



**WARATAH PROJECT  
TASMANIA  
EL64/2004**

**ANNUAL PROGRESS REPORT  
10<sup>TH</sup> AUGUST 2006 TO 9<sup>TH</sup> AUGUST 2007**

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**Distribution:**  
Mineral Resources Tasmania  
Bass Metals 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**

Exploration activity to 9<sup>th</sup> Aug 2007 has concentrated on the near mine environment at the Magnet Mine. Data modelling has included the production of a 3D model of mine workings. A first pass program of 2400 drilling meters is proposed to assess the Zn-Pb-Ag potential of remnant mineralisation in the immediate vicinity of the Magnet Mine workings. Targets are hangingwall and footwall near surface mineralisation, down dip beneath maximum depth of development, and lateral along strike, both to the north and south of the mine. Targets in the local area are magnet analogous structures to the NE, and a magnetic anomaly to the SW to be investigated by mapping, soils and EM. A total program of \$662,000 is proposed.

Potential resources are 20 000t in the immediate magnet hanging-wall 40,000t for Magnet depth extensions, and 500,000t in nearby structural targets at grades at or better than 6%Pb, 394g/t Ag, 7%Zn.

It has become clear through modelling of the mine workings that the potential down dip extension of the mine can only be investigated through an arrangement for the adjacent tenement with Stellar Resources.

**Expenditure -** Reporting period \$50,230.96

Total to date \$94,405.08

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## **1. INTRODUCTION**

This report is a summary of the exploration activities conducted on the Waratah exploration licence, EL64/2004 (Figure 1), for the period of 10 August 2006 to 9 August 2007. The licence covers a total area of 104 km<sup>2</sup>. The Waratah licence is subject to an exploration Joint Venture agreement between Bass Metals Ltd (BSM) and Geoinformatics Exploration Inc. BSM is currently managing exploration of the licence from a base at the Hellyer Mine site.

The licence is situated in northwest Tasmania and located over an area containing the prospective Magnet Mine and Mt Bischoff Mine stratigraphies. The licence was claimed primarily because it is considered prospective by BSM for further carbonate-replacement mineralisation.

### **1.1 Location:**

The Waratah licence is located approximately 55km southwest of Burnie via Waratah township, on the west coast of Tasmania (Figure 1). The 104km<sup>2</sup> tenement encloses the Mt Bischoff Mining Lease and the adjacent small township of Waratah. The licence area can be found on the Inglis and Arthur River (1:100,000) LTIS map sheets.

Topographically the area is of highly variable relief with the majority of the licence area classified as state forest. In general, vehicular access is limited due to topography and thick rainforest vegetation. In the southern portion of the licence various tracks run off the Murchison Hwy and Magnet Rd between Magnet and Waratah. In the north-east the Belmont and Wandle Roads run off the Murchison Hwy, and in the north there is limited access via Flannel Rd.



## **1.2 Geology Overview:**

A number of geological units are present within the Waratah licence area; however the units of interest in terms of prospectivity for significant mineral deposits are chiefly the Burnie and Oonah Formation, Early Cambrian carbonates of the Crimson Creek Formation and Cleveland-Waratah Association, Cambrian Ultramafics and the Devonian Meredith Granite. Obviously it is the relationship between the Meredith Granite and the earlier sedimentary successions that provides the mineral prospectivity of the area. Regional geology is found below 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 Crimson Creek Formation**

The Crimson Creek Formation represents a correlate of the Upper Neoproterozoic-Lower Cambrian Togari Group sedimentary and mafic volcanic succession. The group can be subdivided into four main phases of sedimentation; a lower dolomitic succession with basal siliceous conglomerate-sandstone, a phase of mafic rift volcanism and associated volcanoclastic sedimentation, renewal of shallow-marine carbonate sedimentation, and at the top, a Cambrian phase of deep-water siliciclastic sedimentation (Seymour *et al*, 2006).

### **1.2.3 Cleveland-Waratah Association**

Considered as emplacement products of the Early Cambrian Tyennan Orogeny, the Cleveland-Waratah association consists of lithicwacke, red mudstone, chert, mafic volcanics with Ocean Floor Basalt characteristics, and rare carbonate rocks which host mineralization at the Cleveland Mine (Seymour *et al*, 2006).

### **1.2.4 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).

### **1.2.5 The 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).

### **1.2.6 Parmeener Supergroup**

Sediments of the Parmeener Supergroup represent Late Carboniferous to Late Triassic intrabasinal lithologies deposited unconformably on top of Late Devonian granites and older folded rocks. The Lower Parmeener Supergroup consists of mostly glacial and glaciomarine rocks, while the Upper Parmeener Supergroup consists of mostly fluvial and lacustrine sedimentary rocks (Seymour *et al*, 2006).

