

# New assays show Great Boulder closing in on higher-grade nickel at Eastern Mafic

Latest results highlight the neck and feeder zones of the intrusion as being most prospective for nickel sulphide mineralisation

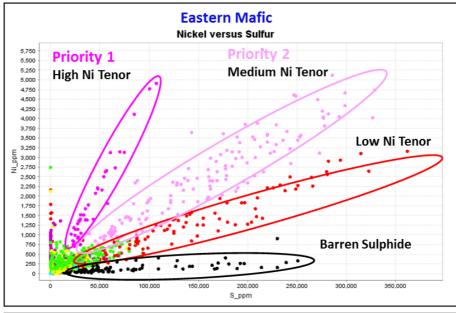
### Highlights

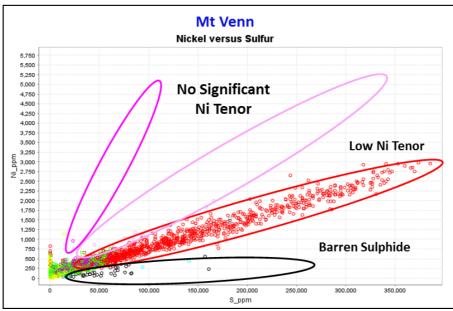
- Latest assays from drilling at the Eastern Mafic deposit contain wider, higher-grade nickel and cobalt than seen in previous results
- These latest assays come from the feeder zone and 'neck' of the intrusion at the Zermatt prospect where mineralisation has now been extended to 400m of strike; Significant new results include:
  - 33m at 0.3% Ni, 0.2% Cu, 0.04% Co
  - 5m at 0.4% Ni, 0.3% Cu, 0.03% Co
  - 7m at 0.3% Ni, 0.2% Cu, 0.05% Co
- New zone of sulphide mineralisation intersected at the Cortina prospect, 500m west of Zermatt in hole 18EMRC021 (assays pending)
- Copper-nickel mineralisation intersected at the southern extension of the feeder zone at the Ben Lomond prospect (18EMDD002)
- Two wide zones of sulphide mineralisation intersected within the feeder structure at anomaly ML13, between Zermatt and Ben Lomond (18EMRCD013 – assays pending)
- The results show the prospective zone for high grade nickel sulphide mineralisation is within the feeder and 'neck' of the intrusion where higher-tenor nickel sulphide (nickel in 100% sulphide) has been intersected (Figure 1)
- Great Boulder will now aim to identify higher grade nickel in massive sulphide accumulations at the base of the intrusion associated with high nickel tenor sulphide.
- At Mt Venn, the latest results continue to extend the known mineralisation which has now been defined over 1km of strike length. Significant new results include:
  - 43m at 0.4% Cu, 0.2% Ni, 0.06% Co from 141m
    - including 11m at 0.5% Cu, 0.3% Ni, 0.09% Co
    - including 5m at 0.8% Cu, 0.2% Ni, 0.05% Co
  - 20m at 0.6% Cu, 0.1% Ni, 0.02% Co from 141m
    - including 3m at 1.2% Cu
  - 14m at 0.6% Cu, 0.2% Ni, 0.05% Co from 236m
    - including 4m at 1.0% Cu, 0.2% Ni, 0.05% Co

Great Boulder Resources (ASX:GBR) is pleased to announce that the latest assays from the Eastern Mafic deposit in WA show that the Company is closing in on the higher-grade zone of nickel mineralisation.

Three distinct sulphide phases have been identified at the Eastern Mafic, with high-tenor nickel sulphide found along the feeder zone and neck of the intrusion at Zermatt considered the most prospective for high-grade nickel sulphide mineralisation (Figure 1).

This supports Great Boulder's view that the Eastern Mafic is closer to the source of high-grade nickel mineralisation. Mt Venn only has a single phase of low-tenor nickel (Figure 2), however the deposit appears to be more copper and cobalt rich than the Eastern Mafic.





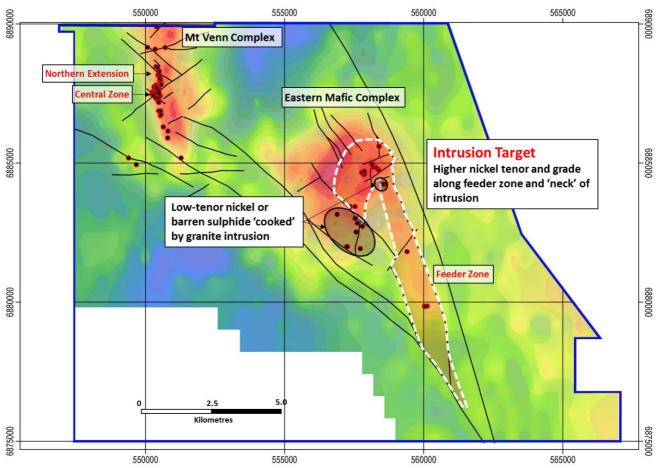
**Figure 1:** Nickel tenor analysis showing three phases of sulphide mineralisation at the Eastern Mafic and single phase at Mt Venn. Barren sulphide is predominantly at the Eastern Mafic where late-stage granites intrude

Around the edge and along structures through the Eastern Mafic complex, late-stage granite intrudes and alters the primary sulphide into barren pyrite/pyrrhotite and magnetite. These areas produce very strong EM responses, however there is little nickel, cobalt or copper of economic interest and they are considered a low priority for follow-up drilling.

Great Boulder Managing Director Stefan Murphy said the results were beginning to deliver a clear message about the nature of the mineralized system at the Eastern Mafic and Mt Venn.

"There is now a pattern emerging which supports our geological interpretation as to how the sulphide system was formed and where the higher grades and wider mineralisation may be found," Mr Murphy said.

"Once all assays are received we will be able to target the prospective rocks that host the higher tenor nickel and look for the base of these intrusions where massive sulphide typically accumulates."



