

## HIGH-GRADE GOLD FOLLOW-UP: EXPLORATION COMMENCING FOLLOWING GRANT OF MURCHISON TENEMENTS

### SUMMARY

- All tenements in Enterprise's 820 km<sup>2</sup> Murchison Gold and Base Metals Project now granted.
- The landholding contains several historical significant gold and copper-zinc targets which require aircore (AC) and reverse circulation (RC) drill testing.
- At Jeffery Well, a +1g/t Au aircore anomaly over 1,000m x 500m requires follow up drilling. Significant historical results include 5m @ 5.0 g/t Au from 60m in JWAC058, 3m @ 9.19 g/t Au from 111m in 96LWAC056, and 1m @ 30.2 g/t Au from 63m in JWAC023. \*
- At Behring Bore, a shallow +1g/t Au aircore anomaly over 900m x 500m requires follow up drilling.\*
- The landholding contains +50km of felsic volcanic stratigraphy with several Cu-Zn massive sulphide intersections.
- Enterprise has lodged Programs of Work (PoW's) to allow AC and RC drilling programs to commence.

\*Refer ENT ASX release 3 November 2017

### OVERVIEW

Enterprise Metals Limited (ASX: ENT; "Enterprise" or "the Company") is pleased to advise that all tenements in the Company's 100% owned Murchison Gold and Base Metals Project in Western Australia are now granted (refer Figure 1 overleaf).

Enterprise's 820 km<sup>2</sup> Murchison Project is 35km north of Cue and covers Archaean rock sequences prospective for orogenic gold and volcanogenic massive sulphide (VMS) copper-zinc deposits. The project includes strike extensions of the gold mineralized Big Bell, Cuddingwarra, Chieftain (or *Mt Magnet*) and Emily Shear Zones, and the Wattagee and Emily Well VMS horizons.

Recent geochemical work by the Geological Survey of Western Australia (GSWA) indicates that the felsic volcanics in both the Wattagee and Emily Well horizons have geochemical characteristics consistent with VMS fertile packages across the Yilgarn and Canadian Abitibi Provinces.

While the Cue district contains several major gold mines, including **Westgold's Big Bell** (2.8 Moz historical production and 2.5 Moz resource), **Day Dawn** (Great Fingall and Golden Crown mines, 1.7 Moz historical production and 0.89 Moz resource) and **Cuddingwarra** camp gold mines (0.8 Moz production and current resources of 0.55 Moz), these deposits were easily found because they outcropped. **Enterprise's Murchison Project is under-explored due to surficial cover.**

The Enterprise team has significant experience in exploring for and discovering "blind" mineral deposits in the deeply weathered Yilgarn of Western Australia, and makes extensive use of airborne and ground geophysics to "see through" the cover and define favourable litho-structural targets for drill testing.

Figure 1. ENT's Murchison Project over Interpreted Bedrock Geology & Competitor Landholdings Showing Gold Endowment (Moz produced + Moz current resource)

