

**CUNDERDIN IRON PROJECT ACQUIRED - AIRBORNE SURVEY COMMISSIONED - TALKS WITH STRATEGIC PARTNER INITIATED**

**SUMMARY**

Enterprise Metals Limited (“Enterprise” or “the Company”, ASX: “ENT”) wishes to announce that following completion of legal and technical due diligence, its wholly owned subsidiary Enterprise Iron Pty Ltd (“ENI”) has exercised its option to acquire a 100% interest in the Cunderdin iron exploration project by purchasing all of the issued capital in Glintan Pty Ltd, the registered holder of Exploration Licence application 70/3756. Enterprise has also applied for a further tenement to the south of E70/3756, to cover potential southerly strike extensions of the interpreted Archaean quartz-magnetite/banded iron formation (“BIF”) units.

The Company has also commenced discussions regarding the project with a potential strategic partner who operates as both a trading house and also an iron ore customer.

The exploration target is magnetite (and possibly hematite/goethite) contained within Archaean quartz-magnetite/BIF units. The Company has commissioned a geophysical contractor to fly a low level 200m line spaced airborne magnetic and radiometric survey over both tenements. The survey is due to commence on or about 20 February 2010.

The project is centered approximately 135 km east of Perth in Western Australia, and straddles the Great Eastern Highway and the standard gauge railway line that runs from Kalgoorlie to the port of Kwinana south of Perth.

