

ASX ANNOUNCEMENT ACN 123 567 073 16 December 2015

Amended 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 10th - 12th December 2015.

Reverse circulation (RC) drill hole VWRC001 was collared at 725,047E, 7159,404N, with a -60 dip on azimuth 150 degrees magnetic, and RL577m. 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 (~0.1-1%) and trace chalcopyrite (~0.1%) associated with red jasper. Weak-medium-strong chlorite-epidote alteration in dolerite.
- from 256-291m, interbedded laminated sulphide-rich (~5% 20%) black shale and dolerite. Sulphides dominantly pyrrhotite and 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 trace 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.

*Cautionary 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 any mineralisation present.

Table 1. Drillhole Collar Attributes

Hole No.	Grid	Easting	Northing	Depth	RL	Dip	Azimuth
VWRC001	MGA GDA94 Zone 50	725,047m	7159,404N	318m	577m	-60°	150 ⁰ mag

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.

Section 1 Sampling Techniques and Data

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

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Criteria	Commentary
Sampling techniques	 Drilling at Vulcan West in 2015 was sampled at 1m intervals. A 1-2kg sample of each metre interval was obtained from cone splitter and collected in a calico bag, and remainder of each 1 metre sample (30-45Kg) was collected into a green polythene bag.
Drilling techniques	Drilling was by Reverse Circulation (RC) technique with face sampling hammer of nominal 140 mm hole diameter, with booster and auxilliary air (2400cfm at 850 psi) to maximize recovery and minimize wet samples.
Drill sample recovery	 Sample recoveries were not recorded, but recoveries were assessed visually by height of samples in green plastic polythene bags. Recoveries were deemed to be excellent.
Logging	 Geological logging is qualitative and quantitative. Individual 1m samples were each logged for lithology, mineralisation, grainsize, texture, oxidation, weathering, colour and 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 polythene bags from drill rig cyclone. After logging, washed reference drill chips of every 1m interval were retained in a plastic chip tray. Entire RC hole (318m) was lithologically logged.
Sub-sampling techniques and sample preparation	 1 metre samples were collected from cone splitter into calico bags. 84 x 4 metre composite samples were collected from entire hole using a PVC spear into each 1 metre green polythene bag and were dispatched to laboratory for sample preparation and assay. 36 x 1 metre samples were also collected and dispatched to laboratory for sample preparation and assay.
Quality of assay data and laboratory tests	Not material as no assays undertaken to date.
Verification of sampling and assaying	 Primary sample and lithological data was collected using a set of standard Excel templates and re-entered into laptop computers. Not material as no assays undertaken to date.
Location of data points	 Drill site surveyed by a modern hand held GPS unit with an accuracy of 5m which is sufficient accuracy for the purpose of compiling and interpreting the results of scout RC drill hole. Topographic control is by NASA Shuttle Radar Topography Mission (SRTM). The grid system is MGA GDA94 Zone 50.
Data spacing and distribution	 No additional sample compositing was used apart from the standard 4m composite sampling.
Orientation of data in relation to geological structure	 RC drill hole orientation was determined from modelling of MLEM data, and was planned to intersect EM feature orthogonally.
Sample security	 Clear mark up and secure packaging to ensure safe arrival and accurate handling at assay facility. Samples delivered to laboratory by Enterprise personnel.
Audits or reviews	 Logging of chips at site was regularly reviewed by 2nd geologist.

JORC Code, 2012 Edition – Table 1 report for ASX Release 16 December 2015

Section 2 Reporting of Exploration Results

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

Criteria	Commentary					
Mineral tenement and land tenure status	 Vulcan West is wholly within Enterprise's 100% owned, granted Explor Licence 52/2049. The tenement is on the Department of Parks & Wi (DPaW) owned Doolgunna Pastoral Lease. The tenement sits within Yugunga-Nya Native Title Claim. E52/2049 expires on 26 October 2018. The tenement is in good standing there are no existing impediments to exploration or renewal at expiry date 	ildlife n the g and				
Exploration done by other parties	No prior exploration by other parties at Vulcan West.					
Geology	 E52/2049 covers an interval of the Goodin Fault, a major reactivated refault that separates siliciclastic and mafic units of the Yerrida Group is south, from mafic Narracoota Formation volcanics of the Bryah Group to north. The principal exploration targets are Volcanic Hosted Massive Sulp (VHMS) and sediment hosted massive sulphide base metal (copper, deposits. 	n the o the				
Drill hole information	No prior drilling. Refer Table 1 of this Report for VWRC001 collar information.					
Data aggregation methods	No data aggregation methods employed at this date.					
Relationship between mineralisation widths and intercept lengths	 Not material, as from visual observation, no economic mineralisatintersected to date. 					
Diagrams	Appropriate map and cross section will be prepared when assays are availa					
Balanced reporting	The accompanying document is considered to be a balanced report w suitable cautionary Note.	ith a				
Other substantive exploration data	 Details of Moving Loop Electromagnetic Survey which defined drill target a Loop size: 200m x 200m Line spacing: 400m with selective 200m infill lines Station Spacing: 100m (50% overlap most moves) Frequency: 0.5 Hz minimum Transmitter: VTX-100 Max Current/Voltage: 100 Amp/ 500 Volts Receiver: EMIT SMARTem24 Sensor: EMIT Smart Fluxgate or Fluxgate Line Lengths: ~4.8km ~4.8km *4.8km <	re:				
Further work	 Assaying of 4 metre composite and selected 1 metre samples. Down Hole Electromagnetic Surveying (DHEM) by contractors. Modelling and interpretation of DHEM data by consultants. Follow up RC and/or diamond core drilling if appropriate. 					