

RC drilling starts at Mt Venn copper-nickel-cobalt project in WA

Maiden program comprises 18 holes to test EM conductors with coincident copper-nickel anomalies

Great Boulder Resources (ASX: GBR) is pleased to announce that RC drilling has commenced at its Mt Venn copper-nickel-cobalt prospect within its Yamarna Project east of Laverton in WA.

A total of 18 holes are planned to test 18 of the 32 EM conductor plates as part of the first phase RC drilling program. Given the extensive targets identified in the ground EM survey, only 1-2 holes have been planned for each EM plate. However, additional holes have been designed and a decision to drill these will be made based on results from the first-phase RC program (including which holes to diamond drill).

The drilling will focus on a 5km-long northern trend, where the strongest and most shallow conductors were detected with coincident copper-nickel anomalies. Eight RC drill holes have been planned to test this priority area.

The copper-nickel geochemical trend extends north beyond the limit of the EM survey. In this area, strong silver-zinc-lead results were also returned and it appears to represent a different style of mineralisation to the main magmatic copper-nickel target. Five holes have been planned to test this northern extension and down-hole EM will be undertaken to identify and orientate any conductors associated with sulphide mineralisation.

The northern trend is bounded to the south by a large east-west trending fault. South of the fault, bedrock conductors have been identified over a 3.5km strike but under considerable transported cover. These conductors will be tested in three locations, targeting the large basal conductors and upper more discrete, high amplitude conductors.

The western target area sits off the main Mt Venn trend and exhibits a different geochemical signature, with higher background nickel and chromium levels which suggest a more ultramafic lithology. The conductor plates are deeper than those on the main northern trend and two RC drill holes have been planned for this target.

The RC drill rig has arrived on site and collared the first of the planned 18 drill holes. It is anticipated that the drill program will take three weeks to complete with assay results available two weeks later.

Each RC drill hole will also be cased and prepared for down-hole EM surveying which will then be used to better constrain and orientate the conductors for subsequent phases of RC and diamond drilling.

