

**MT BLOCK PROJECT  
(LAKE MACKINTOSH GROUP)  
TASMANIA  
EL48/2003**

**PARTIAL RELINQUISHMENT REPORT  
11<sup>th</sup> June 2007 – 10<sup>th</sup> June 2008**

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**Distribution:**

Mineral Resources Tasmania  
Bass Metals Ltd

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The conclusions and recommendations expressed in this report / table represent the opinions of the Authors based upon the data available and provided to them. The opinions and recommendations provided from this information are in response to a request from the client and no liability is accepted for commercial decisions or actions resulting from them.

**Note: All figures and grids are according to the GDA94, Zone 55 datum.**

## ABSTRACT

Bass Metals Ltd (BSM) commenced management of the Mt Block exploration licence (EL48/2003) on 11 June 2006. For the year ended 10/06/2008 work conducted on the portion to be relinquished has included -

- Partial relinquishment review

**Expenditure –** Reporting period \$290,523.07

Total to date \$474,679.59

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# 1. INTRODUCTION

This report is a summary of the exploration activities conducted on the Mt Block licence EL48/2003, for the period of 11th June 2007 to 10th June 2008. The licence covers a total area of 65 km<sup>2</sup>.

## 1.1 Location and Access

The tenement is located 13 km north-northeast of the township of Tullah, on the west coast of Tasmania (Figure 1). Access to the area is via the Murchison Highway and tracks which access via the 220kv transmission lines which traverse the area. Access within the tenement is via a limited number of 4wd tracks and ATV-only tracks.

The licence area can be found Charter 1:25,000 topographic map sheet and the Sophia 1:100,000 LTIS map sheet.

