

# More strong copper-nickel-cobalt assays at Mt Venn discovery in WA

***Mineralised intersection of 80m from near-surface and open in all directions highlights the emerging scale of Mt Venn; diamond drilling now underway***

Great Boulder Resources (ASX: GBR) is pleased to announce the second batch of assays from the maiden drilling program at its Mt Venn project in WA contains more wide intersections of copper, nickel and cobalt.

The latest results provide further evidence Mt Venn is emerging as a significant discovery. Numerous targets are yet to be drill-tested along the prospective 9km of strike length.

Significant assays in the second batch include a mineralised intersection of 80m from 24m downhole in 17MVRC017, containing several wide zones of mineralisation<sup>1</sup>:

- **15m at 0.54% Cu, 0.16% Ni and 0.05% Co from 24m downhole**, including
  - 3m at 1.0% Cu, 0.12% Ni and 0.04% Co from 24m; and
  - 3m at 0.34% Cu, 0.22% Ni and 0.08% Co from 27m
- **16m at 0.59% Cu, 0.13% Ni and 0.04% Co from 62m downhole**, including
  - 3m at 0.85% Cu, 0.13% Ni and 0.04% Co from 63m;
  - 3m at 0.74% Cu, 0.14% Ni and 0.04% Co from 71m; and
  - 2m at 0.40% Cu, 0.21% Ni and 0.07% Co from 76m;
- **10m at 0.78% Cu, 0.18% Ni and 0.06% Co from 90m downhole**, including
  - 3m at 1.0% Cu, 0.16% Ni and 0.05% Co from 90m; and
  - 6m at 0.70% Cu, 0.19% Ni and 0.06% Co from 93m.

The results extend the known mineralisation in the central zone, which hosted the initial strong assay results previously reported (see ASX release dated 13 November, 2017).

A down-hole EM (DHEM) survey has now been completed on all accessible holes with initial results received over the central zone (Figure 2). The updated EM plates show a series of steeply dipping, stacked conductors in the mineralised zone with additional off-hole conductors that will now be tested.

1. Significant assay results from holes 17MVRC016 and 017 are detailed in Appendix 2.

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A diamond drill rig has commenced the first of five planned holes. Diamond drilling will initially focus on completing existing holes that were abandoned along the larger 9km trend and then drill extensions of the main mineralised trend. An RC drill rig is expected back on site early next week and will operate until the Christmas break.

Great Boulder Managing Director Stefan Murphy said the significant scale of Mt Venn is becoming clear.

“The results received so far are outstanding, particularly given that this was a first-pass reconnaissance drilling program,” Mr Murphy said.

“Despite the limited number of holes drilled to date, we have already outlined a substantial discovery of copper, cobalt and nickel over very wide intervals and extensive strike length.

“Importantly, the mineralisation remains open in all directions and we have several highly promising targets yet to be drilled.

“The initial down-hole EM results have provided us with valuable information and we look forward to receiving the final results from the remainder of the survey. This data will allow us to better target the next round of drilling and by Christmas we expect to have a far greater understanding of what is emerging as a large mineralised system.”



