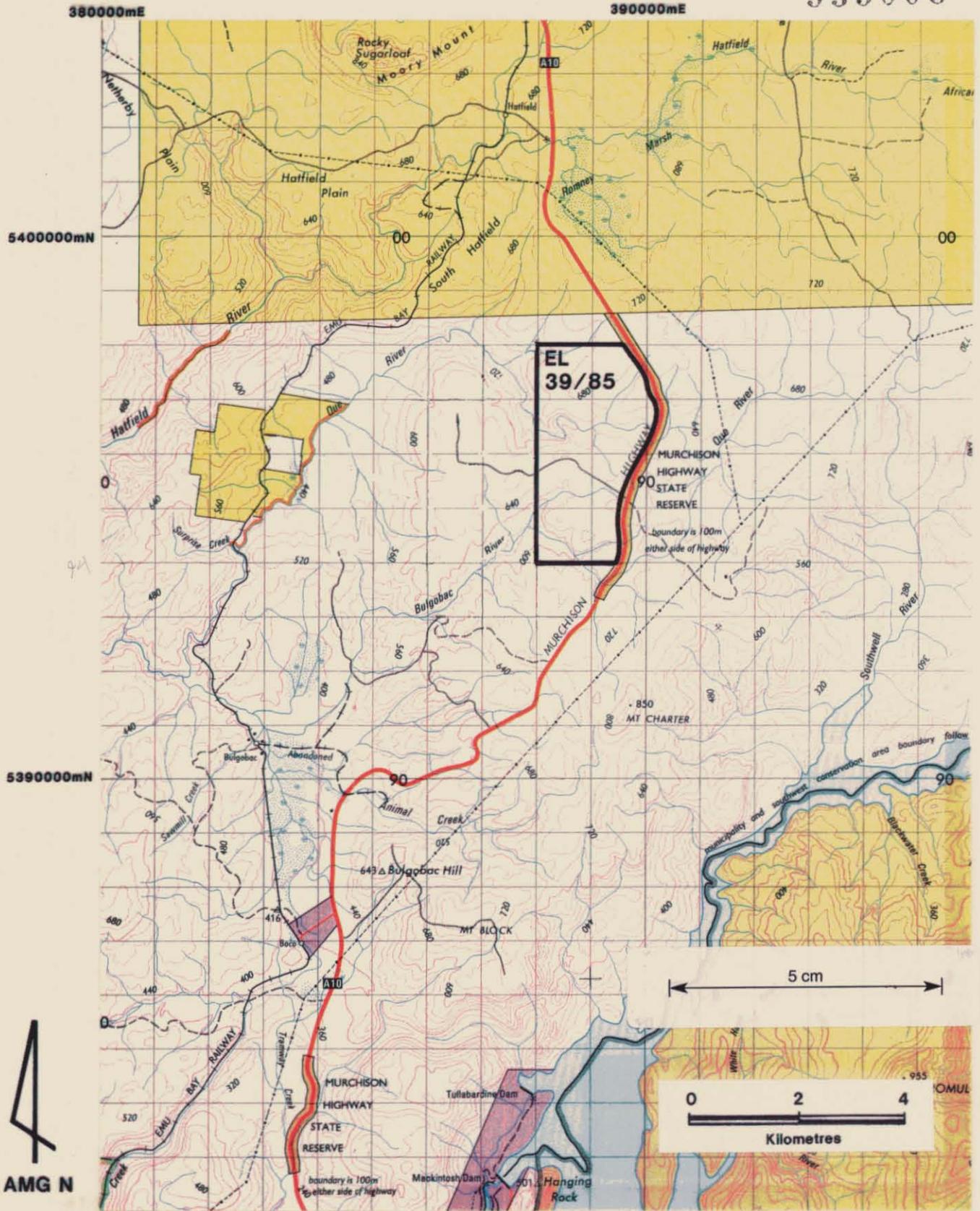
The licence was granted to CSR Ltd on 14 February, 1986. In mid 1988 CSR's Mineral Group was purchased by Placer Exploration Ltd. At about that time the Department of Mines increased the original area of 11 sq km to 16 sq km, to adjust the EL boundaries to AMG kilometre graticules.

In February, 1991 Aberfoyle Resources Ltd concluded a joint venture agreement with Placer to fund and manage exploration on EL 39/85.