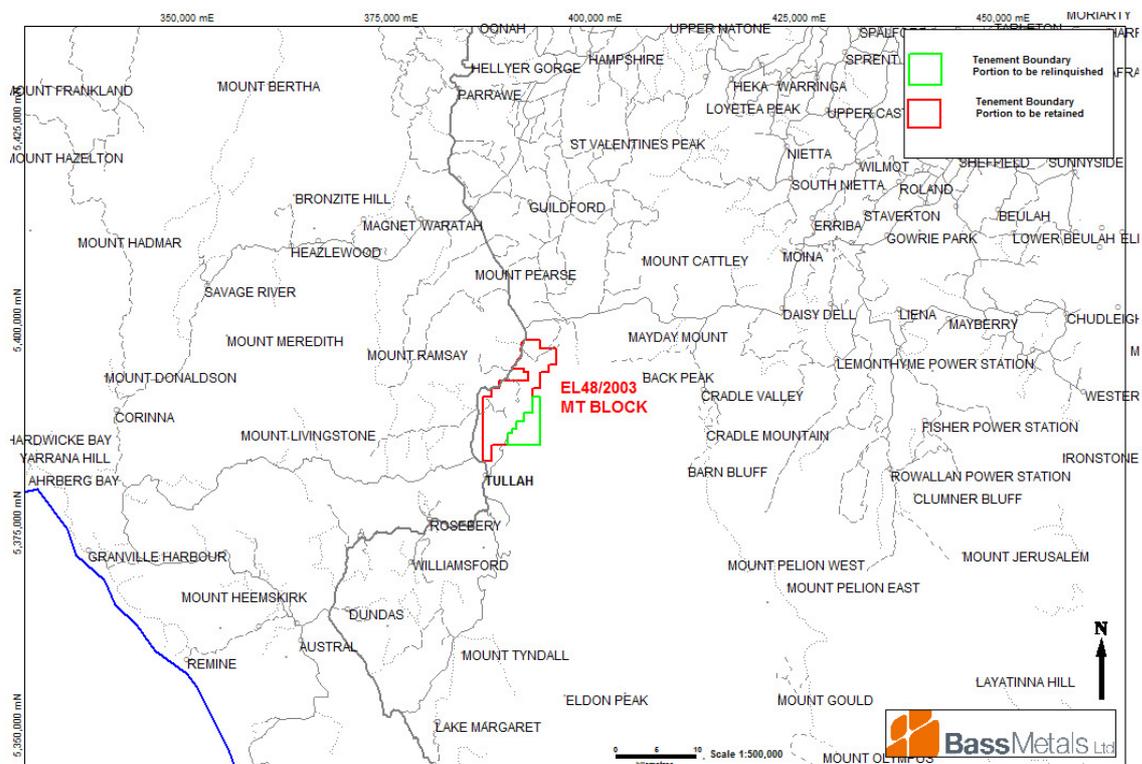


Figure 1. Location Map

## 1.2 Geology Overview

The base and precious metal deposits of the Hellyer-Que River-Mt Charter area lie above the main Central Volcanic Complex of the Mt Read Volcanics (MRV) as it passes into a sequence of volcanic and sediments, which near Hellyer and Que River it is called the Mt Charter Group. Within the Mt Charter Group is a volcanic package called the Que-Hellyer Volcanics (QHV), comprising a group of andesitic to dacitic volcanic and sediments (Figure 2). Que River and Mt Charter are hosted by the highly variable 'Mixed Sequence', sandwiched between basaltic to andesitic volcanics. Volcanic-related and marine sediments cover the volcanics.

### 1.2.1 Mt Read Volcanics

The area straddles the entire east-west sequence of the MRV. The MRV are a belt of volcanic, volcanoclastic and sedimentary rocks of Mid- Cambrian age. The belt is famous for hosting Tasmania's world-class polymetallic VHMS deposits (eg. Rosebery, Hellyer, Que River).

#### *Western Volcano-Sedimentary Sequence*

The southeastern portion of the licence is mapped as belonging to the Western Volcano-Sedimentary Sequence. This unit is coeval with the Central Volcanic Complex of the MRV though older than the Tyndall Group. It is described as including beds of lithicwacke turbidite, mudstone (commonly rich in shards), siltstone and shale. It also contains subordinate intrusive and volcanic rocks, which are commonly andesitic (Seymour *et.al.*, 2006).

#### *Bonds Range Quartz Feldspar Biotite Porphyry*

The Bonds Range Quartz-Feldspar-Biotite (+/-Hornblende) Porphyry crops out at two localities on the licence. It is recorded as being complex, showing variations in colour, grain size, degree of alteration and deformation, and phenocryst assemblage. At Ten Mile Creek it hosts a quartz-hematite stockwork (containing gold mineralisation).

#### *Tyndall Group*

The Tyndall Group is a unit of quartz-bearing volcanoclastic sandstone and conglomerate. It also contains minor volcanic, intrusive and ignimbritic rocks of mixed felsic and andesitic provenance (Seymour *et.al.*, 2006).