**Diamond drilling underway at Mt Venn**

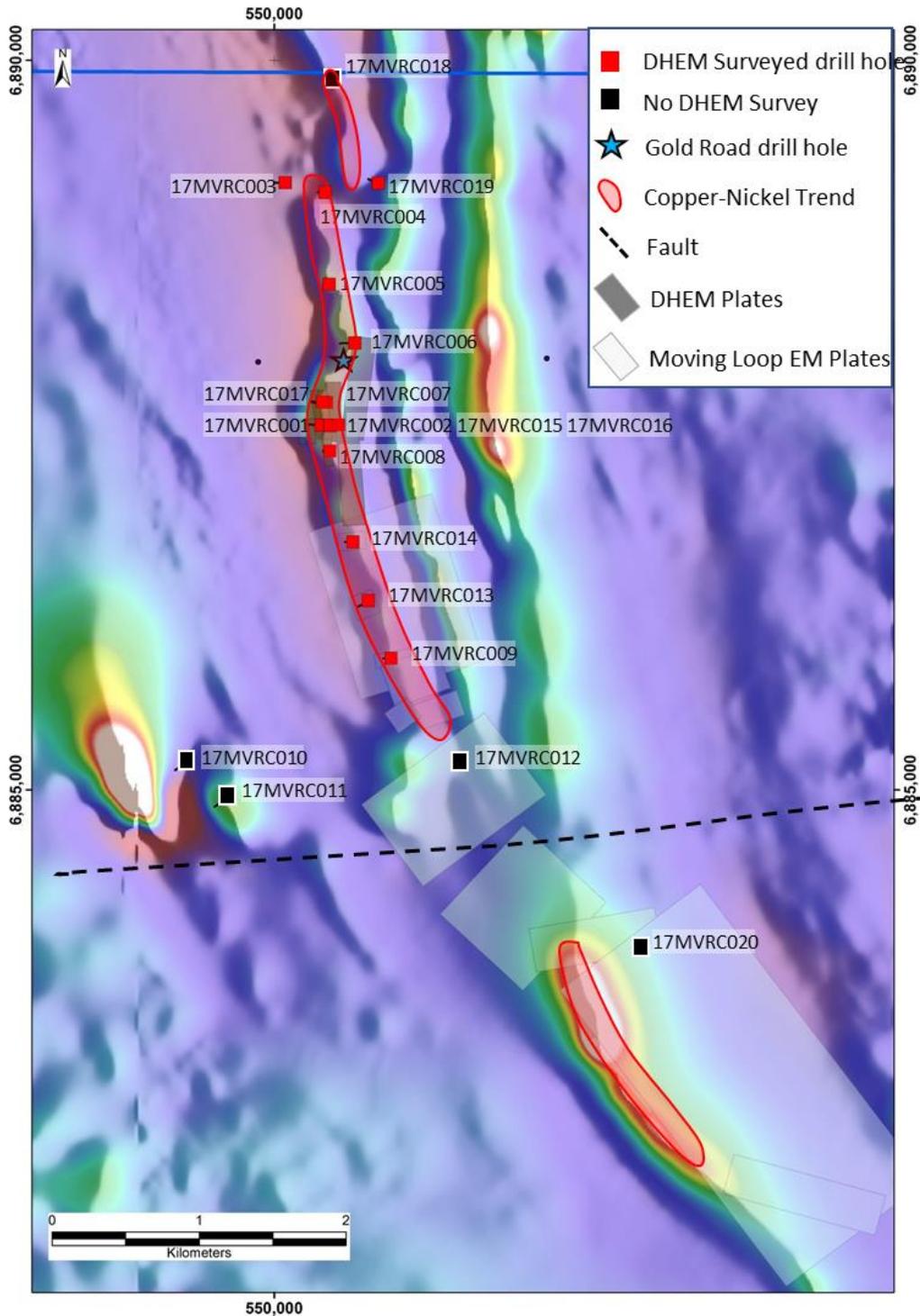


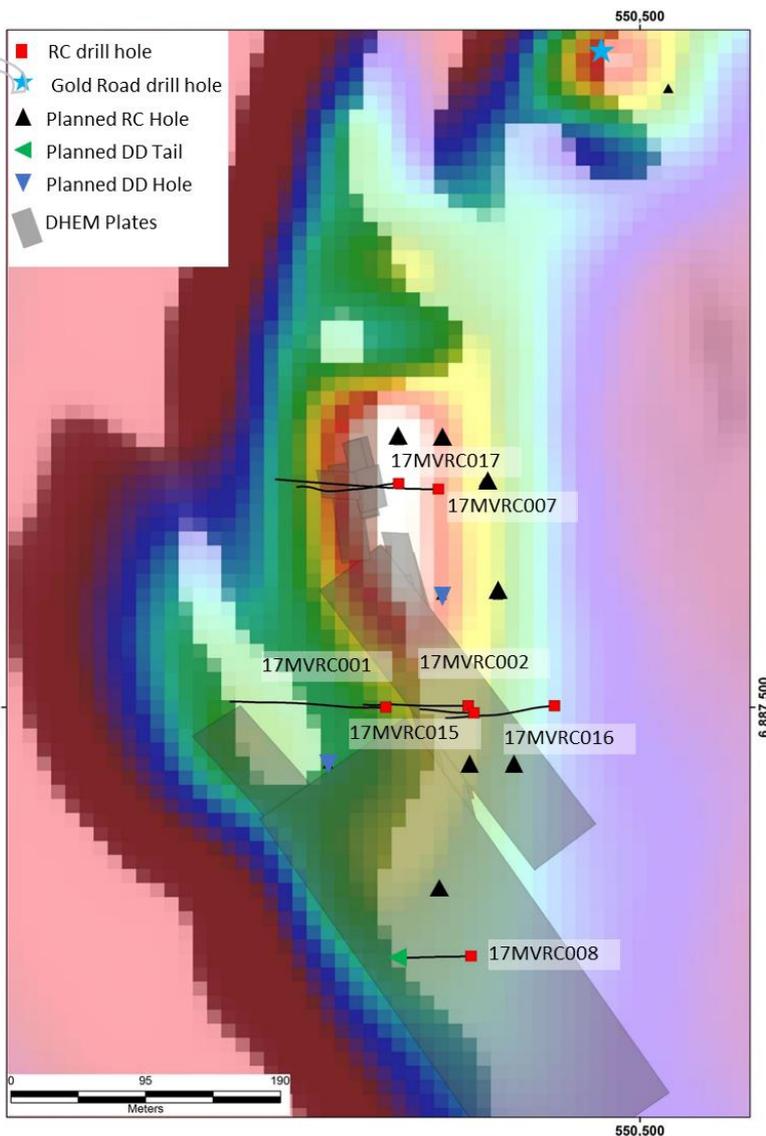
Figure 1. DHEM location map over TMI magnetic image

## Details of the Results

Assay results from 17MVRC017 confirm wide, steeply dipping mineralisation extending from near-surface to a depth of 100m down hole. The high copper grades of **>1% Cu** are particularly encouraging, along with discrete nickel-cobalt rich zones near surface. Strong DHEM conductors have been modelled along strike and down dip which will be targeted in the current drill program.

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Mineralisation intersected in 17MVRC016 shows steep dip continuity from drill hole 17MVRC015. A strong off-hole conductor is detected to the south of 17MVRC016 which is coincident with the magnetic trend heading south west away from the drill hole



**Figure 2.** Central mineralised zone with DHEM plates over RTP-1VD magnetic image

Drill hole 17MVRC008 was drilled at the southern end of the central mineralised zone. The hole terminated before intersecting the main magnetic unit. DHEM has identified an off-hole conductor beneath this hole which corresponds with a magnetic high. Modelling of the EM plate suggests a similar orientation to mineralisation in 17MVRC001, 200m to the northwest. A diamond tail is planned off the bottom of 17MVRC008 to test the off-hole conductor.

An additional RC drill hole is planned 50m to the north of 17MVRC008 (drilled to the west) to test the intersection of the discrete copper dominant mineralisation extending from 17MVRC001 and the copper-nickel-cobalt mineralisation intersected in holes 17MVRC002 & 015.

Results from the DHEM modelling are consistent with the view that mineralisation is strike continuous along the central mineralised zone.

The dominant pyrrhotite sulphide mineralogy also supports the model that the mineralised zone strikes north-south along the magnetic trend and extends further north where significant copper-nickel-cobalt mineralisation is intersected in the Gold Road hole and 17MVRC006.

Priority diamond and RC drilling will be undertaken to test the strike and dip extensions along this zone as well as any off-hole conductors identified in the DHEM survey.

The DHEM survey also identified a discrete, strong off-hole conductor associated with the high-grade copper zone in 17MVRC001, along a separate western magnetic trend. The conductor peak is located south and closer to surface than intersected in 17MVRC001 and will be tested with a diamond drill hole during this current program.

