

**HUSKISSON PROJECT  
(NORTH ROSEBERY GROUP)  
TASMANIA  
EL3/2005**

**PARTIAL RELINQUISHMENT REPORT  
10<sup>TH</sup> AUGUST 2007 TO 30<sup>TH</sup> JUNE 2008**

**Tenement Holder/Manager**  
Bass Metals Ltd.  
Suite 5, 2 Richardson St  
West Perth, WA, 6005

Prepared By:  
Sally Bates, *B.App.Sc* (Geol)  
Bass Metals Ltd, TAS

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Mineral Resources Tasmania  
Bass Metals Ltd  
Clancy Exploration Ltd

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**Note: All figures and grids are according to the AGD66 datum and AMG66 grid system.**

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**ABSTRACT**

Bass Metals Ltd (BSM) commenced management of the Huskisson exploration licence (EL3/2005) on 10 August 2005. Work conducted on the area to be relinquished within the licence since the last reporting period has included:

- A literature review of the Huskisson project by a new addition to the geological team who has been assigned this tenement.
- A VTEM work program was proposed to be flown as an extension of the previously approved program.
- A review of the potential of the Huskisson Syncline and associated carbonate-rich rocks to host skarn-type mineralisation.

**Expenditure** – Reporting period \$8,415.00

Total to date \$41,022.84

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## **1. INTRODUCTION**

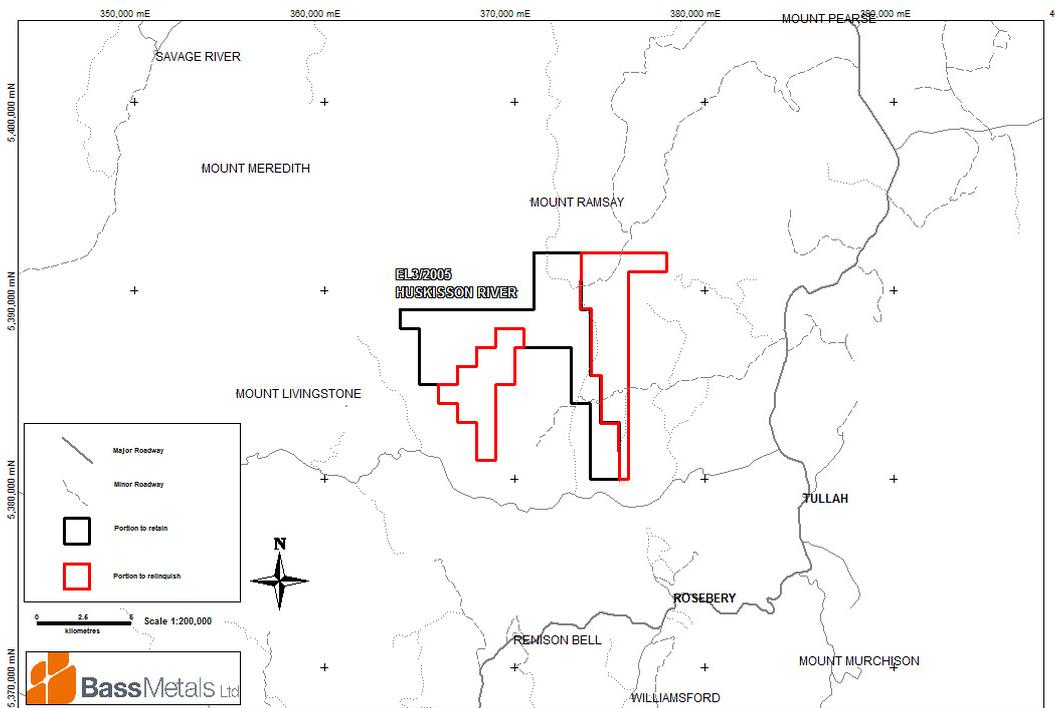
This report is a summary of the exploration activities conducted on the areas to be relinquished within the Huskisson exploration licence, EL3/2005 (Figure 1), for the period of 10 August 2007 to 31 June 2008. The licence covers a total area of 74 km<sup>2</sup>. The Huskisson licence is subject to an exploration joint venture agreement between BSM and Geoinformatics Exploration Inc. BSM is currently managing exploration of the licence from a base at the Hellyer Mine site.

The licence was acquired because of the potential for carbonate-replacement and Ni-skarn mineralisation where the Meredith Granite intrudes into the Huskisson syncline.