### 1.2.2 Mt Charter Group

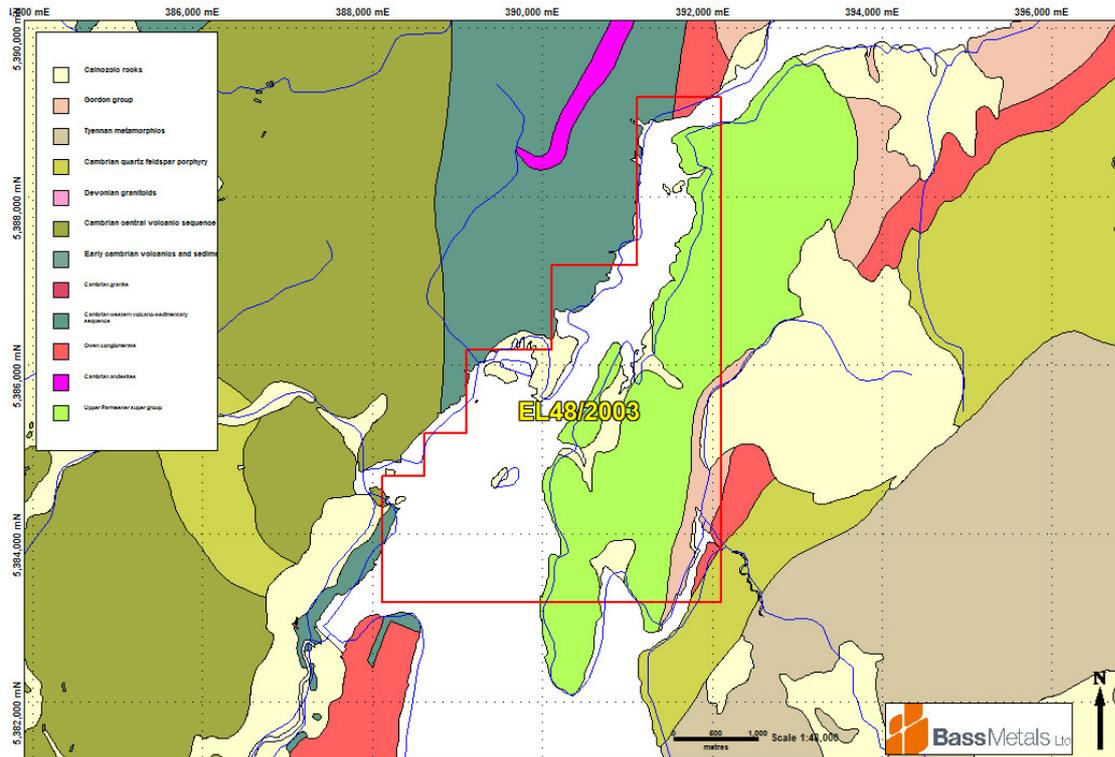
#### *Que Hellyer Volcanics (QHV)*

The QHV is up to 1000m thick near Que and Hellyer, but wedges out to less than 50m to the northwest of Hellyer. The units of the QHV are summarised below:

- The Upper or Hellyer Basalt consists of massive to pillowed amygdaloidal basalt lava and volcanoclastic rocks.
- The mixed Sequence host to the Que River, Hellyer and Mt Charter systems is comprised of epiclastics, dacitic lavas and breccias.
- The Feldspar Pyric Andesite, a porphyritic andesite lava which is the footwall unit to the Hellyer and Que River deposits and subsequently altered to Silica-Sericite-Pyrite mineralogy at these locations, which in turn is underlain by;
- The Lower Basalt, a sequence of basaltic pillow lavas and volcanoclastics, which form the immediate footwall at Que River and Hellyer.

Overlying the QHV is the Que River shale, which is in turn overlain by rhyolite, felsic volcanoclastics, greywacke and shale of the Southwell subgroup. The Southwell subgroup is overlain by the Mt Cripps subgroup (a correlate of the Tyndall beds at the Henty Mine) which is a sequence of volcanoclastics, siltstones and conglomerates only outcropping along the eastern boundary of the Hellyer area tenements.

Beneath the QHV are the Animal Creek Greywacke and Black Harry Beds, a sequence of sediments defining the base of the Mt Charter Group.



**Figure 2. Regional Geology displaying boundary of relinquished portion**

## 2. REVIEW OF PREVIOUS WORK – Prior to current tenement

### 2.1 Historic Mining

Minimal historic mining activity in the area is published; the White Hawk Mine located on the White Hawk creek now abandoned was described as a vein lead prospect. Deposit size and mine life was not noted.

### 2.2 Exploration prior to current licence area

The South Mt Charter area has been a focus of exploration since the 1970's due to the extensive Silica-Sericite-Pyrite-(Barite) alteration exposed at surface. This alteration is similar to the footwall alteration associated with the nearby Hellyer and Que River volcanic-hosted massive sulphide (VHMS) Zn-Pb-Ag-Au deposits.

Early work at Mt Block aimed at testing the lower contact of the altered Dacite to test the equivalent of the Hellyer/Que River orebody stratigraphic position. In doing so, significant Au-Ag-Ba mineralization was intersected from surface but not fully evaluated.

Historic exploration for this area is limited due to the fact that before the granting of the EL to Saracen Mineral Holdings in June 2004, the ground was vacant for some time.

**Date:** 1968 – 69

**Company:** Comstaff Pty Ltd

**Exploration Rationale:** Attempting to locate the “barite” as seen at the Rosebery Mine.

**Work Completed:** Reconnaissance sediment sampling. 27,600 feet of creeks were cut and paced out. 78 sediment samples were taken at approx. 500 foot spacings.

**Results and Conclusions:** Samples were analysed for Cu, Pb, Zn, Ag, Sn & Ba. Several anomalies were located mainly in Zn and Ag.

**Date:** 1970

**Company:** Comstaff Pty Ltd

**Exploration Rationale:** Not noted

**Work Completed:** Geochemical stream sediment sampling over 35 miles

**Results and Conclusions:** Not noted.

**Date:** 1971

**Company:** Comstaff Pty Ltd

**Exploration Rationale:** Not noted

**Work Completed:** Geological Mapping and regional sampling

**Results and Conclusions:** Low order results were recorded

**Date:** June 2004

**Company:** Saracen Mineral Holdings

**Work Completed:** Data Assessment. Targeting through electromagnetic dataset interpretation.

**Results and Conclusions:** 28 targets were identified for follow up.

**Date:** 2005

**Company:** Saracen Mineral Holdings

**Work Completed:** The incorporation of data to compile a 3-Dimensional database. East Que magnetic anomalies were of interest and to be followed up.

