



GODKIN EL 50/2007

**ANNUAL REPORT
FOR THE PERIOD ENDING 20th SEPTEMBER 2012**

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1. SUMMARY

Exploration on EL 50/2007, Great Northern Creek (informally called Godkin) during the fifth year of tenure has focussed on research of the volcanic rocks to the west of the Rosebery Fault.

Previously this tenement has been part of MMG's nickel tenements but the potential for Rosebery style mineralisation has been significantly enhanced by recent drill intersections on the Lake Rosebery tenement (EL 41/2010), where basemetal sulphides have been intersection on the western side of the Rosebery Fault.

Two research projects are underway with the University of Tasmania to better understand the lithologies to the west of the Rosebery Fault.

Considerable expenditure has been committed to this tenement with \$555,323 expended by Allegiance pre 2008 when a 2328 metre diamond drilling programme was completed and an additional \$57,242 completed since MMG has been exploring the tenement for a total expenditure for the tenement life to date of **\$612,565**.

2. INTRODUCTION

EL50/2007 is located approximately 3km southeast of the Renison Mine which is 6km west of the township of Rosebery in Western Tasmania (Figure 1).

The EL is considered by MMG and its former owners OZ Minerals and Eastren Pty. Ltd. to be prospective for nickel sulphide deposits. Nickel prospectivity is derived from an interpretation of aeromagnetic data which shows strong magnetic features associated with Cambrian ultramafic outcrop on an adjoining tenement continuing undercover into EL 50/2007 (Figures 2).

More recently MMG has recognised the potential for VMS deposits.

The EL is located in high relief terrane with a cover of temperate rainforest. Access is provided to the EL by forestry roads and historic exploration tracks from the Murchison Highway.

3. LAND TENURE

EL 50/2007, Great Northern Creek (known informally as Godkin) was granted under the ERA system to Eastren Proprietary Limited, a wholly owned subsidiary of Allegiance Mining Pty Ltd, on 24 October 2007 for a period of 5years.

Allegiance Mining Pty Ltd was purchased by Zinifex Australia Limited in early 2008. Subsequently on July 18th 2008 the name of Zinifex Australia Limited was changed to OZ Minerals Australia Ltd as a result of a corporate merger between Zinifex Ltd and Oxiana Ltd. In June 2009 China Minmetals Non-Ferrous Metals Co Ltd acquired from OZ Minerals Ltd a 100% indirect interest (through its subsidiary Album Investment Pty Ltd) in MMG Australia Limited (previously OZ Minerals Australia Ltd) the holder of the tenement.

