

# **Moving Loop EM Survey Commences at Mulga Tank Project**

# **Key Points**

- High-powered MLEM survey has commenced at the Mulga Tank Ni-Cu-PGE Project
- Extensive survey over >28km² designed to test entire Mulga Tank ultramafic intrusion
- MLEM aims to delineate buried electromagnetic bedrock conductors that could be associated with deposits of massive Ni-Cu-PGE sulphides
- WMG survey at 200m line spacing and 3x the power of historical surveys will test the intrusion at far greater detail than historical work
- Ongoing news flow at WMG's flagship project over the next 2 months

Western Mines Group Ltd (WMG or Company) (**ASX:WMG**) is pleased to update shareholders on the commencement of a Moving Loop Electromagnetic survey (MLEM) at the Company's flagship Mulga Tank Ni-Cu-PGE Project.

# **Summary**

The Mulga Tank Project project contains the entire Mulga Tank Dunite Intrusion, a major ultramafic intrusion, 100% owned by WMG and a key feature of the under explored Minigwal Greenstone Belt. Limited historical work shows good evidence for a working sulphide mineral system within the intrusion and the project is considered highly prospective for Ni-Cu-PGE magmatic sulphide mineralisation. WMG is completing a series of high-resolution ground based geophysical surveys (ASX, Geophysical Surveys to Unlock Mulga Tank Ni-Cu-PGE Project, 25 August 2021) aimed at unlocking the project; in order to define and derisk robust drill targets.

An extensive MLEM survey has recently commenced at the project. The survey will cover the entire intrusion, of over 28km², and will explore for buried electromagnetic bedrock conductors that could be associated with deposits of massive Ni-Cu-PGE sulphides. At 200m line spacing, this will be at twice the resolution of previous surveys, and using a high-powered, low frequency system the survey will offer greater detail and **greater potential to detect bedrock conductors than any previous work**. The survey will be conducted in three blocks, optimised to the inferred structure of the intrusion, and will offer ongoing news flow from WMG's flagship project over the next 2 months.

Commenting on the Mulga Tank Project, WMG Managing Director Caedmon Marriott said:

"We know the Mulga Tank intrusion shows clear evidence for a working magmatic sulphide mineral system; the required geochemical processes occurred and Ni-Cu-PGE sulphides were formed. The challenge is locating deposit sites where massive sulphide mineralisation may have accumulated.

This MLEM survey will be a key component in our exploration process. Its an extensive, high-resolution and high-powered survey, covering the entire intrusion of over 28km<sup>2</sup> and aims to delineate buried electromagnetic bedrock conductors that could be associated with deposits of massive Ni-Cu-PGE sulphides.



# **Project Overview**

The Mulga Tank Project comprises exploration licence E39/2132 and exploration licence application E39/2223, covering approximately 113km<sup>2</sup> of the southern end of the Minigwal Greenstone Belt, 190km east-northeast of Kalgoorlie. The Minigwal Greenstone Belt, trending NNW over a strike of approximately 50km, is very under explored due to the presence of shallow sand cover. Tenement E39/2132 contains the entire Mulga Tank Dunite Intrusion, a major ultramafic intrusion and a key feature of the area, considered highly prospective for Ni-Cu-PGE magmatic sulphide mineralisation.

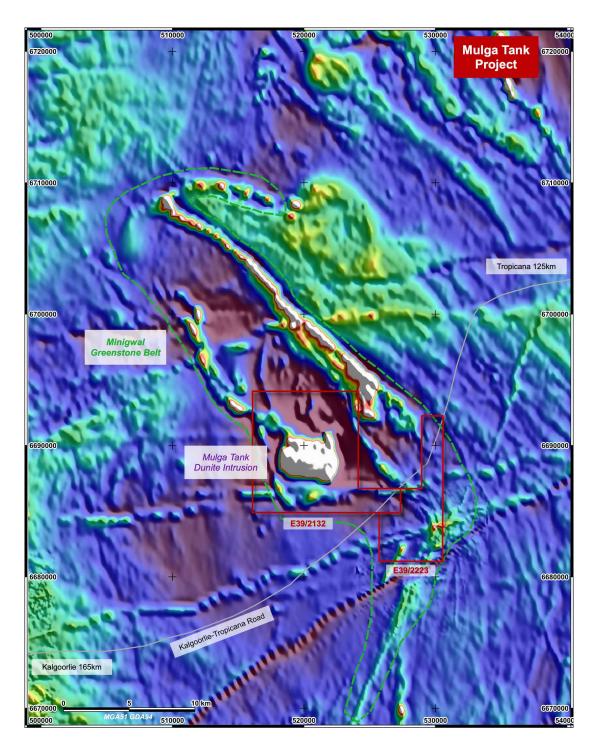


Figure 1: Minigwal Greenstone Belt Aeromagnetics (RTP NEshade L)



# **Moving Loop Electromagnetic Survey**

WMG has designed a high-resolution MLEM survey across the entire Mulga Tank intrusion at 200m line spacing, with 100m station spacing along lines. The Company has engaged GEM Geophysics to undertake the survey using their high-powered, very low frequency system and Jessy Deep HTS SQUID sensor. GEM mobilised to site earlier this week and have now commenced the survey.

The line orientation of the survey has been optimised perpendicular to the interpreted structure of the intrusion and will be completed sequentially in three blocks (Figure 2), offering ongoing news flow from WMG's flagship project over the next 2 months.

