

**Annual Report  
EL20/2008 'Williamsford'**

**For the Period 06/03/2008 to 06/03/2009**

**Keywords**

Rosebery, Mt Read Volcanic Belt, Mt Lyell, Que River, Renison, Cambrian

**Map sheets**

Roseberry 1:25,000, Dundas 1:25,000,

**Silver Mines Limited**

FKP House, 5<sup>th</sup> Floor 17-19 Bridge Street,

Sydney, NSW 2000

GPO PO Box 3932, Sydney NSW, 2001

P: +612 9253 0902 F: +612 9253 0901

ACN 107 452 942

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# 1 Summary

Exploration License (EL) 20/2008, is a 15 sq km area located 20km NE of Zeehan, and 15km S of Rosebery over the highly prospective Cambrian Age Mt Read Volcanic Belt. This geology hosts, with adjacent rock types, 3 of 6 major world class current and recent past mining operations at Mt Lyell (Cu-Au), Avebury (Ni), Henty (Au), Rosebery (Ag-Pb-Zn), Hellyer (Ag-Pb-Zn), Que River (Cu-Ag-Pb-Zn) and Renison (Sn). These six mines are located within a 60km radius from Rosebery, and have been a backbone of Tasmania's diversified resource development prosperity for over 100 years. The EL20/2008 area has easy access via a sealed Murchison Highway that connects Zeehan-Strahan-Rosebery tourist-logging port on the W coast, with Burnie logging port, to the north.

In 2008 Silver Mines Ltd (SML) commissioned Geoplan Services to complete a preliminary scan of available data. Field work located a NW structural corridor imprinted over a regional N to NE strata strike of the Mt Read volcanic belt. The EL has a high tin and base metal prospectivity, from exploration and mining in the past, (from digital airborne geophysical signature overlays), related to a near surface Devonian age granite that intruded older high sulphur content volcano-clastics.

The EL20/2008 area was held as EL11/2002 for many years by Zinifex Australia (ex Pasminco), operator of the nearby Rosebery and Hercules base-metal mines and mineral processing infrastructure. Modern-day exploration has been preserved in its reports to Mineral Resources of Tasmania. MRT have developed an excellent digital database retrieval system from past work in EL20/2008. This area is also only 4km SE of the Renison Tin mine, with its mothballed mine infrastructure currently under-utilized by the current operator, a subsidiary of Metals Exploration.

Analysis of airborne geophysical data by Silver Mines geologists identified an intense magnetic high in the north western portion of the EL and a broad zone of low magnetic susceptibility in the north eastern portion of the EL. Both of these targets warrant further field based investigation.

## 2 Introduction

Exploration License 20/2008 is a 15 sq km area located 20km NE of Zeehan, and 15km S of Rosebery over the highly prospective Cambrian Age Mt Read Volcanic Belt. This geology hosts, with adjacent rock types, 3 of 6 major world class current and recent past mining operations at Mt Lyell (Cu-Au), Avebury (Ni), Henty (Au), Rosebery (Ag-Pb-Zn), Hellyer (Ag-Pb-Zn), Que River (Cu-Ag-Pb-Zn) and Renison (Sn). These six mines are located within a 60km radius from Rosebery, and have been a backbone of Tasmania's diversified resource development prosperity for over 100 years.

## 3 Location and Access.

EL20/2008 Willamsford comprising 15 sq Km and has easy access via a sealed Murchison Highway that connects the Zeehan-Strahan-Rosebery tourist-logging port on the west coast, with Burnie logging port, to the north. Figure 1 shows the location of EL 20/2008 in relation to major highways and regional geology.