### **1.1 Location and Access:**

The Huskisson licence is located 22km west of Tullah via the Pieman road, on the west coast of Tasmania (Figure 1). This tenement is practically inaccessible, except by helicopter in the west, but with good access via the Pieman Road on unsealed forestry and private tracks in the east. The licence area can be found on the Pieman and Sophia 1:100,000 Topographic map sheets.

The terrain in the area is generally rugged with the majority of the area covered in *Nothofagus-Atherosperma* rainforest and related scrub. The licence area does not encroach on any conservation areas, but is covered in the west by State Forest Reserve.



**Figure 1. Huskisson Exploration Licence (EL3/2005) location map**

## 1.2 Geology Overview:

Broadly, the geology of the eastern half of the tenement is dominated by Cambrian sediments lying adjacent to the Rosebery Fault and the northern extensions of the Federal-Bassett Fault system, which hosts the tin mineralisation at Remison Bell. In contrast, the western side of the tenement is dominated by the large, open Huskisson Syncline. The Meredith Granite is interpreted to intrude along the axis of the syncline and come into contact with the Gordon Limestone and Cambrian Ultramafics. Refer to the Regional Geology Map in Figure 2.

### 1.2.1 Burnie and Oonah Formation

The Burnie and Oonah Formation is a thick, polydeformed Proterozoic quartzwacke turbidite succession, widespread in western Tasmania. The formation comprises of two lithological associations. The dominant quartzwacke turbidite association, which includes minor alkaline dolerite intrusions and lavas, consists of interbedded quartz sandstone, quartzwacke, siltstone and pelite. The secondary lithological association is predominately pelite and/or carbonate including mafic volcanics and conglomerate in some places. Near Zeehan this association is host to a number of Devonian vein, skarn and replacement-tin deposits, and at Mt Bischoff a dolomitic unit hosted major Devonian tin lodes (Seymour *et al*, 2006).

### **1.2.2 Early Cambrian Dundas Group**

An Early Cambrian sequence of mafic volcanoclastic lithicwacke, siltstone and mudstone with minor carbonate and basalt sits directly above the Crimson Creek Formation; host to the Renison Bell sulphide tin-skarn mineralisation (Turner *et al.*, 1991).

### **1.2.3 Mid-Cambrian Ultramafics**

In the early phase of the Tyennan Orogeny, the east-facing Tasmanian passive margin collided with an oceanic arc, resulting in obduction of mafic-ultramafic complexes across much of Tasmania. The original geometry of the allocthanous sheets has been substantially disrupted by later deformation so that the present surface occurrences are typically steeply dipping and fault bounded (Seymour *et al.*, 2006).

### **1.2.4 Owen Group**

The Owen Group is Cambrian to Ordovician in age and sits unconformably on the Mt Read Volcanics (MRV). The unit typically includes large volumes of coarse siliclastic conglomerate composed dominantly of metaquartzite clasts derived from the Tyennan Metamorphics. It also includes turbidite and shallow marine sandstone units (Seymour *et al.*, 2006). It is not likely to host any exhalative styles of mineralisation such as Taylor and Mathison (1990) report for the younger Gordon Group. However, it could potentially host mineralisation associated with intrusion of Late Devonian–Early Carboniferous granitoids.

### **1.2.5 Gordon Group**

The Gordon Group above the Pioneer Sandstone is a shallow-marine to peritidal, platform succession of predominately micritic, dolomitic limestone. The Gordon Group carbonate sequence is an important ore host for skarn mineralisation associated with intrusion of Late Devonian–Early Carboniferous granitoids (Seymour *et al.*, 2006).

### **1.2.6 Eldon Group**

The Eldon Group is locally disconformable and erosional on the Gordon Group. The lower part of the succession is dominated by shallow-marine quartz sandstone (Crotty and Florence Formations); the upper by a thick, shelf-facies shale unit with minor limestone identified locally as the Bell Shale and correlates (Seymour *et al.*, 2006).

### **1.2.7 Meredith Granite**

World-class tin and tungsten ore bodies, as well as many lead, silver, gold, zinc, copper and bismuth deposits of different styles, are genetically and spatially related to the emplacement of high-level Middle Devonian to Early Carboniferous granitoids in Western Tasmania. The major bodies are the Husetop, Granite Tor, Grassy, Dolcoath, Meredith, Heemskirk and Interview granites, and these include both I and S types. Styles of mineralisation associated with the Devonian granitoids include stratabound carbonate replacement cassiterite-massive sulphide, silicate and magnetite skarns, and disseminated and vein deposits.