### **1.2.7 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.

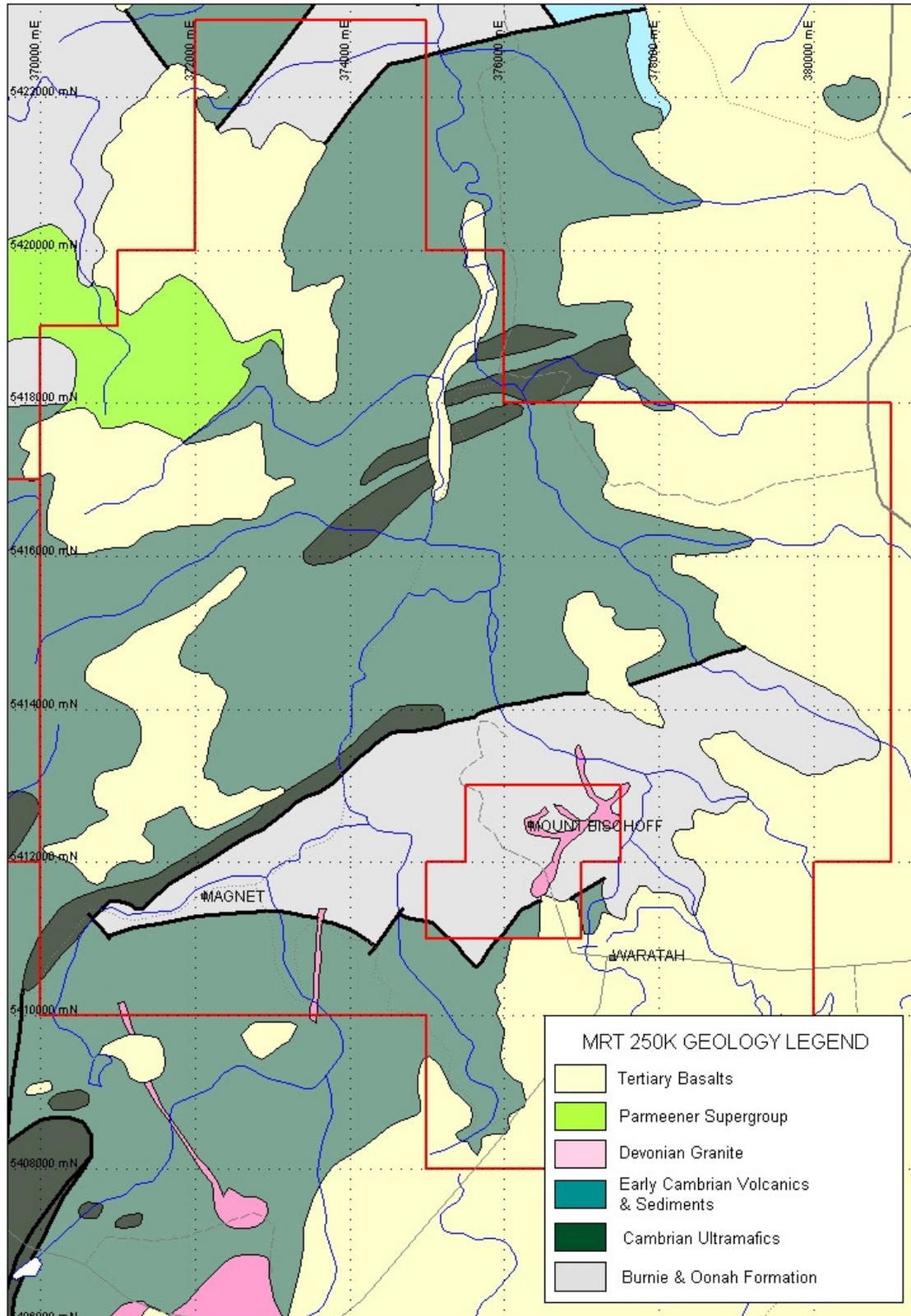


Figure 2. Regional Geology showing Licence Area boundaries and towns.

### 1.3 Exploration Rationale:

The Waratah tenement was acquired because it overlays the interpreted subsurface extent of the Meredith Granite and potentially contains carbonate units within the Burnie and Oonah Formation and base of the Crimson Creek Formation.

This relationship is of interest as carbonates at the base of the Crimson Creek Formation host the sulphide skarn mineralisation at the Renison Bell Mine (24.54Mt@1.41%Sn). Locally, Early Cambrian rocks of the Cleveland-Waratah association also contain rare carbonates which host Devonian skarn mineralisation at the Cleveland Mine (12.4Mt@0.61%Sn, 0.25%Cu) located only 8.5km south-west of the Magnet workings.

The tenement also encloses the world-class Mt Bischoff deposit (10.54Mt@1.1%Sn) and contains the small, but rich Magnet Mine (0.63Mt@7.3%Zn, 7.3%Pb, 427g/tAg). Most of the known mineral occurrences in the licence area are intrusion-related tin or base metal mineralisation, with a number of historic placer tin deposits down stream of the Mt Bischoff Mine.

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

### 2.1 Historic Mining:

The Mt Bischoff tin deposit was discovered in 1871 and during the following decade earned a reputation as being the richest tin mine in the world. Mt Bischoff went on to produce a total of 10.54Mt@1.1%Sn, however for the purpose of this report no further discussion of exploration within the vicinity of the mine will be detailed as the mining lease is excluded from the current exploration licence.

Of more relevance is the Magnet lead-zinc-silver deposit first noted around the same time as Mt Bischoff in 1877. The noted gossan was revisited some time later and in 1895 the Magnet Silver Mining Co NL was founded. Mining commenced with extraction of high-grade silver-lead until 1900 when the installation of a tramway allowed lower-grade ore to be exploited until the mine closure in 1933.

No further mining activity has occurred on the site, however in 1973 the zinc-rich tailings were removed by Electrolytic Zinc for treatment at Rosebery.

### 2.2 Exploration Prior to Current Licence Area:

Exploration in the Waratah licence area has generally concentrated in the areas adjacent to the Magnet Mine as reflected in the open file data. Modern exploration activity commenced in 1956 (Figure 3). A summary of this work is presented below.

**Date:** 1956-1960

**Company:** Rio Tinto Australian Exploration P/L (EL4/59)

**Exploration Philosophy:** Exploring for large-scale regional targets.

**Work Completed:** Airborne EM survey, airborne magnetic survey, gravimetric profiling, air photograph interpretation and geological mapping.

**Results and Conclusions:** No significant results. No further work recommended (59\_0269).

**Date:** 1951(?) -1963

**Company:** Electrolytic Zinc Co

**Exploration Philosophy:** Exploring for extension to Magnet orebody. Mineralisation interpreted to be open to south.

**Work Completed:** Literature review, surface mapping and two diamond drill holes (WP83 & WP84) southwest of Magnet Mine. Technical report not viewed.

**Results and Conclusions:** Both drill holes intercepted interpreted hangingwall veins of limited width. Best results were; WP83 0.7%Pb, 3.9%Zn, 1.2oz Ag and WP84 2.35%Pb, 2.3%Zn, 3.45oz Ag. No further work recommended.

**Date:** 1963-1968

**Company:** Aberfoyle Tin NL (Cleveland Tin NL)

**Exploration Philosophy:** Magnet Mine mineralisation lies in a similar stratigraphic position to the Cleveland Mine mineralisation. Possibility for extension.

**Work Completed:** Geochemical sampling, magnetometer traverses, geological mapping, diamond core re-logging (EZ holes WP83-84) and petrology.

**Results and Conclusions:** Previous exploration was not adequate to test for repetition of similar ore bodies to the south. Current exploration produced 3 geochemical anomalies interpreted to represent similar ore bodies to the south. These anomalies are recommended for drill testing.

**Date:** 1971-1988

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

**Exploration Philosophy:** Exploring for repetition of the Magnet Mine mineralisation; Assessment of the Arthur River alluvial tin prospect north-east of Mt Bischoff; Exploration for Mt Bischoff-style tin mineralisation at Ramsay prospect south of Mt Bischoff and Deep Gully Creek to the north-east.

**Work Completed:** Magnet Mine: Soil geochemical sampling, ground magnetic survey, geological mapping, diamond drilling and DIGHEM survey.

Arthur River: Heavy concentrate sampling, stream sediment sampling, geological mapping.

Ramsay Prospect: Geological mapping, geochemical sampling, magnetic survey.

Deep Gully Creek: Heavy concentrate sampling, geological mapping, airborne magnetic survey, DIGHEM survey, percussion drilling (DGC1-5), down-hole SIROTEM surveys, soil geochemistry, rock chip sampling.

**Results and Conclusions:** Drilling around Magnet (MAG1 & MAG2) yielded disappointing results, as did hole BAB1 to the northeast. The Ramsay prospect contains coincident Cu Sn W & ground magnetic anomalies. Deep Gully Creek drilling best result from DGC4 returned 65ppm Sn over 25.5m. Deep Gully Creek is considered prospective for a tin deposit akin to Renison Bell or Mt Bischoff (85\_2411).

**Date:** 1989-1990

**Company:** Billiton Australia (EL46/88)

**Exploration Philosophy:** Follow-up previously defined anomalies. Stone Dam aeromagnetic anomaly has similar characteristics to Mt Bischoff. Deep Gully Creek has same stratigraphic host rocks and encouraging rock chip results from Ethol Creek outcrop. Targeting Mt Bischoff style mineralisation.

**Work Completed:** Stone Dam Creek: Magnetometer survey, geological mapping, rock chip sampling, UTEM survey and diamond drill hole.

**Results and Conclusions:** UTEM and ground magnetic results indicate that Stone Dam anomaly not due to Tertiary basalt, and not inconsistent with massive sulphide (pyrrhotite) source. WD89-1 drilled into UTEM anomaly, however no anomalous geochemistry encountered, and the UTEM anomaly subsequently re-interpreted to be weathering feature in Tertiary basalt. No further work recommended. Tenement relinquished (90\_3092).