**Figure 2:** Gravity image showing Mt Venn and Eastern Mafic complexes. Intrusion target prospective for nickel sulphide highlighted in white and zones of barren sulphide in black

### Eastern Mafic

Drilling has now finished with a total of 30 RC and diamond holes drilled for 6,777m. Results have been received from the majority of drill holes, with assays pending for the final eight holes of the program.

The maiden drill program successfully identified a new magmatic sulphide system at the Eastern Mafic that shows a significant improvement in nickel grade and tenor when compared to Mt Venn (Figure 1).

Drilling targeted electromagnetic (EM) conductors generated from airborne and ground surveys and nickel and copper in aircore geochemistry. Initial scout RC and diamond drilling was used to test the various conductors and orientation of mineralisation, with follow-up down-hole EM (DHEM) used in conjunction with assay results to identify the most prospective conductors.

The results show multiple sulphide phases at the Eastern Mafic, with the most prospective and higher nickel grades and tenor occurring along the feeder zone and the intersection of the feeder with the Eastern Mafic.

Great Boulder will focus its exploration efforts along the 6km feeder zone and neck of the intrusion, targeting basal accumulations of the higher tenor nickel sulphide. Massive sulphide typically accumulates at the base of fertile mafic intrusions and higher grades are found where the high tenor nickel sulphide accumulates.

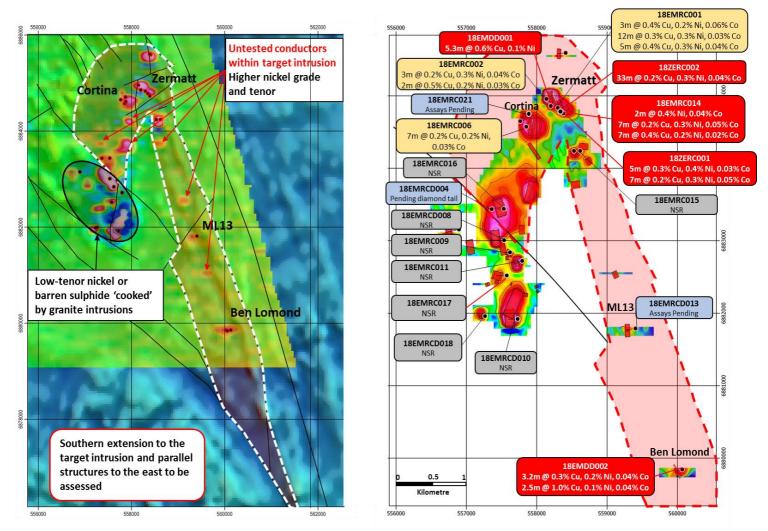


Figure 3: Airborne EM over magnetic image showing intrusion target (white) and untested conductors prospective nickel sulphide mineralisation (LHS)

MLEM late time (Ch. 35) showing intrusion target (red), MLEM conductor plates and drill hole collar locations. New assay results in red, previously reported results in yellow (RHS)

Drilling at Zermatt has now defined mineralisation over 400m of strike, within an upper and lower sulphide lens. Mineralisation is mostly hosted in gabbro (minor ultramafic) with nickel grade and tenor improving towards the southeast and at depth in the lower lens.

Sulphide mineralisation is quite pervasive throughout the host mafic-ultramafic unit, but typically in low concentrations. Where sulphide accumulates as semi-massive to massive, there is an improvement in overall nickel grade but this tends to occur in zones of lower tenor nickel, resulting in grades of 0.3-0.5% Ni.

Zones of higher nickel tenor sulphide (+2% nickel in 100% sulphide) has mostly been intersected as disseminated to matrix in texture and which does not produce a strong EM response, unlike the massive but barren pyrrhotite which produces a very strong response.

Moderate strength conductors associated with higher tenor nickel have produced the best results, eliminating spurious responses from highly conductive but barren sulphide. DHEM plate modeling provides the shape and location of the strongest part of these conductors, which can then be targeted as potential sources of more massive and higher-grade nickel.

Identifying the mafic-ultramafic unit that hosts the higher-tenor nickel sulphide is key as it has the best potential for basal accumulations of high-grade nickel sulphide mineralisation.

The Cortina prospect, located 500m southwest from Zermatt, hosts similar mineralisation to Zermatt. A more massive but lower nickel tenor lens that produces a strong EM response was intersected in 18EMRC006, while a disseminated but higher tenor lens associated with a mafic-ultramafic contact was intersected in 18EMRC003.

An extension to the higher tenor lens was drilled in 18EMRC021, intersecting 17m of sulphide mineralisation (assays pending).

Hole ID	From	То	Interval	Sulphide	Sulphide Texture	Prospect
	m	m	m	%		
18EMRC021	134	151	17	5-25%	Disseminated – Matrix	Cortina

Table 1: Summary of mineralised intersections from 18EMRC021 (assays pending)

Diamond hole 18EMDD002 tested the Ben Lomond prospect (previously anomaly ML15) at the southern extent of the 6km long feeder zone that represents a wide ductile zone splaying of the main Yamarna shear. Strong ductile deformation has resulted in shearing of mafic, ultramafic and intermediate units with numerous granitoids intruding along the feeder zone.

Sulphide mineralisation appears to have been emplaced along the structure and then dislocated and cut by later intrusions/shearing. An upper zone of mineralisation (91.5-99.1m) hosts grades up to 0.6% Ni and appears to represent a remobilised sulphide lens with moderate nickel grade and tenor.

A lower lens of more copper dominant and low nickel tenor mineralisation has been intruded by multiple granitoids and appears structurally controlled and remobilised. Mineralisation in the lower lens is distinct from the upper lens, suggesting different sulphide phases that have a structural overprint.

At anomaly ML13, between Zermatt and Ben Lomond, drill hole 18EMRCD013 tested an off-hole DHEM conductor with a diamond drill tail. Two sulphide lenses were intersected, an upper zone of 23m from 270m downhole and a lower zone of 15m from 321m (assays pending).