Economically, the stratabound carbonate-replacement cassiterite-massive sulphide mineralisation forms the most important Devonian ore type, with major deposits at Renison Bell, Mt Bischoff, Queen Hill, Montana, Cleveland and Razorback (MRT Report, 2005).

### **1.2.8 Tertiary Basalts**

Radiometric dates from basalts across Tasmania indicate an age range of between 16.4Ma and 64.5Ma (Everard *et al.*, 2004). These basalts cover the majority of the licence.

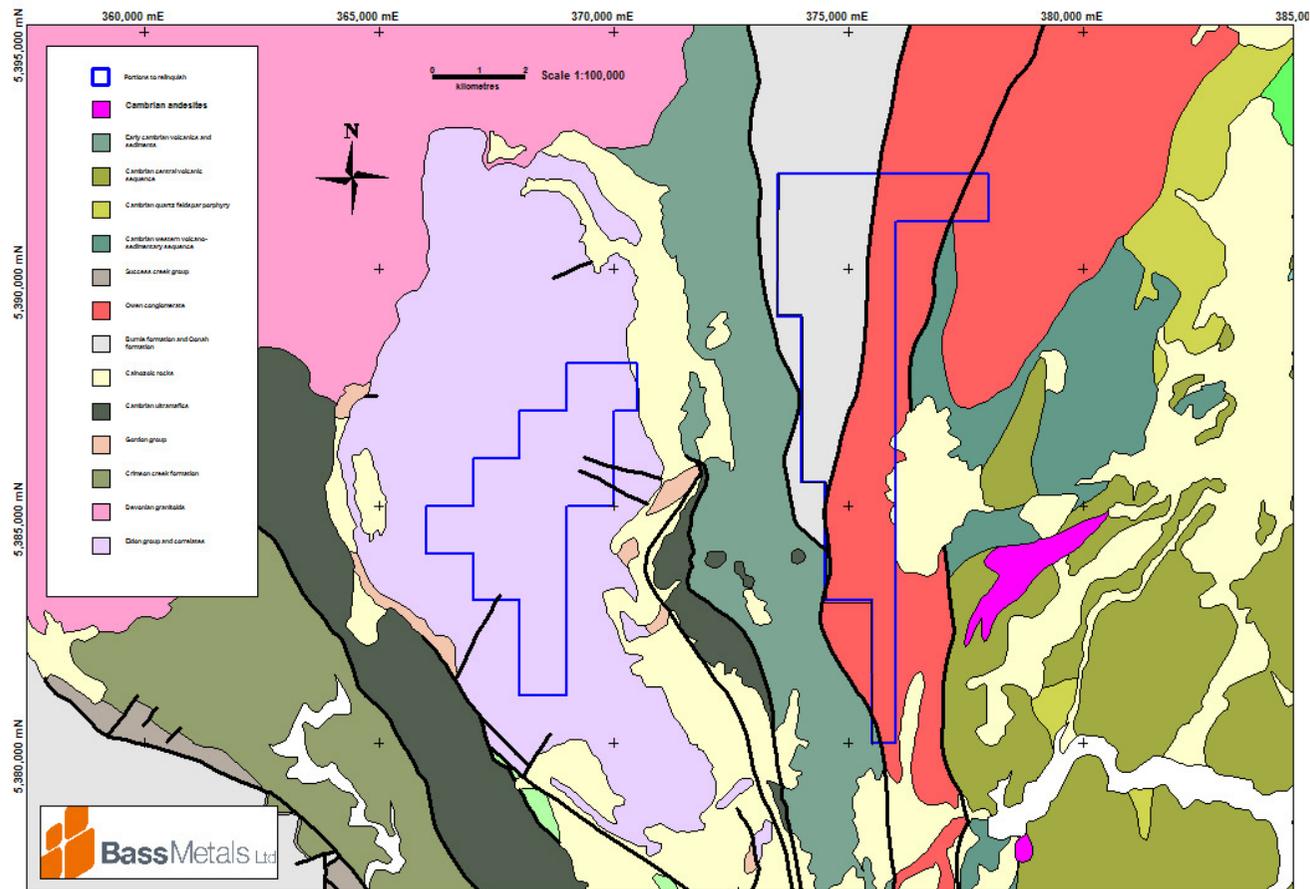


Figure 2. Regional geology showing licence area boundaries for relinquishment

### **1.3 Exploration Rationale:**

The Huskisson tenement was acquired as it covers a large portion of the Huskisson Syncline and the southeastern margin of the Meredith Granite. The granite is interpreted to come into contact with the Gordon Limestone and Cambrian Ultramafics providing the possibility for stratabound carbonate-replacement mineralisation and/or Ni-skarn mineralisation associated with Devonian granites.