**Date:** 1988-1989

**Company:** Placer Exploration Ltd (EL47/88)

**Exploration Philosophy:** Test Magnet Creek area for gold mineralisation.

**Work Completed:** Data review, stream sediment sampling, rock chip sampling, air photograph interpretation and petrology.

**Results and Conclusions:** Weak gold anomalism in Magnet Creek unexplained. No further work recommended. Tenement relinquished (90\_3070).

**Date:** 1990-1993

**Company:** RGC Exploration (EL12/90 & EL15/90)

**Exploration Philosophy:** Explore for gold associated with mafic (boninitic) volcanics.

**Work Completed:** Historic data compilation, stream sediment sampling and bulk leach sampling.

**Results and Conclusions:** Weak gold anomalism in Magnet Creek probably shed from small base metal workings in the area. No further work recommended. Tenement relinquished (90\_3070).

**Date:** 1994-1998

**Company:** Mining Project Investors P/L (EL17/93) JV Pasminco Exploration

**Work Completed:** Data review, stream sediment sampling, rock chip sampling, air photograph interpretation and petrology.

**Results and Conclusions:** Drill hole (NMM-1) into Magnet anomaly in Magnet Creek intersected zone of disseminated magnetite alteration that accounted for magnetic anomaly. No further work recommended.

Literature review and rock chip sampling of Magnet Mine concluded that the mine area is under explored by modern exploration techniques. Further work recommended. Tenement relinquished (98\_4226).

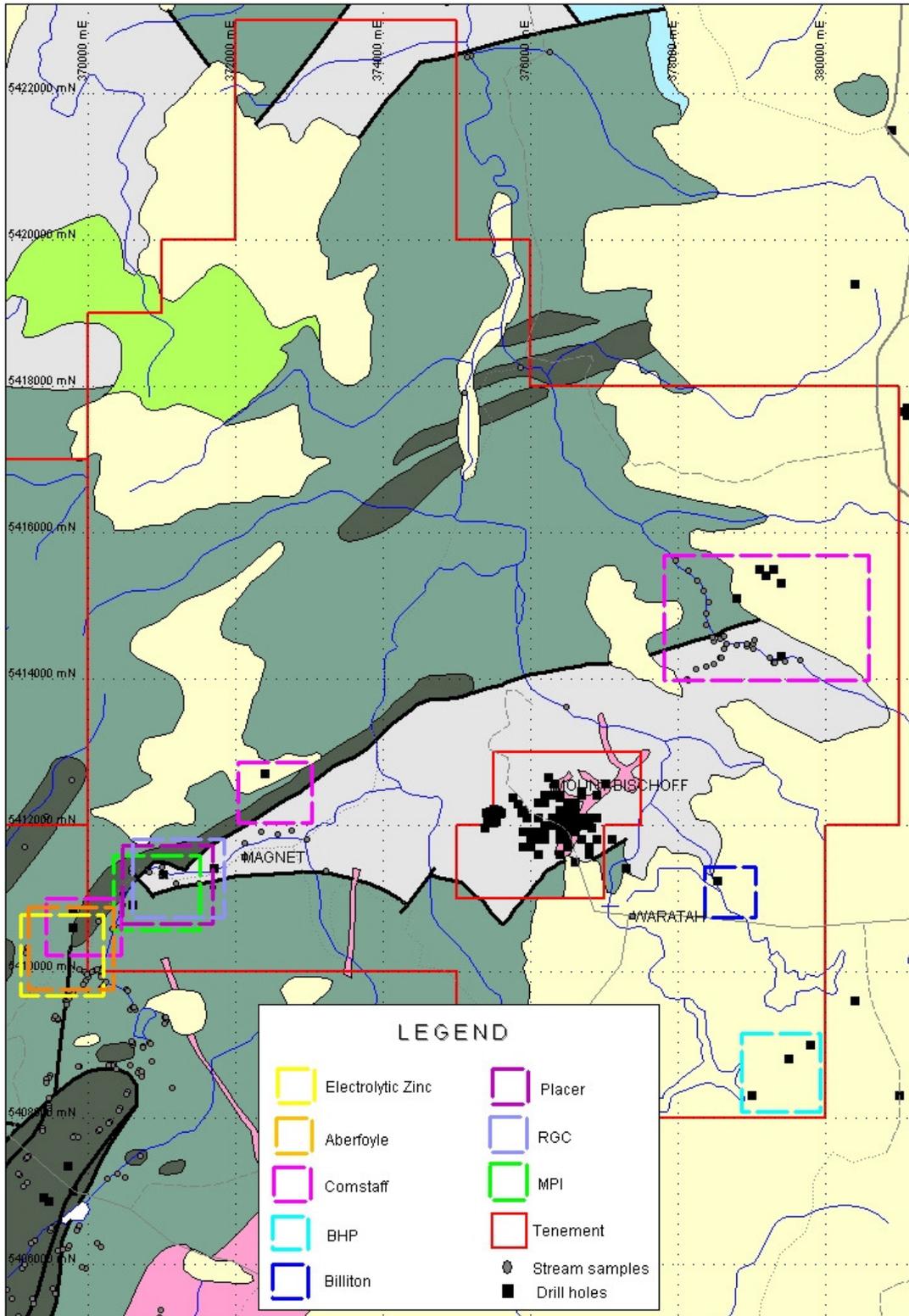


Figure 3. Historical Exploration Activity Map showing old workings and prospects

### **3. DURING CURRENT TENEMENT (10<sup>th</sup> August 2005 – 9<sup>th</sup> August 2006)**

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

Still interested in the idea of using a remote sensing system to map wall rock alteration on a more regional basis. 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.

ASTER is an acronym for 'Advanced Spaceborne Thermal Emission and Reflection Radiometer' and it is an instrument that flies on the Terra Satellite. It collects a similar radiation spectrum to the HyMap instrument but at a lower resolution (4x4m pixels versus 30x30m pixels). BSM had this ASTER data forwarded to Bob Agars at AGARSS.

BSM realised that because of the lower resolution of the ASTER data and the issue of vegetation shielding radiation reflected from the ground surface that the data would be more useful for targeting 'active zones' rather than providing the bullseye targets that had originally been hoped for from the HyMap data.

In terms of alteration within the Waratah tenement, the concentration of alteration occurs within the central part of the licence north of Waratah township. The scattered alteration is dominated by SiO<sub>2</sub> with lesser carbonate alteration adjacent to Mt Bischoff in the Oonah and Burnie Formation. North of Mt Bischoff into the andesitic terrain argillic alteration predominates. Further north again within the volcanic sediments occurs a zone of discreet carbonate alteration. Sericite and phyllic alteration have a strong spatial association and are scattered throughout. These alteration relationships appear to superficially map changes in broad lithological associations, but do not appear to highlight any particular structural features or known mineral occurrences (Figure 4).

In regards to historic mine development in the licence area, there is very little alteration mapped around the Magnet Mine and there is no distinguishable character to the alteration adjacent to Mt Bischoff.

Interpretation methodology employed in processing the ASTER data was included in Appendix 2 of the report for the reporting period 10/8/2006 – 9/8/2007.

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

##### **Regional Targets**

BSM utilised Joint Venture partners Geoinformatics Exploration Inc to compile a 3-dimensional spatial database (GIS).