Hole ID	From	То	Interval	Sulphide	Sulphide Texture	Prospect
	m	m	m	%		
18EMRCD013	270	278	8	25-50%	Semi Massive - Massive	ML13 – Upper Lens
	278	283	5	5-10%	Disseminated	ML13 – Upper Lens
	283	293	10	10-50%	Blebby - Massive	ML13 – Upper Lens
	321	336	15	10-25%	Blebby – Semi Massive	ML13 – Lower Lens

Table 2: Summary of mineralised intersections from 18EMRCD013 (assays pending)

All remaining samples have been dispatched to the laboratory for analysis, with final results expected in 3-4 weeks. The DHEM survey at the Eastern Mafic has also been completed with conductor plate modelling underway.

On receipt of final assays and DHEM conductor plates, Great Boulder will complete a revised geological model with the aim of identifying the lithological and structural units that host the most prospective nickel sulphide mineralisation.

Based on the strong structural control of mineralisation along the feeder zone and variations in the nickel tenor across different lithologies, Great Boulder will also assess the southern extension of the feeder zone and possible parallel structures to the east, closer to the terrane bounding Yamarna shear zone.

### Mt Venn

A total of 19 RC and diamond holes were drilled at Mt Venn for 4,284m. Drilling focused on strike and dip extensions to the central zone, while also testing the northern extension.

Drilling continues to intersect wide zones of copper dominant mineralisation, with mineralisation now defined over 1km of strike.

Mineralisation within the central zone is now well defined over two sub-parallel northwest trending units that host multiple mineralised lenses. Mineralisation remains open along strike and down-dip where the latest drilling intersected a mineralisation to a depth of 240m below surface.

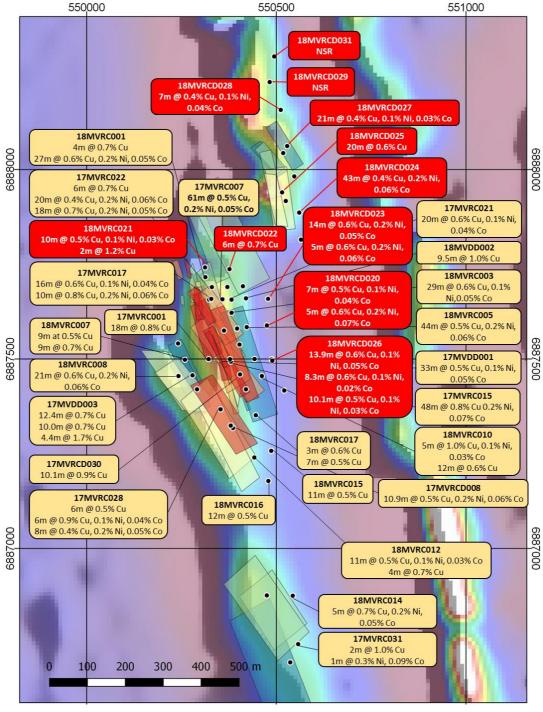
The northern extension of the system was also discovered during this program, with wide zones (20-44m) of copper dominant sulphide mineralisation intersected. A series of northwest trending structures cut through the central zone and also appear to offset the northern extension.

Significant new assay results include:

Hole ID	From	То	Interval	Cu	Ni	Co
	m	m	m	%	%	%
18MVRCD020	152	159	7	0.5	0.1	0.04
18MVRCD020	206	211	5	0.6	0.2	0.07
18MVRC021	40	50	10	0.5	0.1	0.03
18MVRC021	67	72	5	0.4	0.1	0.04
18MVRC021	78	80	2	1.2	0.0	0.01
18MVRC022	43	49	6	0.7	0.1	0.02
18MVRC023	236	250	14	0.6	0.2	0.05
-including	245	249	4	1.0	0.2	0.05
18MVRC023	256	261	5	0.6	0.2	0.06
18MVRC024	102	103	1	2.8	0.1	0.03
18MVRC024	141	184	43	0.4	0.2	0.06
-including	142	153	11	0.5	0.3	0.09
-including	169	174	5	0.8	0.2	0.05

18MVRC025	141	161	20	0.6	0.1	0.02
-including	143	145	2	1.2	0.1	0.02
-including	155	158	3	1.2	0.1	0.02
18MVRCD026	219.8	233.7	13.9	0.6	0.1	0.05
-including	227.6	230.5	2.9	1.0	0.2	0.06
18MVRCD026	249.7	258.0	8.3	0.6	0.1	0.02
18MVRCD026	267.7	277.8	10.1	0.5	0.1	0.03
-including	270.2	273.1	2.9	1.0	0.1	0.03

Table 3: Summary of significant intersections at Mt Venn



**Figure 4:** Mt Venn RC and diamond drilling over RTP 1VD magnetics and DHEM conductor plates. Previous reported holes (yellow) and new assay results (red)