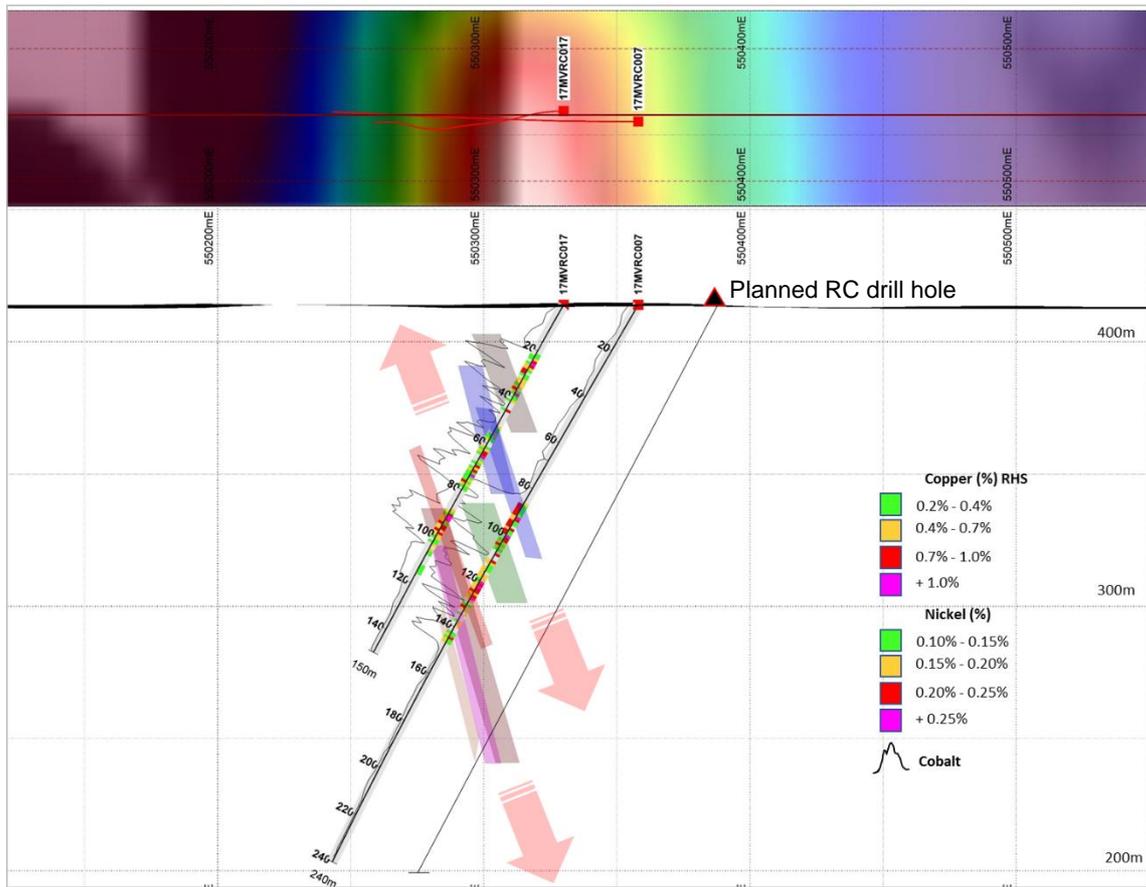


Figure 3. X-Section 6887660mN with modelled EM conductor plates (TMI-1VD magnetic image top)

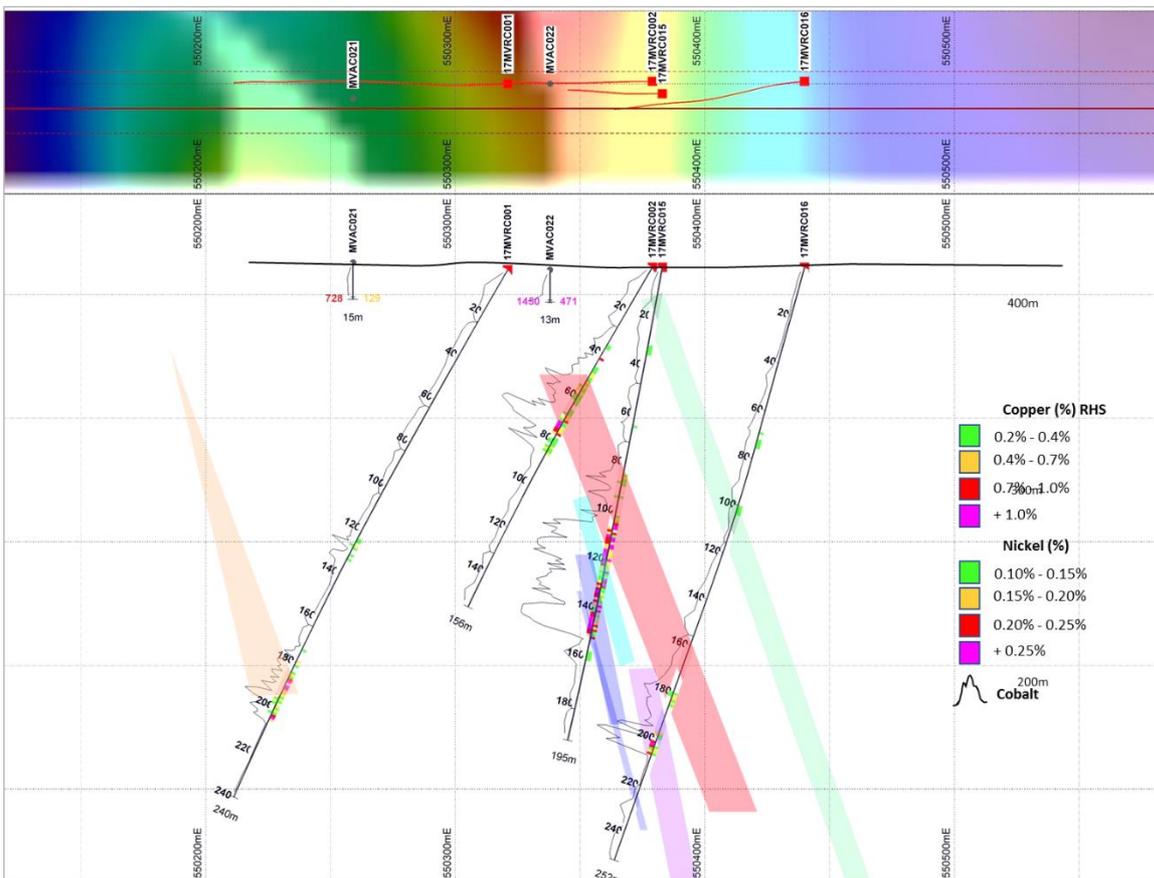


Figure 4. X-Section 6887500mN with modelled EM conductor plates (TMI-1VD magnetic image top)

