

# **WHITE SPUR CREEK EL 10/2011 ANNUAL REPORT**

**FOR THE PERIOD ENDING 6TH NOVEMBER 2015**

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Mineral Resources Tasmania, Hobart  
MMG – Melbourne Group office

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## DIGITAL DATA

Product	Format
Sample data	.csv
Report and Appendices	.pdf

## 1 SUMMARY

Exploration Licence 10/2011 was granted to MMG on the 6<sup>th</sup> November 2011. Work completed during the period was grid based soil and rock sampling as part of a bigger regional program. A total of 261 soil and 192 rock samples were collected.

A coherent soil and rock anomaly - The White Spur anomaly is a 1km x 250m Cu, Zn, Pb, Cd, Ti, Sb, Ag & In response associated with significant sericite and K feldspar alteration. Follow up exploration work on this anomaly is proposed for the next twelve months.

## 2 INTRODUCTION

This report details work undertaken on EL 10/2011 White Spur Creek (Figure 1) from 7<sup>th</sup> November 2014 to 6<sup>th</sup> November 2015.

The White Spur licence covers a portion of the Cambrian Mount Read Volcanics to the south of the Rosebery and Hercules Mines and to the west of the Henty Mine in Western Tasmania. The principal exploration targets sought within the licence area are Hellyer or Rosebery-type VHMS Pb-Zn-Cu-Ag-Au massive sulphide deposits. A 5km strike length of the contact between the White Spur Formation (WSF) and the Central Volcanic Complex (CVC) runs through the centre of the tenement and has been the main target of recent exploration. The CVC – WSF contact has been considered to be a correlate of the Rosebery-Hercules host horizon by previous workers (Hicks, 2009, Vicary, 1997). A second and less well understood target is the Jones Creek package, in the NE part of the tenement. This sequence of shales and fine volcanogenic sediments associated with rhyolitic intrusives is thought to correlate with the Rosebery host position, but correlations are not as clear as for the base of the White Spur Formation due to structural complications.

Access into the tenement is via Howards Rd. (off the Anthony Rd) or on 4WD tracks (in particular the Moore's Pimple track) heading south from Mt Read and the Hercules Mine. Within the EL access is via a series of old logging tracks and a new HEC road, which follows a major canal.

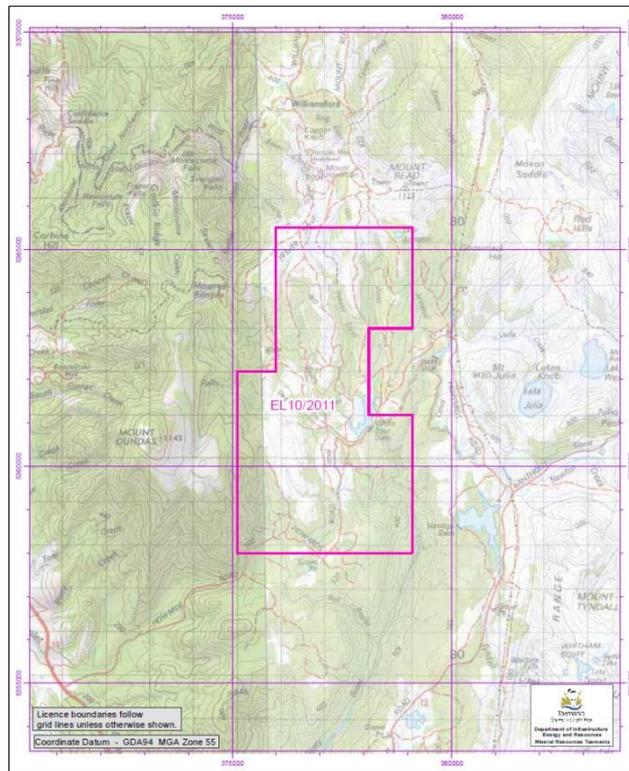


Figure 1: Location of EL 10/2011

### 3 GEOLOGY

The MRV in the area of EL 10/2011 can be subdivided into three main units; the WSF, CVC and Henty Fault Wedge Sequence. Of these only the first two are part of the VHMS prospective sequence.

The WSF was formally defined by Corbett and Lees (1987) as a west facing sequence of felsic tuff, siltstone, greywacke and slate that unconformably overlies the Central Volcanic Complex between the North Henty Fault and Williamsford. The WSF is conformably overlain by Dundas Group conglomerate, quartzwacke, mudstone and lithicwacke on the western end of Howards Road. The abundance of quartz-phyric detritus in the White Spur Formation may suggest derivation from Tyndall Group rocks located to the east of the Henty Fault Zone.

### 4 PREVIOUS EXPLORATION

Previous exploration was compiled in the 2014 Annual Report – the reader is referred to this report for information.