### Appendix 1 – Eastern Mafic Drill Hole Location

Hole ID	Drill Type	Easting	Northing	Azi	Dip	<b>Total Depth</b>	Prospect
18EMDD001	DD	558200	6884860	25	-62	198.8	Zermatt
18EMDD002	DD	560069	6879843	251	-61	161	Ben Lomond
18EMRC001	RC	558300	6884834	48	-66	190	Zermatt
18EMRC002	RC	558139	6884957	58	-60	140	Zermatt
18EMRC003	RC	557765	6884650	28	-60	240	Cortina
18EMRC005	RC	558411	6885593	263	-60	240	
18EMRC006	RC	557852	6884574	28	-60	274	Cortina
18EMRC007	RC	558617	6884241	233	-64	216	
18EMRC009	RC	557620	6882840		-90	198	
18EMRC011	RC	557793	6882722	246	-60	230	
18EMRC014	RC	558382	6884758	48	-62	222	Zermatt
18EMRC015	RC	558530	6884240	268	-60	150	
18EMRC016	RC	557532	6883440	268	-60	180	
18EMRC018	RC	557264	6881995	270	-60	168	
18EMRC019	RC	557877	6884614	180	-70	204	Cortina
18EMRC020	RC	558531	6884239		-90	96	
18EMRC021	RC	557872	6884710	240	-60	270	Cortina
18EMRC022	RC	558389	6885602	270	-60	150	
18EMRC023	RC	557229	6881986	230	-60	120	
18ZERC001	220	558382	6884758	85	-60	220	Zermatt
18ZERC002	180	558348	6884783	45	-60	180	Zermatt
18ZERCD003	252	558392	6884731	90	-60	355	Zermatt
18BLRC001	RC	560030	6879852	255	-60	132	Ben Lomond
18BLRC002	RC	560129	6879856	255	-60	260	Ben Lomond
18EMRCD004	RC-DD	557360	6883437	79	-60	273.7	
18EMRCD008	RC-DD	557536	6883009	270	-60	374.0	
18EMRCD010	RC-DD	557729	6881920	268	-60	261.6	
18EMRCD012	RC-DD	556895	6883155	258	-60	381.6	
18EMRCD013	RC-DD	559405	6881789	262	-60	373.8	ML13
18EMRCD017	RC-DD	557574	6882520	268	-62	315.8	

### Appendix 2 – Mt Venn Drill Hole Location

HoleID	Drill Type	Easting	Northing	Azi	Dip	Total Depth	
18MVRC014	RC	550529	6886860	233	-60	195	
18MVRC015	RC	550487	6887260	268	-60	210	
18MVRC016	RC	550482	6887180	268	-60	180	
18MVRC017	RC	550446	6887351	268	-60	240	
18MVRC021	RC	550309	6887740	268	-60	155	
18MVRC022	RC	550376	6887741	268	-60	180	
18MVRC023	RC	550480	6887660	268	-60	276	
18MVRC024	RC	550557	6887880	268	-60	216	
18MVRC025	RC	550549	6887980	268	-60	210	
18MVRC027	RC	550516	6888048	230	-60	174	
18MVRC028	RC	550512	6888160	268	-60	180	
18MVRC029	RC	550482	6888231	270	-60	168	
18MVRC030	RC	550412	6887692	265	-60	256	
18MVRC031	RC	550494	6888298	270	-70	180	
18MVRC032	RC	550565	6887815	268	-60	280	
18MVRC033	RC	550999	6887169	180	-60	180	
18MVRCD018	RC-DD	550523	6887420	268	-60	120	
18MVRCD020	RC-DD	550471	6887580	268	-60	150	
18MVRCD026	RC-DD	550488	6887500	268	-70	150	

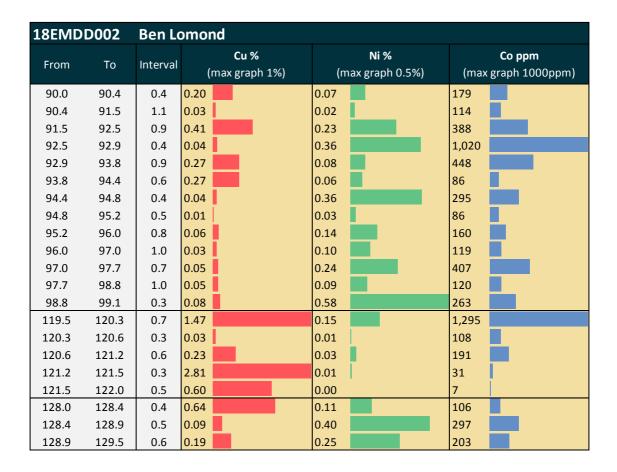
Appendix 3 – Summary of Eastern Mafic Significant Intersections

18EMR	C <b>014</b>	Zerma	ntt			
_	_		Cu %	Ni %	Co ppm	
From	То	Interval	(max graph 1%)	(max graph 0.5%)	(max graph 1000ppm)	
71	72	1	0.09	0.10	503	
72	73	1	0.20	0.07	314	
73	74	1	0.14	0.08	367	
74	75	1	0.93	0.03	103	
75	76	1	0.16	0.01	41	
113	114	1	0.27	0.39	329	
114	115	1	0.11	0.02	35	
115	116	1	0.04	0.03	75	
116	117	1	0.03	0.02	29	
117	118	1	0.01	0.02	128	
118	119	1	0.10	0.35	316	
119	120	1	0.14	0.51	458	
120	121	1	0.11	0.15	153	
121	122	1	0.05	0.04	49	
122	123	1	0.06	0.04	96	
123	124	1	0.12	0.38	976	
124	125	1	0.23	0.26	426	
125	126	1	0.10	0.15	170	
126	127	1	0.11	0.45	630	
127	128	1	0.40	0.35	336	
128	129	1	0.17	0.46	637	
129	130	1	0.11	0.30	412	
130	131	1	0.03	0.06	85	
131	132	1	0.03	0.04	123	
132	133	1	0.18	0.19	181	
133	134	1	0.34	0.19	199	
179	180	1	0.07	0.22	187	
180	181	1	0.07	0.31	168	
181	182	1	0.23	0.26	138	
182	183	1	0.27	0.22	123	
183	184	1	0.27	0.14	88	
184	185	1	0.28	0.25	178	
185	186	1	1.26	0.27	173	
186	187	1	0.14	0.15	122	

18EMD	MDD001 Zermatt									
From	То	Interval	<b>Cu %</b> (max graph 1%)	<b>Ni %</b> (max graph 0.5%)	Co ppm (max graph 1000ppm)					
154.7	155.0	0.3	2.63	0.18	140					
156.6	157.0	0.4	1.19	0.01	21					
157.0	157.3	0.3	0.38	0.08	84					
157.3	158.1	0.8	0.29	0.18	286					
158.1	158.5	0.4	0.30	0.22	305					
158.5	159.0	0.5	0.89	0.09	291					
159.0	160.0	1.0	0.77	0.06	72					
175.6	176.1	0.5	0.20	0.22	349					
176.1	177.0	0.9	0.05	0.07	100					
177.0	177.3	0.3	0.05	0.03	151					
177.3	178.0	0.7	0.22	0.23	874					