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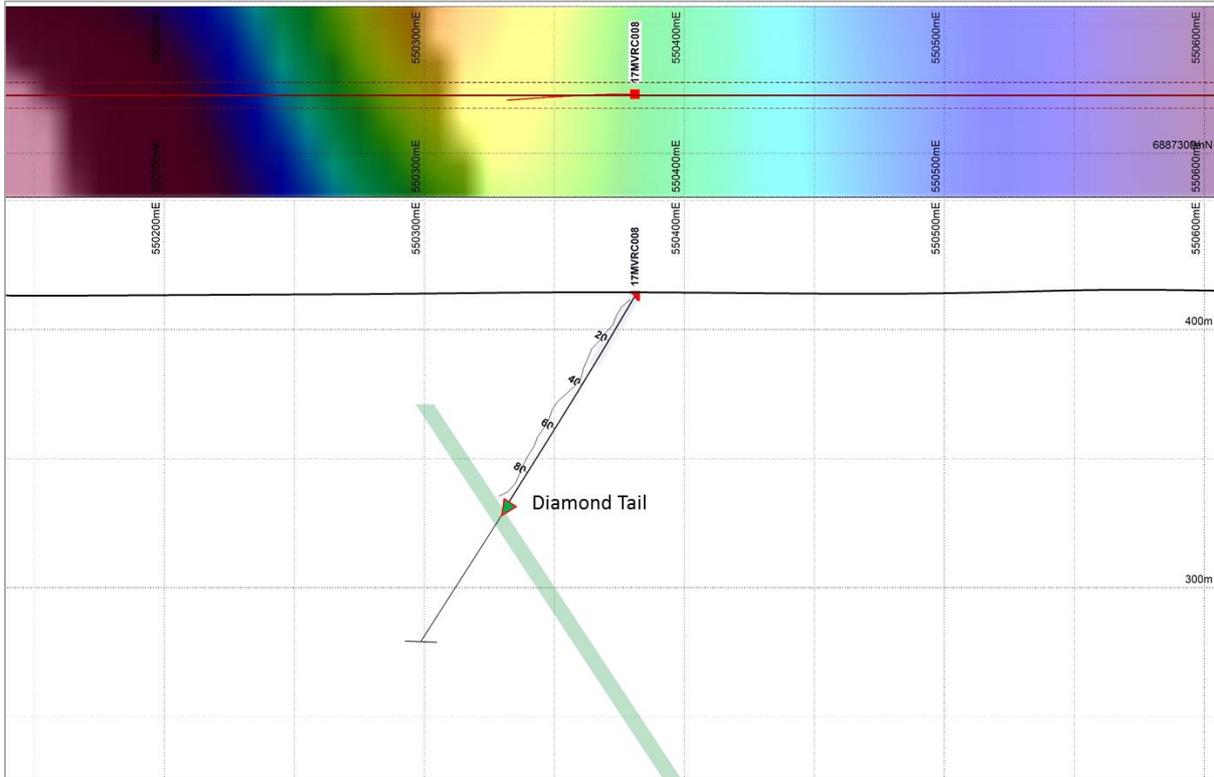


Figure 5. X-Section 6887320mN with modelled EM conductor plate (TMI-1VD magnetic image top)

DHEM modelling for the remaining surveyed holes is currently underway, with final conductor plates expected in the coming days. RC drilling, and where required diamond tails, will then be drilled to test any off-hole conductors identified along the northern and southern extensions to the central mineralised zone (Figure 6 and 7).

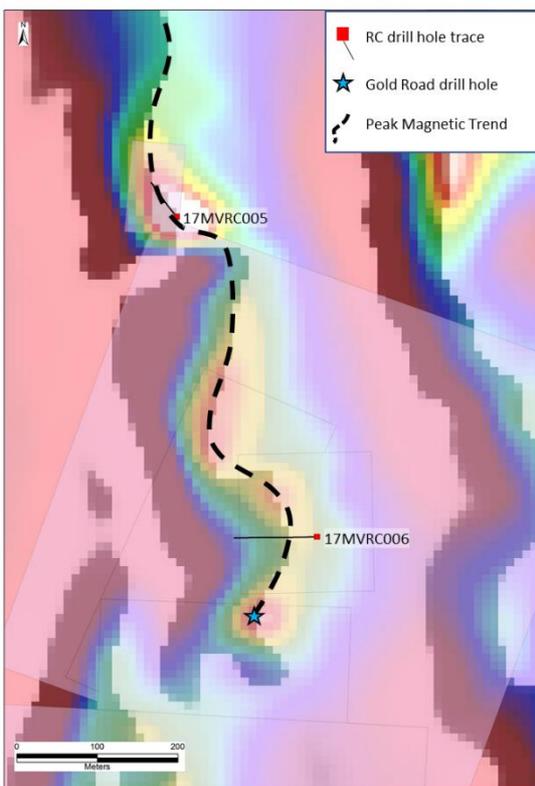


Figure 6. Northern extension to central mineralised zone

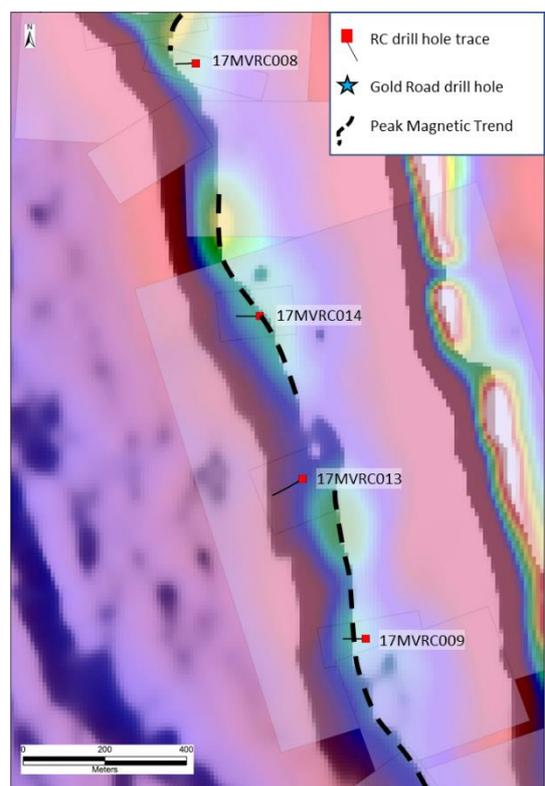


Figure 7. Southern extension to central mineralised zone

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Preliminary petrography results have also been received that show the dominant rock types in the area are gabbros and pyroxenites, metamorphosed to amphibolite facies. Silicate minerals have been recrystallized during peak amphibolite metamorphism, with dominant plagioclase and amphibole after pyroxene noted in the rock specimens.