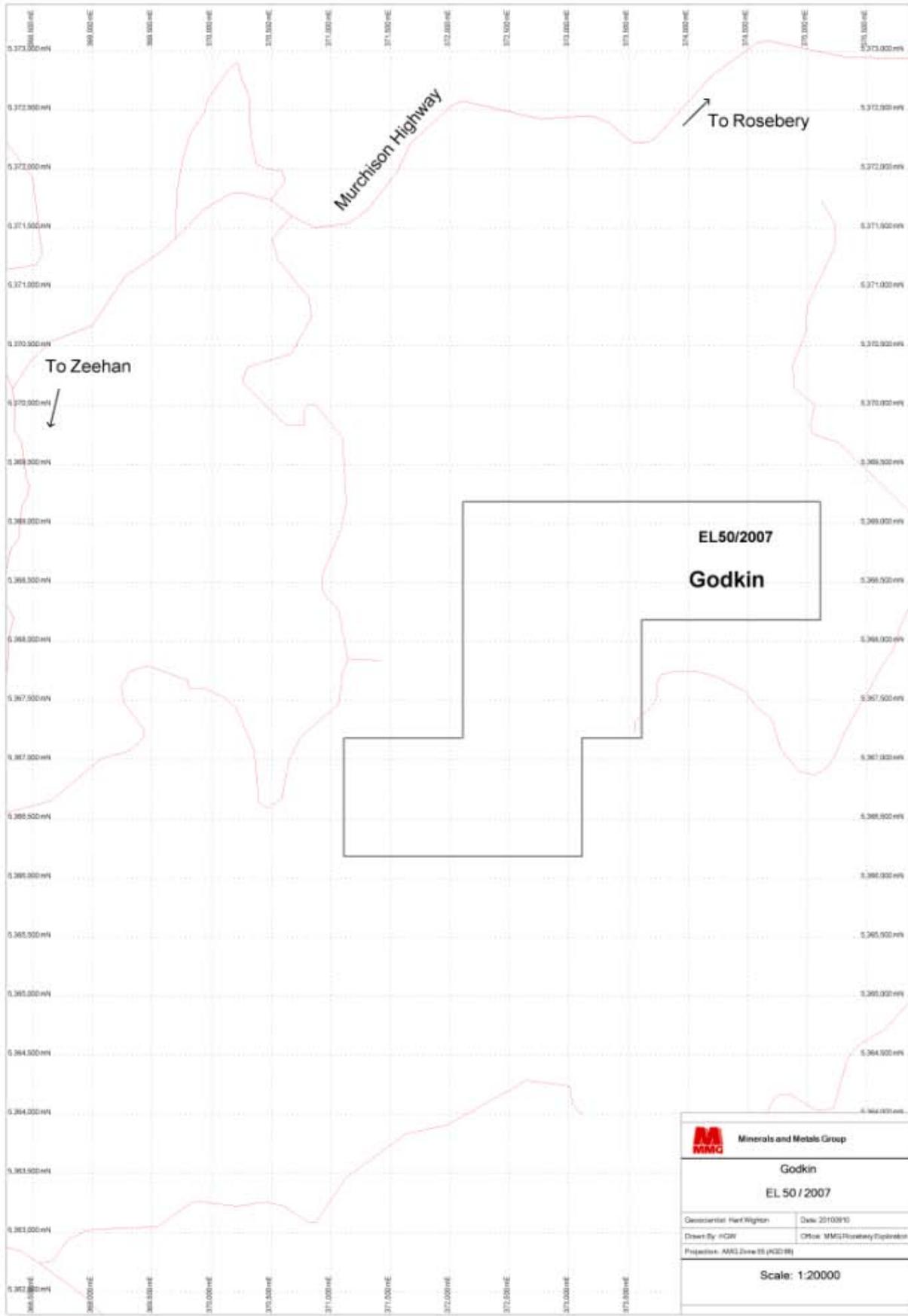


Figure 1: Location EL50/2007 Godkin

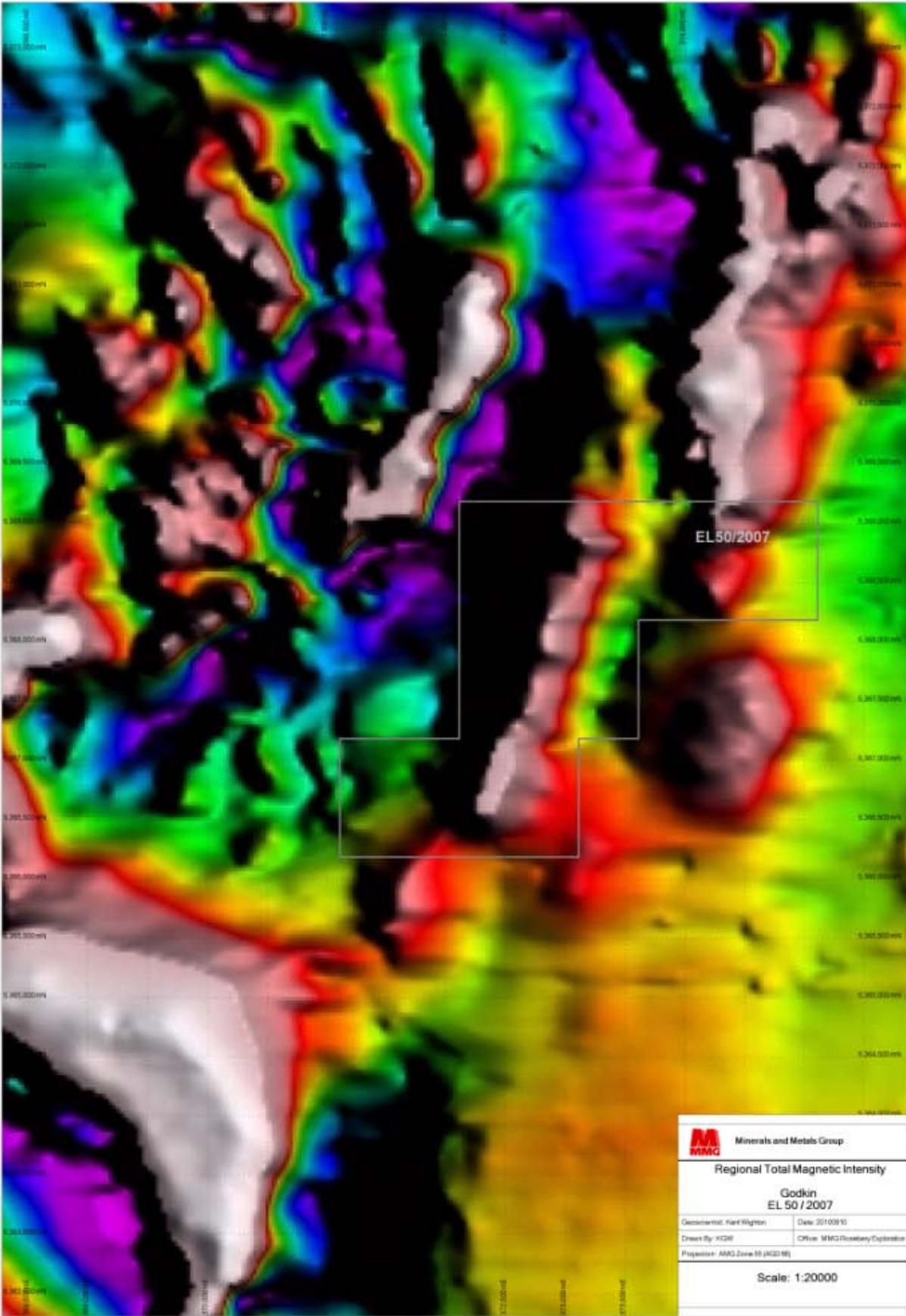


Figure 2: Regional Total Magnetic Intensity of EL50/2007 Godkin

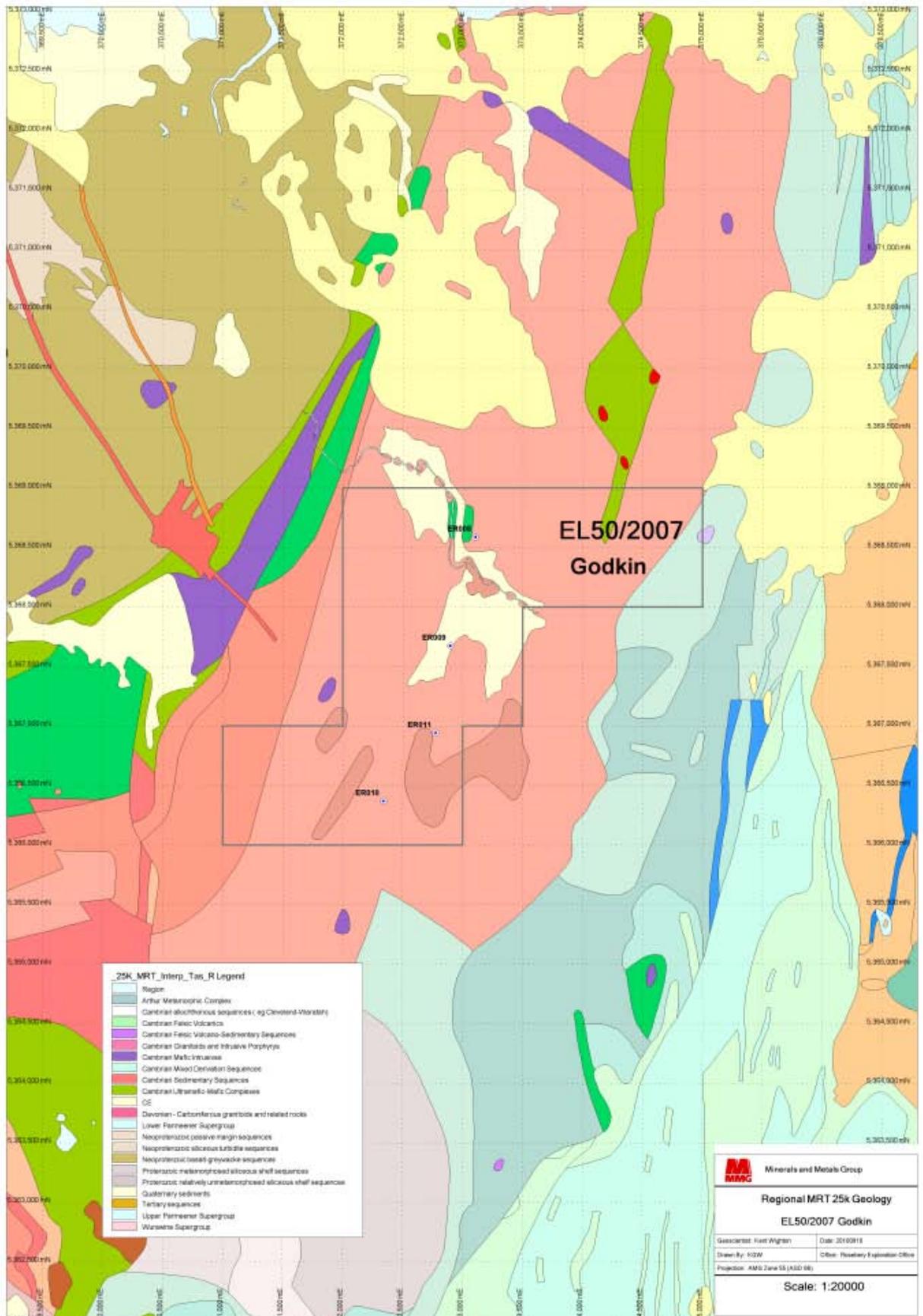


Figure 3: Regional 1:25K Geology of EL50/2007 Godkin

4. GEOLOGY

The Avebury deposits are hosted in both serpentinitised dunite and strongly metasomatised, tremolite-diopside ultramafic skarn. The ultramafic has intruded Mid Cambrian basaltic volcanoclastic greywackes overlain by sandstone, siltstone and polymictic felsic volcanic breccias.

The ultramafic has a strong magnetic signature due to high concentrations of magnetite released during the serpentinisation process and subsequent Fe metasomatism. High resolution aeromagnetics is a key early exploration tool.

EL 50/2007 overlies Cambrian volcanoclastic sediments hosting two belts of Cambrian mafic-ultramafic rocks (Figure 3). The Cambrian sequence is intruded at depth by a late Devonian Granite which forms an ENE trending ridge connecting