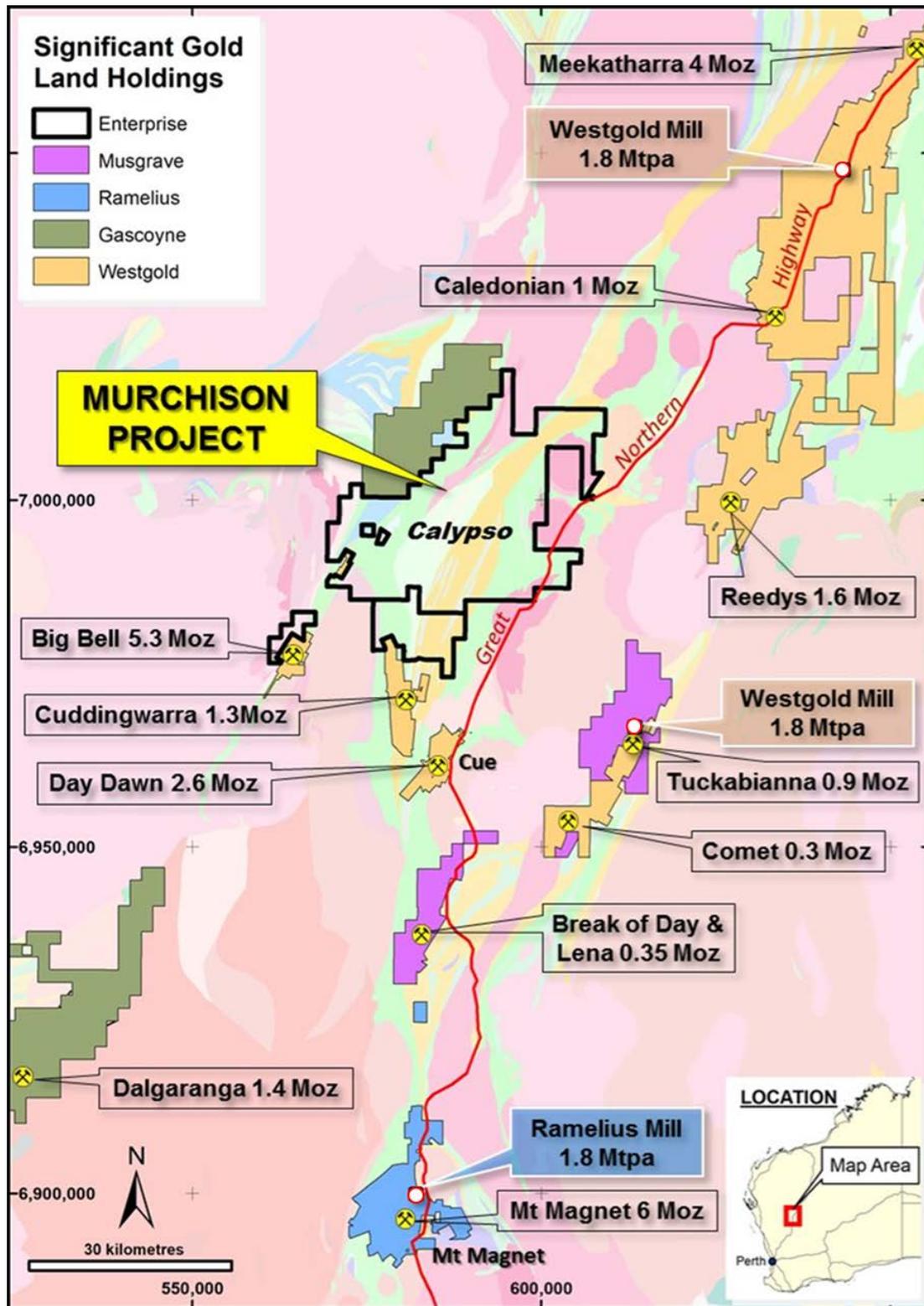


Figure 2. ENT's Murchison Project, Surficial Geology & Au & Cu-Zn Occurrences

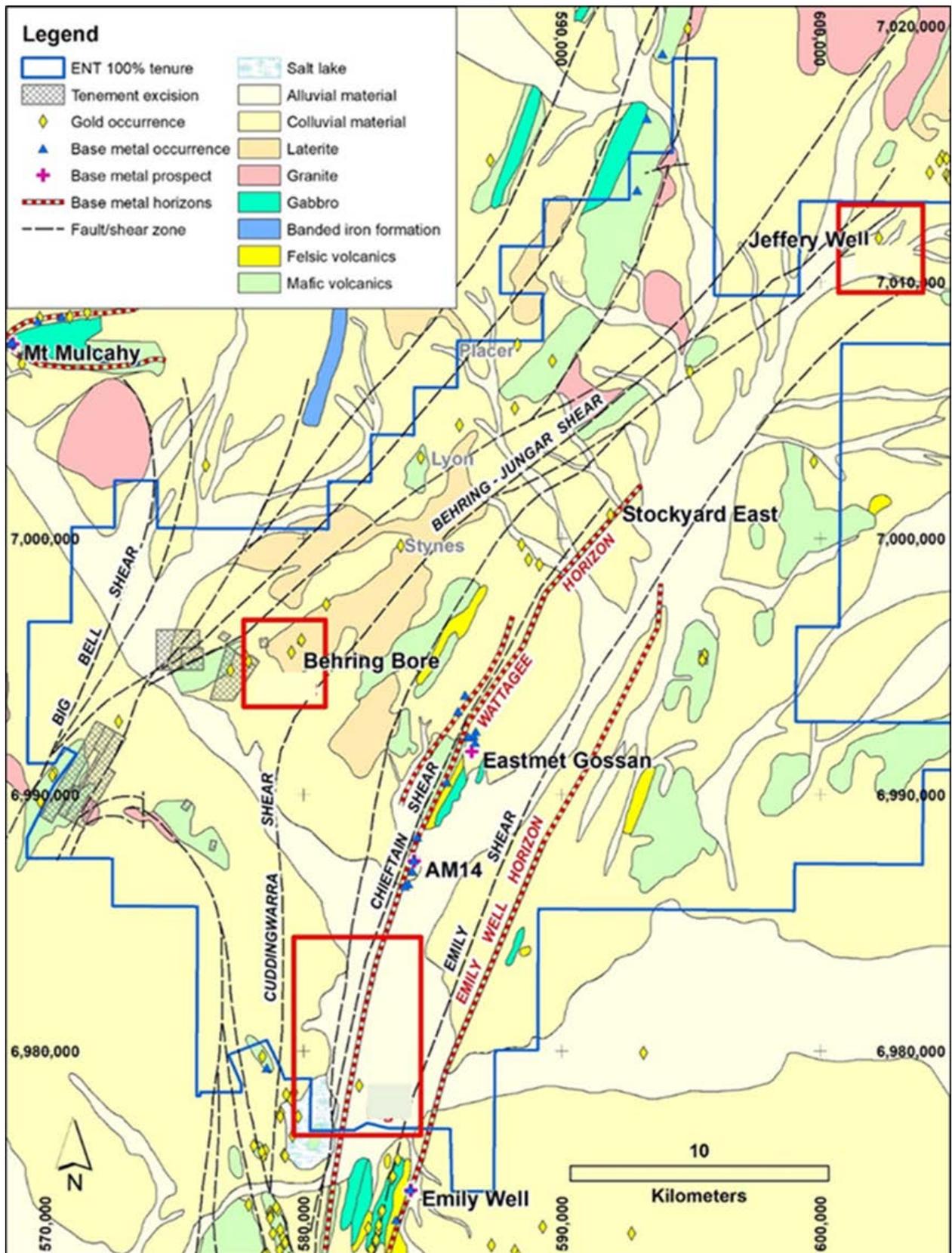
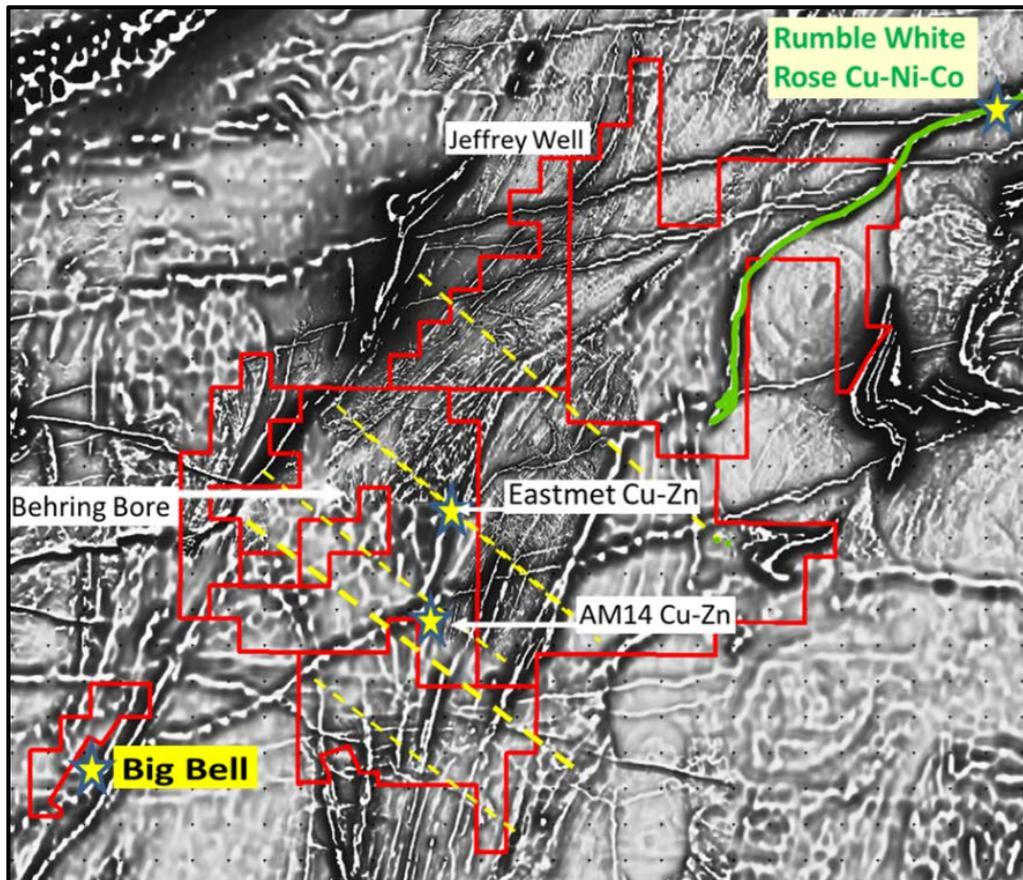