The sulphide mineralogy is pyrrhotite dominant with common chalcopyrite and rare pentlandite. The sulphide minerals appear to have been remobilized to secondary sites, intergrown with both the amphibolite assemblages and later, retrogressive greenschist assemblages. Given the dominant gabbro precursor and copper rich sulphide composition, the initial petrography results provide further evidence the mineralisation intersected so far at Mt Venn represents a late-stage, highly fractionated phase of the magmatic system.

Great Boulder intends taking several bulk samples from diamond core through the main mineralised zones for initial metallurgical test-work, assessing the distribution of different sulphide minerals and ability to produce separate copper and nickel-cobalt concentrates.

#### **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.

## Appendix 1 – RC drill hole collar locations

Hole ID	Easting	Northing	Azimuth	Dip	EoH (m)
17MVRC001	550321	6887500	268	-60	240
17MVRC002	550379	6887501	270	-60	156
17MVRC003	550076	6889161	268	-60	156
17MVRC004	550349	6889094	270	-60	102
17MVRC005	550376	6888464	315	-60	108
17MVRC006	550550	6888062	270	-60	198
17MVRC007	550358	6887655	270	-60	240
17MVRC008	550381	6887323	270	-60	95
17MVRC009	550798	6885902	270	-60	114
17MVRC010	549394	6885181	236	-60	150
17MVRC011	549672	6884938	234	-60	174
17MVRC012	551278	6885178	250	-60	114
17MVRC013	550643	6886297	240	-60	162
17MVRC014	550538	6886699	268	-60	120
17MVRC015	550383	6887496	270	-80	195
17MVRC016	550440	6887501	265	-75	252
17MVRC017	550330	6887659	270	-60	150
17MVRC018	550400	6889902	260	-60	102
17MVRC019	550710	6889157	285	-60	150
17MVRC020	552510	6883900	268	-60	87

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Appendix 2 – Significant Cobalt-Nickel-Copper Intercepts

Hole = 17MVRC016					
From	To	Interval	Cu % (max graph 2%)	Ni % (max graph 0.3 %)	Co ppm (max graph 1000ppm)
176	180	4	0.16	0.07	254
180	181	1	0.30	0.11	407
181	182	1	0.46	0.10	381
182	183	1	0.62	0.08	332
183	184	1	0.33	0.10	317
184	185	1	0.42	0.07	263
185	186	1	0.34	0.08	313
186	190	4	0.13	0.08	285
190	194	4	0.12	0.05	171
194	195	1	0.14	0.07	236
195	196	1	0.08	0.03	105
196	197	1	0.10	0.07	211
197	198	1	0.58	0.16	528
198	199	1	0.25	0.18	578
199	200	1	0.27	0.06	199
200	201	1	0.17	0.04	139
201	202	1	0.17	0.22	705
202	203	1	0.19	0.26	816
203	204	1	0.33	0.20	652
204	205	1	0.47	0.15	469
205	206	1	0.70	0.17	561
206	207	1	0.27	0.20	640

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Hole = 17MVRC017						
From	To	Interval	Cu % (max graph 2%)	Ni % (max graph 0.3 %)	Co ppm (max graph 1000ppm)	
20	21	1	0.10	0.04	144	
21	22	1	0.24	0.04	167	
22	23	1	0.28	0.13	474	
23	24	1	0.49	0.14	476	
24	25	1	0.75	0.09	339	
25	26	1	1.46	0.12	413	
26	27	1	0.75	0.16	555	
27	28	1	0.51	0.19	670	
28	29	1	0.32	0.22	748	
29	30	1	0.19	0.25	855	
30	31	1	0.27	0.15	508	
31	32	1	0.31	0.07	257	
32	33	1	0.61	0.15	541	
33	34	1	0.42	0.16	561	
34	35	1	0.40	0.14	479	
35	36	1	0.45	0.16	564	
36	37	1	0.18	0.22	745	
37	38	1	0.36	0.17	571	
38	39	1	1.10	0.12	417	
39	40	1	0.35	0.04	153	
40	41	1	0.29	0.08	269	
41	42	1	0.50	0.12	404	
42	43	1	0.03	0.05	159	
43	44	1	0.01	0.02	50	
44	45	1	0.01	0.02	46	
45	46	1	0.72	0.12	371	
46	47	1	0.15	0.06	188	
47	48	1	0.02	0.02	40	
48	49	1	0.15	0.06	182	
49	50	1	0.04	0.03	76	
50	51	1	0.02	0.02	50	
51	52	1	0.16	0.02	46	
52	53	1	0.45	0.03	100	
53	54	1	0.26	0.07	225	
54	55	1	0.24	0.08	247	
55	56	1	0.46	0.04	133	
56	57	1	0.66	0.12	349	
57	58	1	0.32	0.12	383	
58	59	1	0.21	0.15	467	
59	60	1	0.17	0.05	147	
60	61	1	0.20	0.08	256	
61	62	1	0.33	0.17	513	
62	63	1	0.59	0.15	465	
63	64	1	0.78	0.16	499	
64	65	1	0.70	0.14	420	
65	66	1	1.06	0.09	272	
66	67	1	0.28	0.03	122	
67	68	1	0.51	0.08	283	
68	69	1	0.32	0.11	349	
69	70	1	0.72	0.07	265	
70	71	1	0.47	0.15	470	
71	72	1	0.86	0.18	560	
72	73	1	0.27	0.12	373	
73	74	1	1.10	0.13	408	
74	75	1	0.31	0.13	423	
75	76	1	0.63	0.11	393	
76	77	1	0.23	0.22	695	
77	78	1	0.57	0.20	623	
78	79	1	0.28	0.10	345	
79	80	1	0.21	0.04	141	
80	84	4	0.16	0.05	151	
84	88	4	0.17	0.08	247	
88	89	1	0.64	0.05	151	
89	90	1	0.37	0.18	570	
90	91	1	0.74	0.14	500	
91	92	1	1.06	0.16	529	
92	93	1	1.25	0.17	538	
93	94	1	0.68	0.19	608	
94	95	1	0.32	0.20	653	
95	96	1	0.92	0.18	597	
96	97	1	0.88	0.18	574	
97	98	1	0.44	0.22	673	
98	99	1	0.95	0.19	593	
99	100	1	0.52	0.20	625	
100	101	1	0.42	0.13	423	
101	102	1	0.26	0.09	283	
102	103	1	0.24	0.12	389	
103	104	1	0.56	0.06	201	

## 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 along the main conductor trend.

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.