**Results and Conclusions:** None noted

### **3. CURRENT WORK**

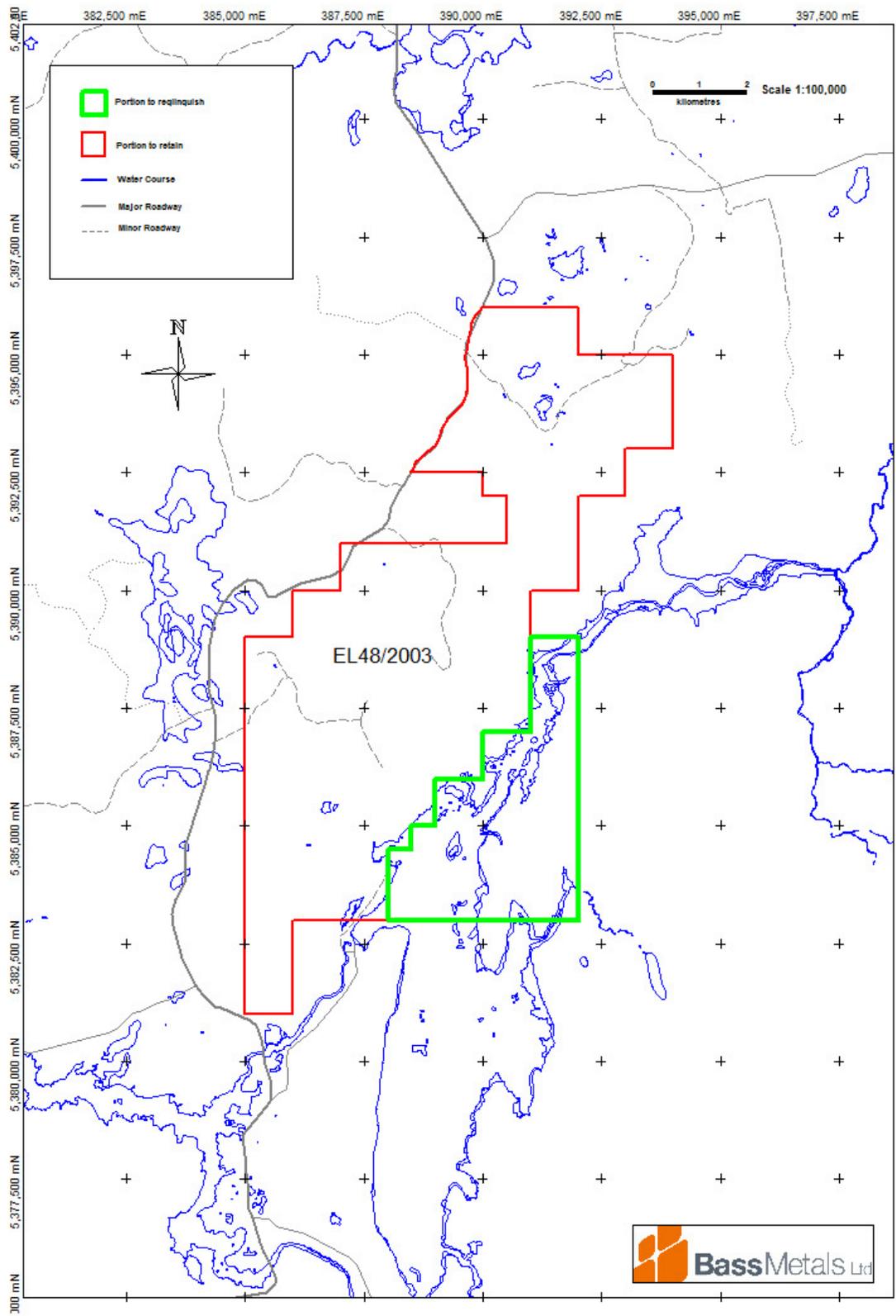
#### **3.1 2006 – 2007 (BSM)**

Diamond holes HED8, 9 and 10 were undertaken during the 2006/07 reporting period. These holes were designed to test the 5<sup>th</sup> ranked target to the south of Mt Charter. The Pb/Zn soil anomaly coincident with this target is one of the more significant in the area and the target is adjacent to the Mt Charter Fault which is implicated in mineralization at High Point and is interpreted to be a basin-bounding fault active during the Cambrian. The lead soil geochemistry indicates connectivity of the target area with the Mt Charter system. Refer to annual progress report for 2006/07 year for details.

These three drill-holes were not located within the area to be relinquished.