## 4 Regional Geology

The geology of most of this narrow (2-4km), NE trending (5-6km) EL 20/2008 is composed of the N-S & NW faulted Mt Read Volcanic trough of mid to late Cambrian age marine sediments, with numerous base metal prospects. Basement in EL 20/2008 is a faulted Proterozoic age quartzite inlier of the Oonah Formation equivalents in the south, east and west, whilst in the north of the EL are late Cambrian sandstones. Early Cambrian age tectonic activity with associated intruded ultra-mafic and mafic greywacke rock units are in the EL's north-central area. A concealed Devonian age granite, identified in airborne magnetic data, crops out just west of the EL20/2008 along the NW trending Godkin Ridge, where granite, intruding volcanoclastics, is closest to the surface along the NW trend of the Renison-Godkin zone, of mainly tin potential. In the south a Devonian age dolomite, or altered older rocks, host silver-lead-zinc skarn mineralization of high grades

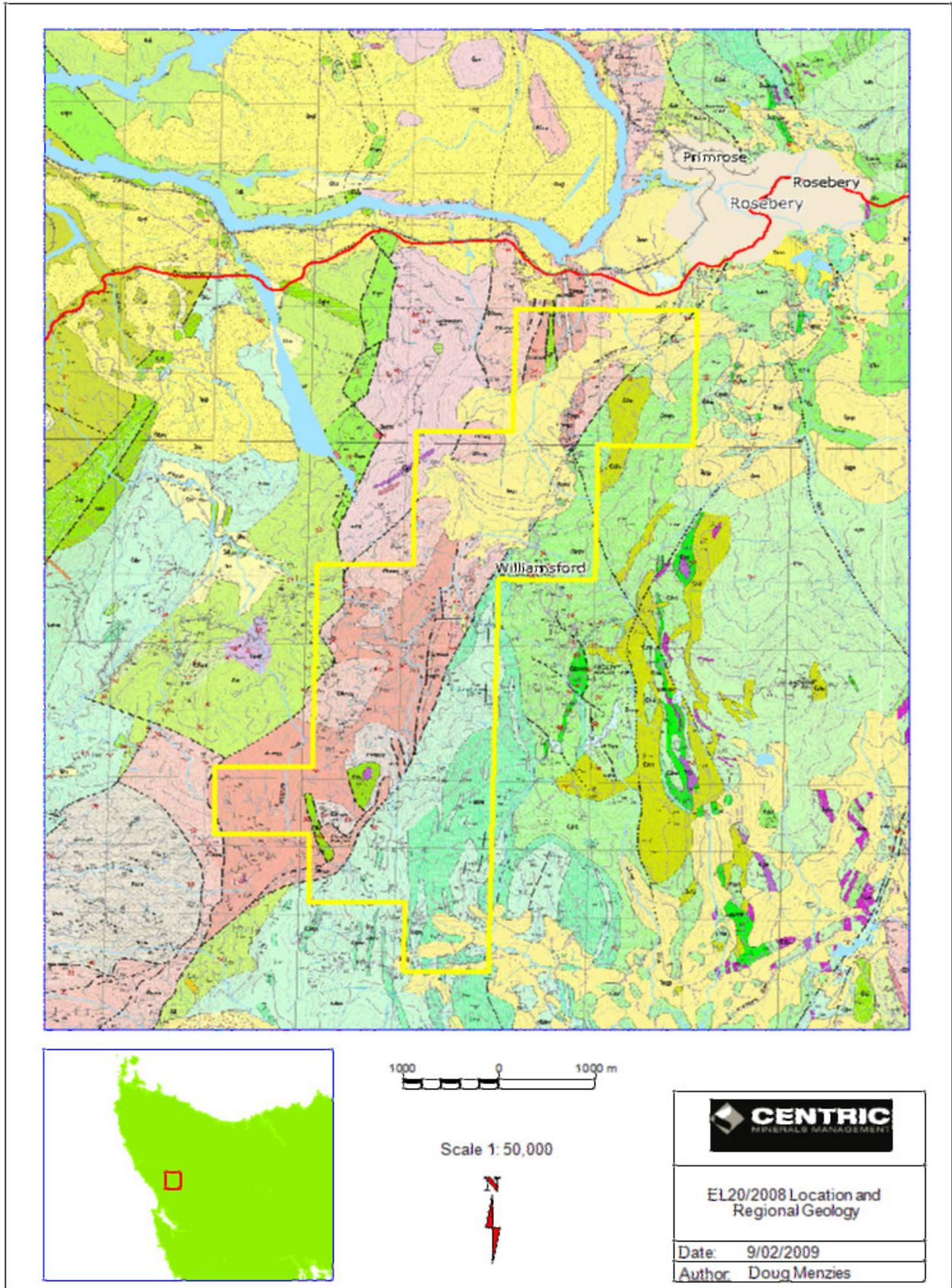


Figure 1. Location of EL 20/200 (yellow boundary) and regional geology of the Williamsford area.