Within 10km of the southern boundary sit the world-class deposits of Renison Bell (24.54Mt @ 1.41% Sn) and Rosebery (32.7Mt @ 14.5% Z, 4.4% Pb, 0.58% Cu, 145 g/t Ag & 2.2 g/t Au).

## **2. REVIEW OF PREVIOUS WORK - Prior to current tenement**

### **2.1 Historical Mining:**

No records exist in the public domain for mining activity within the Huskisson licence area.

### **2.2 Exploration Prior to Current Licence Area:**

Exploration has been conducted over the Huskisson tenement since the 1960s when Comstaff evaluated the area for base metal and gold mineralisation. The large Huskisson Syncline dominates the western half of the Huskisson licence with the Meredith Granite interpreted to intrude along the axis of the syncline thereby coming into contact with the Gordon Limestone and Cambrian Ultramafics. Small parcels of Tertiary Basalt occur within the tenement. Three known mineral occurrences are located within the Huskisson licence and have previously been considered to be related to the Meredith Granite. These are Just in time (Pb), Lynch Creek (Pb) and Silver Reward (Ag). (Figure 3) More recently the area has been assessed for Renison-style tin, Hellyer/Rosebery-style VHMS, granite-related skarn deposits and vein-hosted tinstungsten mineralisation.

**Date:** 1963-1988

**Company:** Comstaff P/L EL5/63

**Exploration Philosophy:** Part of a wider regional program exploring for multiple commodities such as asbestos, Ni, Sn, Au and base metals.

**Work Completed:** Stream sediment sampling, geological mapping, Self Potential survey, Ground Magnetic survey, CRONE, INPUT, ground and GENIE EM surveys, auger geochemistry, rock chip sampling, costeaning, drilling and IP survey.

**Results and Conclusions:** Will O Wisp (Pb) and Just-In-Time (Pb/Ba) prospects identified. Joint venture entered with BHP in 1985, but upon review prospects not considered sufficiently significant. No further field work completed until licence relinquished in 1988 [97\_4004].

**Date:** 1980-1985

**Company:** Gold Fields Exploration P/L (JV Renison Ltd) EL17/77

**Exploration Philosophy:** Targeting stanniferous skarns and Renison-style carbonate-replacement deposits.

**Work Completed:** Stream sediment sampling, airborne magnetic and EM surveys, geological mapping and petrology.

**Results and Conclusions:** No significant results. No further work recommended [85\_2496].

**Date:** 1980-1985

**Company:** Getty Oil Development Co Ltd (JV BHP) EL32/79

**Exploration Philosophy:** Exploring for Renison-style tin deposit at Pre-Cambrian – Cambrian contact.

**Work Completed:** Stream sediment sampling, soil geochemistry, rock chip sampling, DIGHEM 2 airborne EM survey, Ground Magnetic survey and geological mapping.

**Results and Conclusions:** No conductors or geochemical anomalies identified; no further potential exists for Renison-style tin deposits with EL32/79 [85\_2346].

**Date:** 1990-1992

**Company:** RGC Ltd EL12/90 & EL15/90

**Exploration Philosophy:** Exploring for tin associated with the Meredith Granite.

**Work Completed:** Minimal work completed; technical report not found.

**Results and Conclusions:** Licence relinquished in 1992 due to budget constraints [97\_4004].

**Date:** 1993-1997(?)

**Company:** Pasminco Exploration Ltd EL1/93

**Exploration Philosophy:** Exploring Proterozoic Oonah Formation for carbonate-hosted massive sulphides.

**Work Completed:** Literature review, geological surface mapping, compilation of soil geochemical data, airborne magnetic survey and interpretation, ground magnetic survey, rock chip sampling and petrology.

**Results and Conclusions:** No sufficiently significant results. Prospectivity for base metals low; few obvious targets left. Licence holding to be reviewed [97\_4004].