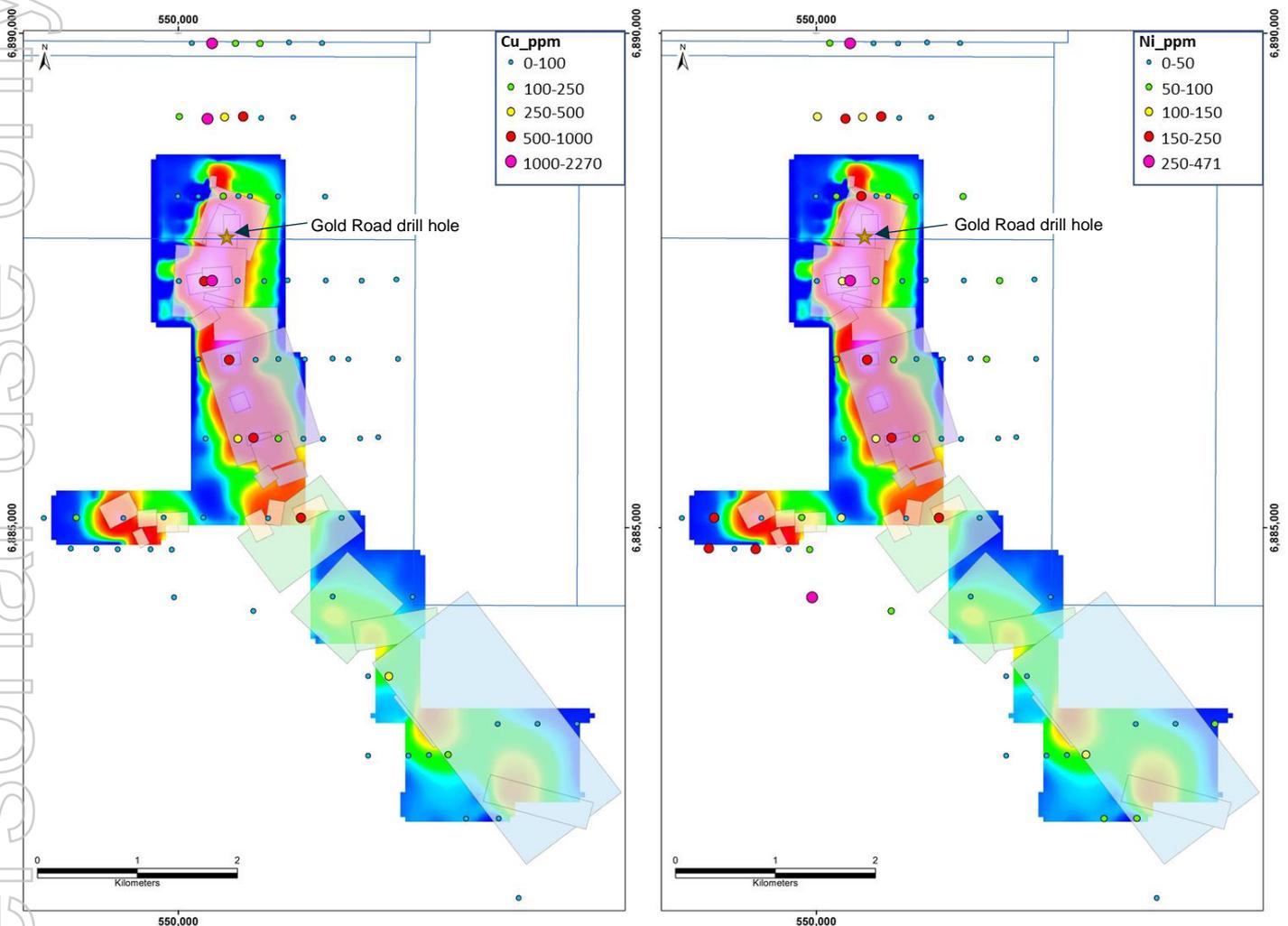
Aircore drilling defined a very discrete copper-nickel-cobalt bedrock trend (end of hole) associated with the peak conductor trend in the northern area. The geochemical anomaly extends a further 1.2km north of the survey area where some of the strongest copper results, and associated zinc, lead and silver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

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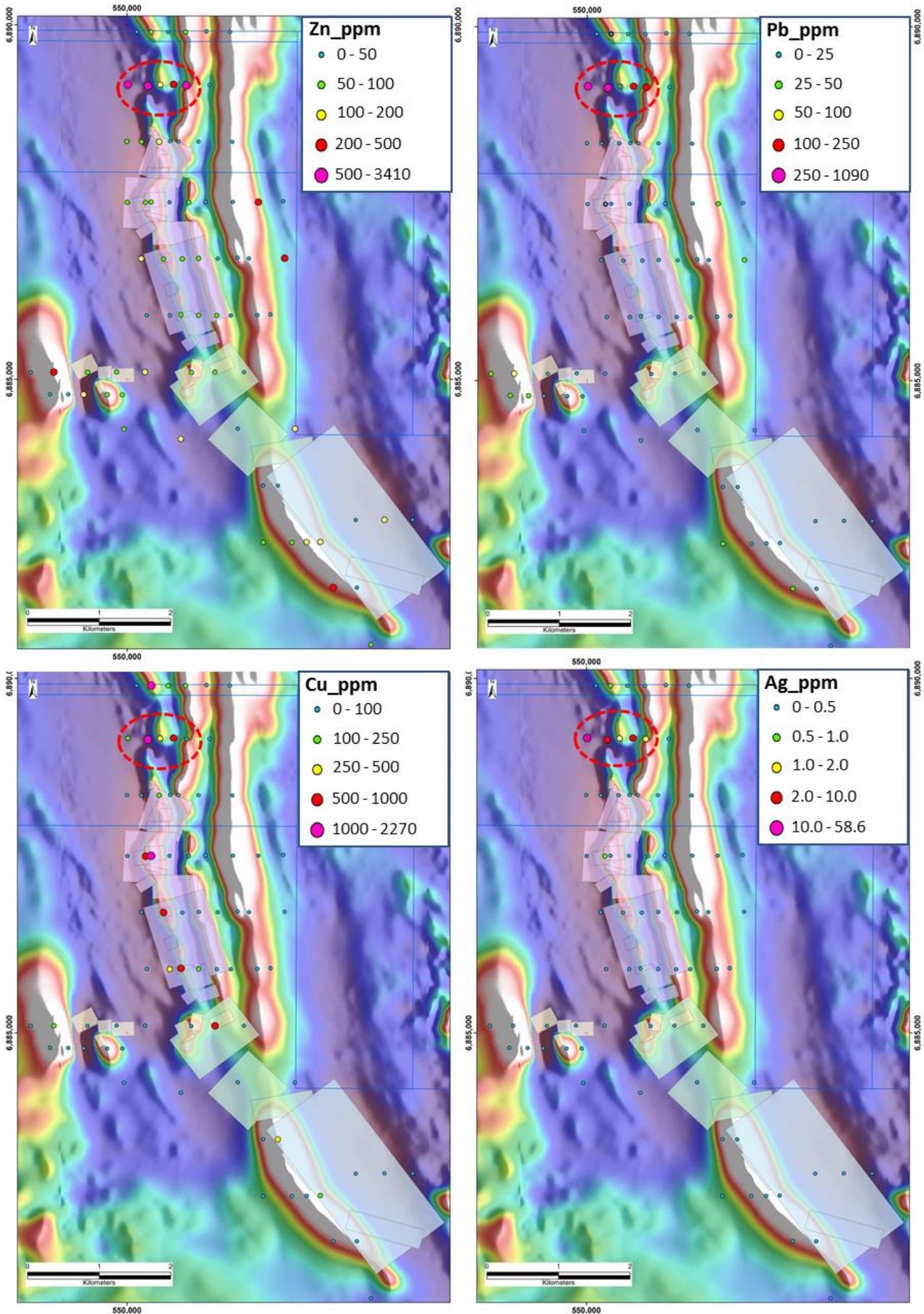
The northern survey area exhibits a very strong correlation between the modelled conductors and copper-nickel in the aircore geochemistry results. This strong EM-geochemical association provides further evidence that the EM response is associated with bedrock sulphide mineralisation, consistent with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



