

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.

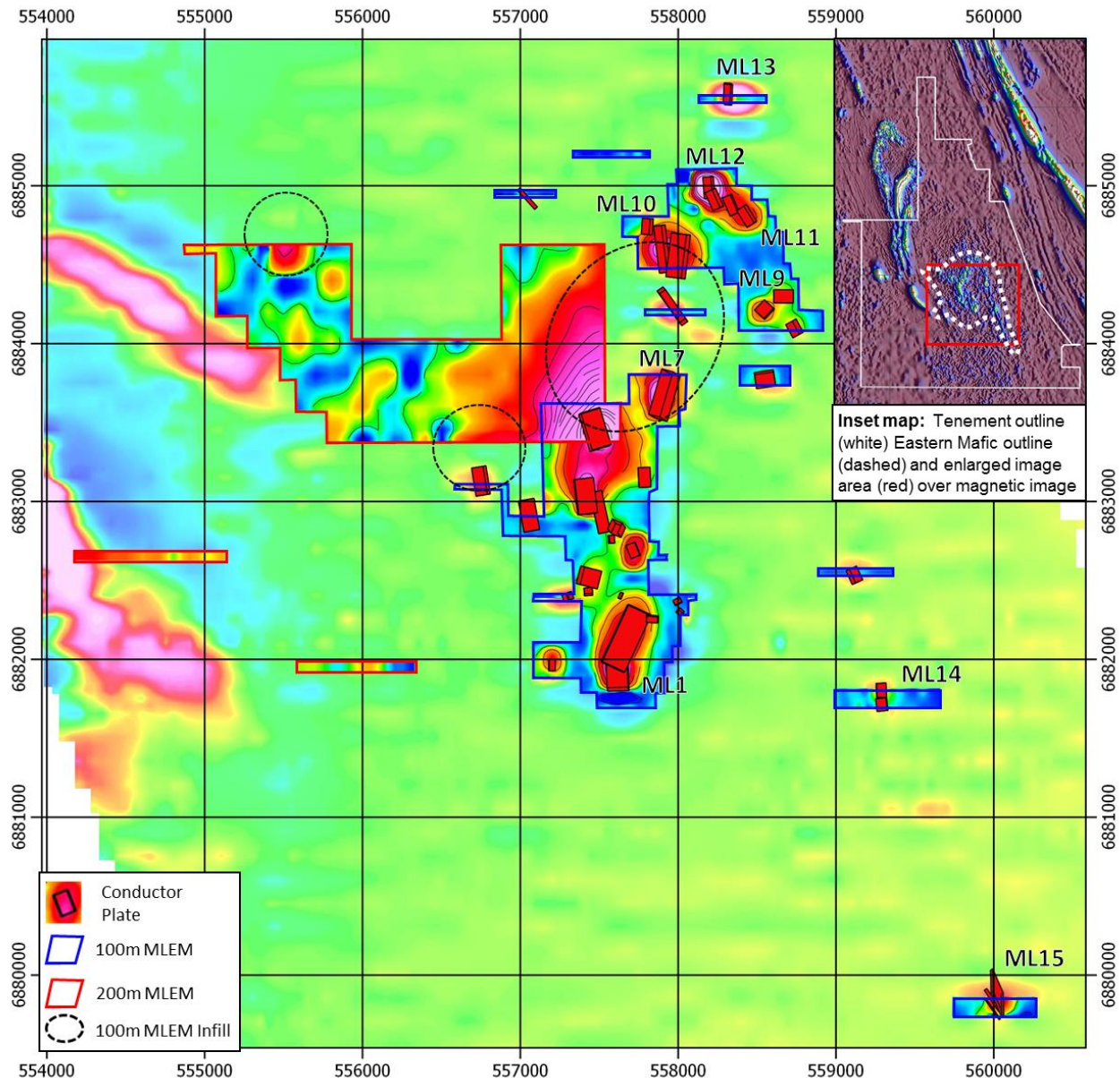


Figure 1: MLEM late time (Ch. 35) showing 100m loop survey (blue) and 200m loop survey (red) with planned 100m loop infill areas (dashed black). Modelled conductor plates are shown in solid red: Base image late-time (Ch. 35) airborne EM

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.