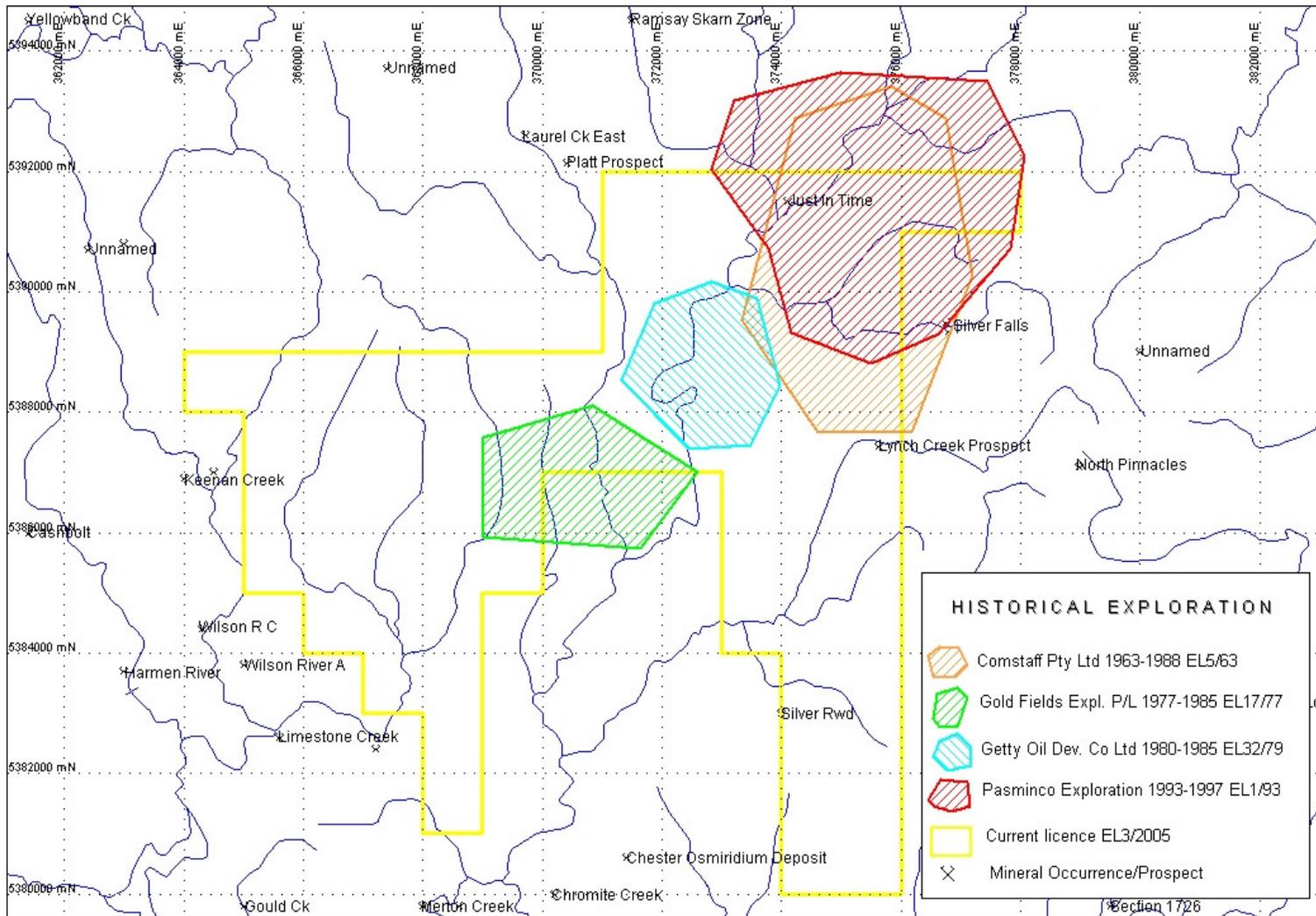


Figure 3. Historic Exploration Activity Map showing old workings and prospects.

### **3. SUMMARY OF WORK COMPLETED FOR LIFE OF TENURE**

#### **3.1 Exploration Completed for reporting period (10<sup>th</sup> Aug 2005 – 9<sup>th</sup> Aug 2006)**

Following execution of the Joint Venture Agreement with Geoinformatics; BSM actively sought any datasets of potential value for targeting VHMS and intrusive-related skarn deposits in the Huskisson tenement area. The MRT topographic, geophysical and 1:100,000 scale digital geological map series were used as base maps for presenting other historical company datasets. Various company datasets were captured into FracSIS and MapInfo format.

#### **TERRA Satellite (ASTER Data)**

BSM managed to source some ASTER data over the northwest corner of Tasmania. It was decided that the data would be used in a more regional sense than had originally been anticipated.

