RESOURCES LIM

Great Boulder



Receipt of Entry Permit means Great Boulder set to conduct first exploration at Mt Venn since announcing initial assays of up to 1.7% copper plus nickel and cobalt

Great Boulder Resources (ASX: GBR) is pleased to advise that it has now received its Mining Entry Permit and Consent to Mine from the Western Australian Minister for Aboriginal Affairs, allowing access to the Cosmo-Newbery Aboriginal Reserve.

The receipt of the Mining Entry Permit and Consent to Mine are the last approvals required by Great Boulder and allows exploration to commence at the Mt Venn copper-nickel-cobalt prospect within its Yamarna Project near Laverton in WA.

Great Boulder has already completed the heritage survey along the entire 9km-long Mt Venn intrusive complex as well as a large intrusion immediately east of the Mt Venn complex ("Eastern Mafic Complex"). A total of 195km of tracks were surveyed and cleared as part of Great Boulder's plan to undertake ground-based EM and drilling activities.

The Company has finalized plans for its maiden exploration campaign at Mt Venn and has engaged ground EM crews and an aircore drilling contractor. This will be the first exploration undertaken at Mt Venn since Great Boulder announced initial assays of up to 1.7% copper plus nickel and cobalt in March this year (see ASX release dated March 29, 2017).

Great Boulder personnel will travel to site in the coming days to supervise track and pad clearing for the aircore programme. Ground EM and aircore crews are expected on site early next week.

As previously announced, the ground EM survey will test six initial targets to identify and confirm the orientation of the bedrock conductors for follow-up RC and diamond drilling. Based on the current plan it is anticipated the EM field work will be completed in 3 weeks and data processing completed 1-2 weeks after.

The aircore geochemistry programme will test the entire Mt Venn complex for nickel-copper depletion-enrichment signatures. Approximately 100 holes are planned which is anticipated to take 2 weeks to complete. Detailed multi-element analysis of the bedrock will be used to map the metal distribution and it is anticipated final assays will be available for review in early October.

Great Boulder will provide further details regarding the timing on the current exploration programme and planning for the RC drill programme over the coming weeks as results become available.

### August 28, 2017



Figure 1. Ground based moving loop EM survey and aircore drilling locations (XTEM image left, magnetic image right)

Great Boulder Managing Director Stefan Murphy said the Company was very pleased to receive the final permits allowing exploration to commence at Mt Venn.

"While the permitting process has taken longer than anticipated, we are glad to now be mobilising crews to site ahead of our very promising exploration programme at Mt Venn," Mr Murphy said.

"The planning process has been extensive and the extra time allowed us to refine our approach to ensure we gather as much field data as possible during September, ahead of an RC programme in October to test the EM conductors.

"Mt Venn is an extremely large prospect with multiple conductors along the 9km strike that have been identified from the XTEM survey. This current programme will define and prioritise our targets for RC drilling."

# Mt Venn Background

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

Great Boulder holds its interest in the Yamarna Project through a joint venture, where Great Boulder is earning an initial 75% interest. The Yamarna JV recently acquired Exploration Licence E38/2320 from Gold Road in March 2017.

Gold Road previously drilled and assayed an RC drill hole on the edge of an EM anomaly identified from an airborne XTEM survey undertaken to map the Thatcher's Soak paleochannel as a source of ground water for the Gruyere gold mine.

Gold Road logged the drill hole and identified extensive sulphide mineralisation. The hole was assayed for gold, base metals and a multi-element suite. Copper-nickel sulphide mineralisation was confirmed in the assays with hand-held XRF grades of +1% Cu and +0.3% Ni.

Great Boulder subsequently assayed and logged the hole and confirmed that the EM anomaly relates to primary bedrock sulphide mineralisation, with peak assay results of 1.7% Cu, 0.2% Ni, 528ppm Co (over 1m intervals). Two distinct lenses of higher grade mineralisation have been identified in the geochemistry data from drill hole 15GYWB0004:

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

Table. Upper and Lower mineralised lenses identified in drill hole 15GYWB0004



Figure 2. RC chip trays from drill hole 15GYWB0004 showing mineralised intersections

Significantly, the peak of the drilled conductor is located 450m south of the RC drill hole on Great Boulder's original Yamarna Project. Another strong EM conductor is located a further

2km south along the same magnetic trend and also within Great Boulder's Yamarna Project. Recent analysis of XTEM flight lines has identified additional late time EM responses that have the potential to host bedrock sulphide mineralisation.

The airborne XTEM survey was flown on wide 500m and 1km flight lines for the purpose of defining the Thatcher's Soak paleochannel. The data generated by the XTEM survey has identified several prospective anomalies, however the wide spacing, height and power of the airborne survey is not able to penetrate deep enough to provide a definitive location of the conductors. The planned ground EM survey will test several targets under the interpreted paleochannel.

# Yamarna Background

### Location

The Yamarna project is located 130 km east of Laverton in the Eastern Goldfields District of Western Australia and straddled by both the White Cliffs Road and the Great Central Highway. The recently-discovered Gruyere gold deposit (Gold Road – Gold Fields Joint Venture) is located 25 km to the northeast of GBR's tenements.



Figure 3. Great Boulder Project Location Map

## Ownership

The Yamarna Project consists of six granted exploration licenses and one granted prospecting license. GBR has executed a JV agreement with EGMC to earn a 75% interest in the Yamarna project through a minimum expenditure of \$2,000,000 in exploration over five years. Once GBR has met this minimum expenditure commitment, EGMC will have the right to contribute 25% to all future exploration expenditure and retaining its 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.

### **Geological Setting**

The Yamarna Project lies immediately west of the Yamarna greenstone belt and covers the southern extensions of the Mt Venn igneous complex which intrudes at the southern end of the Jutson Rocks greenstone belt. A poorly-explored greenstone enclave, interpreted to represent a previously unrecognised portion of the Mt Venn igneous complex (Eastern Mafic complex), has been interpreted on the project tenements.

The majority of the project tenements are dominated by Tertiary to Recent cover comprising aeolian and alluvial material with locally well-developed calcrete horizons. The Thatcher's Soak palaeochannel extends NE-SW across the project tenements. The surficial cover overlies a dissected sequence of Permian glacial deposits of variable thickness as well as masking the Archaean granitoid-greenstone bedrock.

The Mt Venn igneous complex is known to host anomalous Ni-Cu mineralisation associated with pyrrhotite along the Mt Venn corridor. The anomalous Ni-Cu zones are electrically conductive and EM has been used along this trend to explore mineralised for Ni-Cu zones. Interpretation of regional aeromagnetic and airborne EM data and recently acquired drill hole and analytical data from E38/2320 indicates that the Ni-Cu anomalous corridor extends under cover onto the GBR tenements with a number of magnetic and EM anomalies evident on the GBR tenements that remain untested by drilling.

Significant gold mineralisation has been recognised immediately east of the GBR tenements along the Attila-Alaric trend (Yamarna greenstone belt) and along the Gruyere trend (Dorothy Hills greenstone belt). The Jutson Rocks greenstone belt, which includes the Mt Venn igneous complex, also hosts gold mineralisation and a number of regolith gold anomalies have been defined therein.



Figure 4: Yamarna Project Geology Map

#### August 28, 2017

#### **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**

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