the Granite Tor and Pine Hill Granite outcrops. The granite intrusion has extensively altered and metasomatised both the Cambrian volcanoclastics and ultramafic intrusions.

The ultramafic rocks are strongly serpentinitised and locally metasomatised to a diopside-tremolite assemblage. The associated gabbros are frequently extensively talc-carbonate altered. Calcareous sediments are extensively diopside altered with garnet rich skarns.

A variety of mineralisation styles are interpreted as accompanying the granite metasomatic event:

- Cu-Pb-Zn-Ag veins in altered gabbros and Cambrian sediments
- Qtz-cassiterite veins
- Large Cu-As (-WO₄) skarns at Colebrook Hill
- Pervasive (sometimes massive) pyrrhotite mineralisation in altered gabbros and sediments.
- Scheelite mineralisation in skarned sediments.

Considering the geological setting and the obvious intense metasomatic activity in the area, MMG considers the area to be prospective for Avebury style remobilised nickel sulphide deposits in altered ultramafics. This model dictates that all ultramafic occurrences within a prescribed distance from a granitic intrusive are potential targets.

The company also considers the presence of other, more conventional styles of nickel sulphide mineralization as a possibility and is tailoring its exploration data interpretation efforts accordingly.

Previous mapping include the volcanoclastic rocks as part of the Dundas Group sediments and the more recent 1:100,000 interpretation has these rocks as Owen Conglomerate equivalents. Recent work by MMG suggests that these units are possibly older and potentially host VMS deposits.

5. CURRENT EXPLORATION

Work Completed in the 2011-2012 Period

On-ground exploration on EL 50/2007 this year is focussed around research. One study by Wayne Baker is looking at the Natone Volcanics which outcrop just to the North of this tenement and the other study is by Michael Febey who is analysing the stratigraphy between the Rosebery fault and the Cleveland – Waratah rocks. These will both be reported in 2013.