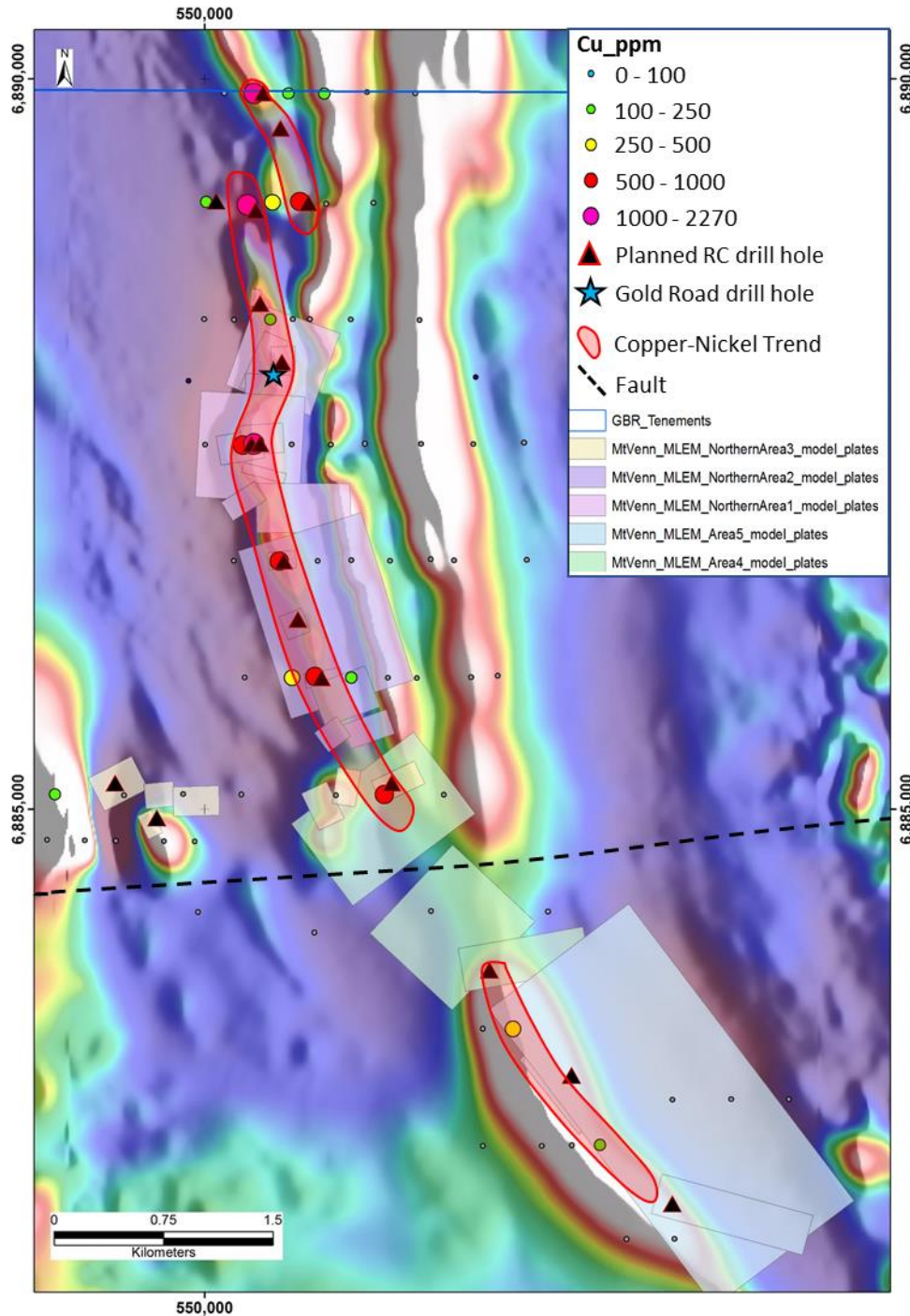


Figure 1. Planned RC drill hole locations, targeting EM conductor plates and copper-nickel trend

The drill hole planning was designed to intersect the middle and upper portions of the conductor plates where the EM response is strongest and drilled perpendicular to its modelled orientation.

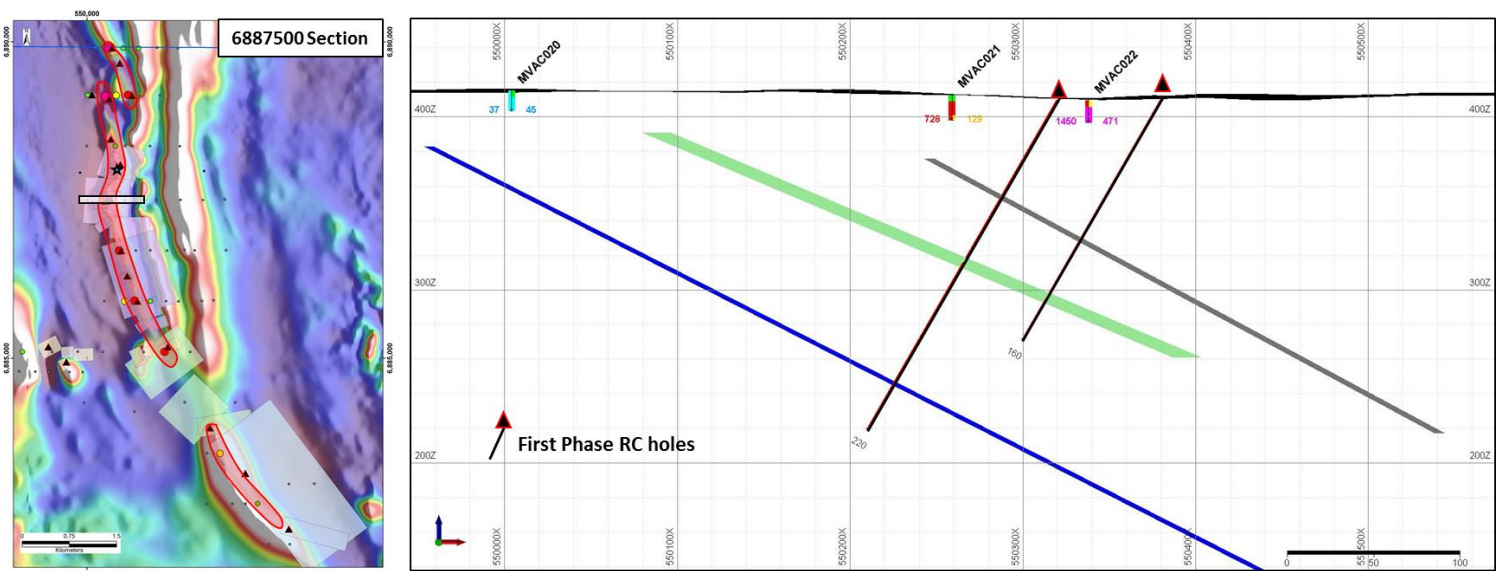
The main drill targets are the shallow, strong EM responses with co-incident copper-nickel geochemistry. However, some drill holes have been extended to the deeper underlying conductor plates where there is no drill data.