A reduction in the area of EL 39/85 to 8 sq km was made in accordance with statutory requirements in February, 1992.

No new work has been undertaken since the last annual report; Richardson, 1994. As EL 39/85 is to be relinquished this report summarises exploration conducted since granting in 1986.

935005



**Aberfoyle Resources Limited**  
EXPLORATION DIVISION

**NORTH WEST TASMANIA**  
**BULGOBAC RIVER E.L. 39/85**  
**LOCALITY MAP**

Compiled : **Lands Dept.**  
Drawn :  
Traced : **MAR**  
Checked :  
Plate No. : **BR 5**

REVISIONS			
Init.	Date	Init.	Date

Location Code :

Scale : **1:100 000**

Date : **January 1992**

1-07-1

### 3.0 EXPLORATION SUMMARY

#### 3.1 Introduction

The primary target within EL 39/85 was a Volcanic Hosted Massive Sulphide deposit of the Hellyer or Que River type, hosted by the Que-Hellyer Volcanics. These rocks on EL 39/85 occur entirely at depth beneath overlying Que River Shale and Southwell Subgroup volcanoclastics. They comprise the western edge of the Que-Hellyer Volcanic basin.

Exploration on EL 39/85 has therefore largely been based on geophysics and diamond drilling.

#### 3.2 Work Completed

Initial exploration was based on a programme of geological mapping, VLF-EM, Induced Polarisation, CSAMT and gravity. Results of these surveys are described in Williams, 1987a. During 1987 two diamond holes were drilled to test anomalous CSAMT responses with some gravity support; BRD01 and BRD02. Downhole EM (not to end of hole in BRD01) failed to detect anomalous responses. Results from these holes are presented in Williams, 1987b.

Subsequently in 1988 two stratigraphic holes were completed; BRD03 and BRD04. BRD03 in the north of the EL showed the QHV to thin and become shallower in that direction. BRD04 located a possible extension of the Mt. Charter Fault. Both of these holes are described in Williams, 1988. During the same year a UTEM survey was completed in the north of the EL but no responses that could be attributed to massive sulphides were detected.

Extension of the original gravity survey over most of the licence was also completed in 1988; Williams, 1988. Interpretation of this survey

indicated a small sub-basin in the south of the licence where thickened QHV and Que River Shale sequences are bounded by inferred Cambrian growth faults; Leaman, 1988.

BRD01 was extended through to mica sandstone basement within the sub-basin and read to hole bottom, with downhole EM, during 1989. No anomalies were detected; Ellis, 1990.

← Cambrian to para 2. 1993  
of Apr 1991

During 1990 BRD05 was drilled as a second test of the prospective sub-basin defined by the gravity survey. A thick QHV sequence was intersected but DHEM failed to detect any anomalies; Ellis, 1990.

After entering into a joint venture agreement with Placer in 1991, Aberfoyle conducted a UTEM survey over the Sock Creek Volcanics within the EL. No responses worthy of follow up were detected; Richardson, 1992a. A 50% reduction in the area of EL 39/85 was made in accordance with statutory requirements in February, 1992; Richardson, 1992b.

Subsequent work has focussed on reinterpretation of existing data as part of re-evaluation of the entire Que-Hellyer Volcanic basin. In particular datasets such as magnetics, gravity etc. have been merged with those from the adjacent Mackintosh EL 106/87. The aim was to develop deep, conceptual, geologically based targets for drill testing.

Unfortunately no untested target areas of sufficient quality could be developed to warrant deep drilling.

It was therefore decided to relinquish EL 39/85.

#### 4.0 **REHABILITATION**

Access for diamond drilling comprised four wheel drive tracks extending north and south from the Que Road. The track extending north to drill hole BRD 03 has been rehabilitated by replacing removed topsoil back onto the track using an excavator.

Access south of the Que Road remains to be rehabilitated. It is proposed rehabilitation be delayed until the tender process for the area is complete. At that time the new licence holder may opt to retain and assume responsibility for existing access. If tracks are no longer required, Placer Exploration Ltd. will assume responsibility.

## 5.0 CONCLUSION

Exploration for Volcanic Hosted Massive Sulphide deposits at depth on EL 39/85 has focussed on the use of surface geophysics and diamond drilling coupled with downhole EM.

Some potential remains in the far SW corner of the licence and in the area between BRD03 and BRD01 but a lack of specific targets has led to relinquishment of the EL.

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