

CR 10789

EL 43/2002  
Mt Sorell  
WESTERN TASMANIA

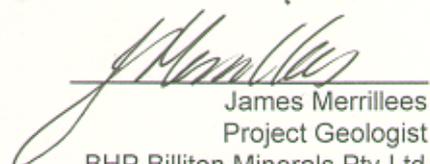
FIRST ANNUAL AND FINAL REPORT  
FOR THE PERIOD  
1 FEBRUARY 2003 TO  
22 DECEMBER 2003

*Data presented in  
AGD 66 Datum*

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## SUMMARY

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This first annual and final report documents work completed by BHP Billiton Minerals Pty Ltd (BHPB) on EL 43/2002 (Mt Sorell) from date of grant on 1 February 2003 to surrender on 22 December 2003.

EL 43/2002 is located approximately 25 km south of Queenstown in the Mt Sorell area of western Tasmania.

The exploration target in this area is volcanic-hosted massive sulphide (VHMS) mineralisation (e.g. Hellyer, Mount Lyell, Rosebery).

An electromagnetic anomaly was identified by BHPB in the 2002 MRT initiative, heli-EM survey data. EL 43/2002 was granted over the anomaly area. A ground program including ground EM, geochemistry and drilling was proposed.

Unsuccessful attempts were made during the first annual period to find a suitable partner to complete the first stages of the proposed work program. In addition, the anomaly was later downgraded due to its unfavourable stratigraphic position and low amplitude.

At the conclusion of the first annual period, BHPB decided to surrender EL 43/2002 in full. No field work was undertaken.

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## 1. INTRODUCTION

This first and final report documents work completed by BHP Billiton Minerals Pty Ltd (BHPB) on EL 43/2002 (Mt Sorell) from date of grant on 1 February 2003 to surrender on 22 December 2003.

EL 43/2002 is located approximately 25 km south of Queenstown, in the Mt Sorell area, western Tasmania (**Figure 1**).

The exploration target in this area is volcanic-hosted massive sulphide (VHMS) mineralisation (e.g. Hellyer, Mount Lyell, Rosebery).

## 2. TENEMENT DETAILS

EL 43/2002 (Mt Sorell) was applied for on 23 October 2002 and granted to BHPB on 1 February 2003 for a period of five years. The EL covers an area of 23 square kilometres. A location map of the tenement holding is shown in **Figure 1**. Background land tenure is Crown and Private Land.

