



EL 43/1992 MELBA FLATS

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SUMMARY

EL 43/1992 is a 6 sq km Exploration Licence surrounding a 269 ha mining lease, RL 2M/2007 which was acquired to facilitate development of the small scale potential resources identified at Melba Flats. In January 2010, an application for ML 2M/2007 to transfer to a Retention License RL5/ 2009 was granted.

EL 43/1992 is part of a broader strategy by MMG to explore the Melba Flats area for conventional Ni sulphide deposits that also contain significant Cu and PGE's. MMG has developed a deposit model that takes account of the Ni sulphide bearing Gabbroic dyke system at Melba Flats which includes potential resources at Cuni Genets and Nickel Reward, and the large buried magnetic source to the west of Melba Flats. A favoured scenario is that this magnetic feature represents an ultramafic body which may host conventional Ni sulphide deposits. The bulk of the anomaly lies outside of EL43/1992; however the eastern part is within. To this end, MMG is in advanced JV negotiations to enable access to the entire opportunity for drill testing.

Work completed comprised geophysical modelling of the airborne magnetic data and review of previous exploration data.

1 INTRODUCTION

The Melba Flats area is located 17km south of Rosebery on the Murchison Hwy and is around 9km NE of Zeehan in Western Tasmania (Figure 1). Access to the project area is via tracks established by Forestry Tasmania.

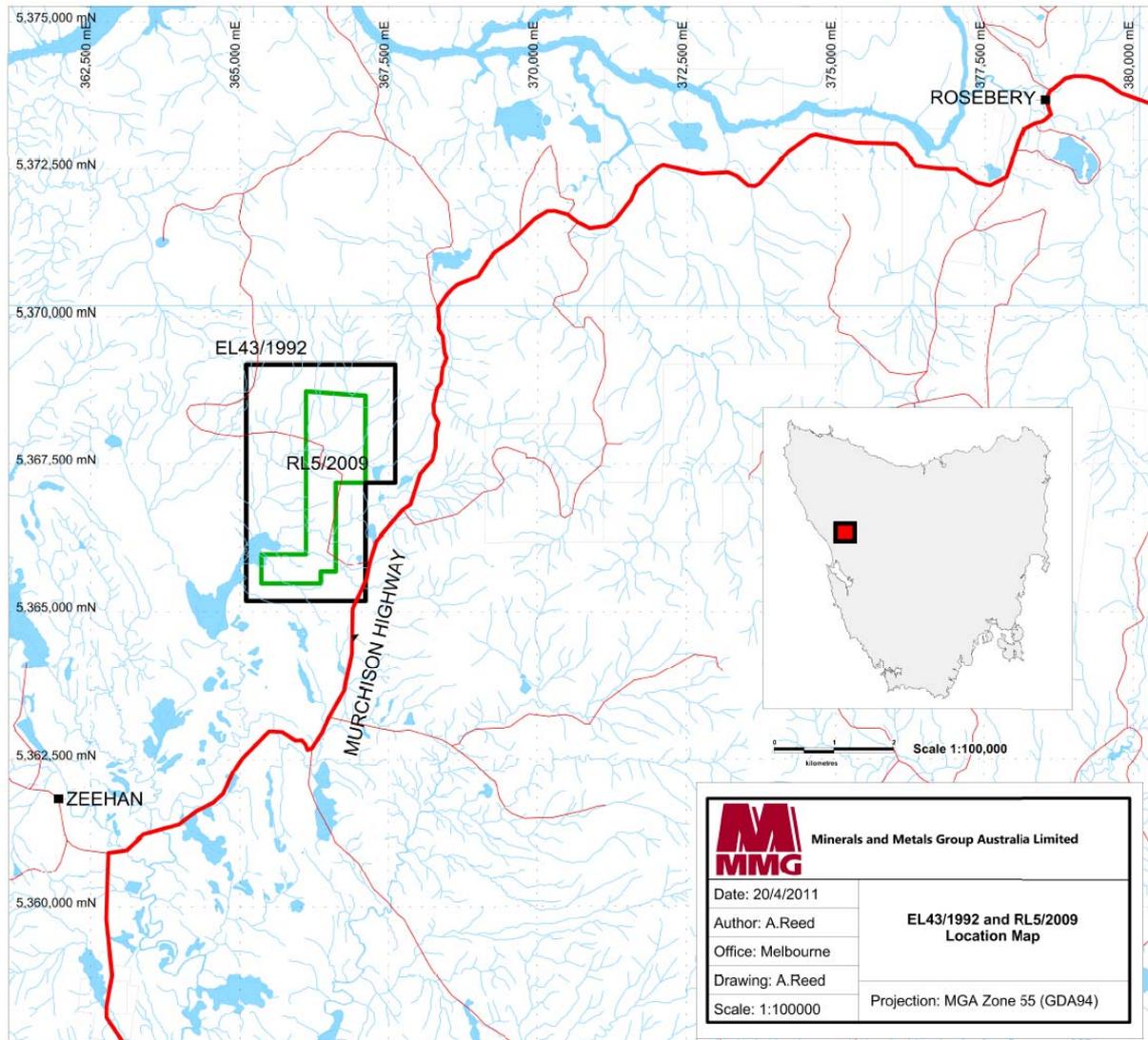


Figure 1. EL43/1992 Location Plan

EL 43/1992 is a 6 sq km Exploration Licence surrounding a 269 ha former mining lease, ML 2/2007. These areas were acquired to facilitate development of identified resources at Melba Flats in conjunction with the Avebury Ni mine. With the acquisition of Allegiance Mining, MMG are now the beneficial owner of both tenements.