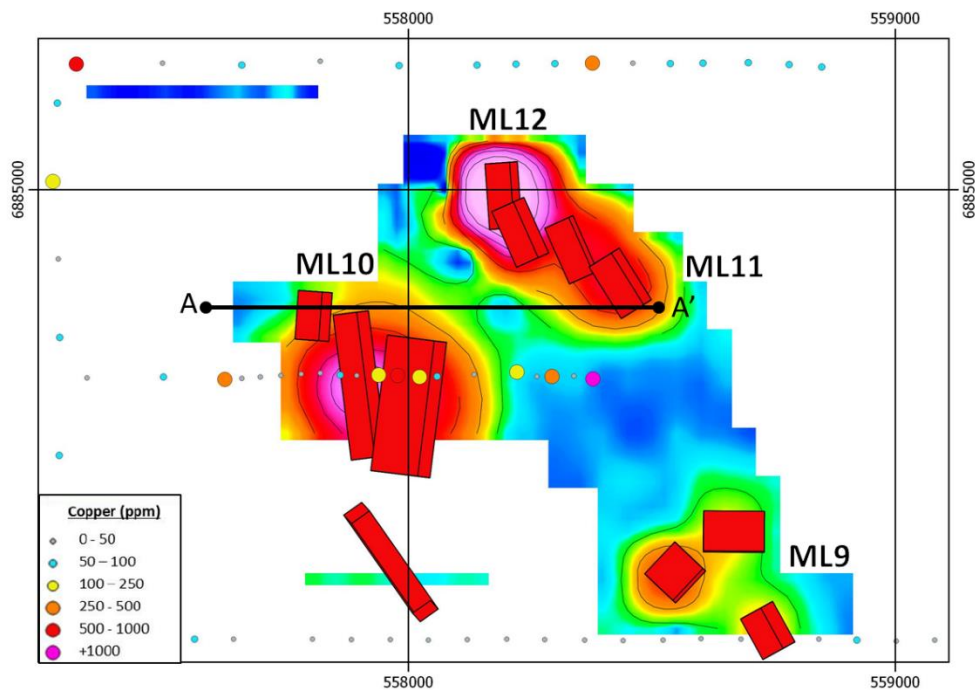


Figure 2A: Plan view map of intersection of the eastern shear zone with the core of the intrusion showing Ch 35 MLEM image and modelled conductor plates with end of hole (fresh rock) copper aircore geochemistry¹

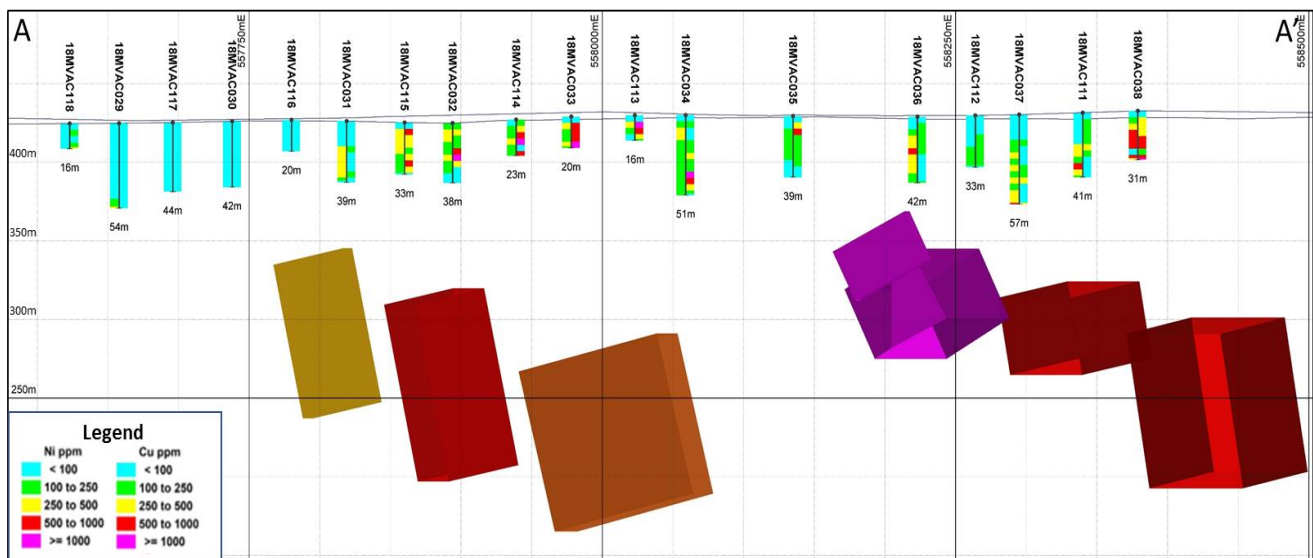


Figure 2B: X-section (6884800mN) showing conductor plate depth and orientation with overlying copper-nickel supergene mineralisation from aircore geochemistry¹ (200m window north and south from section line)

Drilling is expected to commence on Mt Venn in the first week of July, expanding the copper-nickel-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.

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, 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.

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

Appendix- JORC Code, 2012 Edition Table 1

The following table relates to activities undertaken at Great Boulder's Yamarna projects.

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<i>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i> <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> <i>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</i>	This announcement updates activities at Great Boulder Resources' (GBR) Mt Venn project (Yamarna). This includes a ground Electromagnetic Survey. The ground EM survey was carried out at a 100m line spacing with initial 100m stations, down to 25m infill for to better define peak conductors. The survey used a EMIT SMART Fluxgate 3 component B-field sensor and SMARTem24 receiver by Merlin Geophysical Solutions. EM configuration: moving in-loop configuration was used. A 100m x 100m transmitter loop to generate 60 amps with a base frequency of 1Hz and a 200m x 200m transmitter loop to generate 90 amps with a base frequency of 1Hz. Three consistent readings taken at each station. EM survey locations were collected by handheld GPS. The sampling techniques used are deemed appropriate for the style of exploration.
Drilling techniques	<i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i>	No drilling is reported in this announcement.
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> <i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to</i>	No drilling is reported in this announcement.