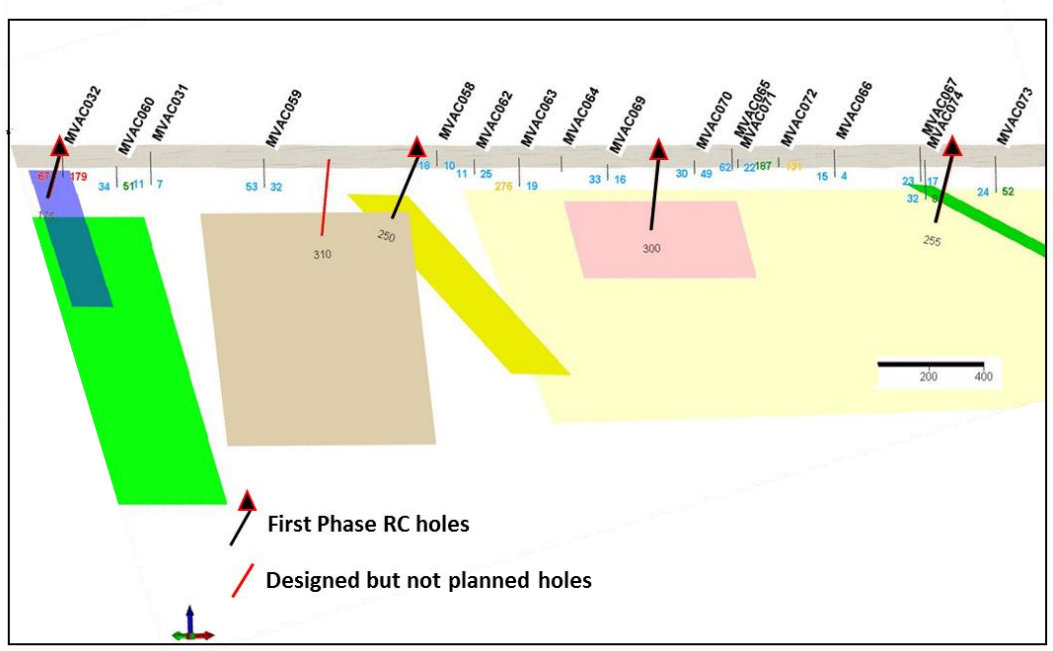
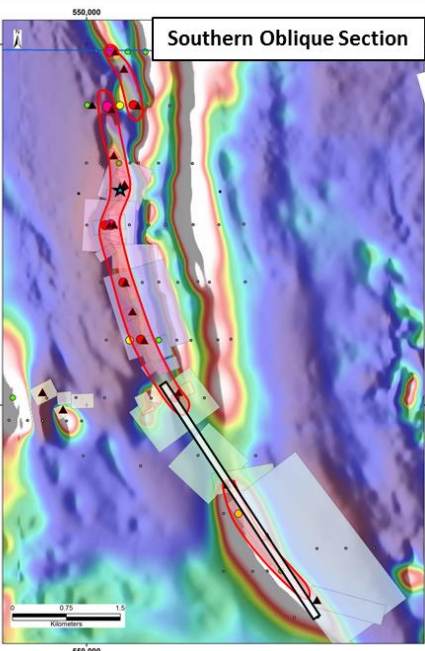
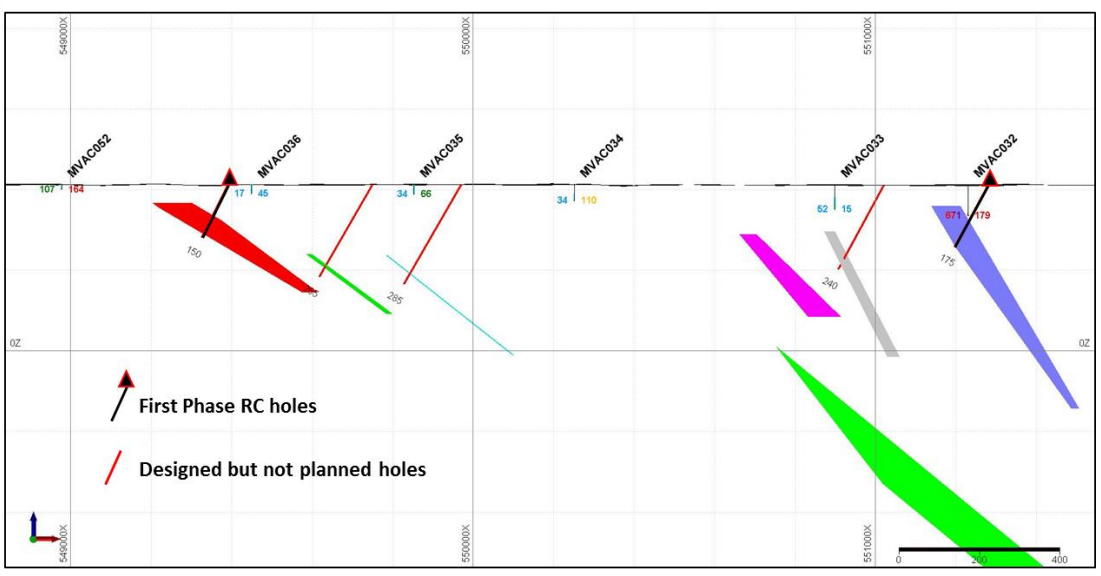
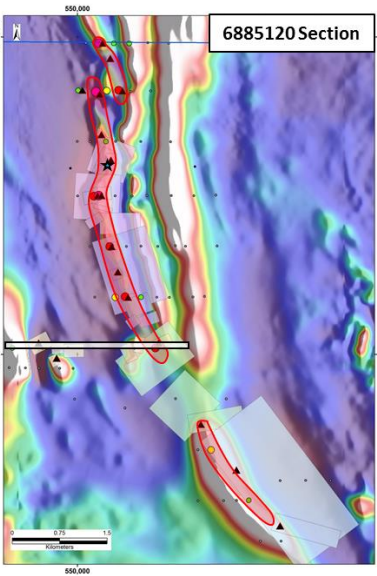
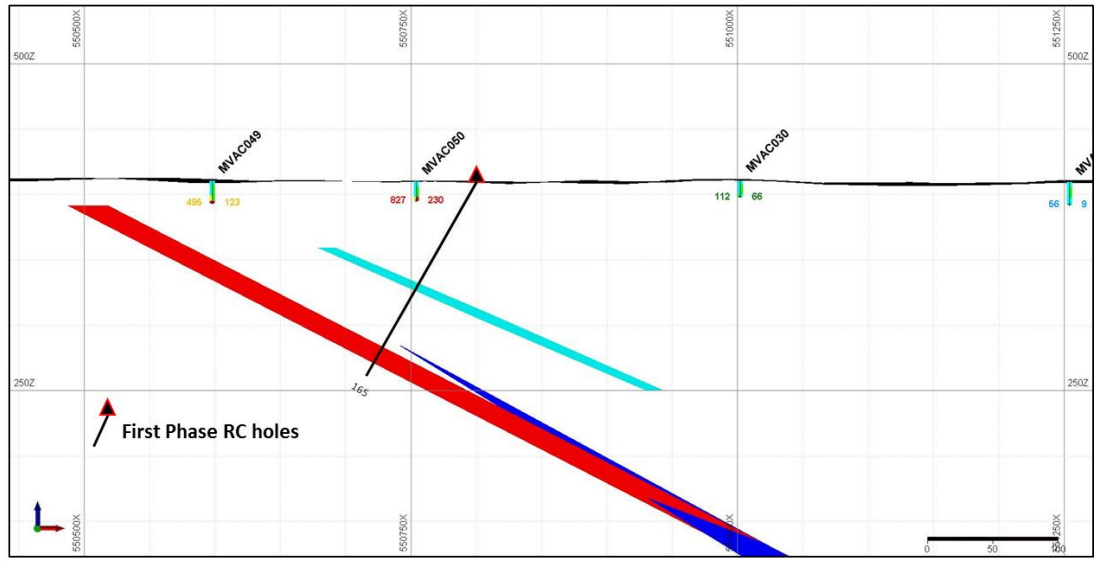
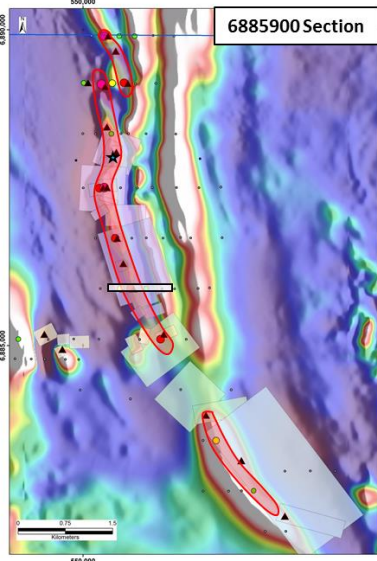
Drill hole planning on the northern extension where no EM was conducted is based on drilling 120m - 160m holes under the peak geochemistry results and then probing with down-hole EM.