18ZERC	001	Zerma	att			
_	_		Cu %	Ni %	Co ppm	
From	То	Interval	(max graph 1%)	(max graph 0.5%)	(max graph 1000ppm)	
123	124	1	0.63	0.24	217	
124	125	1	0.11	0.27	243	
125	126	1	0.19	0.31	425	
126	127	1	0.42	0.11	157	
127	128	1	0.12	0.34	508	
128	129	1	0.13	0.34	1,110	
129	130	1	0.09	0.46	501	
130	131	1	0.14	0.10	110	
131	132	1	0.03	0.02	45	
132	133	1	0.01	0.01	22	
133	134	1	0.06	0.05	67	
134	135	1	0.17	0.19	195	
135	136	1	0.21	0.08	91	
136	137	1	0.15	0.06	221	
137	138	1	0.17	0.03	677	
138	139	1	0.78	0.06	101	
139	140	1	0.10	0.03	47	
140	141	1	0.19	0.23	356	
141	142	1	0.11	0.23	274	
142	143	1	0.08	0.04	80	
143	144	1	0.17	0.11	102	
175	176	1	0.30	0.15	97	
176	177	1	0.17	0.21	163	
177	178	1	0.07	0.12	100	
178	179	1	0.07	0.06	63	
179	180	1	0.11	0.41	224	
180	181	1	0.12	0.49	514	
181	182	1	0.53	0.31	237	
182	183	1	0.30	0.31	238	
183	184	1	0.42	0.48	329	
184	185	1	0.20	0.18	117	
185	186	1	0.19	0.14	108	
186	187	1	0.09	0.22	189	
187	188	1	0.15	0.27	202	

18ZERC	002	Zerma	ntt				
From	То	Interval	Cu %		Ni %		Co ppm
	. 0	ec. rai	(max graph 1%)		(graph 0.5%)		graph 1000ppm)
101	102	1	1.20	0.03	_	39	
102	103	1	0.05	0.11		102	
103	104	1	0.02	0.04		44	
104	105	1	0.09	0.18		158	
105	106	1	0.16	0.35		287	
106	107	1	0.06	0.19		353	
107	108	1	0.23	0.15		534	
108	109	1	0.18	0.43		535	
109	110	1	0.11	0.36		250	
110	111	1	0.19	0.24		336	
111	112	1	0.12	0.47		287	
112	113	1	0.25	0.36		215	
113	114	1	0.13	0.12		94	
114	115	1	0.10	0.25		174	
115	116	1	0.11	0.24		416	
116	117	1	0.18	0.32		616	
117	118	1	0.15	0.32		448	
118	119	1	0.18	0.29		378	
119	120	1	0.68	0.33		372	
120	121	1	0.34	0.22		232	
121	122	1	0.17	0.28		301	
122	123	1	0.20	0.35		711	
123	124	1	0.33	0.26		625	
124	125	1	0.20	0.21		999	
125	126	1	0.15	0.36		599	
126	127	1	0.16	0.40		570	
127	128	1	0.16	0.31		308	
128	129	1	0.21	0.38		420	
129	130	1	0.08	0.31		289	
130	131	1	0.02	0.10		99	
131	132	1	0.07	0.20		361	
132	133	1	0.13	0.47		740	
133	134	1	0.05	0.29		224	
150	151	1	0.11	0.16		270	
151	152	1	0.16	0.32		307	
152	153	1	0.11	0.23		173	
153	154	1	0.46	0.11		105	
154	155	1	0.36	0.07		91	



Appendix 4 - Summary of Mt Venn Significant Intersections

18MVR	CD020							
From	То	Interval	(	<b>Cu %</b> max graph 1%)	(n	<b>Ni %</b> nax graph 0.5%)	(max	Co ppm graph 1000ppm)
152.0	152.9	0.9	0.92		0.02		83	
152.9	153.2	0.3	0.15		0.14		471	
153.2	153.8	0.6	0.12		0.22		709	
153.8	154.2	0.4	0.22		0.13		430	
154.2	154.7	0.5	0.46		0.12		418	
154.7	155.5	0.8	0.44		0.14		516	
155.5	156.0	0.5	0.32		0.12		795	
156.0	157.0	1.0	0.28		0.10		318	
157.0	157.3	0.3	0.27		0.10		328	
157.3	157.8	0.5	0.97		0.09		314	
157.8	158.1	0.3	0.70		0.13		416	
158.1	159.0	0.9	0.53		0.04		148	
164.8	165.4	0.6	1.55		0.02		67	
206.0	206.7	0.7	1.18		0.03		117	
206.7	207.2	0.4	1.08		0.21		666	
207.2	207.5	0.3	0.69		0.07		247	
207.5	208.0	0.6	0.31		0.28		861	
208.0	209.0	1.0	0.22		0.30		903	
209.0	210.0	1.0	0.23		0.30		898	
210.0	211.2	1.2	0.40		0.24		733	
211.2	211.5	0.3	2.05		0.12		483	