## 5 Local Geology/Mineralisation

EL 20/2008 contains approximately 28 small mines and prospects dotted along the NNE strike of volcano-clastics, along the similar strike trend of the Rosebery structure, with Williamsford, Ring Valley mines, Godkin Ridge extended, and Moores Pimple being the major past workings moving from north to south within the EL area. In the NE of EL 20/2008 mineralization is bedding controlled vein type styles on surface, within the Mt Read Volcanics, but is also present in both older and younger age rocks, indicative of either remobilization or more than one mineralizing period. There is some gold potential in the old Deep Lead alluvial prospect.

Airborne magnetic and radiometric gravity and E-M data on 250m line spacing in the EL generated local geophysical signatures that indicate probable concealed NW trending granite intrusive. After measuring the NNE strata bound control to mineralized occurrences, the next most prominent trend of mineralization occurrence concentration is in the south. Here unconformable underlying Proterozoic age basement, related to Devonian age Ag-Pb-Zn±Cu in dolomite skarn, a remobilization from either granite &/or greenstones when mine/prospect spatial points are plan plotted (Refer to Fig 1).

The most recent explorer in EL 20/2008 was Zinifex, who operate the Roseby Mine, located some 5km NE of the NE corner. They completed geophysics, geological maps, rock-chip sampling, and partial leach geochemistry, over several gridded areas. These geochemical anomalies were seldom followed up by further ground geophysics and/or drilling. This may have been related to Zinifex priorities related to restructuring of the companies operating budget, core business and other exploration priorities. They still retain large Mineral Claims around old mines and prospects like the Hercules mine zone, excised from EL20/2008.

The Renison Bell Tin mine ML, 3km NW of EL20/2008, is estimated to contain 26.0 million tonnes of 1.4% Sn associated with Devonian granite plutons. Alluvial mining of cassiterite originally began in the 1890's after George Bell discovered an alluvial resource. Hard rock mining of an iron-sulphide-cassiterite rich strata-bound replacement body within dolomite commenced in 1936.

## 6 Exploration

Exploration completed during the reporting period entailed office-based analysis of open-file reports, and aeromagnetic, radiometric and geological data to identify prospective areas and potential targets.

### 6.1 Aeromagnetic data interpretation

An interpretation of Total Magnetic Intensity data, (using the first vertical derivative) was completed over the tenement area and surrounds. This interpretation is shown in Figure 3 and identified an intense magnetic high in the north-western portion of the exploration license. This feature is indicative of a buried magnetite-bearing intrusion or hornfelsing associated with a granite contact. Arc-shaped magnetic lineaments further to the west of the EL also show similarities to a hornfelsed granitic contact. The northern parts of the EL (and further to the north of the EL) exhibit a broad zone of low magnetic susceptibility or possibly magnetite depletion. This maybe a manifestation of a broad mineralisation system and warrants further investigation.

