

## More than 30 conductors consistent with massive sulphides now identified at Eastern Mafic complex

Some of the strongest conductors coincident with high copper-nickel geochemistry results; Drilling to start in a fortnight

Great Boulder Resources (ASX: GBR) is pleased to announce the ground-based moving loop EM (MLEM) survey at its Mt Venn copper-nickel-cobalt project in WA has identified more strong conductors within the Eastern Mafic complex, taking the total to more than 30.

Many of these conductors are large and shallow, occurring between 50m and 120m below surface, modelled down to a depth of 300-350m below surface and exhibit a strong response consistent with a massive sulphide source.

The most recently-identified conductors sit on a trend from moving-loop anomaly ML1 in the south to ML7 in the centre of the intrusion (see Figure 1). There is a 1km gap in the EM survey between anomaly ML7 and anomaly ML10 that will now be infilled with ground EM to provide full coverage of the 4km-long trend which stretches from ML1 in the south to ML12 and 13 in the north.

This trend is considered to be highly prospective given the conductor plates associated with anomalies ML10, 11 and 12 show some of the strongest late-time responses, with conductance values ranging from 9,000 to 30,000 Siemens. These conductors are also coincident with some of the strongest copper-nickel geochemistry results from the recent aircore drilling and represent priority targets for drill testing (Figure 2).

Several strong conductor plates have also been modelled along the eastern shear zone (ML14 and 15). This shear zone is considered a possible feeder into the intrusion, making the identification of large bedrock conductors along its length even more significant.

A wider-spaced, more powerful EM survey has also been completed to the west of the main trend in an area of deeper weathering and cover. Where the main EM survey uses a 100m diameter loop (60 amps) on close spaced stations to generate detail needed for conductor plate modelling, the wider-spaced survey uses a larger 200m diameter loop which is more powerful (90 amps) and can penetrate deeper through cover and into the intrusion.

The larger EM loop has identified several new anomalies, including an extremely large conductor at the eastern end of the survey area (Figure 1). These will now be infilled with a closer spaced 100m loop EM survey to provide the detail needed to generate conductor plates for additional drill hole planning.

Planning for the maiden drill program is now well advanced and will be adjusted as further EM results are received. Given the large number of conductors already identified, the drill program has been expanded to 6,500-7,000m at the Eastern Mafic plus an additional 2,000-3,000m at Mt Venn to test extensions to known mineralisation.

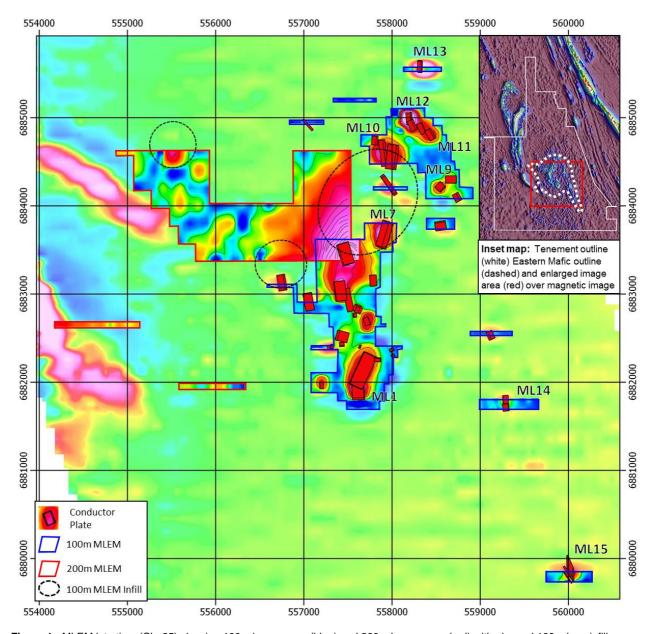
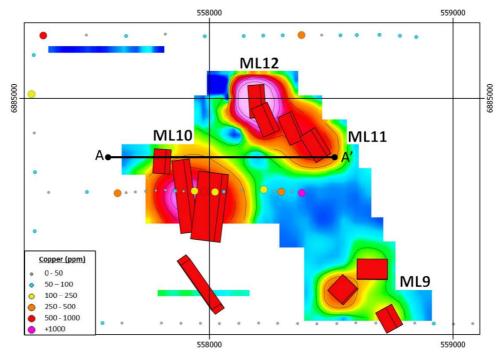


Figure 1: MLEM late time (Ch. 35) showing 100m loop survey (blue) and 200m loop survey (red) with planned 100m loop infill areas (dashed black). Modelled conductor plates are shown in solid red: Base image late-time (Ch. 35) airborne EM

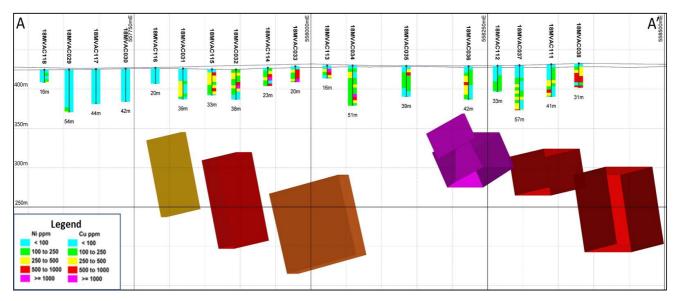
Depth to the top of conductor plates ranges from 40m to 120m below surface, extending down to an average depth of 300 below surface (up to 350m in places). Conductor plate modelling suggests most responses are from relatively thick, steeply dipping sources, which is also supported by magnetic and gravity inversion modelling.

Subtle variations in conductor strength, magnetic, gravity and geochemistry results suggest variations in the formation of the intrusion and sulphide mineralogy. This is evident in the recent 200m loop survey that identified a large continuous conductor over 600m in length, suggesting many of the discrete conductors may also be connected at depth.

Of particular note is the intersection of the eastern shear zone with the core of the intrusion, where some of the strongest conductor plates have been modelled with coincident copper and nickel geochemistry from aircore drilling above the modelled plates (Figure 2). The intersection of a mineralized feeder structure into the neck of the intrusion is considered a primary target for massive nickel sulphide mineralisation.



**Figure 2A**: Plan view map of intersection of the eastern shear zone with the core of the intrusion showing Ch 35 MLEM image and modelled conductor plates with end of hole (fresh rock) copper aircore geochemistry<sup>1</sup>



**Figure 2B:** X-section (6884800mN) showing conductor plate depth and orientation with overlying copper-nickel supergene mineralisation from aircore geochemistry<sup>1</sup> (200m window north and south from section line)

Drilling is expected to commence on Mt Venn in the first week of July, expanding the coppernickel-cobalt mineralization already identified. On completion of the expanded EM survey and Heritage survey, drilling will move to the Eastern Mafic, initially with an RC drill rig and joined shortly after with a diamond drill rig to test the deeper targets.

## Competent Person's Statement

Exploration information in this Announcement is based upon work undertaken by Mr Stefan Murphy whom is a Member of the Australasian Institute of Geoscientists (AIG). Mr Stefan Murphy has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a 'Competent Person' as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC Code). Mr Stefan Murphy is an employee of Great Boulder and consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.

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1. Refer to ASX Announcement "Exceptional EM Conductor Results from Eastern Mafic Complex" (30 April 2018)