Work conducted by MMG on EL 50/2007 during 2009-2010

Work during 2009 / 2010 tenement year concentrated on data compilation. Data from all exploration tenements with nickel potential are re-interpreted on a continual basis as more information comes to hand from research projects designed to increase our understanding of the Avebury mineralising system and or identify characteristics of more conventional styles of nickel sulphide mineralisation.

Work conducted by Allegiance Mining/Eastren on EL 50/2007 during 2008-2009

There was no field activity carried out on Exploration Licence EL 50/2007, between October 2008 and October 2009.

Work conducted by Allegiance Mining/Eastren on EL 50/2007 during 2007-2008

Work completed on EL50/2007 during the first year of tenure included four diamond drill holes for 2328m. All holes were logged by contract geologist Nic Turner (Callaghan, 2008).

DDH ER008 intersected actinolite-chlorite-carbonate altered gabbro with two narrow intervals of quartz-axinite-calcite skarn. No significant mineralisation was intersected.

DDH ER009 intersected serpentinitised ultramafic intruding what has been interpreted to be Huskisson Group sandstone, carbonaceous shale and siltstone with thin inter-beds of chert conglomerate and felsic volcanic breccia. The ultramafic contact was interpreted as being intrusive. The ultramafic was locally altered to intensely metasomatised diopside-tremolite skarn with minor sulphide mineralisation.

Minor but significant Nickel arsenides and possible nickel sulphides were present in the hole with best intercepts of:

345.7 – 349.2 3.5m @ 0.2% Ni and 0.5% S.

355.0 – 356.0 1.0m @ 0.4% Ni, 0.5%, As and 0.5% S.

The stratigraphy and structural setting is seen as having many similarities to the Avebury Mine.

DDH ER010 intersected a similar sequence to that previously described in ER009. Again minor nickel sulphides and arsenides were present, particularly towards the end of the hole.

DDH ER011 intersected a similar sequence to that previously described in ER009. No significant nickel sulphides were present. Sulphides were observed in the ultramafic but the nickel values did not increase correspondingly.

The alteration and sulphide mineralisation hosted in the ultramafic intrusions was regarded as encouraging but petrographic studies are required for confirmation of sulphide and arsenide species. A full geological interpretation is yet to be completed from the drilling program

6. CONCLUSIONS AND RECOMMENDATIONS

MMG has recognised the potential for VMS mineralisation in the volcanic units between the Rosebery Fault and the Cleveland –Waratah association rocks.

It is recommended that a term extension be obtained for the tenement and further analysed and assessment of this new paradigm be assessed.

7. ENVIRONMENTAL

There were no surface disturbance or rehabilitation activities undertaken during the reporting period.

8. EXPENDITURE

Expenditure on EL 50/2007 Godkin for the year ending 20th September 2012 was approximately **\$14,220** mainly relating to staff salaries and administrative costs.

Total expenditure for EL 50/2007 for the 5 years from September 2007 is Allegiance **\$555,323** and MMG **\$57,242** for a total expenditure of **\$612,565**.

Table 1: expenditure for the period 2011-2012

	Project	Nickel Tasmania
	WBS Element	XP/00052/04
		Godkin EL50/2007
TOTAL COSTS	AUD	14,220.80
PERSONNEL	AUD	9,223.75
CONTRACT FIELD SUPPORT		
GEOSCIENCE CONSULTANTS		
TRACK CUTTING & GRIDDING		
GEOCHEMICAL & ASSAYING		
DRILLING		
GEOPHYSICS		
OTHER CONTRACTORS		
STORES & SUPPLIES	AUD	40.00
VEHICLES, PLANT & MAINTENANCE		
LAND & ENVIRONMENT	AUD	821.73
EQUIPMENT HIRE		
DEPRECIATION, OFFICE & SUNDRY	AUD	4,135.32

9. KEYWORDS

Keywords

GODKIN, GREAT NORTHERN CREEK, RENISON, AVEBURY, NICKEL SULPHIDE MINERALISATION, LIDAR, ULTRAMAFIC, SERPENTINITE

10. REFERENCES

Callaghan, T., 2008. EL50/2007 Great Northern Creek, Annual Report to October 2008,
Unpublished OZ Minerals company report.