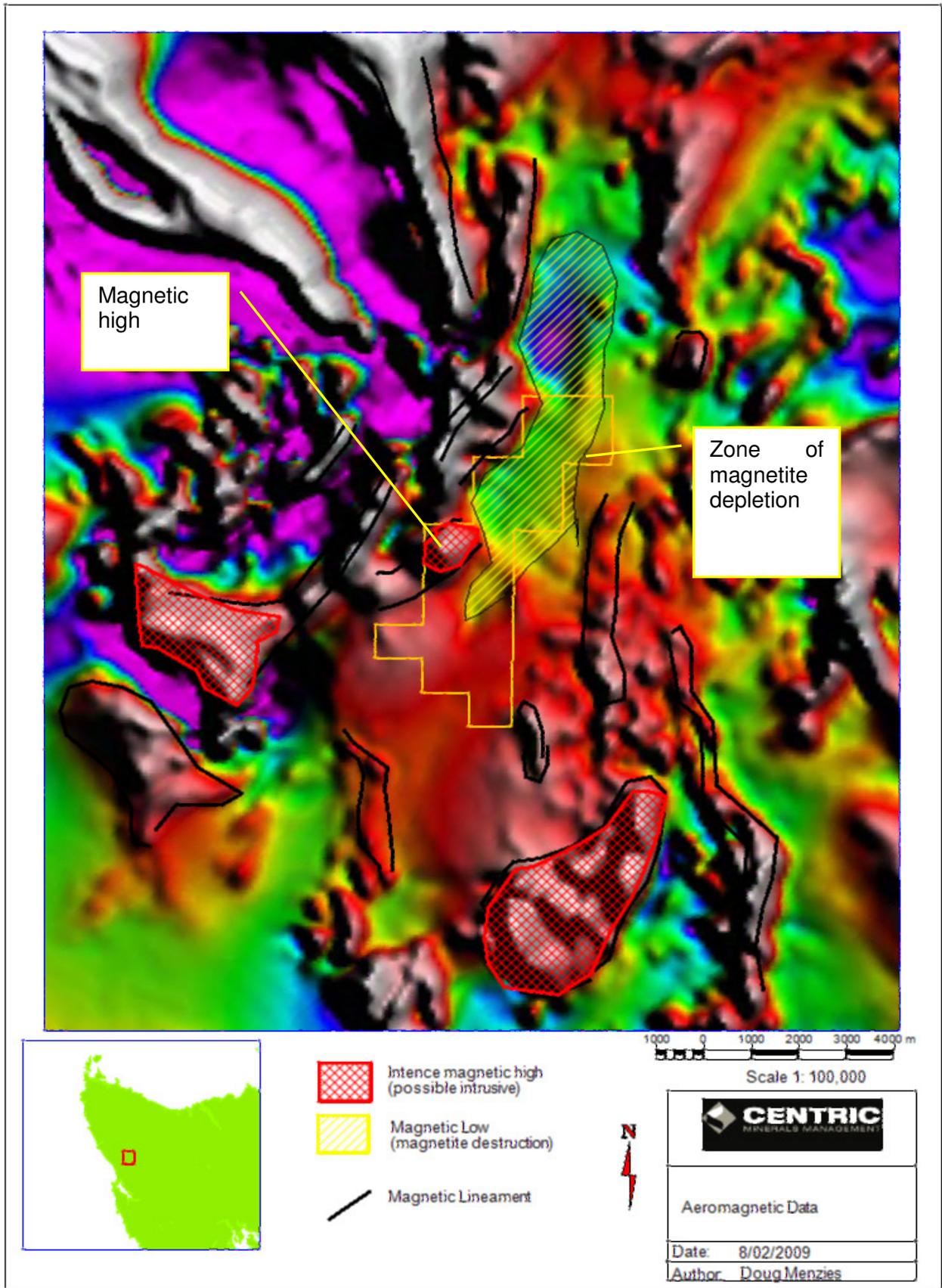


Figure 3. Interpretation of aeromagnetic data, showing intense magnetite high in the NW of the EL and a broad zone of low magnetic susceptibility in the NW of the EL.

## 6.2 Radiometric data interpretation

The total count Potassium Radiometric data has a dominant NE trending fabric and exhibits high potassium count associated with granitic rocks. Interestingly a small zone of high potassium content is coincident with the intense magnetic high on the north-western portion of the EL, mention above. Figure 5 display Potassium SW derivative from the Radiometric data within and surrounding EL20/2008.