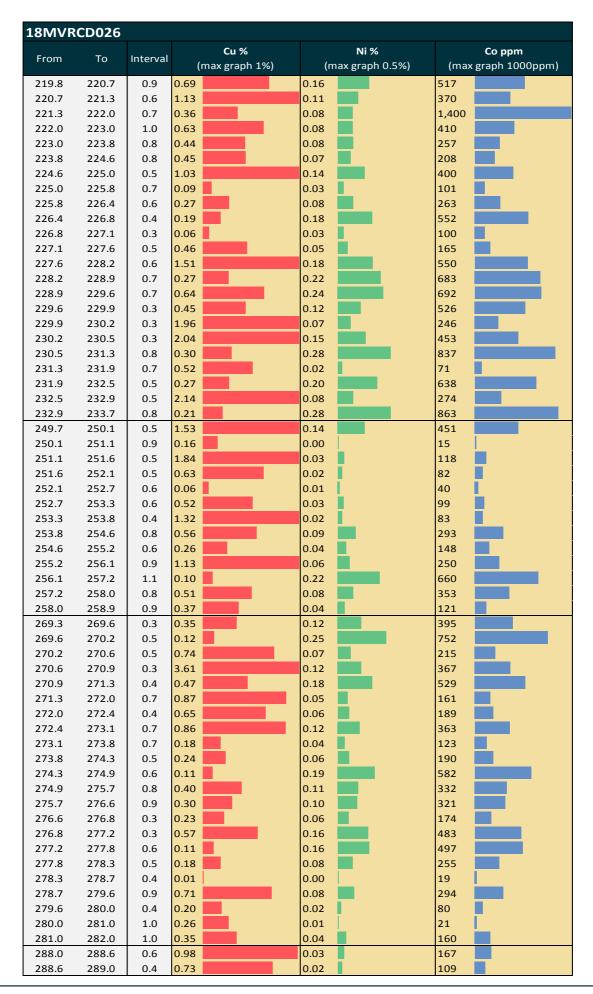
18MVR	C021				
			Cu %	Ni %	Co ppm
From	То	Interval	(max graph 1%)	(max graph 0.5 %)	(max graph 1000ppm)
32	33	1	0.81	0.04	168
33	34	1	0.35	0.03	135
34	35	1	0.18	0.02	87
35	36	1	0.09	0.01	64
36	37	1	0.04	0.02	70
37	38	1	0.11	0.05	177
38	39	1	0.18	0.05	153
39	40	1	0.30	0.03	128
40	41	1	0.73	0.05	211
41	42	1	0.23	0.16	458
42	43	1	0.18	0.09	255
43	44	1	0.61	0.16	463
44	45	1	0.38	0.18	524
45 46	46 47	1 1	0.50 0.36	0.15	453 263
47	47	1	0.35	0.12	380
48	46 49	1	0.84	0.08	258
49	50	1	0.72	0.04	130
67	68	1	0.58	0.07	201
68	69	1	0.25	0.20	547
69	70	1	0.54	0.12	342
70	71	1	0.29	0.12	336
71	72	1	0.51	0.14	401
72	73	1	0.46	0.02	64
73	74	1	0.27	0.03	104
74	75	1	0.04	0.01	34
75	76	1	0.13	0.03	87
76	77	1	0.46	0.04	155
77	78	1	0.06	0.01	31
78	79	1	0.86	0.06	166
79	80	1	1.45	0.04	133
80	81	1	0.35	0.03	103
81	82	1	0.29	0.01	46
90	91	1	0.92	0.07	185
91	92	1	0.20	0.05	120
92	93	1	0.19	0.05	140
93	94 05	1	0.13	0.06	153
94 107	95 108	1	0.29	0.12	306 408
107	108	1	0.31	0.20	487
108	110	1	0.62	0.09	236
110	111	1	0.35	0.04	118
111	112	1	0.26	0.04	112
111	114	1	0.20	0.0-7	116

18MVR	18MVRC022							
From	То	Interval	(	<b>Cu %</b> max graph 1%)	(m	<b>Ni %</b> nax graph 0.5%)	(max	Co ppm graph 1000ppm)
43	44	1	0.75		0.10		356	
44	45	1	0.65		0.07		257	
45	46	1	0.52		0.06		214	
46	47	1	0.66		0.04		169	
47	48	1	0.63		0.04		154	
48	49	1	0.79		0.08		300	
49	50	1	0.27		0.09		346	
50	51	1	0.28		0.07		262	

18MVR	C023				
From	То	Interval	<b>Cu %</b> (max graph 1%)	<b>Ni %</b> (max graph 0.5%)	Co ppm (max graph 1000ppm)
187	188	1	0.28	0.06	250
188	189	1	0.22	0.05	198
189	190	1	0.30	0.04	157
190	191	1	0.64	0.06	252
191	192	1	0.26	0.06	216
231	232	1	0.48	0.07	230
232	233	1	0.23	0.04	144
233	234	1	0.18	0.06	218
234	235	1	0.14	0.11	351
235	236	1	0.14	0.06	202
236	237	1	0.30	0.17	524
237	238	1	0.64	0.15	463
238	239	1	0.80	0.16	494
239	240	1	0.83	0.09	403
240	241	1	0.36	0.21	617
241	242	1	0.41	0.17	509
242	243	1	0.47	0.20	581
243	244	1	0.20	0.29	830
244	245	1	0.24	0.24	722
245	246	1	0.88	0.15	450
246	247	1	1.21	0.19	568
247	248	1	1.09	0.14	418
248	249	1	0.65	0.18	522
249	250	1	0.19	0.19	534
256	257	1	0.39	0.23	621
257	258	1	0.38	0.25	678
258	259	1	0.55	0.23	644
259	260	1	0.98	0.20	539
260	261	1	0.70	0.15	431
261	262	1	0.23	0.07	195