Figure 2. RC drill rig on site collaring first hole at Mt Venn

The planned drill hole depths vary from 120m to 300m however the field practice will be to drill at least 30m past the base of the conductive zone (sulphide mineralisation). The following cross-sections show some of the main conductors being targeted and drill hole orientations





Mt Venn Background

Great Boulder's Yamarna Project hosts the Mt Venn igneous complex, where recent drilling established the presence of a mineralised magmatic sulphide system.

In late 2015 Gold Road drilled and assayed an RC drill hole on the edge of an EM anomaly identified from an airborne XTEM survey, identifying copper-nickel-cobalt mineralisation. Great Boulder subsequently re-assayed the hole and confirmed primary bedrock sulphide mineralisation, with peak assay results of 1.7% Cu, 0.2% Ni, 528ppm Co (over 1m intervals) over two distinct lenses.

Zone	From (m)	To (m)	Interval (m)	Cu (%)	Ni (%)	Co (ppm)
Upper	67	73	6	0.54	0.08	244
	<i>including</i>		1	1.53	0.12	341
Lower	85	88	3	0.85	0.12	360
	<i>including</i>		1	1.71	0.07	235

Great Boulder completed a ground based moving loop EM survey in September 2017 and reported extensive strong EM conductors and co-incident copper-nickel mineralisation from aircore geochemistry (refer to announcement dated 5 October 2017 - [link](#)).