## 5 WORK COMPLETED (YEAR 4)

During the period a total of 261 soil and 192 rock samples were collected. These samples were collected from tracks, road and old gridlines.

The location of soil samples are shown in Figure 2 and assay results from the soil and the rock assays are included as .csv files.

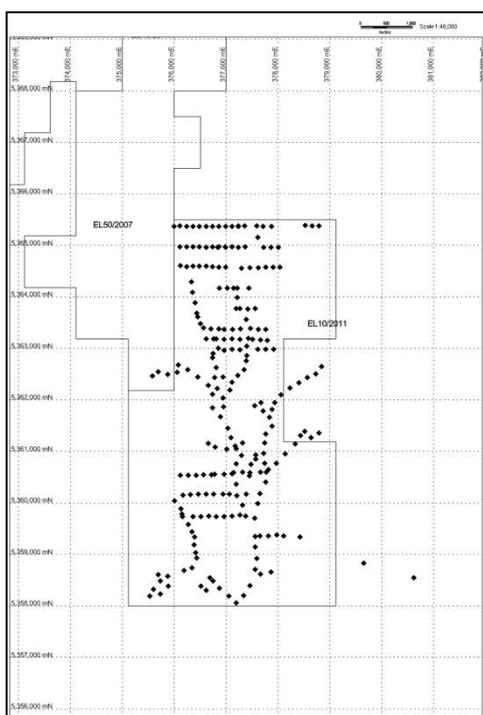
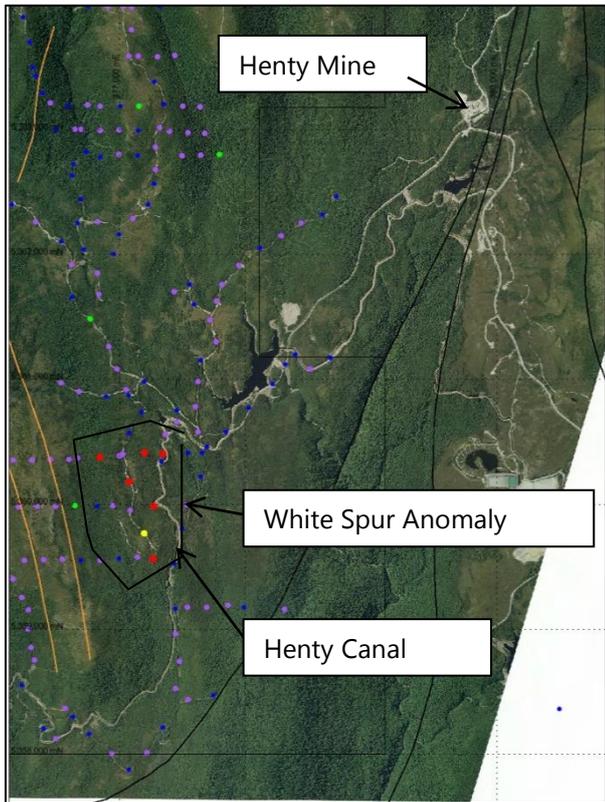


Figure 2: Location of soil samples.