Models were developed for targeting VHMS, intrusive related tin systems (e.g. Renison and Mt Bischoff) and intrusive related nickel skarn systems (e.g. Avelbury). Targets were identified and ranked according to probabilistic Monte Carlo analysis of best-available 2D and 3D geoscientific data and allowed an assessment of exploration risk and uncertainty.

At Waratah, using Monte-Carlo Ranking analysis, Geoinformatics generated a total of 10 intrusive-related, carbonate-replacement targets, 7 Hellyer-Rosebery VHMS targets and 1 nickel skarn-related target for a total of 18 targets (Figure 5).

To date, attention has been focused on the Magnet mine area, represented by the three co-incident targets in the south west corner of the EL. It is intended that in the 2007-08 period that more attention will be given to the other Geoinformatics targets in the tenement.

The Geoinformatics process methodology was included as Appendix 3 for the reporting period 10/8/2005-9/8/2006.

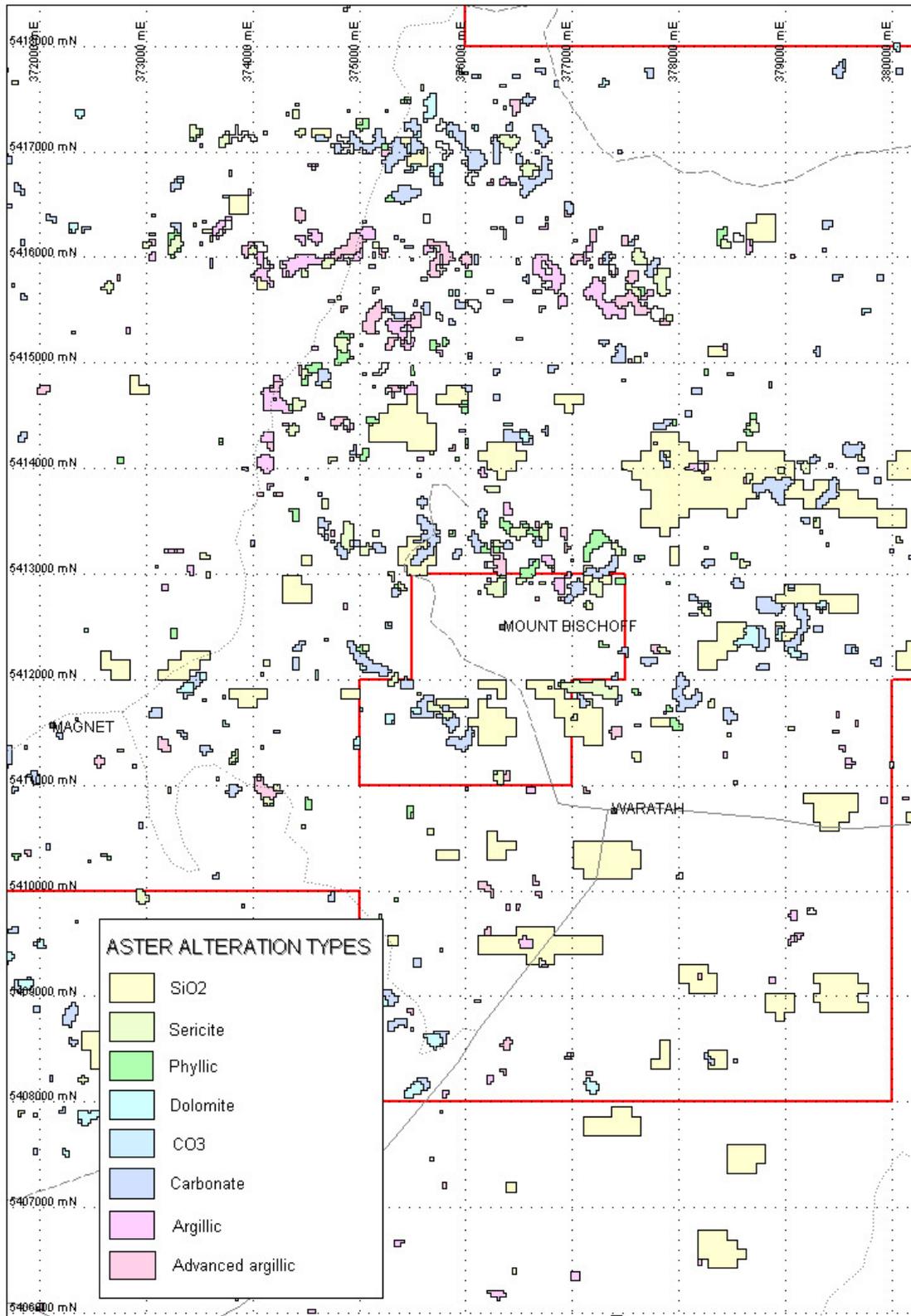


Figure 4. Alteration Map based on processing of ASTER satellite data.