The conductors extend over the 7.5km-long survey area of the Mt Venn intrusion and show a strong late-time response indicative of a bedrock source. Aircore drilling also identified sulphide mineralisation and no carbonaceous or graphitic shales have been encountered to-date.

EM plate modelling in the northern survey areas show a series of stacked, near surface conductors along a 3.6km strike length immediately north of an interpreted east-west striking fault. Assay results from this area show a strong correlation between the EM response and copper, nickel and cobalt in the end-of-hole geochemistry.

Aircore drilling defined a very discrete copper-nickel-cobalt bedrock trend (end of hole) associated with the peak conductor trend in the northern area. The geochemical anomaly extends a further 1.2km north of the survey area where some of the strongest copper results, and associated zinc, lead and silver were returned.

In the southern area, the paleochannel cover was extensive and up to 120m deep in places. The ground-based EM was able to penetrate the paleochannel sediments and identify late-time bedrock conductors. The modelled conductor plates are much deeper than the northern area, with assay results still showing a copper-nickel trend but much more moderate than the north.

The average depth to top of conductor in the northern area is 30-50m, whereas the southern conductors beneath the paleochannel sediments are modelled at ~150m below surface.

The northern survey area exhibits a very strong correlation between the modelled conductors and copper-nickel in the aircore geochemistry results. This strong EM-geochemical association provides further evidence that the EM response is associated with bedrock sulphide mineralisation, consistent with the previously reported Gold Road drill hole that intersected massive and semi-massive sulphides with up to 1.7% Copper.