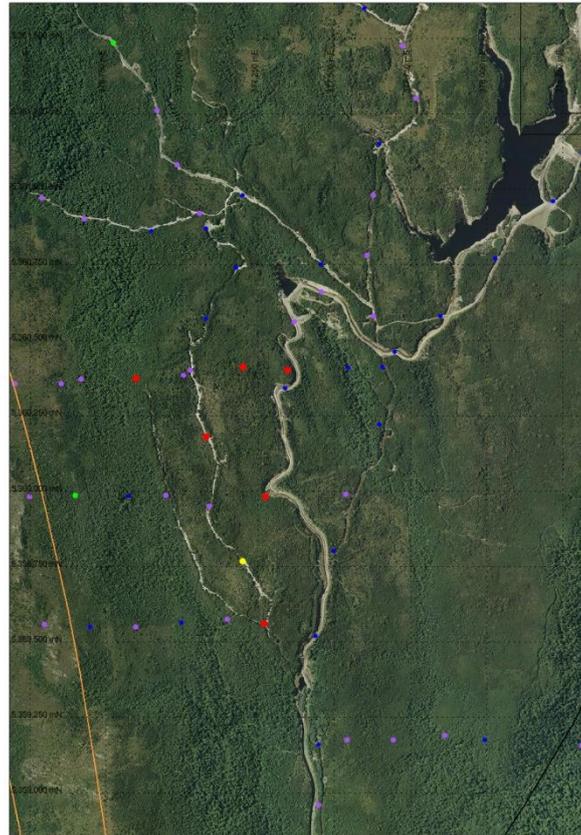
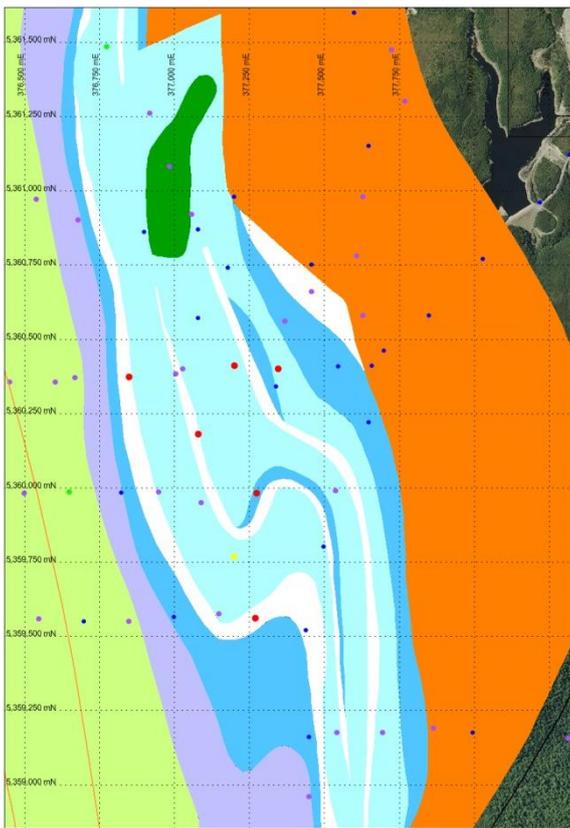
The White Spur anomaly is a 1km x 250m Cu, Zn, Pb, Cd, Ti, Sb, Ag & In response associated with significant sericite and K feldspar alteration. The anomaly is located approximately 4 kilometres from the Henty Gold Mine offices and near the Henty Canal; the site is easily accessible (Figure 3).

The anomaly is hosted in White Spur formation or in Rosebery stratigraphy - Hangingwall lithologies – above the Central volcanic Sequence (Figure 4).

