

ASX ANNOUNCEMENT ACN 123 567 073 14 December 2015

## **Exploration Update, Drilling Vulcan West Target, Doolgunna**

Enterprise Metals Limited ("Enterprise" or "the Company") (ASX: ENT) advises that the first drill test of the Vulcan West Moving Loop Electromagnetic (MLEM) target at Doolgunna in Western Australia was completed between 10<sup>th</sup> - 12<sup>th</sup> December 2015.

Reverse circulation (RC) drill hole VWRC001 was collared at 725,047E, 7159,404N, with a -60 dip on azimuth 150 degrees magnetic. The Vulcan West EM target is a discrete basement conductor located in the volcano-sedimentary stratigraphy of the Narracoota/Karalundi Formations, in a similar position to Sandfire Resources NL's DeGrussa and Monty massive sulphide copper deposits.

After passing through several metres of alluvial cover, the hole penetrated a deep zone of oxidation to 81m downhole. A summary of the lithological units intersected from 81m follows\*:

- from 81-185m, medium grained dolerite, with weak-medium pervasive chlorite-epidote alteration, along with weak-moderate silicification;
- from 185-256m, interbedded green-grey coloured shale and fine-grained dolerite, with red
  jasper occurring in or at the boundary with shale. Locally minor pyrite and occasionally
  chalcopyrite associated with red jasper. Weak-medium-strong chlorite-epidote alteration in
  dolerite.
- from 256-291m, interbedded laminated sulphide-rich black shale and dolerite. Sulphides dominated by pyrrhotite and minor pyrite.
- from 291-318m end of hole, grey chert and vocaniclastic sediments, medium-strongly silicified, with hydrothermal brecciation of at the end of the hole.

## **Comments**

The interbedded sulphide-rich shale unit with admixed dolerite from 256 to 291m is the likely source of the modelled Vulcan West MLEM anomaly. However, the zone from 185 to 256m which displayed red jasper alteration with associated sulphides (including minor chalcopyrite) may also be of importance.

PVC casing was inserted into hole VWRC001 to allow down hole electromagnetic (DHEM) surveying at a later date. The DHEM survey will be used to confirm that the surface MLEM target has been intersected, and will also look around the hole for any other conductors potentially indicative of massive sulphide. The drilling of the planned second hole has been postponed, pending the assay results from VWRC001 and the results of the follow up DHEM survey.

Four metre composite samples and 1m individual samples from 256-291m have been dispatched to the laboratory for analysis, and assay results will be released to the ASX as soon as they become available.

\*Note: Individual 1m samples were each logged by visual observation of a handful of washed drill cuttings (~2mm - 12mm in size) collected by sieve from individual 1m drill samples (~30kg -45kg) collected in green plastic bags. Logged lithologies and sulphide content are therefore a guide only and full geochemical analysis will provide a more accurate determination of mineralisation present.

Dermot Ryan Managing Director

## **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 Member of the Australian Institute of Geoscientists and has sufficient experience of relevance to the styles of mineralisation 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. Mr Ryan and Enterprise Metals Limited confirm that other than the Geophysical Exploration Results presented in this Report, they are not aware of any new information or data that materially affects the information included in the relevant previous Enterprise Metals Limited market announcements relating to the Vulcan Prospect.

For a summary of previous work at the Vulcan Prospect, refer Table 1 of ENT ASX release 22 October2015. See link: <a href="http://enterprisemetals.com.au/wp-content/sharelink/20151022-em-conductor-located-at-vulcan-prospect---doolgunna-wa-77588433359985422.pdf">http://enterprisemetals.com.au/wp-content/sharelink/20151022-em-conductor-located-at-vulcan-prospect---doolgunna-wa-77588433359985422.pdf</a>