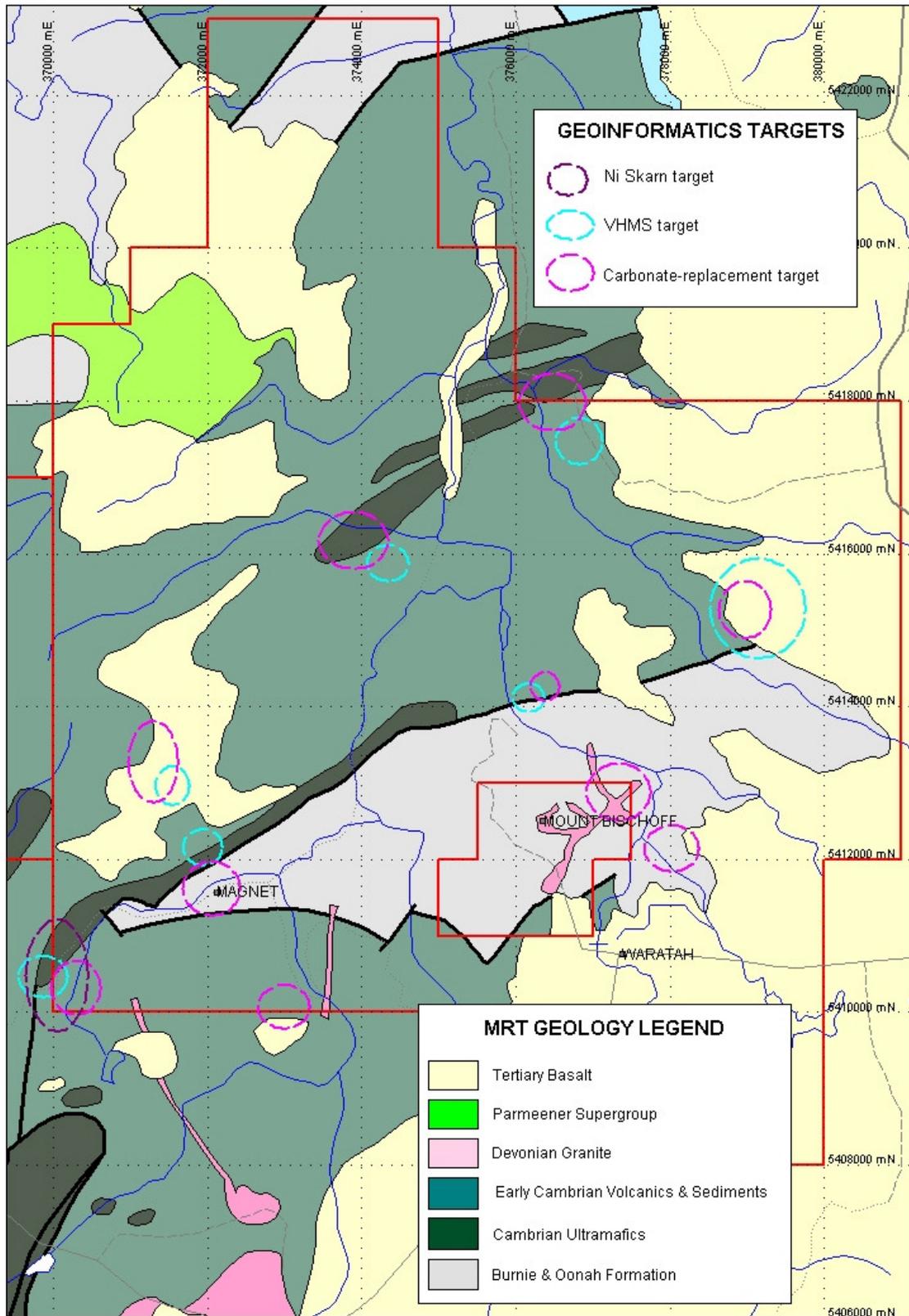


Figure 5. Geoinformatics Targets on the Waratah Licence.

#### **4. CURRENT WORK (Exploration completed during the report period) 10<sup>th</sup> August 2006 – 9<sup>th</sup> August 2007**

The section below reports on exploration activities between 10th August 2006 and the 9th August 2007. The main thrust of the work has been to produce a 3D model of the Magnet mine workings, combined with a review of literature to produce a near mine exploration plan. The near mine environment has not been the subject of recent exploration and presents an attractive target for BSM.

##### **Background**

The Magnet orebody was a Pb-Ag-Zn occurrence that was mined from 1891 to 1940 for Pb and Ag only. Historic production is recorded as 630,000t at 6%Pb, 394g/tAg, 7%Zn (Pb and Ag recovery grades, Zn not recovered from tails until 1970's)

The main ore shoot was a pipe like orebody that is said to have occurred at the junction of spur faults (strike 33M, dip 55 degrees west with the main structure (strike 360M, dip 60 degrees west). The mineralisation appears to have been intimately associated with a serpentinised mafic dyke (Chaku '98). The main lode had a strike extent of 90m (300ft) dipping west at -73 at surface, and flattening to -55 degrees below 4 level (approx 80m below surface).

The magnet mine operated till 1933, then was let on tribute until final closure in 1940. No information has been found detailing any development between 1933 and 1940. Reports indicate that the mine was developed to level 16 (60-65 foot levels) (Nye 1925) approximately 320m below surface, and was closed due to poor metals prices and high development costs.

##### **Down Plunge extension**

Nye (1923) commented that there was no indication that ore system was diminishing with depth, and ore shoot characteristics were consistent from 9 to 14 levels (max depth at the time), with the ore body 200 ft long (60m), and at least 6ft thickness (1.8m) of high grade ore.

The datamine model, shown in figs 4 - 5 (based on Nye 1923), currently includes workings to 14 level.

Modelling of the old workings has been referenced by survey of adits which have been recently located. This model, at this stage is accurate to approx 20M, and indicates the strike of development at approx 10.degrees Magnetic along the lode.

Nye, 1926 reports that the north drive on 13 level, though being 250 feet in length, is only stoped over a short distance, due to a high sphalerite content, and "would be better off left intact until such time as the zinc contents of the ores can be recovered". Therefore, this area presents an attractive target for intersecting zinc mineralization.

Potential of 40, 000T at grades at or better than 6%Pb, 394g/t Ag, 7%Zn (as reported grades were recovery grades) exists for a further 100m of vertical development below 16 level, assuming a mineable 200m body of 1.8m thickness, an S.G of 4, and continuation of the ore system with depth.

From the Development modelling, it is obvious that any un-mined down plunge extension of 'ore pipe(s) lie on the adjacent EL 1/2004, and require joint venture cooperation to investigate.

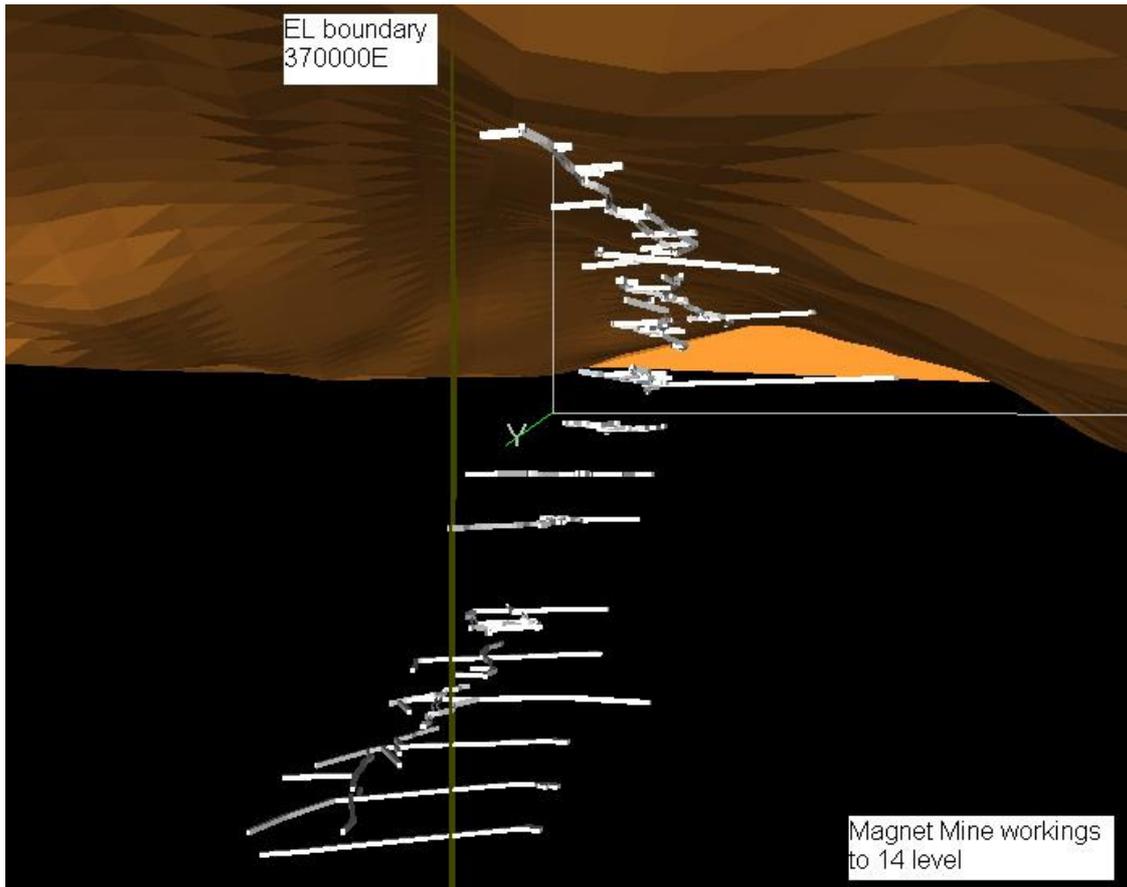


Figure 6. Magnet mine model viewed from south with EL boundary shown as vertical green line.