**Figure 8.** 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. The EM survey was not extended to this area, primarily as the XTEM data showed it to be relatively dead. Figure 5 below shows the coincident zinc-lead-silver trend along with copper.

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**Figure 9.** End of hole zinc, lead, silver and copper on RTP magnetic image and modelled EM plates. Red circle highlights discrete zinc-lead-silver anomaly

## Appendix- JORC Code, 2012 Edition Table 1

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

## Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<p>Reverse circulation drilling (RC) was used to produce a 1m bulk sample and representative 1m split samples (nominally a 12.5% split) were collected using a cone splitter.</p> <p>Geological logging was completed and mineralised intervals were determined by the geologists to be submitted as 1m samples. In intervals assessed as unmineralised 4m composite (spear) samples were collected for laboratory for analysis. If these 4m composite samples come back with anomalous grade the corresponding original 1m split samples are then routinely submitted to the laboratory for analysis.</p> <p>The samples were crushed and split at the laboratory, with up to 3kg pulverised, with a 50g samples analysed by Industry standard methods.</p> <p>The sampling techniques used are deemed appropriate for the style of exploration.</p> <p>The down hole EM (DHEM) survey was carried out on selected, case drillholes, DigiAtlantis system by Merlin Geophysical Solutions. The DHEM surveys were designed/managed by Newexco Services.</p> <p>DHEM survey Specifications:</p> <ul style="list-style-type: none"> <li>200mx200m loops (~80amps)</li> <li>Phoenix TXU-30 transmitter</li> <li>EMIT DigiAtlantis 3-Componet fluxgate probe</li> <li>EMIT SAMRTem24 receiver</li> <li>Base frequency of 0.125Hz to 1 Hz</li> <li>Stacks 3x8, 3X16 and 3x 128</li> <li>Sampling interval 2.5m/5m/10m</li> </ul> <p>DHEM Survey collar locations collected by handheld GPS.</p>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>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).</li> </ul>	<p>Reverse Circulation drilling used 125 to 140mm diameter drill bits. RC drilling employed face sampling hammers ensuring contamination during sample extraction is minimised.</p>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> </ul>	<p>Drilling techniques to ensure adequate RC sample recovery and quality included the use of "booster" air pressure. Air pressure used for RC drilling was 700-800psi.</p>

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- *Measures taken to maximise sample recovery and ensure representative nature of the samples.*
  - *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*
- Logging of all samples followed established company procedures which included recording of qualitative fields to allow discernment of sample reliability. This included (but was not limited to) recording: sample condition, sample recovery, sample split method.
- Of the 3,065m of RC drilling, overall logging of all sample recovery recorded 87% "good", 3% "moderate", 10% poor. Logging of the sample condition recorded 85% "dry", 3% "moist", 12% "wet".
- RC sample intervals recorded 39% 1m split samples, and 61% 4m composite samples (note: generally composite samples are in unmineralised zones)
- No quantitative analysis of samples weights, sample condition or recovery has been undertaken.
- No quantitative twinned drilling analysis has been undertaken at the project.

**Logging**

- *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.*
  - *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*
  - *The total length and percentage of the relevant intersections logged.*
- Geological logging of samples followed established company and industry common procedures. Qualitative logging of samples included (but was not limited to) lithology, mineralogy, alteration and weathering.

**Sub-sampling techniques and sample preparation**

- *If core, whether cut or sawn and whether quarter, half or all core taken.*
  - *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*
  - *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*
  - *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*
  - *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.*
  - *Whether sample sizes are appropriate to the grain size of the material being sampled.*
- Splitting of RC samples occurred via cone splitter by the RC drill rig operators. Cone splitting of RC drill samples occurred regardless of the sample condition.
- Samples taken were typically between 1.5-3.3kg.
- All samples were submitted to ALS Minerals (Kalgoorlie) for analyses. The sample preparation included:
- Samples were weighed, crushed (such that a minimum of 70% pass 2mm) and pulverised (such that a minimum of 85% pass 75um) as per ALS standards.
  - Analysis was undertaken for gold, platinum and palladium using, 30g charge for fire assay and ICP-AES (ALS method; PGM-ICP23)
  - A 4 acid digest and ICP-AES (ALS method; ME-ICP61) was used for 33 elements This included Co, Cu, Ni, Zn.
  - For elements that reported over range, ALS used ore grade 4 acid digest and ICP-AES methods; (nickel) Ni-OG62, (copper) Cu-OG62, (sulphur) S-IR08 (Leco Sulphur analyzer).