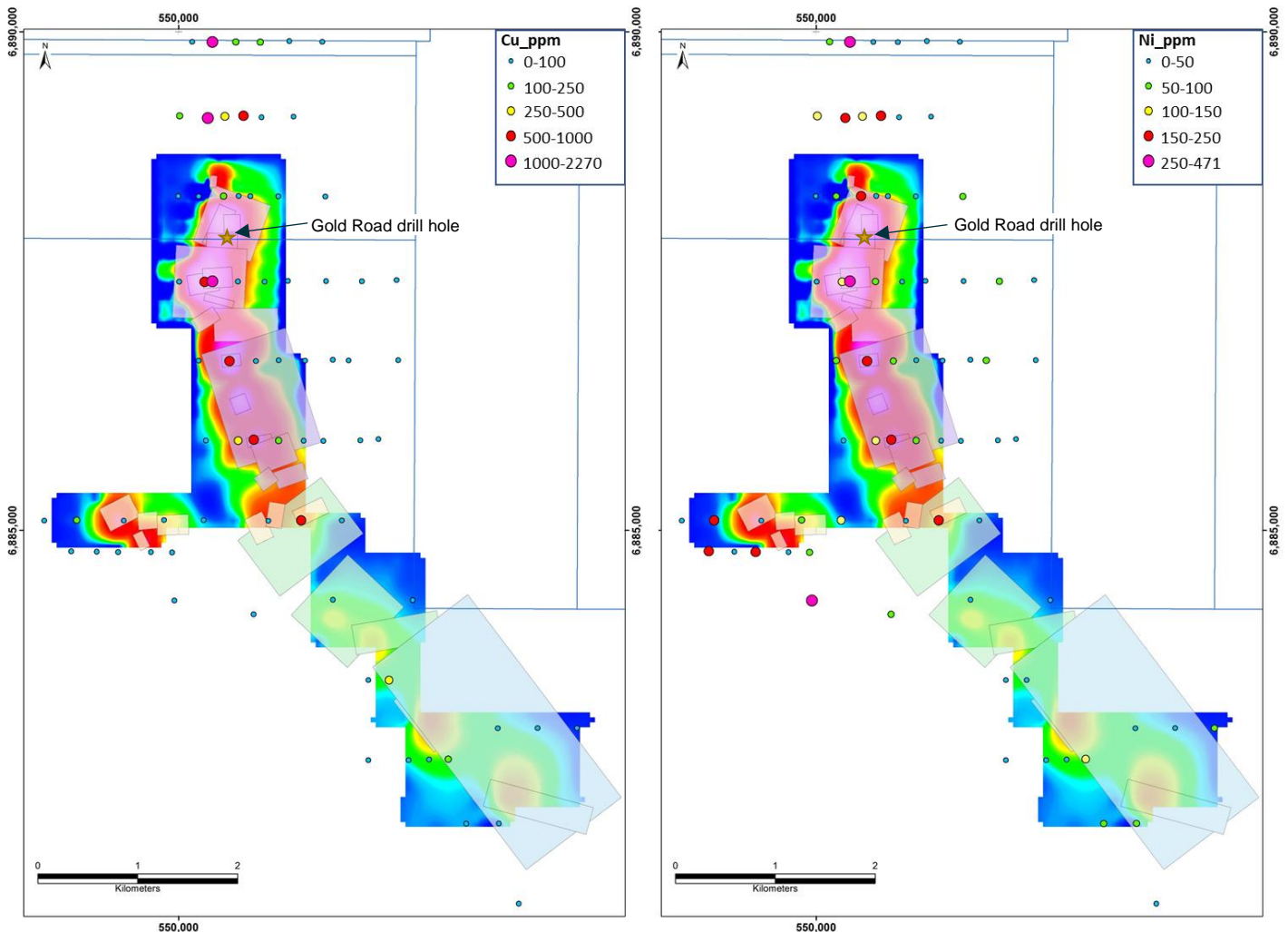


Figure 3. End of hole copper (LHS) and nickel (RHS) grades shown over Channel 30 EM response. Note the EM survey does not cover the northern extension of the Cu-Ni anomaly

In addition to the primary copper-nickel trend, there is a unique multi-element anomaly north of the EM survey area that is particularly anomalous in zinc, lead and silver (Figure 4). The EM survey was not extended to this area, primarily as the XTEM data showed it to be relatively dead. Figure 4 below shows the coincident zinc-lead-silver trend along with copper. In addition to the primary EM conductors, the northern zinc-lead-silver anomaly will also be tested in the RC drill programme.