Figure 7. Plan view of magnet mine model with western EL boundary shown in Blue

### Shallow hangingwall and footwall targets

Nye (1926) reported on the discovery of the 'New Lode' at 15 level, identified by a short cross cut through the ankerite hangingwall, previously thought to be barren. This body was a 3-5 foot wide (up to 10ft) galena rich vein zone occurring 20ft into the ankerite hangingwall. It was mined upwards to at least 9 level, probably until 1933.

Nye(1926) states that the upper levels characteristics of the new lode could not be inspected due to flooding and collapse of workings. It is possible that the upper workings were not able to be re-opened for exploitation of the 'New Lode'. Nye, 1926, reports an assay of 200 ounces of silver per ton from a four inch vein in the New Lode. A diagrammatic representation of the New Lode is shown in fig 8.

The hangingwall position in the upper levels is therefore a shallow target for Pb-Zn-Ag mineralisation both to the North and South of the mine, and may prove to have potential for a shallow open pit over old workings.

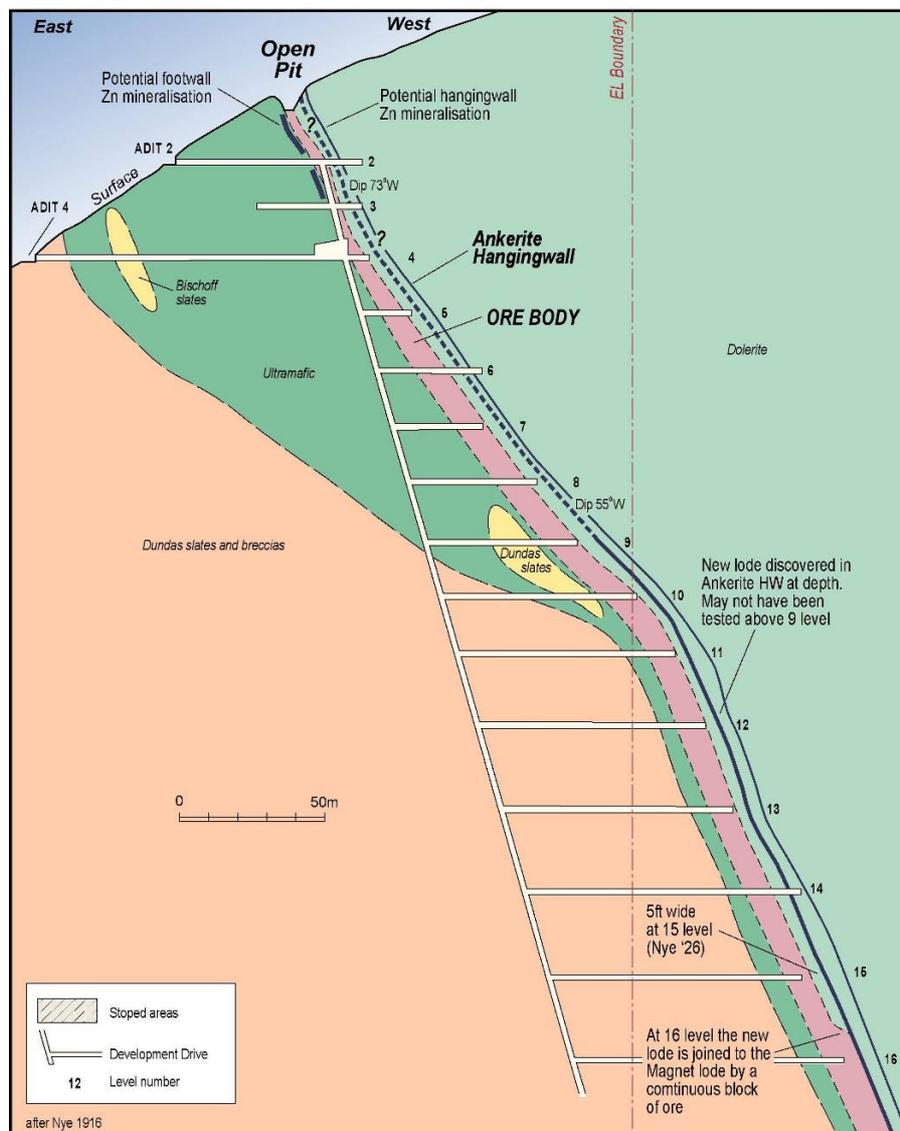
At 16 level the back lode was found to be joined with the main magnet lode over 40-50 feet, by a continuous block of ore (Nye 1929). The back lode at 15 and 16 levels was also found to develop into a considerable body of ore ranging in width (presumably thickness) up to 22 feet.

Outcrop located at AMG 370178E, 5410811N appears to be a stoped surface expression of the ore bearing vein system (possibly part of the old open pit) the stoped

surface has a strike of 004 magnetic, and dips 25 degrees west. The exposure represents the footwall and hangingwall of the orebody, seen in fig. 10. The footwall breccia is gossanous and partially mineralised in outcrop, fig.11. A float sample collected from this location shows promising mineralisation (fig 12). The hangingwall ankerite body is exposed , but difficult to sample due to the danger of the open stope. Shallow drilling may reveal the presence of the 'hangingwall lode' in this location.

It is estimated that a potential hangingwall lode may produce 20,000t of ore at magnet comparable grades, calculated between surface and 4 level

It should be noted that there is currently a zone of exclusion in the direct vicinity of the Magnet Gossan, as it is designated a fossicking reserve.



**Figure 8. Cross section of magnet lode, shown in dark pink, with potential for unmined expression of the 'New Lode' above 9 level.**