18MVR	C024				
Билия	т.	Internal	Cu %	Ni %	Co ppm
From	То	Interval	(max graph 1%)	(max graph 0.5 %)	(max graph 1000ppm)
102	103	1	2.75	0.10	294
141	142	1	0.43	0.08	263
142	143	1	0.57	0.18	601
143	144	1	0.34	0.23	763
144	145	1	0.52	0.28	958
145	146	1	0.73	0.29	977
146	147	1	0.65	0.29	959
147	148	1	0.32	0.30	1,000
148	149	1	0.55	0.27	917
149	150	1	0.40	0.27	926
150	151	1	0.34	0.28	920
151	152	1	0.40	0.27	892
152	153	1	0.60	0.16	532
153	154	1	0.35	0.09	309
154	155	1	0.27	0.16	547
155	156	1	0.22	0.23	780
156	157	1	0.29	0.22	716
157	158	1	0.93	0.12	396
158	159	1	0.40	0.07	261
159	160	1	0.40	0.09	296
160	161	1	0.48	0.09	321
161	162	1	0.47	0.10	347
162	163	1	0.04	0.02	68
163	164	1	0.21	0.09	288
164	165	1	0.29	0.20	632
165	166	1	0.29	0.12	391
166	167	1	0.23	0.24	757
167	168	1	0.21	0.24	783
168	169	1	0.32	0.22	706
169	170	1	1.13	0.14	471
170	171	1	0.27	0.22	688
171	172	1	0.43	0.20	631
172	173	1	0.51	0.18	563
173	174	1	1.75	0.11	372
174	175	1	0.26	0.16	512
175 176	176	1	0.69	0.16	524
176	177	1	0.45	0.16	496
177	178	1	0.26	0.04	132
178	179	1	0.19	0.16	503
179	180	1	0.14	0.06	199
180	181	1	0.31	0.28	795 S
181	182	1	0.22	0.26	
182	183	1	0.66		473
183	184	1	0.55	0.05	177

18MVR	C025				
From	То	Interval	<b>Cu %</b> (max graph 1%)	<b>Ni %</b> (max graph 0.5%)	Co ppm (max graph 1000ppm)
141	142	1	0.43	0.05	150
142	143	1	0.24	0.05	160
143	144	1	1.32	0.08	248
144	145	1	1.17	0.05	167
145	146	1	0.31	0.07	217
146	147	1	0.32	0.13	369
147	148	1	0.35	0.04	133
148	149	1	1.19	0.06	199
149	150	1	0.70	0.03	112
150	151	1	0.08	0.04	159
151	152	1	0.10	0.02	64
152	153	1	0.25	0.06	173
153	154	1	0.54	0.06	171
154	155	1	0.34	0.05	152
155	156	1	0.67	0.10	296
156	157	1	2.10	0.07	192
157	158	1	0.72	0.02	65
158	159	1	0.44	0.06	163
159	160	1	0.65	0.03	97
160	161	1	0.46	0.07	210



18MVR	C027				
From	То	Interval	<b>Cu %</b> (max graph 1%)	<b>Ni %</b> (max graph 0.5%)	Co ppm (max graph 1000ppm)
108	109	1	1.03	0.04	164
109	110	1	1.94	0.04	168
110	111	1	0.18	0.04	139
111	112	1	0.11	0.10	309
112	113	1	0.14	0.09	273
113	114	1	0.30	0.10	325
114	115	1	0.17	0.09	293
115	116	1	0.21	0.11	349
116	117	1	0.17	0.11	367
117	118	1	0.17	0.09	306
118	119	1	0.36	0.13	417
119	120	1	0.29	0.12	392
120	121	1	0.20	0.09	280
121	122	1	0.32	0.07	235
122	123	1	0.39	0.10	322
123	124	1	0.14	0.04	112
124	125	1	0.18	0.07	202
125	126	1	0.45	0.14	431
126	127	1	0.28	0.15	445
127	128	1	0.23	0.11	374
128	129	1	0.25	0.14	430
164	165	1	0.24	0.01	31
165	166	1	0.74	0.07	182
166	167	1	0.03	0.01	21
167	168	1	0.64	0.08	215

18MVR	C028				
From	То	Interval	<b>Cu %</b> (max graph 1%)	<b>Ni %</b> (max graph 0.5%)	Co ppm (max graph 1000ppm)
44	45	1	1.13	0.03	103
45	46	1	0.39	0.10	328
46	47	1	0.35	0.13	379
47	48	1	0.37	0.10	321
48	49	1	0.22	0.23	679
49	50	1	0.18	0.23	695
50	51	1	0.32	0.17	501
51	52	1	0.34	0.10	291
52	53	1	0.26	0.07	211
53	54	1	0.16	0.04	113
54	55	1	0.19	0.03	85
55	56	1	0.43	0.08	241
56	57	1	0.25	0.02	80
57	58	1	0.09	0.02	81
58	59	1	0.07	0.02	84
59	60	1	0.16	0.05	161
60	61	1	0.07	0.02	72
61	62	1	0.08	0.03	110
62	63	1	0.32	0.05	167
63	64	1	0.37	0.05	169
64	65	1	0.38	0.06	198
65	66	1	0.76	0.07	236

### 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.

### Appendix- JORC Code, 2012 Edition Table 1

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

### **Section 1 Sampling Techniques and Data**

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <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> </ul>	bulk sample and representative 1m split samples (nominally a 12.5% split) were collected using a cone splitter.  Diamond drilling (DD) was also undertaken, with samples
	<ul> <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>	intervals were determined by the geologists to be submitted as 1m samples for RC drilling. In RC intervals assessed as unmineralised, 4m composite (scoop) 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. For the diamond drilling, samples were selected after geological logging and range in sample lengths from 0.3m to 1.5m.  The samples were crushed and split at the laboratory, with up to 3kg pulverised, with a 50g samples analysed by Industry standard methods.  The sampling techniques used are deemed appropriate for the style of exploration.
Drilling techniques	<ul> <li>Drill type (eg core, reverse circulation, openhole 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>	Diamond core orientation is determined using a Relfex ACT II RD tool. The core is reconstructed into continuous runs on an angle iron cradle for orientation marking.
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to</li> </ul>	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 method.  While the drilling programme is still on going, no issues relating to core recovery have been noted.