Figure 3. ENT's Murchison Tenements in Red over 1<sup>st</sup> VD Magnetic Image

### SIGNIFICANT GOLD PROSPECTS

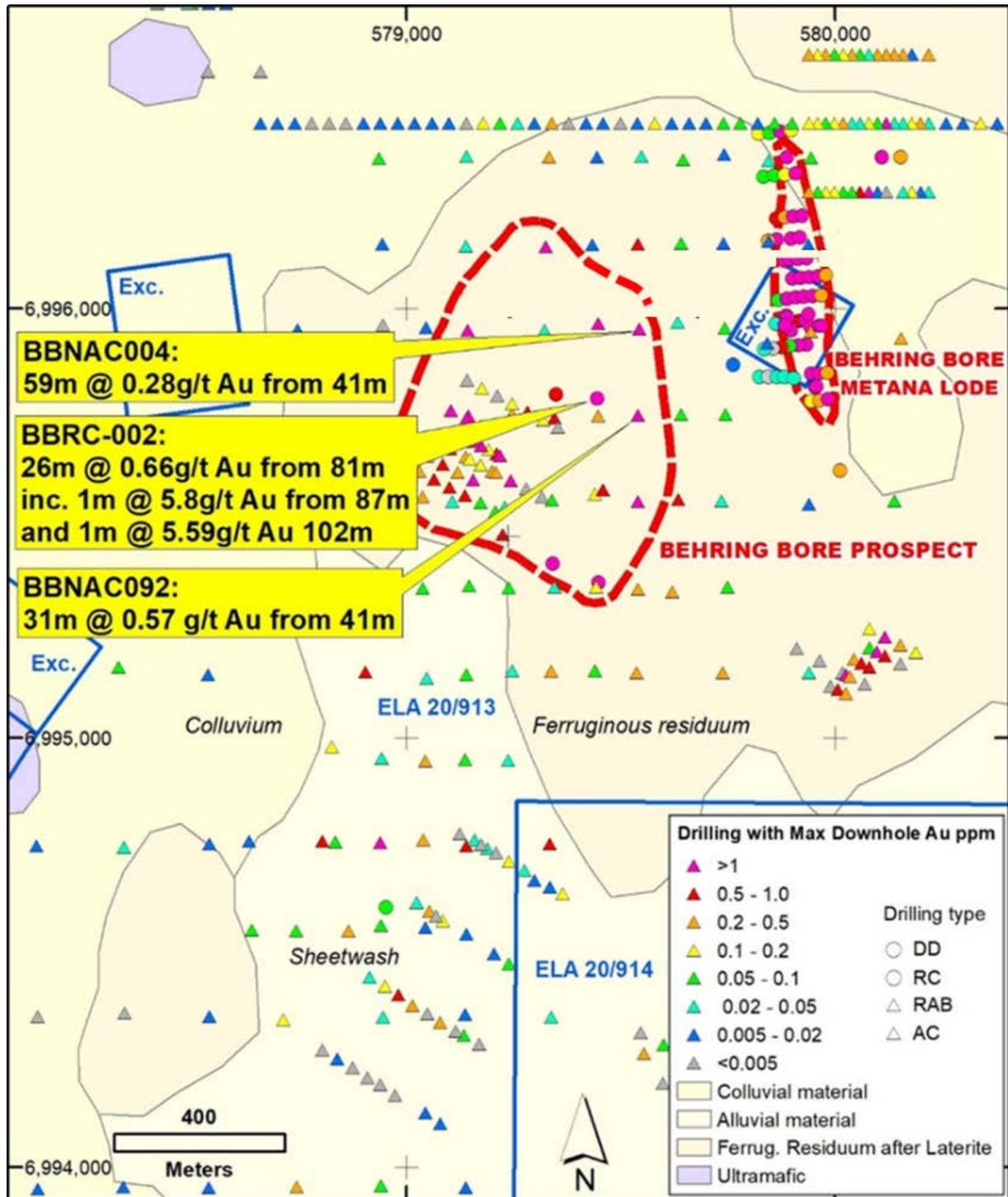
Several priority gold systems have been identified for follow up work, based on compilation of historical drilling and other exploration results reported by previous explorers.