Mining Lease 2M/2007 was granted on 22 August 2007 for a 10-year period. Due to the prevailing economic conditions in 2009 and the size of the potential resource at Melba Flats, MMG applied for and had approved the conversion of ML 2/2007 into a Retention Licence (RL5/2009).

Modern exploration for Ni commenced in 1993 when Rio Tinto Exploration (CRA Exploration) explored for high grade Cu Ni deposits associated with the Cuni massive sulphide pods. They undertook Helimag surveying, IP, drilling and sponsored Honours research.

From 1997 to 2008, Allegiance Mining undertook exploration to identify additional feed for the Avebury mill. A number of shallow holes were drilled in what is now the Retention Licence.

Allegiance Mining was acquired by Zinifex in 2008 and ownership then passed to OZ Minerals with the merger of Zinifex and Oxiana in 2008. OZ Minerals undertook limited further shallow drilling. Any resources quoted for Cuni Genets and Nickel Reward in previous reports and by Allegiance Mining prior to the acquisition by Zinifex were not estimated according to the JORC Code for resource estimation. MMG has not attempted to estimate the resources.

2 REGIONAL AND LOCAL GEOLOGY

The Melba Flats area comprises Cambrian sediments intruded by a number of Cambrian(?) gabbro dykes. The dykes are thought to be genetically associated with the Serpentine Hill and Razorback Ultramafic bodies east of the tenements, although an association with the Henty Dyke Swarm is also considered possible. The sediments dip to the east and generally strike north south. District folding and common small-scale faulting commonly cause local variations to this trend.

The gabbro dykes are intrusive, often with chilled and brecciated margins, and are both concordant and discordant with the enclosing sediments. The dykes, sediments and ultramafics are pervasively altered. Carbonate and carbonate-talc alteration of the gabbro dykes is typically accompanied by late stage carbonate veining.

The Melba Flats Ni-Cu mineralisation is typically disseminated throughout a gabbro dyke host, but more concentrated (massive in places) on the footwall of the dyke. Mineralisation is principally pentlandite-millerite-chalcopyrite-pyrite. Significant cobalt, gold and PGE are associated with either (or both) nickel and copper sulphides. Late-stage carbonate alteration and veining is also accompanied by coarse galena-sphalerite-chalcopyrite. The body of existing petrologic data suggests the Melba Flats sulphides are hydrothermal replacement deposits, derived from a larger magmatic source.

Historical production of 10,000t @ 9.5% Ni and 3.5% Cu to a maximum depth of 50m has been estimated for the Melba Flats field. Exploration to date by Allegiance has shown the Ni-Cu mineralisation to be more widespread and persistent to greater depths than previously thought. Drilling by Allegiance, complemented by surface exposure and former mine workings has identified modest shallow potential resources at Nickel Reward and North Cuni-Genets. The district is regarded as prospective for extensions of these resources and for more substantial bodies at depth associated with larger gabbro and ultramafic intrusives.

4 EXPLORATION COMPLETED 2010/2011

The overall strategy for Allegiance Mining at Melba Flats prior to its purchase by Zinifex/OZ Minerals was to commence production from several small pits and to access deeper resources by way of appropriately sized declines from within these pits. Reflecting this strategy, activity at Melba Flats under Allegiance Mining's management in the recent past has been undertaken with the objectives of:

- Expanding the shallow open-cutttable resources via step out drilling campaigns
- Exploring for depth extensions by drilling down dip of known mineralization
- Progressing development of the shallow resources towards production.

MMG's exploration strategy now, is to assess if the Melba Flats area has the potential to host a large scale Ni/Cu +/- PGE sulphide deposit that will reflect MMG's deposit size criteria.

A review of the Melba Flats deposit model by an internal Ni consultant indicates potential for the discovery of a conventional magmatic Ni sulphide deposit at depth. The Melba Flats dykes which host the known Ni sulphide mineralisation could be the shallower expression of a larger ultramafic body at depth.

5 EXPLORATION PLANNED 2011/2012

The large magnetic source west of Melba Flats which may represent an ultramafic body is modelled to have a number of apophyses. Should the advanced JV negotiations be successfully concluded, then the best of the modelled magnetic apophyses will be drill tested. Similar features, but of lower amplitude, are evident within EL43/1992.

If drilling confirms that the magnetic source is an ultramafic body at depth on the adjacent EL, a program of deep searching EM and drilling will be undertaken on EL43/1992. This program would comprise;

	\$
Salaries	50,000
Ground EM geophysics	75,000
Drilling	150,000
Site preparation/rehabilitation	50,000
Total	<u>325,000</u>

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