Most of the southern portion of the tenement is covered in a patchy silica alteration associated with the intrusion of the Meredith Granite, however no other anomalism of any significance has been identified within the licence area. A report describing the interpretation methodology utilized was included as appendix 1 in the report for the period (8/8/05-7/8/06).

#### **Geoinformatics Geological Modelling & Targeting**

Stage 1b target generation highlighted a Ni-skarn target (ranked 1<sup>st</sup>) just outside the western limit of the tenement. Stage 2 target generation process identified 2 class B Hellyer-Rosebery VHMS style targets in the north of the western side of the Huskisson's licence. These two targets are ranked 55 and 100.

#### **3.2 Exploration completed for reporting period (10<sup>th</sup> Aug 2006 – 9<sup>th</sup> Aug 2007)**

The planning of a field check program, visiting the Geoinformatics target and soil geochemistry over those NE trending faults considered prospective for carbonate-replacement deposits in the western portion of the tenement.

#### **3.3 Exploration completed for reporting period 10<sup>th</sup> Aug 2007 - 31<sup>st</sup> June 2008)**

A review of the potential of the Huskisson Syncline and associated carbonate-rich rocks to host skarn-type mineralisation is ongoing given the activity at the adjacent Venture Minerals Mt Lindsay Fe-Sn project. Mt Lindsay is hosted by different stratigraphy (Crimson Creek) however the northern part of the Huskisson tenement is within the magnetic aureole of the Meredith granite and therefore prospective for Fe mineralisation.

260 line km of VTEM was proposed to be flown as an extension of the previously approved Heazlewood program, scheduled for the first quarter of this year – rejected due to budget constraints and prioritisation.

BSM has decided to relinquish two portions within the licence equalling 40km<sup>2</sup>, (Refer to figure 4.) After careful consideration this decision was made due to the positioning of targets, magnetic data, the granite aureole location and future proposed exploration (Refer to figures 5 & 6)