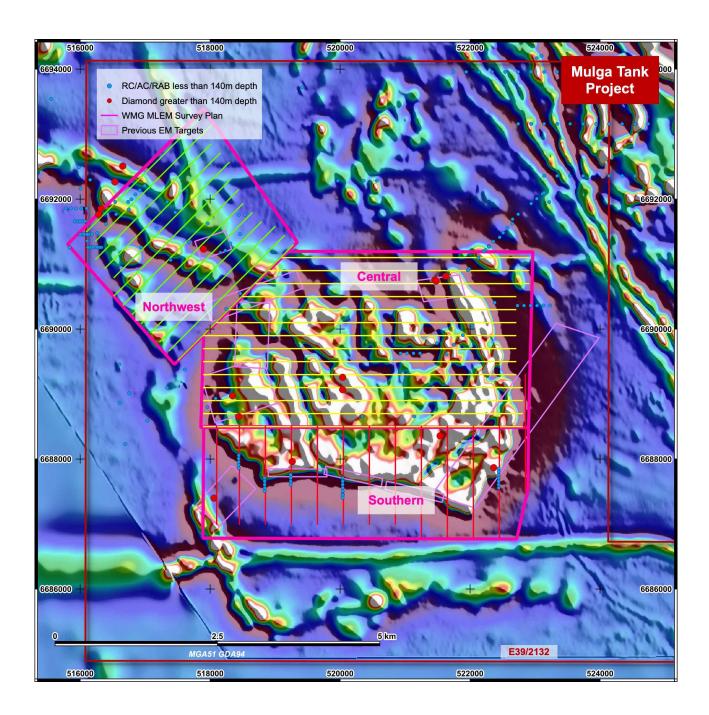


Figure 2: Mulga Tank MLEM Survey Plan



Block	Area	Orientation and Spacing	Notes
Northwest	6.9km <sup>2</sup>	SW-NE at 200m spacing	"Panhandle" area, centred over drill hole MTD006 0.25m at 3.8% Ni, 0.7% Cu and 0.7g/t PGE
Central	12.8km²	E-W at 200m spacing	Main portion of intrusion, looking to resolve historical conductor MTC008 along western edge and multiple targets around MTD004, MTD007 and MTD010
South	8.5km <sup>2</sup>	N-S at 400m spacing	Infill previous survey, extensive geochemical soil anomaly along southern margin, historical BHP RC hole 1.00% Ni

Table 1: Mulga Tank MLEM Survey Blocks

A previous MLEM survey in 2013 identified 10 bedrock conductors across the intrusion. This lowered powered survey was conducted at 400m line spacing, with all lines orientated north-south and as such a number of the EM targets were not able to be sufficiently constrained for drill testing due to the survey lines running approximately parallel to some of the anomalies - including a significant anomaly running along the western side of the intrusion that "is interpreted to be sourced by a large and highly conductive bedrock conductor".

The optimised line orientation of WMG's planned survey should better resolve this untested target, as well as better discern other targets with the high-powered, very low frequency system. WMG's survey will offer greater detail, and greater potential to detect buried electromagnetic bedrock conductors that could be associated with deposits of massive Ni-Cu-PGE sulphides, than all previous work.

WMG is entering an active and productive period with a number of exploration programs operating in parallel across the Company's projects.

The Company looks forward to updating shareholders on the progress of these activities in due course.

For further information please contact: Dr Caedmon Marriott

Managing Director Tel: +61 475 116 798

Email: contact@westernmines.com.au

This announcement has been authorised for release to the ASX by the Board of Western Mines Group Ltd



### **Western Mines Group Ltd**

ACN 640 738 834 Level 3, 33 Ord Street West Perth WA 6005

#### **Board**

Rex Turkington
Non-Executive Chairman

**Dr Caedmon Marriott** *Managing Director* 

Francesco Cannavo
Non-Executive Director

Paul Burton
Non-Executive Director

### **Capital Structure**

Shares: 43.8m Options: 18.4m Share Price: \$0.21 Market Cap: \$9.20m Cash (30/06/21): \$5.5m



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**Western Mines Group** 

### **About WMG**

Western Mines Group Ltd (ASX:WMG) is a mineral exploration company driven by the goal to create significant investment returns for our shareholders through exploration and discovery of high-value gold and nickel sulphide deposits across a portfolio of highly-prospective projects located on major mineral belts of Western Australia.

Our flagship project and current primary focus is the Mulga Tank Ni-Cu-PGE Project, a major dunite intrusive found on the under-explored Minigwal Greenstone Belt. Previous work shows significant evidence for a working sulphide mineral system and is considered highly prospective for Ni-Cu-PGE mineralisation.

WMG holds numerous other projects across major WA mineral belts including Melita (Au), midway between Kookynie and Leonora in the heart of the WA Goldfields and Jasper Hill (Au), with numerous prospective gold trends extending from the adjacent Lord Byron and Fish historical gold mines. The Company is also actively exploring Youanmi (Au), Pavarotti (Ni-Cu-PGE), Rock of Ages (Au), Broken Hill Bore (Au) and Pinyalling (Au).

## **Competent Persons Statement**

The information in this announcement that relates to Exploration Results and other technical information complies with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) and has been compiled and assessed under the supervision of Dr Caedmon Marriott, Managing Director of Western Mines Group Ltd. Caedmon is a Member of the Australian Institute of Geoscientists and a Member of the Australasian Institute of Mining and Metallurgy. He has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code. Caedmon consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

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