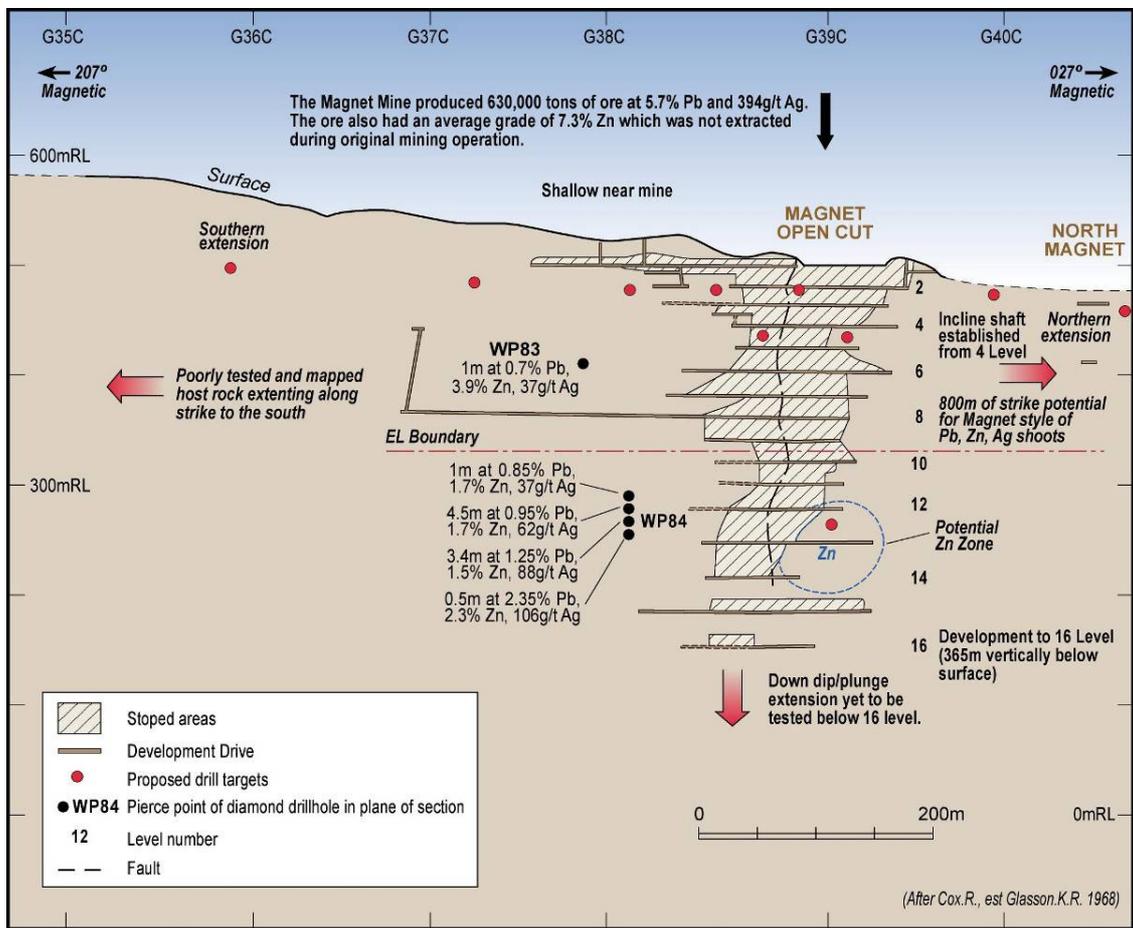


Figure 9. Magnet long-section showing potential exploration target areas.



**Figure 10. Surface expression of Magnet vein system looking North. Hanging wall ankerite body is seen on the left, and footwall carbonate breccia on the right.**



**Figure 11. Partially mineralised outcrop of magnet hangingwall carbonate breccia. Gossanous veining can be seen along the lower edge of the photograph.**



**Figure 12. Mineralised carbonate breccia with sphalerite veining upper right and lower left – float sample.**

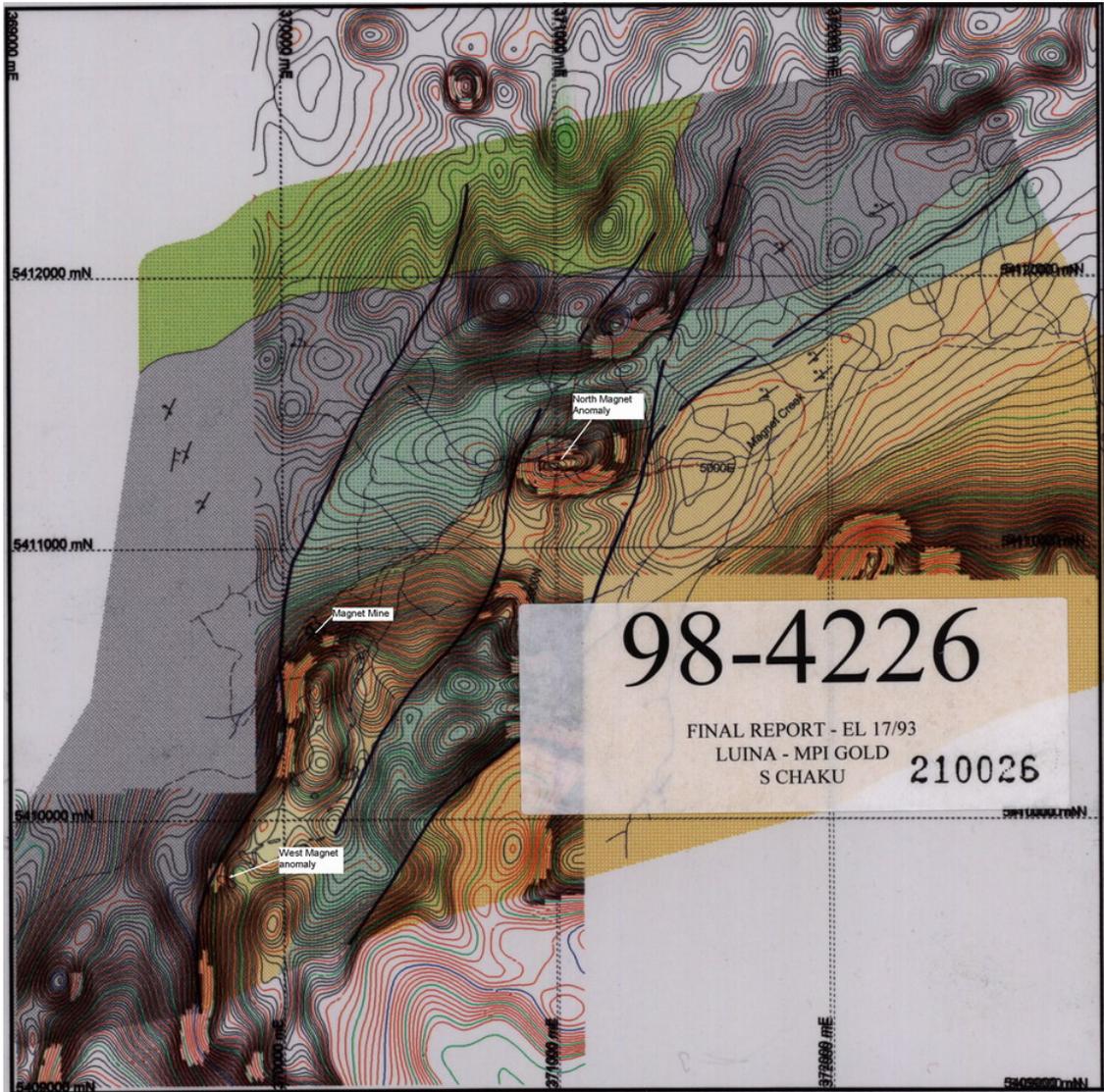
### **Strike extensions**

To the south of Magnet mine, surface workings are traceable at magnet to the western edge of the BSM lease, ( AMG 370000E, 5410000N ) representing the surface expression of the magnet host vein system. Magnetic anomalies exist to the south to at least 5409000N (fig 13).

The southern exploration drive was constructed to test the lode 800ft (240m.) south of no 4 adit (Nye 1923). An adit known as the south adit was driven in to intersect this drive, and was connected with a rise. Little information has been found about the mineralisation traversed by this drive apart from a reference to a 'poor blende seam with splashes of metal in dolomite, documented on a level plan near the intersection of the south adit and the southern exploration drive.

Immediately north of the Main magnet mine workings, along the Magnet structure there is potential for mineralisation extension along the hangingwall, as ore occurred in this position in the upper levels (Nye 1923). This is in addition to the potential for extensions of the 'new lode' mentioned above, which occurs at depth to the west of the hangingwall position, within the 'massive ankerite'.

Mapped and interpreted carbonate units to the south, although not located by the present study, have potential to host carbonate replacement mineralisation.