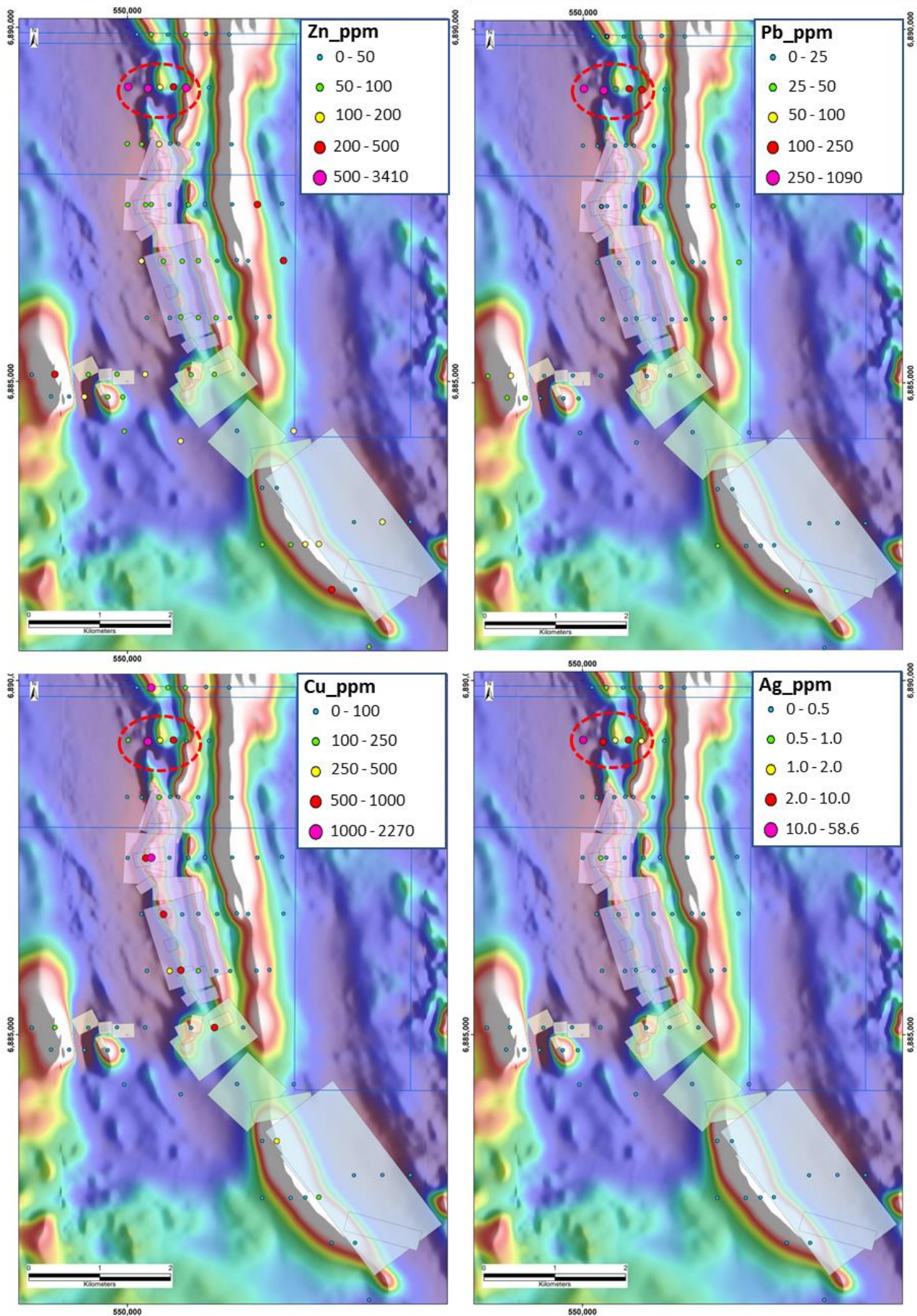


Figure 4. End of hole zinc, lead, silver and copper on RTP magnetic image and modelled EM plates. Red circle highlights discrete zinc-lead-silver anomaly

Competent Person's Statement- Exploration Results

Exploration information in this Announcement is based upon work undertaken by 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 Managing Director 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.

Forward Looking Statements

This Announcement is provided on the basis that neither the Company nor its representatives make any warranty (express or implied) as to the accuracy, reliability, relevance or completeness of the material contained in the Announcement and nothing contained in the Announcement is, or may be relied upon as a promise, representation or warranty, whether as to the past or the future. The Company hereby excludes all warranties that can be excluded by law. The Announcement contains material which is predictive in nature and may be affected by inaccurate assumptions or by known and unknown risks and uncertainties, and may differ materially from results ultimately achieved.

The Announcement contains "forward-looking statements". All statements other than those of historical facts included in the Announcement are forward-looking statements including estimates of Mineral Resources. However, forward-looking statements are subject to risks, uncertainties and other factors, which could cause actual results to differ materially from future results expressed, projected or implied by such forward-looking statements. Such risks include, but are not limited to, copper, nickel, cobalt, gold and other metals price volatility, currency fluctuations, increased production costs and variances in ore grade recovery rates from those assumed in mining plans, as well as political and operational risks and governmental regulation and judicial outcomes. The Company does not undertake any obligation to release publicly any revisions to any "forward-looking statement" to reflect events or circumstances after the date of the Announcement, or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws. All persons should consider seeking appropriate professional advice in reviewing the Announcement and all other information with respect to the Company and evaluating the business, financial performance and operations of the Company. Neither the provision of the Announcement nor any information contained in the Announcement or subsequently communicated to any person in connection with the Announcement is, or should be taken as, constituting the giving of investment advice to any person.