**At Behring Bore** (refer ENT: ASX release 3 November 2017 for details) historical 200m x 100m spaced aircore drilling has defined gold values +1g/t over an area of approximately 900m x 500m. This drilling has intersected very thick, low grade mineralization in the oxide zone including 31m @ 0.57g/t Au in BBNAC092 and 59m @ 0.28 g/t Au in BBNAC004 (refer Figure 4). The mineralization is described as being hosted in the uppermost part of an altered, pyritic dolerite, overlain by graphitic schists.

Drilling in the 1980's also defined the Metana Lode, comprising moderately east dipping gold mineralization intersected over 400m of strike. The mineralization is described as being hosted in the uppermost part of a quartz veined, carbonate- pyrite altered dolerite (similar to the Behring Bore Prospect), overlain by sediments and interlayered basalts, and is moderately dipping to the east with a shallow plunge to the north. The deepest hole testing the Metana Lode is a 70m angled hole.

While the core of the system is located within a small ML excised from Enterprise's tenure, the system is open down dip and down plunge to the north, into and within Enterprise's tenure. The larger Behring Bore Prospect warrants infill drilling, particularly to test for more discrete, potentially moderate east dipping lodes, within the large gold anomalous system. The Metana Lode also requires drill testing down dip and plunge of the historical shallow drilling.

