ASX ANNOUNCEMENT

29 September 2010

SYLVANIA IRON PROJECT NEW AEROMAGNETICS INDICATE POTENTIAL CID's AND DETRITALS

SUMMARY

Enterprise Metals Limited ("Enterprise" or "the Company", ASX: "ENT") wishes to announce that it has received preliminary data from its recent 100 metre line spaced airborne magnetic survey over the eastern portion of its Sylvania project area. The Sylvania Project is located on the southern margin of the Sylvania Dome, approximately 60km southwest of the town of Newman.

The imaged magnetic data clearly shows a well developed paleo-channel, with a flow direction from northeast to southwest. The buried channel is up to several kliometres wide, and has developed over the NE-SW striking *Fortescue River Fault*. (refer Figure 1 below). The paleo-channel abuts possible easterly extensions of the Marra Mamba, Dales Gorge and Joffre Members of the Brockman Iron formation (outcropping in Rio's tenement to the west), and therefore has potential to host significant tonnages and grades of "channel iron deposit" (CID) or unconsolidated detritals containing BIF and lump hematite. This situation may be analogous to Rio Tinto's Perry Creek detrital iron deposit some 12-15km to the west.

Enterprise is planning an aircore drilling program to test the thickness and grade of this paleochannel, which will commence as soon as heritage surveys are completed.

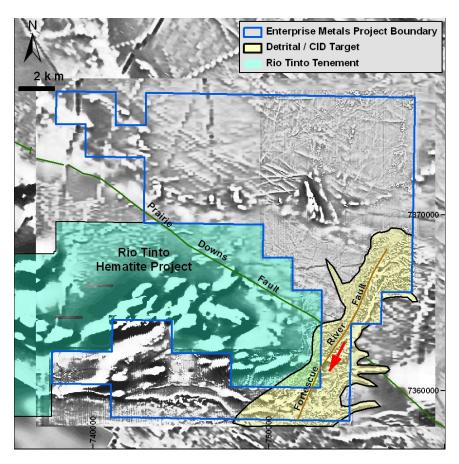


Figure 1. Sylvania Project, Magnetic Image with Paleo-channel Interpretation



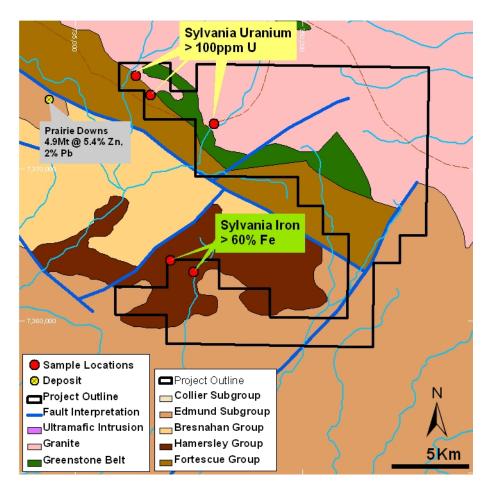


Figure 2. Sylvania Project, Regional Geology

Background

The Sylvania Project is located on the southern margin of the Sylvania Dome in the Pilbara block, approximately 70km west-southwest of Newman. It consists of two wholly owned Exploration Licences 52/1689 and 52/2349, and Exploration Licence 52/2451, over which the Company has an option to purchase.

Hamersley Group banded iron formations ("Bif") and hematite outcrop on the northern margin of the southern portion of Enterprise's tenement. They have been drill tested by Rio Tinto/Hamersley Iron immediately to the north of Enterprise's tenement in successive phases since the late 1980's.

Reconnaissance geological mapping and rock chip sampling by Enterprise in 2009 located outcropping hematite mineralisation (up to 66.3%Fe, refer Figure 2 below) transgressing the Rio Tinto/Enterprise Metals Ltd tenement boundary.

During ground reconnaissance of the eastern portion of the project area, Enterprise staff noted float and boulders of massive goethite in the headwaters of Goldfields Creek, which broadly defines the SW extension of the Fortescue River Fault. This fault juxtaposes the Marra Mamba, Dales Gorge and Joffre Members of the Brockman Iron formation (*Hamersley Group*) to the west from the sediments and volcanic of the *Bangemall Group* to the east. This and the outcrops of massive high grade hematite located in 2009 encouraged Enterprise to commission a low level detailed (100m line spaced) aeromagnetic survey.



Although final leveled magnetic data is yet to be received, the imaged preliminary data is sufficiently good enough for the Company to plan a scout aircore drilling program to test the thickness and grade of the detritals (and/or CID's).

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The information in this announcement that relates to Exploration Results has been compiled by Mr Dermot Ryan, who is a Fellow of the Australian Institute of Geoscientists, and a full time employee of geological consultancy Xserv Pty Ltd. Mr Ryan has sufficient relevant experience in the techniques being reported and styles of mineralisation and types of deposit under consideration, and in the activity he is undertaking, to qualify as a Competent Person as defined in the 2004 Edition of the "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (the JORC Code), and consents to the inclusion of the information in the form and context in which it appears.