**Figure 13. Total Magnetic Intensity Map (Chaku 1998) showing interpreted structure extension to south and north and south Magnet magnetic anomalies.**

## **Nearby anomalies**

The West Magnet magnetic anomaly located 700m to the south west of the magnet mine, and is described by Weber 1997 as being a potential tin target remains untested. This anomaly lies along strike on the Magnet structural trend, in a possible structural jog position analogous to the magnet mine geometry. (fig 12).

The North Magnet anomaly (fig. 12) lies under magnet creek at approx 371000E, 5 410300N. This anomaly was drilled by MPI in 1998 with drill hole NMM1. This drill hole was sited with the assumption that strata would dip to the north at this location, and was drilled in a southerly direction. The drill hole proved to be angled down dip and intersected mudstones, cherts and sandstones with minor pyrite and anomalous magnetic susceptibility from 160-180m. MPI considered that this anomaly was adequately tested, attributed to magnetite alteration, and considered a drill hole angled from the south would involve extensive earthworks. It is possible however, that another drill hole angled in the opposite direction, sited to the south may be a better test for this anomaly.

Another magnetic anomaly lies still further to the north of MPI's North Magnet Anomaly near an interpreted structure. A repeat structure is located approximately 400m to the east. Both of these features have a similar structural interpretation to the fault jog position which hosts the magnet mineralisation, and warrant further investigation.

There are several reported geochemical anomalies, workings and gossans to the North east of Magnet mine worthy of follow up work.

The potential of nearby targets is to produce another deposit of Magnet style of 0.5mt. Pb-Zn-Ag.

## **5. PROPOSED EXPLORATION**

The ongoing development of BSM model of mine workings will assist geological interpretation accurate drill hole targeting. The first phase of model development has captured mine workings and adit positions, and will be followed up by integration of available geological information.

There is good potential for 20,000t of shallow mineralisation at 6%Pb, 394g/t Ag, and 7% Zn in the footwall and hangingwall positions of the Magnet mine within BSM EL, in the immediate mine vicinity, which warrants a closely spaced shallow drilling program.

Anomalies and potential structures to the north east should be investigated, with the possibility of drilling a further hole into the MPI's North Magnet Anomaly, which is in a magnet analogous structural position, potentially hosting another 0.5mt. orebody at 6%Pb, 394g/t Ag, and 7% Zn .

Soil sampling with follow up ground EM over areas of interest may be an effective way of targeting along repeat structures to the north east, and along trend to the south of magnet.

An exploration proposal is currently in progress, with potential works under discussion with MRT staff.

## 6. 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 in Figure 14 shows the location of the 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 *Phytophor Cinamomi* 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.

### LandTenure

The Waratah Exploration Licence comprises:

- Crown Land
- Private Property
- State / Multiple Use Forest
- Savage River Regional Reserve
- MDC Informal Reserve
- Deep Gully Forest Reserve

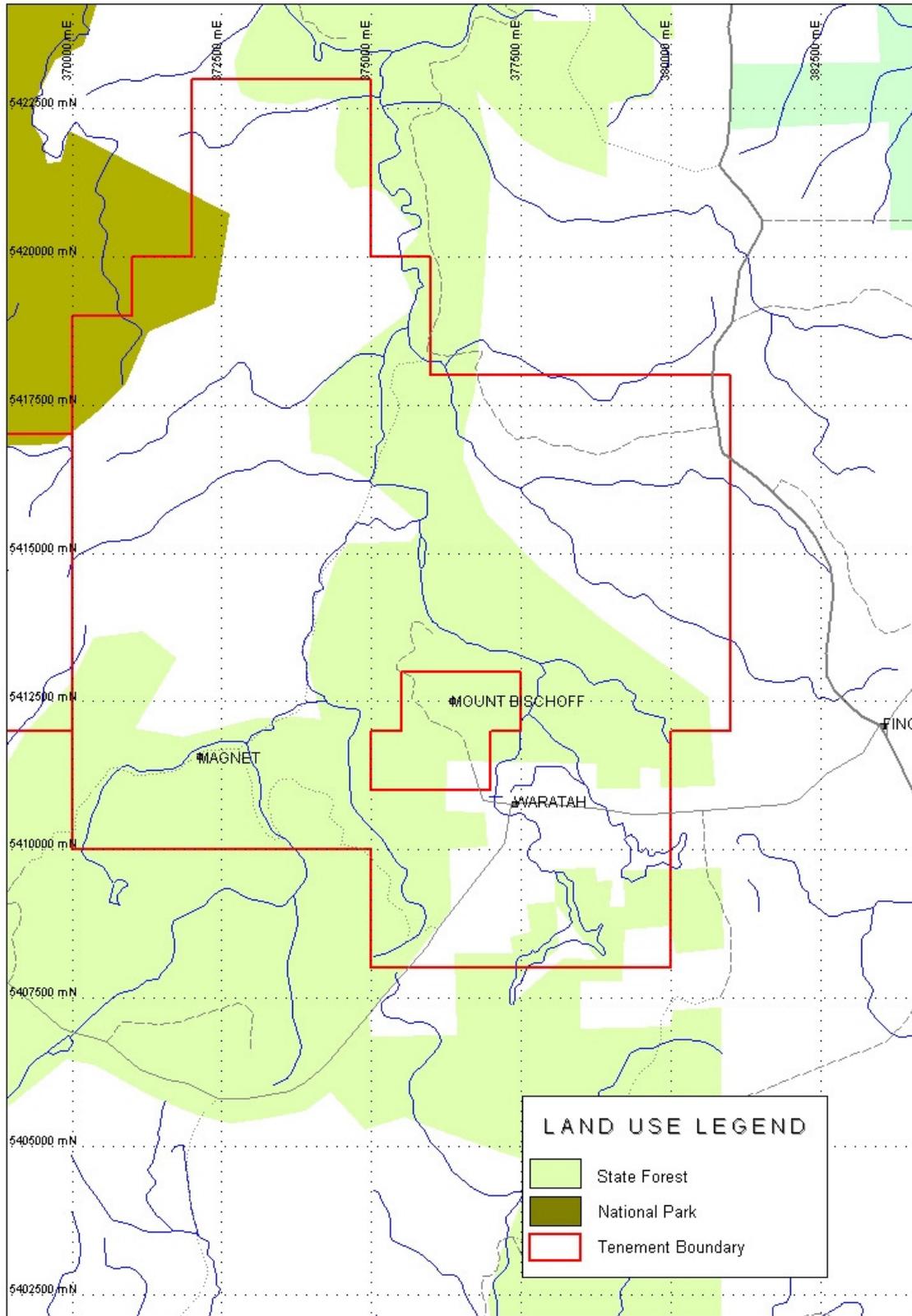


Figure 14. Environmental Activity Map

## 7. EXPENDITURE

	<b>Aug-06 to Aug-07</b>
<b>Administration</b>	\$2010.71
<b>Geology-Personnel&amp; Overheads.</b>	\$36,898.38
<b>Gridding</b>	
<b>Geochemistry</b>	
<b>Geophysics</b>	
<b>Drilling</b>	
<b>Feasibility Studies</b>	
<b>Rehabilitation</b>	
<b>Safety</b>	\$316.67
<b>Other - Geoinformatics</b>	\$11005.20
<b>Total - Eligible</b>	\$50,230.96

Table 2. Expenditure 10 August 2006 to 9 August 2007.

Total expenditure for the period was \$50,230.96

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