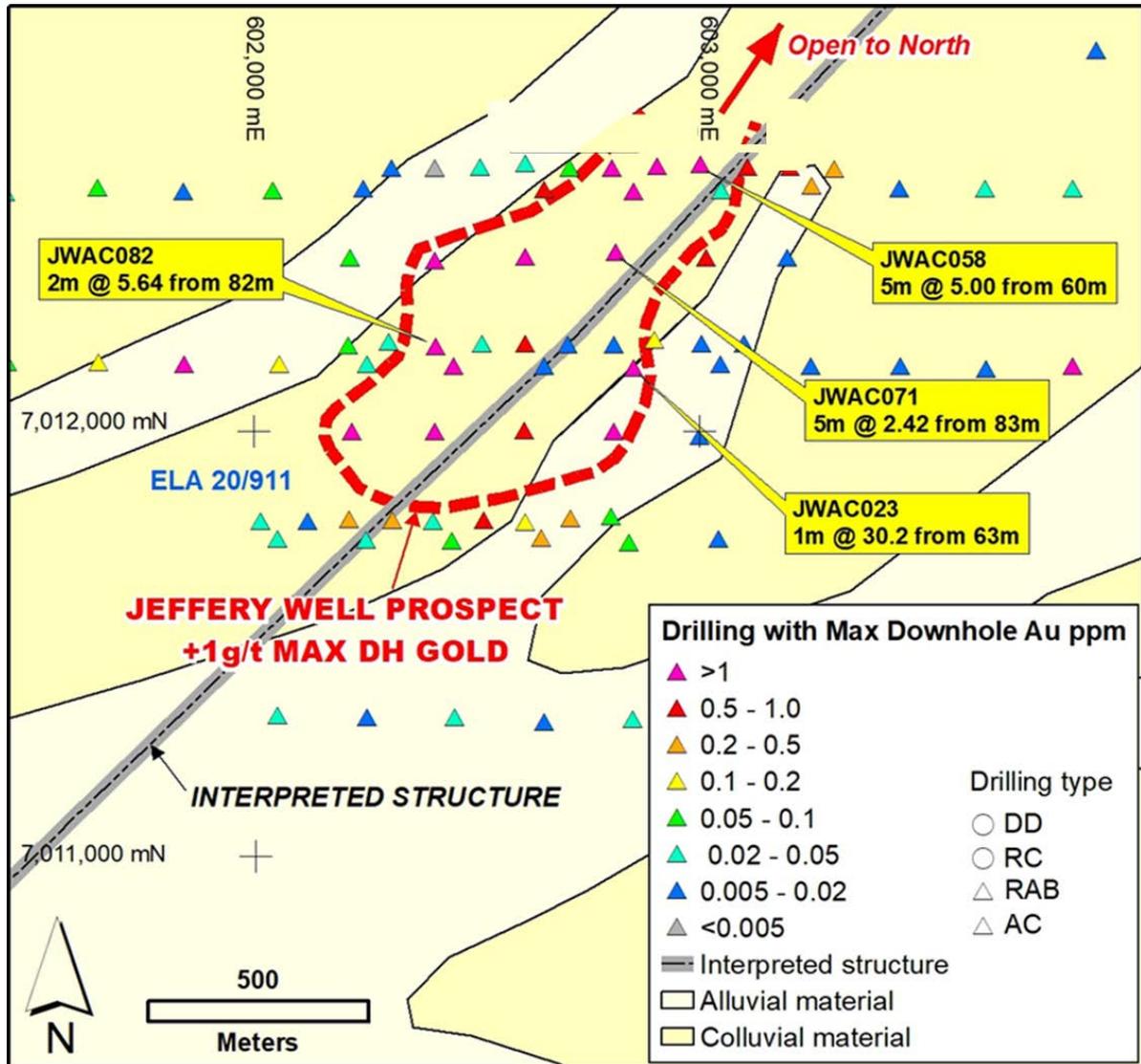
Figure 4. Behring Bore, Surface Geology & Drill Collars, Coloured by Max Downhole Gold Values



At the Jeffery Well Prospect (refer ENT: ASX release 3 November 2017 for details) historical 200m x 100m spaced aircore drilling has defined gold values +1g/t over an area of approximately 1,000m x 500m. (Refer Figure 5).

Significant results reported include 5m @ 5.0 g/t Au from 60m in JWAC058, and a single metre intercept of 30.2 g/t Au from 63m in JWAC023. The mineralization appears to form a flat lying blanket, potentially developed by supergene remobilisation from an underlying mineralised system in the fresh rock basement.

Figure 5. Jeffery Well Prospect - Surface Geology & Drill Collars, Coloured by Max Downhole Gold Values



The northern extensions of four other gold mineralized structures defined at Cuddingwarra and Emily Well occur within E20/742 and adjacent P20/2302 and 2303.

Follow up and step-out drilling is warranted on all the above exploration prospects.

**SIGNIFICANT COPPER - ZINC PROSPECTS**

Enterprise’s Murchison Project contains two stratigraphic horizons with known VMS mineralization:

- the **Wattagee horizon**, containing the AM14, Wattagee Hill and MetalsEx gossans or prospects; and
- the **Emily Well horizon**, with VMS mineralization and gossans located at or near Emily Well. The locations of these prospects are shown in previous Figures 2 & 3.

Recent geochemical work by the GSWA indicates felsic volcanics in both the Wattagee horizon and the Emily Well horizon have geochemical characteristics consistent with VMS fertile packages across the Yilgarn and Canadian Abitibi Provinces.