		Sample collection, size and analytical methods are deemed appropriate for the style of exploration.
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li><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></li> <li><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></li> </ul>	<p>All samples were assayed by industry standard methods through commercial laboratories in Australia (ALS Minerals, Kalgoorlie).</p> <p>Typical analysis methods are detailed in the previous section and are consider 'near total' values.</p> <p>Routine 'standard' (mineralised pulp) Certified Reference Material (CRM) was inserted by Great Boulder at a nominal rate of 1 in 50 samples. Routine 'blank' material (unmineralised sand) was inserted at a nominal rate of 1 in 100 samples. No significant issues were noted.</p> <p>No duplicate or umpire checks were undertaken.</p> <p>The analytical laboratories provided their own routine quality controls within their own practices. No significant issues were noted.</p> <p>All digital data was inspected on a daily basis to insure that erroneous data was not present and to identify missing data.</p>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li><i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li><i>The use of twinned holes.</i></li> <li><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li><i>Discuss any adjustment to assay data.</i></li> </ul>	<p>No verification of sampling and assaying has been undertaken in this exploration programme. No twinned drilling has been undertaken.</p> <p>Great Boulder has strict procedures for data capture, flow and data storage, and validation.</p> <p>No adjustments were made to returned assay data; values returned lower than detection level (DL) are stored as &lt;DL in the database.</p>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li><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></li> <li><i>Specification of the grid system used.</i></li> <li><i>Quality and adequacy of topographic control.</i></li> </ul>	<p>Drill collars were set out using a hand held GPS and final collar locations were collected using a handheld GPS.</p> <p>Downhole surveys were completed by the drilling contractors using the Reflex EZ-TRACK with a measurement taken every 30m downhole. Holes without downhole survey use planned or compass bearing/dip measurements for survey control.</p> <p>The MGA94 UTM zone 51 coordinate system was used for all undertakings.</p>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li><i>Data spacing for reporting of Exploration Results.</i></li> <li><i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the</i></li> </ul>	<p>The spacing and location of the majority of the drilling in the projects is, by the nature of early exploration, variable.</p> <p>The spacing and location of data is currently only being considered for exploration purposes.</p>

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	<p><i>Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></p> <ul style="list-style-type: none"> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<p>In intervals qualitatively logged as unmineralised, 4 metre composite (spear) samples were taken from the RC drill holes. RC sample intervals recorded 39% in 1m splits, and 61% 4m composite sample.</p> <p>The location of all holes with down hole EM is provided in the main body of the report.</p>
<p><b>Orientation of data in relation to geological structure</b></p>	<ul style="list-style-type: none"> <li>• <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></li> <li>• <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></li> </ul>	<p>Drilling was nominally perpendicular to regional mineralisation trends where interpreted and practical. True width and orientation of intersected mineralisation is currently unknown.</p> <p>A list of the drillholes and orientations are reported with significant intercepts is provided as an appended table.</p> <p>The spacing and location of the data is currently only being considered for exploration purposes.</p>
<p><b>Sample security</b></p>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<p>Great Boulder has strict chain of custody procedures that are adhered to for drill samples.</p> <p>All sample bags are pre-printed and pre-numbered. Sample bags are placed in a polyweave bags (up to 5 samples) and closed with a zip tie such that no sample material can spill out and no one can tamper with the sample once it leaves the company's custody.</p> <p>For the down hole EM survey, all data was acquired by Merlin Geophysical Solutions. NewExco provided data analysis, which was then reported to the Company's representatives.</p>
<p><b>Audits or reviews</b></p>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<p>None completed.</p>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<p><b>Mineral tenement and land tenure status</b></p>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> </ul>	<p>Great Boulder Resource Ltd (GBR) is comprised of several projects with associated tenements; Yamarna tenements and details;</p> <p>Exploration licences E38/2685, E38/2952, E38/2953, E38/5957, E38/2958, E38/2320 and prospecting licence P38/4178 where,</p> <p>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</p>

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	<p>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.</p>
<p><b>Exploration done by other parties</b></p>	<ul style="list-style-type: none"> <li>• <i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul> <p>Previous explorers included:</p> <ul style="list-style-type: none"> <li>– 1990's. Kilkenny Gold NL completed wide-spaced, shallow, RAB drilling over a limited area. Gold assay only.</li> <li>– 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.</li> <li>– 2011. Crusader Resources Ltd completed broad-spaced aircore drilling targeting extensions to Thatcher's Soak uranium mineralisation. XRF analysis only, no geochemical analysis completed.</li> <li>– 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.</li> </ul>
<p><b>Geology</b></p>	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting and style of mineralisation.</i></li> </ul> <p>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.</p> <p>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.</p> <p>Visual logging of sulphide mineralogy shows pyrrhotite dominant with chalcopyrite.</p>
<p><b>Drill hole Information</b></p>	<ul style="list-style-type: none"> <li>• <i>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:</i> <ul style="list-style-type: none"> <li>○ <i>easting and northing of the drill hole collar</i></li> <li>○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li>○ <i>dip and azimuth of the hole</i></li> <li>○ <i>down hole length and interception depth</i></li> <li>○ <i>hole length.</i></li> </ul> </li> <li>• <i>If the exclusion of this information is justified on the basis that the information</i></li> </ul> <p>A complete list of the reported significant results from Great Boulder's drilling is provided in the body of the report.</p> <p>A list of the drillhole coordinates, orientations and metrics are provided as an appended table.</p>

	<p><i>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.</i></p>	
<p><b>Data aggregation methods</b></p>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<p>No weight averaging techniques, aggregation methods or grade truncations were applied to these exploration results.</p> <p>All significant intercept lengths were from 1m splits. No length weighting was applied.</p> <p>No metal equivalents are used.</p>
<p><b>Relationship between mineralisation widths and intercept lengths</b></p>	<ul style="list-style-type: none"> <li><i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li><i>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').</i></li> </ul>	<p>The orientation of structures and mineralisation is not known with certainty but drilling was conducted using appropriate orientations for interpreted mineralisation.</p> <p>Preliminary analysis of drilling results suggest that mineralisation may be steep dipping which suggests that intersection widths are broadly representative of the true width of mineralisation.</p>
<p><b>Diagrams</b></p>	<ul style="list-style-type: none"> <li><i>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 of drill hole collar locations and appropriate sectional views.</i></li> </ul>	<p>Refer to figures in announcement.</p>
<p><b>Balanced reporting</b></p>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<p>It is not practical to report all exploration results. Low or non-material grades have not been reported.</p> <p>All drill hole locations are reported and a table of significant intervals is provided in the announcement.</p>
<p><b>Other substantive exploration data</b></p>	<ul style="list-style-type: none"> <li><i>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;</i></li> </ul>	<p>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</p>

*metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*

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)

**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.

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