#### **3.2 2007 – 2008 (BSM)**

During this period a relinquishment review was carried out and it was decided that the south eastern portion equalling 15km<sup>2</sup> would be relinquished reducing the licence to 50km<sup>2</sup>. Due to the majority of this region covering a large portion of Lake Mackintosh and being submerged BSM no longer find this portion prospective. See figure 3



**Figure 3. Relinquishment Map**

#### 4. ENVIRONMENT

The company has environmental policies in place that minimise the impact that exploration activities have on the environment. The policies include guidelines on how to reduce the risk of spreading plant diseases and weeds as a result of day-to-day exploration tasks.

The attached Environmental Activity Map (Figure 4) shows the location of the Exploration Licence relative to conservation areas.

#### Land Tenure

The Mt Block exploration Licence comprises:

- MDC Informal Reserves
- State/Multiple Use Forest
- HEC Land
- Part of Reynolds Falls Nature Recreation Area
- Part of Mackintosh Forest Reserve
- Part of Granite Tor Conservation Area

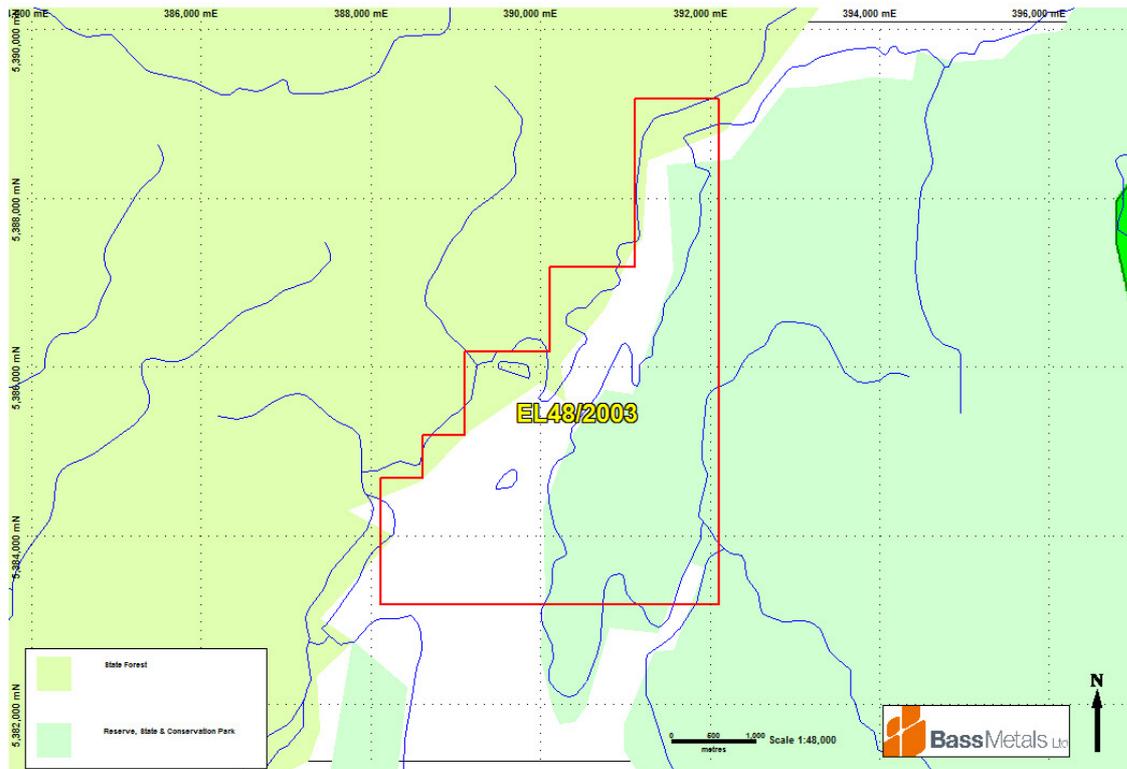


Figure 4. Environmental Activity Map

## 5. EXPENDITURE

June 2007 - June 2008		
Geoscientific Costs	Geology	53,810.59
	Geochemistry	14,459.03
	Geophysics	
	Remote Sensing	
Drilling & Gridding Costs	Gridding	4,779.66
	Drilling	204,160.57
	Land Access Costs	
	Rehabilitation Costs	
	Feasibility Study Costs	
	Other Costs	
	Admin Costs	13,313.22
	<b>Total - eligible</b>	<b>\$290,523.07</b>

**Table 1. Expenditure 11<sup>th</sup> June 2007 to 10<sup>th</sup> June 2008.**

Expenditure, for the twelve months 11<sup>th</sup> June 2007 to 10<sup>th</sup> June 2008, has primarily been taken up with the drilling of 1 diamond hole, down-hole EM and consultant analysis and a review for partial relinquishment.

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