## 3. GEOLOGY AND EXPLORATION RATIONALE

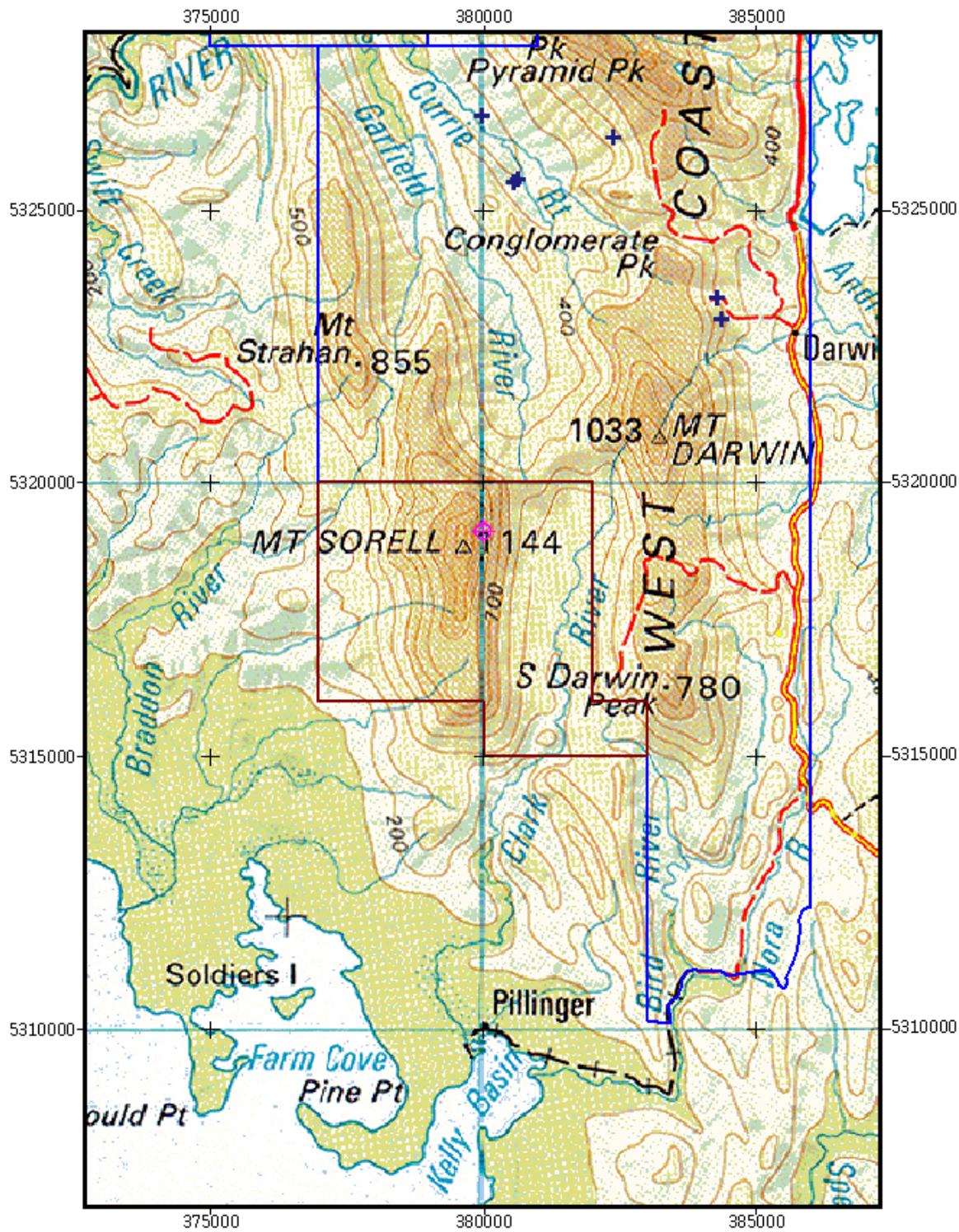
EL 43/2002 (Mt Sorell) is located within the Cambrian Mount Read Volcanic Belt of western Tasmania. The volcanic belt contains world-class volcanic-hosted massive sulphide (VHMS) deposits including Hellyer, Que River, Mount Lyell, Rosebery, Hercules and Henty. Massive polymetallic base metal sulphide deposits are generally excellent electromagnetic (EM) conductors and EM survey techniques are common in the exploration for these deposits.

An electromagnetic anomaly was identified by BHPB in the 2002 MRT initiative, heli-EM survey data (see **Figure 2**). The host stratigraphy in the area of the anomaly is the upper Tyndall Group and overlying Lower Denison Group (Owen Conglomerate). The Tyndall Group is host to the Henty Gold Mine some 50 km further north. Abundant Cu, Au and Ag prospects occur to the east of the anomaly around Mount Darwin.

BHPB applied for an exploration licence over the heli-EM anomaly with intentions to follow up the area on the ground. A ground EM survey was proposed to confirm that the airborne EM anomaly is a true bedrock conductor. If warranted, follow-up work would comprise surface geochemistry and drilling.

## 4. WORK COMPLETED

During 2003, after grant of the licence, a more thorough review of the project was made, including evaluations of the EM data, the local geology and topography in the area. BHPB decided not to pursue the testing of the EM target in its own right as it was considered a high-risk venture. Attempts were made during the first annual period to find a suitable partner to complete the first stages of the proposed work program. However, no suitable companies were found.