	<i>preferential loss/gain of fine/coarse material.</i>	
Logging	<i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i> <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> <i>The total length and percentage of the relevant intersections logged.</i>	No drilling is reported in this announcement.
Sub-sampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> <i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i> <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	No drilling is reported in this announcement.
Quality of assay data and laboratory tests	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> <i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i> <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i>	No drilling is reported in this announcement.

Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i> <i>The use of twinned holes.</i> <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> <i>Discuss any adjustment to assay data.</i>	No drilling is reported in this announcement.
Location of data points	<i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i> <i>Specification of the grid system used.</i> <i>Quality and adequacy of topographic control.</i>	EM survey locations were collected by handheld GPS. The MGA94 UTM zone 51 coordinate system was used for all undertakings.
Data spacing and distribution	<i>Data spacing for reporting of Exploration Results.</i> <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i> <i>Whether sample compositing has been applied.</i>	The spacing and location of the data in the projects is, by the nature of early exploration, variable. The spacing and location of data is currently only being considered for exploration purposes.
Orientation of data in relation to geological structure	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i>	No drilling is reported in this announcement. The EM survey was oriented east-west: approximately perpendicular to lithological trends. The spacing and location of the data is currently only being considered for exploration purposes.
Sample security	<i>The measures taken to ensure sample security.</i>	No drilling is reported in this announcement.
Audits or reviews	<i>The results of any audits or reviews of sampling techniques and data.</i>	None completed.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	- Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. - The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.	Great Boulder Resource Ltd (GBR) is comprised of several projects with associated tenements; Yamarna tenements and details; Exploration licences E38/2685, E38/2952, E38/2953, E38/5957, E38/2958, E38/2320 and prospecting licence P38/4178 where, GBR has executed a JV agreement to earn 75% interest through exploration expenditure of \$2,000,000 AUD over five years. Following satisfaction of the minimum expenditure commitment by GBR, EGMC (current tenement owner) will have the right to contribute to expenditure in the project at its 25% interest level or choose to convert to a 2% Net Smelter Royalty (NSR). Should EGMC choose to convert its remaining interest into a 2% NSR, then GBR will have a 100% interest in the project.
Exploration done by other parties	<i>Acknowledgment and appraisal of exploration by other parties.</i>	Previous explorers included: 1990's. Kilkenny Gold NL completed wide-spaced, shallow, RAB drilling over a limited area. Gold assay only. 2008. Elecktra Mines Ltd (now Gold Road Resources Ltd) completed two shallow RC holes targeting extension to Mt Venn igneous complex. XRF analysis only, no geochemical analysis completed. 2011. Crusader Resources Ltd completed broad-spaced aircore drilling targeting extensions to Thatcher's Soak uranium mineralisation. XRF analysis only, no geochemical analysis completed. - 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.
Geology	<i>Deposit type, geological setting and style of mineralisation.</i>	Great Boulder's Yamarna Project hosts the southern extension of the Mt Venn igneous complex. This complex is immediately west of the Yamarna greenstone belt. The mineralisation encountered in the Mt Venn drilling suggests that sulphide mineralisation is prominent along a EM conductor trend, and shows a highly sulphur-saturated system within metamorphosed dolerite and gabbro sequence. Visual logging of sulphide mineralogy shows pyrrhotite dominant with chalcopyrite.

Drill hole Information	• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: ○ easting and northing of the drill hole collar ○ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar ○ dip and azimuth of the hole ○ down hole length and interception depth ○ hole length. • If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	A complete list of the reported significant results from Great Boulder's drilling is provided in the body of the report. The location and context of the EM survey is provided in grid images in the main report body.
Data aggregation methods	• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. • Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. • The assumptions used for any reporting of metal equivalent values should be clearly stated.	No drilling is reported in this announcement.
Relationship between mineralisation widths and intercept lengths	• These relationships are particularly important in the reporting of Exploration Results. • If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. • If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	No drilling is reported in this announcement. The orientation of structures and mineralisation is not known with certainty but geophysical data was conducted using appropriate orientations for interpreted mineralisation. True width and orientation of mineralisation is currently unknown.
Diagrams	• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view	Refer to figures in announcement.

	<i>of drill hole collar locations and appropriate sectional views.</i>	
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	No drilling is reported in this announcement.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	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. 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). Great Boulder has also recently undertaken RC and DD exploratory drilling with down hole EM surveys.
Further work	- The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). - Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Potential work across the project may include detailed additional geological mapping and surface sampling, additional geophysical surveys (either surface or downhole), and potentially additional confirmatory or exploratory drilling.