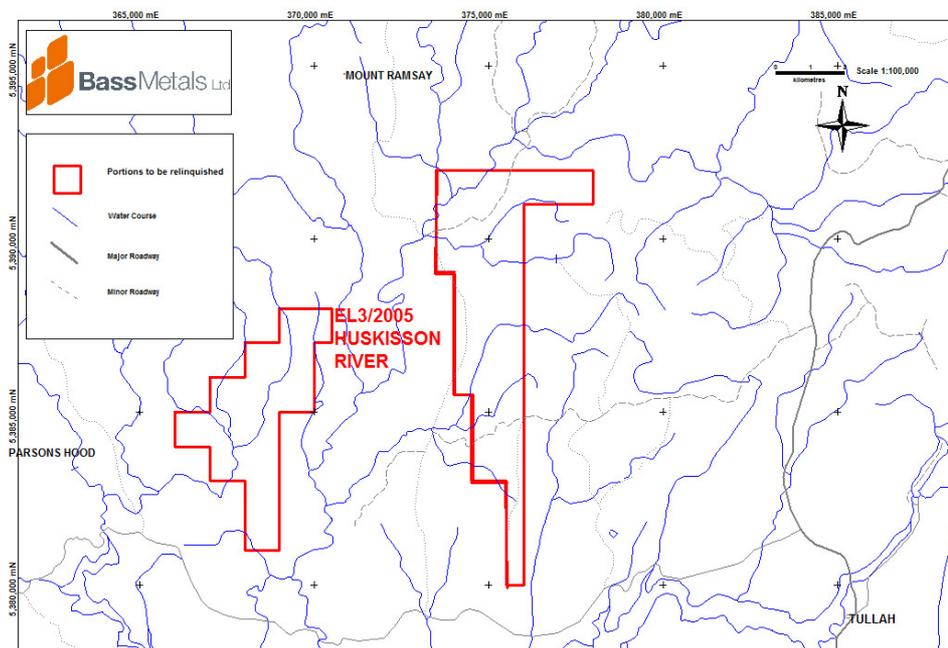


Figure 4. Relinquishment Map

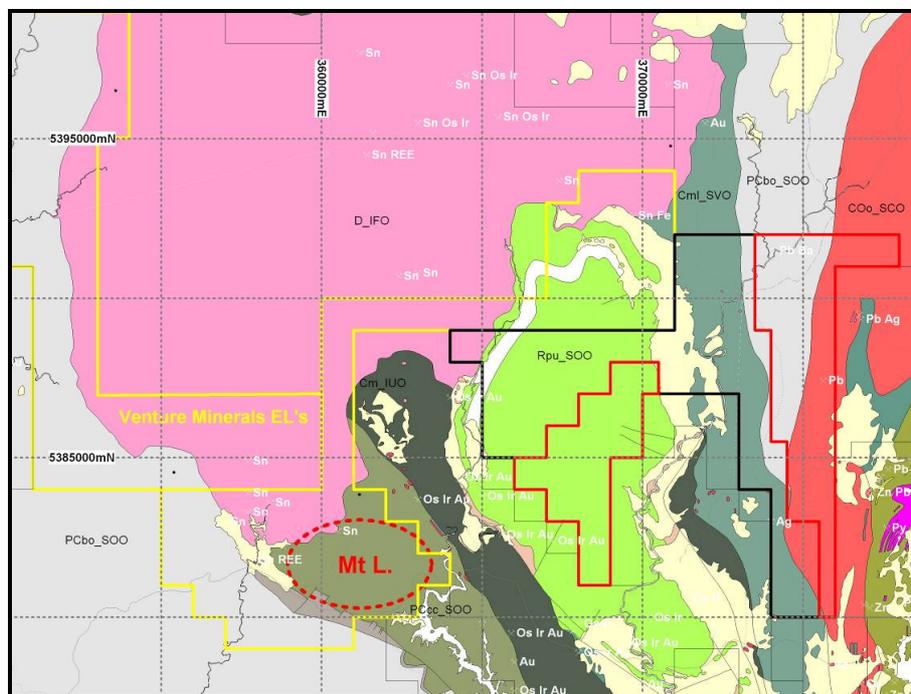
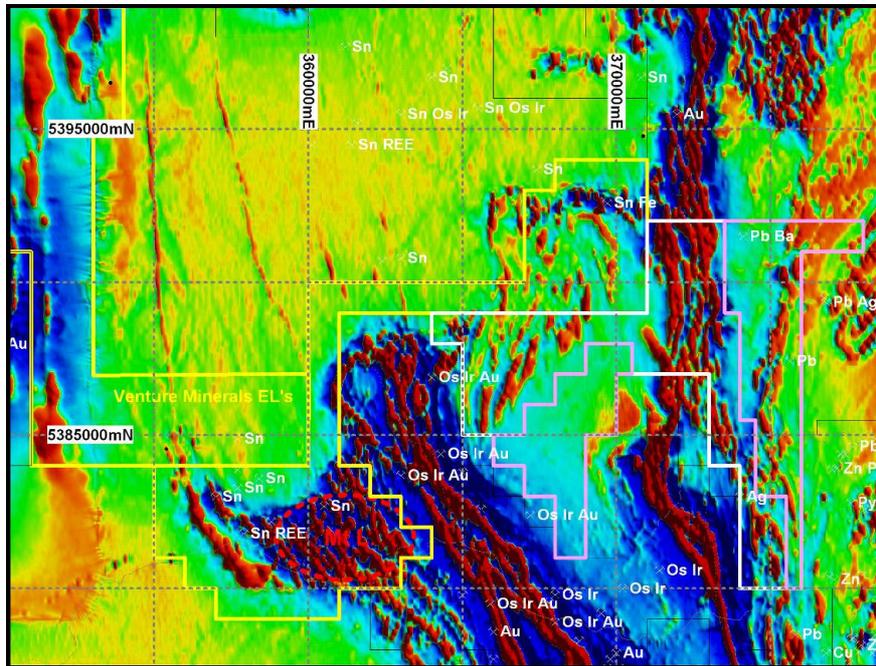


Figure 5. Geological and tenement map of the Huskisson Syncline - Meredith Granite area. Proposed areas for relinquishment are red.



**Figure 6. Magnetics and tenement map of the Huskisson Syncline - Meredith Granite area. Dashed black line indicates the aureole surrounding the Meredith Granite.**

#### 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 6) shows the location of the Exploration Licence relative to conservation areas. It is a condition of the Licence that the Company observe the request by the Tarkine National Coalition Inc. to adopt strict entry protocols to prevent the spread of *Phytophthora Cinnamomi* and/or Myrtle Wilt. BSM have appropriate hygiene measures in place to comply with these requests as outlined in the Mineral Exploration Code of Practice.