Between 1971-1972, Eastmet Minerals explored for Ni-Cu mineralization followed by Cu-Zn sulphides at the Eastmet Massive Sulphide Prospect, and between 1975-1981, Esso Minerals carried out extensive geophysics with follow up drilling throughout the area but concentrating on the AM14 area. The two main Cu-Zn prospects identified by this exploration are:

**AM 14:** Esso discovered Zn/Pb/Cu mineralization hosted by laminated carbonaceous, siliceous dolomitic sediments. The best intercept was **WP138 with 3m at 7.5% Zn, 0.53% Pb and 0.42% Cu from 228m**. The zone has been sporadically drilled over a 1km strike length, with some IP having also been conducted.\* (refer ENT ASX Release 9 October 2017)

**Eastmet Gossan:** The best intercept was **WP15: 9.14m at 1.31% Zn, 0.28% Cu and 0.11% Ni.\***

### **POTENTIAL FOR COPPER-NICKEL-COBALT**

On 7 May 2018, Rumble Resources (ASX: RTR) announced that a large first order conductor had been defined by a moving loop transient electromagnetic survey conducted over the **White Rose Cu-Au Prospect** within their Munarra Gully Cu/Au Project (with Ni/Co potential) some 50km NNE of Cue. (E51/1677 & M51/122)

The White Rose Cu-Au Prospect is hosted by an ultramafic unit (komatiite?) that **extends some 10Km into the northeast corner of Enterprise's E20/911, close to the Jeffrey Well prospect**. (Refer Figure 3, magnetic unit outlined in green). This ultramafic unit within Enterprise's E20/911 represents a significant new target for Enterprise.

Rumble have reported that current small scale surface gold mining has delineated wide zones of copper and gold in shallow oxide material. They also reported that grab sampling completed by Rumble and others identified consistent copper in weathered ultramafic rocks exposed in two small pits currently being mined for gold. Results (33 samples) include:

- Average of 0.68% Cu (all 33 samples) Max. 2.1% Cu.
- Max Au: 1.9 g/t, Max Ni: 0.37% and Max Co: 0.11%.