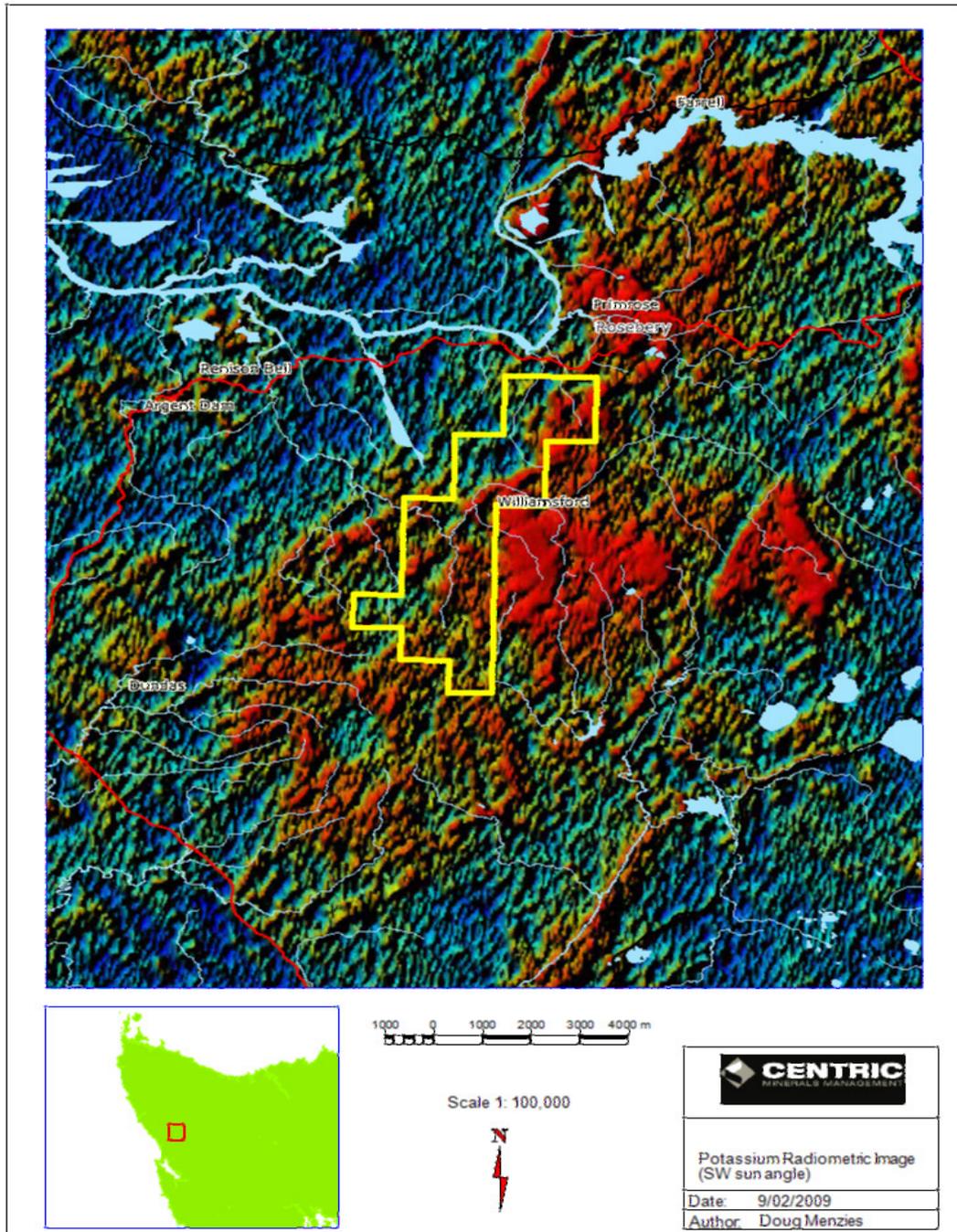


Figure 4 Radiometric data showing Total Count Potassium, with SW sun angle and EL 20/2008 boundary

## 7 Environment Disturbance

As Silver Mines did not complete any field based activities during the reporting there wasn't any surface or environment disturbance.

## 8 Conclusions

Analysis of previous exploration data and mineral occurrences confirms the prospectivity within the Cambrian aged Mt Read Volcanics for Rosebery style Ag-Pb-Zn mineralisation or Rension style Sn mineralisation associated with Devonian aged granitic intrusions. An interpretation of open-file geophysical data, geology data, and mineral occurrences identified several targets including a magnetic high in the north western portion of the EL and a broad zone of low magnetic susceptibility in the north eastern portion of the EL.

## 9 Expenditure

<b>Item</b>	<b>Cost (inc GST)</b>
GeoPlan Sevices technical project review	\$2,200.00
Administrative Costs	\$20,000.00
Office based data analysis	\$9,900.00
<b>Total</b>	<b>\$32,100.00</b>