preferential loss/gain fine/coarse No quantitative analysis of samples weights, sample condition or recovery has been undertaken. material. No quantitative twinned drilling analysis has been undertaken at the project. Geological logging of samples followed established Logging Whether core and chip samples have been company and industry common procedures. Qualitative geologically and geotechnically logged to a logging of samples included (but was not limited to) level of detail to support appropriate lithology, mineralogy, alteration and weathering. 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. Sub-sampling Splitting of RC samples occurred via cone splitter by the If core, whether cut or sawn and whether techniques quarter, half or all core taken. RC drill rig operators. Cone splitting of RC drill samples and sample occurred regardless of the sample condition. If non-core, whether riffled, tube sampled, preparation rotary split, etc and whether sampled wet or Samples taken were typically between 1.5-3.3kg. All samples were submitted to ALS Minerals for analyses. For all sample types, the nature, quality and The sample preparation included: appropriateness of the sample preparation Samples were weighed, crushed (such that a technique. minimum of 70% pass 2mm) and pulverised (such that a minimum of 85% pass 75um) as per Quality control procedures adopted for all ALS standards. sub-sampling stages to maximise A 4 acid digest (HNO3-HBr-HF-HCI) and ICP-AES representivity of samples. (ALS method; MS-ICP61g) was used for 33 multi-elements. This also included Co, Cu, Ni, Measures taken to ensure that the sampling Zn. Note: ME-MS61g uses HBr in lieu of HClO3 is representative of the in situ material (used in ME-MS61 4 acid digest). This change collected, including for instance results for relates to improving resolution of sulphur field duplicate/second-half sampling. values in Mt Venn mineralsation. For elements that reported over range, ALS Whether sample sizes are appropriate to used ore grade 4 acid digest and ICP-AES the grain size of the material being sampled. methods; (nickel) Ni-OG62, (copper) Cu-OG62. Sulphur over range used ALS method S-IR08 (Leco Sulphur analyzer). Iron over range used ALS method Fe-ICP81 (Sodium Peroxide Fusion). Sample collection, size and analytical methods are deemed appropriate for the style of exploration. Quality of The nature, quality and appropriateness of All samples were assayed by industry standard methods through commercial laboratories in Australia. assay data the assaying and laboratory procedures and used and whether the technique is laboratory considered partial or total. Typical analysis methods are detailed in the previous section and are consider 'near total' values. tests For geophysical tools, spectrometers,

handheld XRF instruments, etc, the

parameters used in determining the

analysis including instrument make and

Routine 'standard' (mineralised pulp) Certified Reference

Material (CRM) was inserted by Great Boulder at a

nominal rate of 1 in 50 samples.

model, reading times, calibrations factors applied and their derivation, etc.

 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. Routine 'blank' material (unmineralised sand) was inserted at a nominal rate of 1 in 100 samples. No significant issues were noted.

No duplicate or umpire checks were undertaken.

The analytical laboratories provided their own routine quality controls within their own practices. No significant issues were noted.

### Verification of sampling and assaying

 The verification of significant intersections by either independent or alternative company personnel. No verification of sampling and assaying has been undertaken in this exploration programme. No twinned drilling has been undertaken.

- The use of twinned holes.
- Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.
- Discuss any adjustment to assay data.

Great Boulder has strict procedures for data capture, flow and data storage, and validation.

Limited adjustments were made to returned assay data; values returned lower than detection level were set to the methodology's detection level, and this was flagged by code in the database.

## Location of data points

 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. Drill collars were set out using a hand held GPS and final collar were collected using a handheld GPS.

Downhole surveys were completed by the drilling

contractors. Holes without downhole survey use planned

- Specification of the grid system used.
- Quality and adequacy of topographic control.

or compass bearing/dip measurements for survey control.

# Data spacing and distribution

- Data spacing for reporting of Exploration Results.
- 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.
- the projects is, by the nature of early exploration, variable.

The spacing and location of the majority of the drilling in

Whether sample compositing has been applied.

The spacing and location of data is currently only being considered for exploration purposes.

### Orientation of data in relation to geological structure

- Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.
- 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.

Drilling was nominally perpendicular to regional mineralisation trends where interpreted and practical. True width and orientation of intersected mineralisation is currently unknown.

A list of the drillholes and orientations are reported with significant intercepts is provided as an appended table.

The spacing and location of the data is currently only being considered for exploration purposes.

Sample security	•	The measures taken to ensure sample security.	Great Boulder has strict chain of custody procedures that are adhered to for drill samples.
			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.
Audits or reviews	•	The results of any audits or reviews of sampling techniques and data.	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	Type, reference name/number, location	Great Boulder Resource Ltd (GBR) is comprised of
tenement and	and ownership including agreements or	several projects with associated tenements;
land tenure status	material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical	Yamarna tenements and details;
	sites, wilderness or national park and environmental settings.	Exploration licences E38/2685, E38/2952, E38/2953, E38/5957, E38/2958, E38/2320 and prospecting licence P38/4178 where,
	<ul> <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>	GBR holds a 75% interest in the Yamarna Project with its joint venture partner EGMC holding a 25% interest. EGMC has elected to contribute to expenditure to maintain its 25% interest I the Yamarna project. If EGMC elects to not contribute to the joint venture it will convert to a 2% Net Smelter Royalty (NSR) and GBR will have a 100% interest in the project.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Previous explorers included:  - 1990's. Kilkenny Gold NL completed widespaced, 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 anlaysis 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	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	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
- o dip and azimuth of the hole
- o down hole length and interception depth
- o 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.

A list of the drillhole coordinates, orientations and metrics are provided as an appended table.

### 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 weight averaging techniques, aggregation methods or grade truncations were applied to these exploration results.

All significant intercept lengths were from diamond drilling. No length weighting was applied.

No metal equivalents are used.

### Relationship between mineralisation widths and intercept lengths

These relationships are particularly important in the reporting of Exploration Results.

The orientation of structures and mineralisation is not known with certainty but drilling was conducted using appropriate orientations for interpreted mineralisation.

- 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').

True width and orientation of intersected mineralisation is currently unknown.

A list of the drillholes and orientations are reported with significant intercepts is provided as an appended table.

#### **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 of drill hole collar locations and appropriate sectional views. Refer to figures in announcement.

## 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. It is not practical to report all exploration results. Low or non-material grades have not been reported.

All drill hole locations are reported and a table of significant intervals is provided in the 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.