### **ABOUT ENTERPRISE METALS LTD**

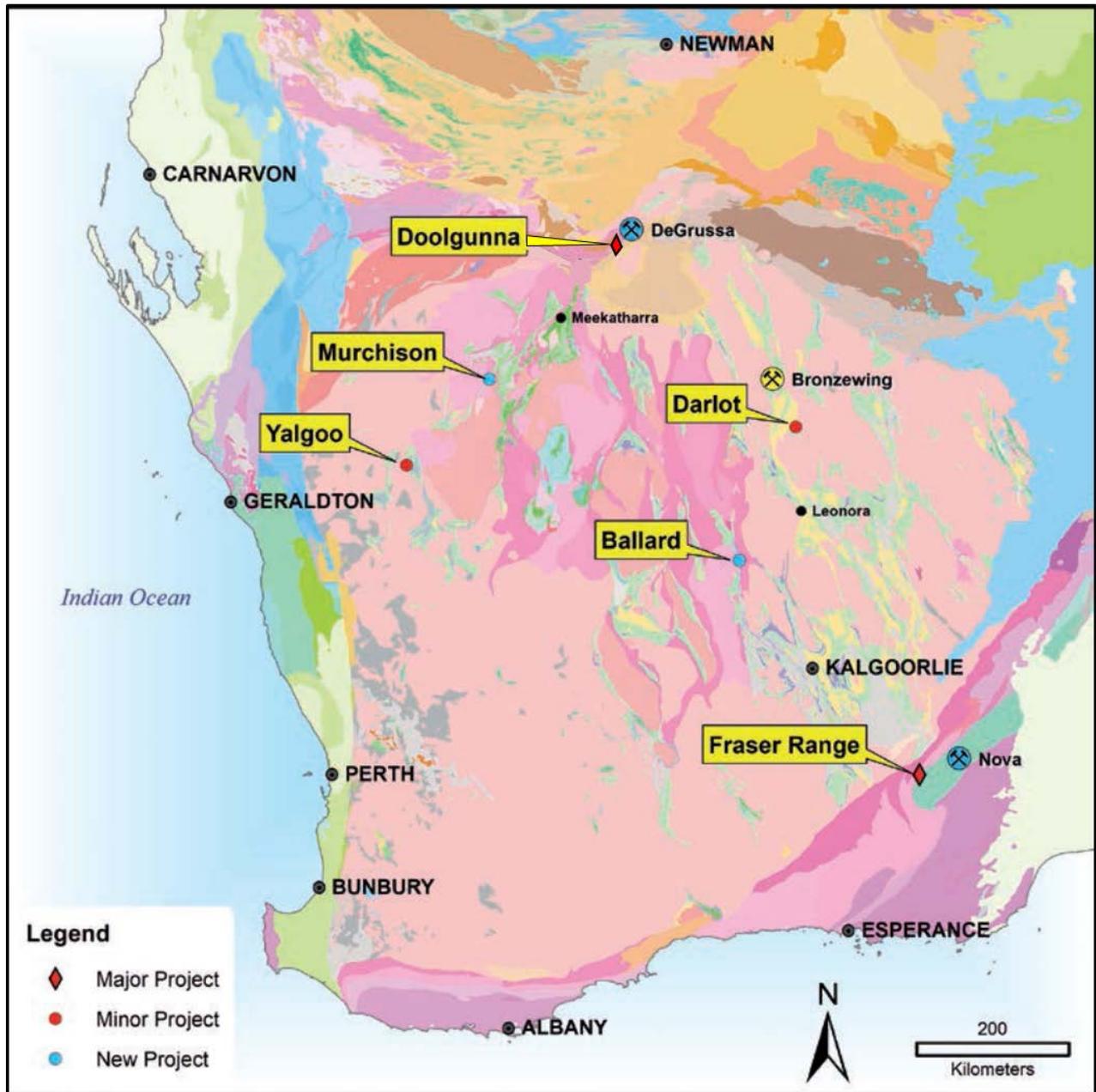
Enterprise Metals Limited (ASX: ENT) was incorporated in January 2007 as a public company and was admitted to the ASX on 20<sup>th</sup> June 2007. Enterprise has 355,652,435 million Shares on issue, and the present market capitalisation is approximately \$8.0 million (based on a share price of 2.2 cents). The Company has three major gold/ base metal projects in Western Australia, two of which are funded by partners.

The **Doolgunna Project** is managed and operated by Sandfire Resources NL (ASX: SFR) under a farm-in agreement whereby SFR can earn a 75% interest by discovery of 50,000t contained copper (or equivalent).

The **Fraser Range Project**, in which Enterprise holds a 30% interest free carried to bankable feasibility stage, is managed and operated by Constellation Resources Limited (soon to be listed on the ASX), which holds a 70% interest.

Enterprise also holds 12 million shares in **Alto Metals Limited** (ASX: AME, or “Alto”). Alto’s wholly owned subsidiary Sandstone Exploration Pty Ltd holds granted tenements covering the ~820km<sup>2</sup> and the majority of the Archaean Sandstone Greenstone Belt in Western Australia, which has produced over 1.3 million ounces of gold. Enterprise’s 12 million Alto shares have a current fair market value of approximately \$0.8M (based on a share price of 7 cents).

Figure 6. Enterprise’s Project Locations- Western Australia



**Further Information**

**Dermot Ryan**  
**Managing Director**  
**+61 9381 2808** [admin@enterprisemetals.com.au](mailto:admin@enterprisemetals.com.au)

**Competent Persons statement**

*The information in this report that relates to Exploration Results is based on information compiled by Mr Dermot Ryan, who is an employee of Xserv Pty Ltd and a Director and security holder of the Company. Mr Ryan is a Fellow of the Australasian Institute of Mining and Metallurgy and a Fellow of the Australian Institute of Geoscientists and has sufficient experience of relevance to the styles of mineralization and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Ryan consents to the inclusion in this report of the matters based on information in the form and context in which it appears.*

**Cautionary statement**

*All historic exploration results referred to in this Report were previously reported to the WA Department of Mines WAMEX Open File system by professionally managed mineral exploration companies, or by ASX listed companies under the JORC Code 2004. Enterprise Metals Ltd understands that this information has not been updated since to comply with the JORC Code 2012 but believes the information has not materially changed since it was last reported.*