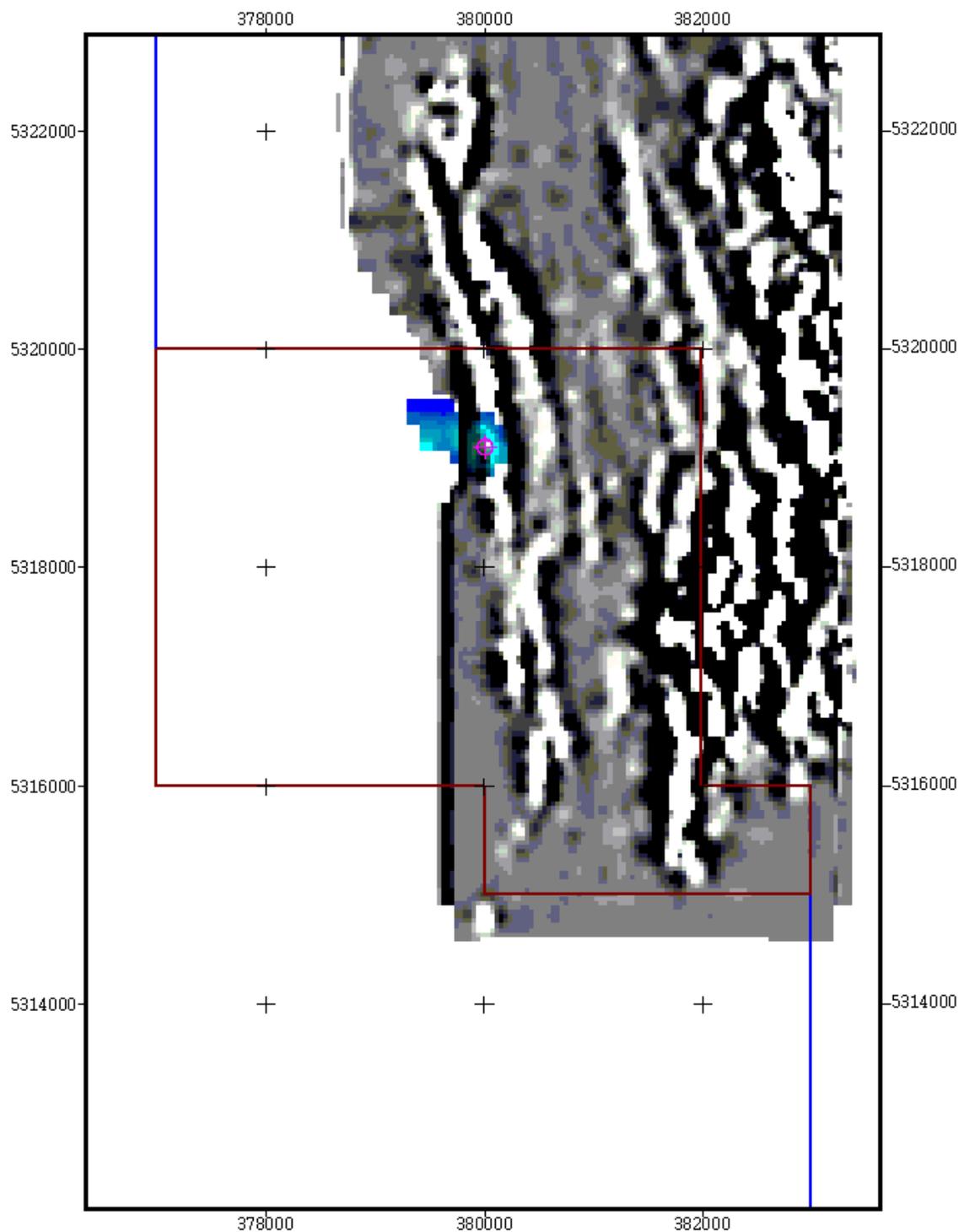


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Western Tasmania

- ⊕ Tasmania EM Targets
- EL 43/2002
- Tas ELs Feb03
- + Tas Drill Database

**Topography and Drill Holes**

Figure 1



1 0 1 2 3 Kilometers

-  Tasmania EM Targets
-  EL 43/2002
-  Tas ELs Feb03

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**Colour Conductivity Depth Slice (68m), < 50 ohm.m clip  
(blue = 50 ohm.m, to red = 10 ohm.m)  
draped on grey scale 1vd TMI magnetics)**

Figure 2

In addition, it was noted that the EM anomaly is hosted in the upper part of the Tyndall Group, which is dominated by coarse-grained volcanoclastic conglomerates. This high-energy depositional environment is less favourable for VHMS deposits.

The anomaly is also not present in all depth slices, thus down-grading its status.

Expenditure on EL 43/2002 totalled \$2,575, comprising data review and interpretation.

## **5. CONCLUSIONS**

An electromagnetic anomaly was identified by BHPB in the 2002 MRT initiative, heli-EM survey data. EL 43/2002 was applied for to cover the anomaly area.

Unsuccessful attempts were made during the first annual period to find a suitable partner to complete the first stages of the proposed work program, including ground EM, geochemistry and drilling. In addition, the anomaly was down-graded due to its unfavourable stratigraphic position and low amplitude.

At the conclusion of the first annual period, BHPB decided to surrender EL 43/2002 in full. No field work was undertaken.