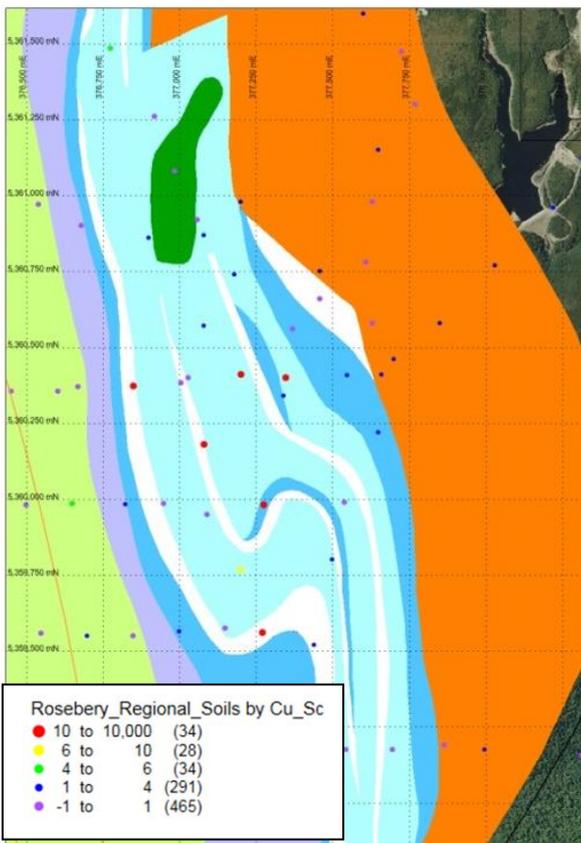


**Figure 3:** Location of the White Spur Anomaly with reference to the Henty Canal.

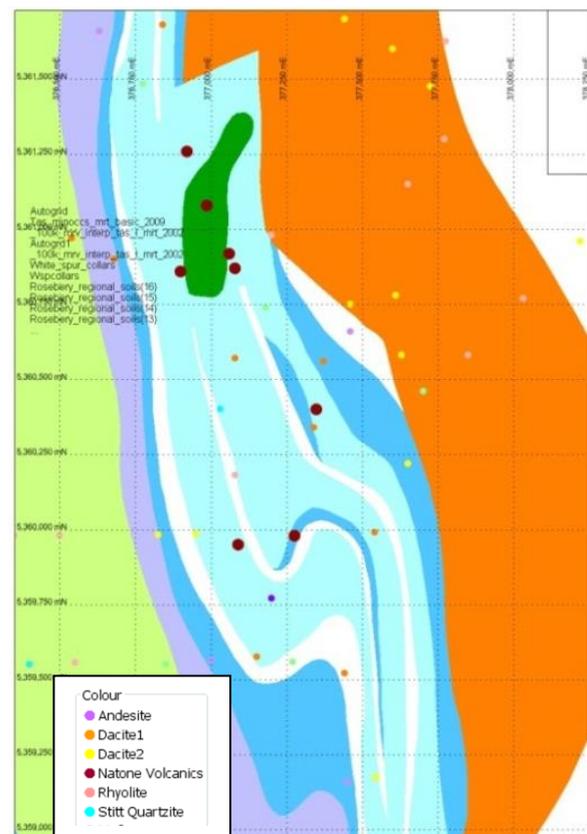
These anomalous samples are spatially associated with a very specific high thorium unit (Figure 5) that hosts the high precious and base metal mineralisation in the Marionoak Domain and also is associated with base metal sulphide clast intersections in WSP17 (Figure 6). These sulphide clasts have previously been linked to a high thorium felsic intrusion (green unit in Figure 5) and this anomaly strengthens this association. For further information on the high thorium felsic intrusive the reader is referred to the 2014 annual report.



**Figure 4a (LHS):** Cu/Sc anomaly overlain on geology, orange unit is CVC, units to west are White Spur formation **Figure 4b (RHS),** Cu/Sc anomaly overlain on air photo.

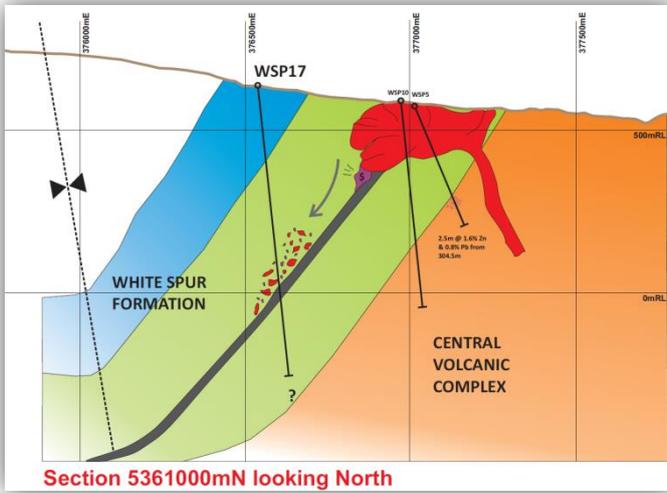


Rosebery_Regional_Soils by Cu_Sc		
● 10 to 10,000	(34)	
● 6 to 10	(28)	
● 4 to 6	(34)	
● 1 to 4	(291)	
● -1 to 1	(465)	



Colour	
●	Andesite
●	Dacite1
●	Dacite2
●	Natone Volcanics
●	Rhyolite
●	Stitt Quartzite

**Figure 5a (LHS):** Cu/Sc anomaly overlain on geology, orange unit is CVC, units to west are White Spur formation **Figure 5b (RHS),** lithology overlain on geology – note close spatial relationship between high Th unit and the anomalous geochemical samples.



**Figure 6a (LHS)** – section 5361000mN showing interpreted relationship between high Th intrusive (red unit) and clastic clast bearing unit. **Figure 6b (RHS)** intersected clasts in WSP 17.

## 6 CONCLUSIONS & RECOMMENDATIONS

In 2014 it was stated that source of the clasts at White Spur remains enigmatic. This geochemical anomaly which is linked to the clasts increases the geological understanding of the area and gives a specific area to follow up.

The work program for 2015-16 will be two staged

1. The area between 5359500 – 5361500mN (2000 metres) and 376500 – 377500mE (1000m) to be soil sampled on a nominal 400 metre x 100 metre grid. It is envisaged that grid lines would be cut but old lines may be discovered that could be rehabilitated. Stage 1: 6 km gridding, 66 soil samples – estimated cost \$25,000. (min \$3k/km for gridding).
2. The area between 5359500 – 5361500mN (2000 metres) and 376500 – 377500mE (1000m) is to be mapped at an appropriate scale utilising all existing grids and access.(max 1 geologist – 1 week).

The total work program would cost an estimated \$50K for the sampling and geological supervision and mapping.

## 7 ENVIRONMENT & REHABILITATION

No rehabilitation work was completed during the period.

## 8 EXPENDITURE

A total of \$52,372.20 was spent on EL 10/2011 for the reporting period.

A detailed expenditure statement is given below (Table 2).

	<b>White Spur Creek EL 10/2011</b>
<b>TOTAL COSTS</b>	<b>52,372.20</b>
Personnel	1,392.64
Other Contractors	3986.36
Geochemical & Assaying	40,374.83
Land & Environment	3,294.93
Vehicle & Equipment Hire	3,323.44

**Table 1: Expenditure for EL 10/2011 White Spur creek**