#### Land Tenure

The Huskisson Exploration Licence comprises:

- State/Multiple Use Forest Land
- MDC Informal Reserve
- Part of Meredith Range Regional Reserve
- Part of John Lynch Forest Reserve

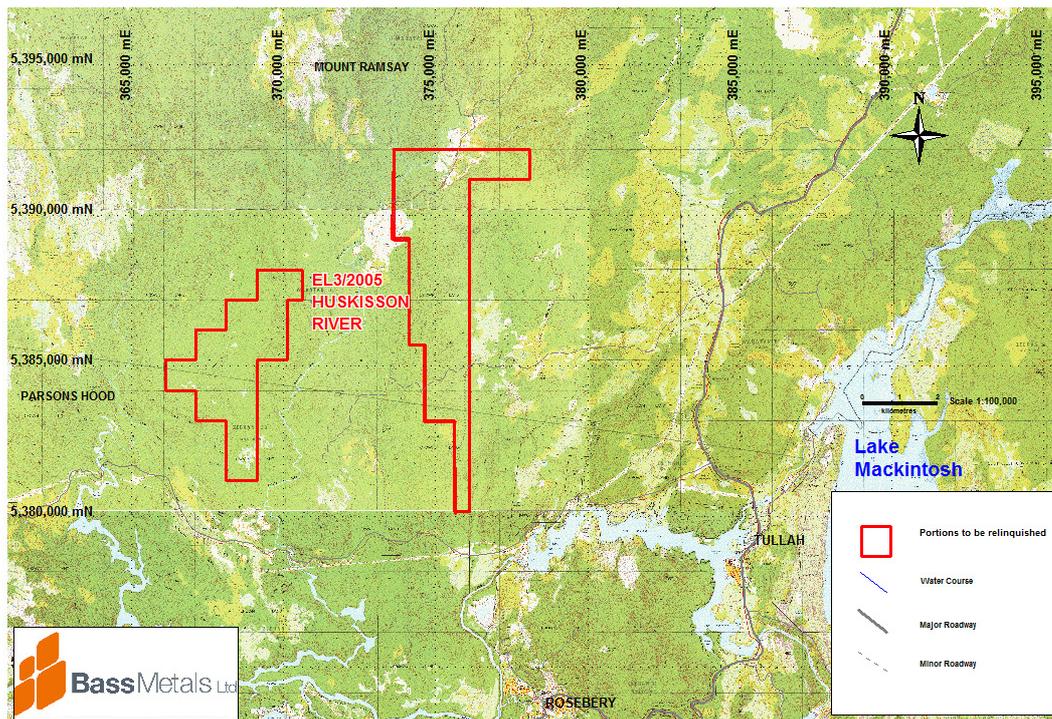


Figure 7. Environmental Activity Map

## 7. EXPENDITURE

August 2007 - August 2008		
Geoscientific Costs	Geology	8,154.60
	Geochemistry	
	Geophysics	
	Remote Sensing	
Drilling & Gridding Costs	Gridding	
	Drilling	11.10
	Land Access Costs	
	Rehabilitation Costs	
	Feasibility Study Costs	
	Other Costs	
	Admin Costs	249.30
	<b>Total - eligible</b>	<b>\$8,415.00</b>

**Table 1. Expenditure 10 August 2007 to 9<sup>th</sup> August 2008.**  
*\*Includes expenditure up to 31<sup>st</sup> May 2008*

Expenditure for the reporting period between 10 August 2007 and 31 May 2008, has primarily been taken up with the planning of a field check program visiting Geoinformatics target and soil geochemistry in the Western portion of the tenement.

## **6. REFERENCES**

**Basford, P.W., 1997.** Huskisson River EL1/93 Annual Report April 1996 – March 1997, Pasmenco Exploration. Report to the Tasmanian Mines Department. **(78\_1313)**

**Fitzgerald, F.G. & McNaught, I.S., 1984.** EL32/79 Huskisson River Tasmania, Progress Report of Exploration for the period January 1984 to June 1984, Final Report. Getty Oil Development Company Ltd. Report to the Tasmanian Mines Department. **(85\_2346)**

**Mineral Resources Tasmania, 2005.** Mineral Exploration Opportunities in Tasmania Report.

**Roberts, P.A., 1985.** EL17/77 Wilson River Area, Final Report. Gold Fields Exploration P/L. Report to the Tasmanian Mines Department. **(85\_2496)**

**Seymour, D.B., Green, G.R., Calver, C.R., 2006.** The Geology and Mineral Deposits of Tasmania: a summary. Bulletin 72 Tasmanian Geological Survey, Mineral Resources Tasmania.

**Turner, N.J., Brown, A.V., McClenaghan, M.P. & Soetrisno, Ir., 1991.** Corinna 1:50,000 Series Map Sheet 7914N, Geological Survey of Tasmania.