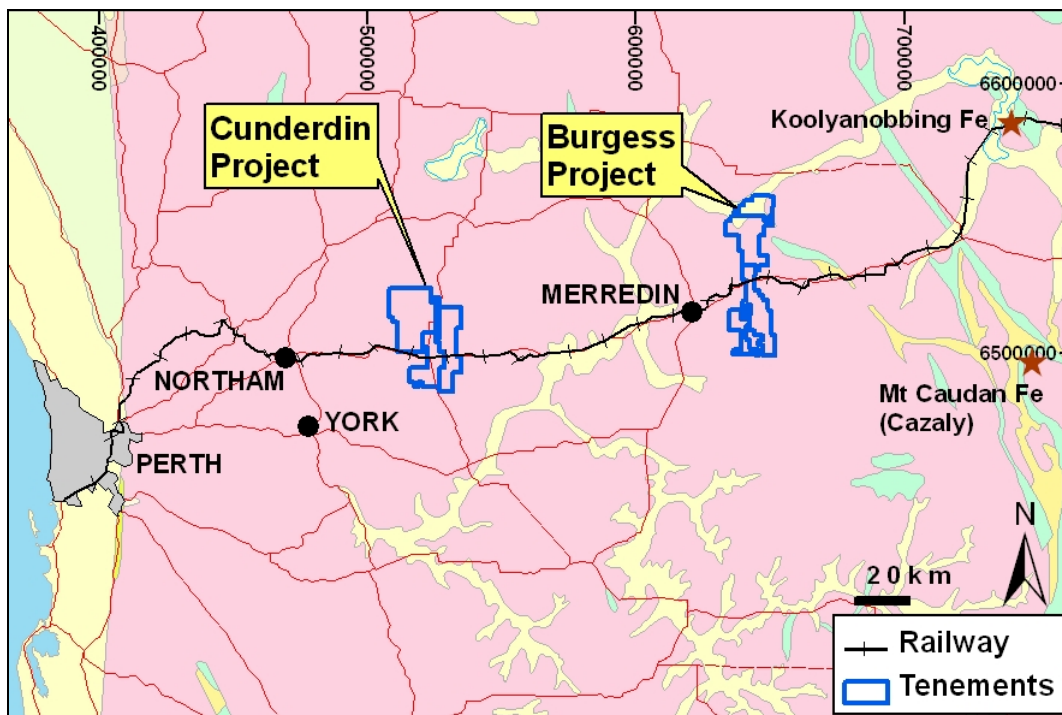


Figure 1. Location Plan – Cunderdin Iron Exploration Project

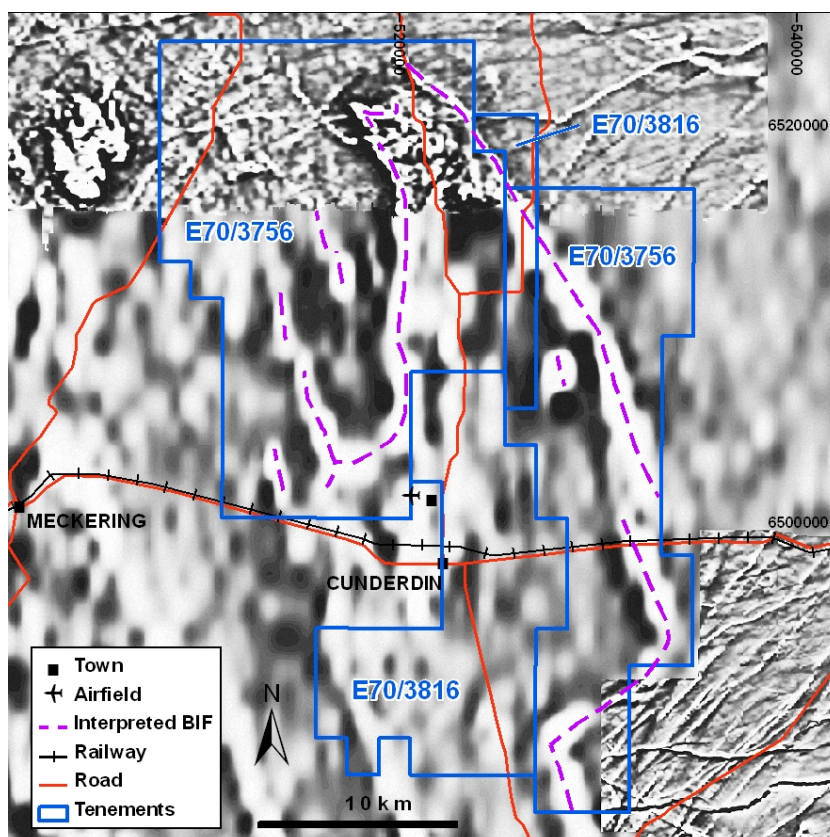
## CUNDERDIN PROJECT

Following completion of legal and technical due diligence, Enterprise’s wholly owned subsidiary Enterprise Iron Pty Ltd (“ENI”) has purchased a 100% interest in the Cunderdin iron exploration project by purchasing all of the issued capital in Glintan Pty Ltd, the registered holder of Exploration Licence application 70/3756. Enterprise has also applied for a further tenement to the south of E70/3756, to cover strike extensions of the interpreted Archaean quartz-magnetite/BIF units.

Under the Cunderdin option agreement, Enterprise will pay the shareholders of Glintan \$10,000 cash and three (3) million Enterprise fully paid shares and a gross production royalty of 1.5% on all minerals produced.

The Cunderdin project now comprises two tenements, E70/3756 and E70/3816, covering a total of approximately 713 km<sup>2</sup> centered on the town of Cunderdin. The tenements cover granitic rocks and granitic gneisses along the western margin of the South West Terrane of the Archaean Yilgarn Craton.

Based on old regional 1,500m line spaced airborne magnetic data, these granitic gneisses contain enclaves of metamorphosed greenstone belts, which elsewhere are known to contain meta-sedimentary units including quartz-magnetite/BIF. Enterprise considers that potential exists in the project area for substantial deposits of iron ore (predominantly magnetite but possibly hematite/goethite) partly concealed below laterite and thin soil and sand cover.



**Figure 2. Cunderdin Project Tenements - 1<sup>st</sup> VD Aeromagnetic Image**

### **ENTERPRISE'S OTHER IRON PROJECTS**

The Company is also exploring several other iron projects in Western Australia. These are briefly summarised below, with locations shown overleaf.

#### **SYLVANIA PROJECT**

The Sylvania Project is located on the southern margin of the Sylvania Dome in the Pilbara block, approximately 70 km east-southeast of the town of Newman. Hamersley Group BIF and hematite outcrop on the northern margin of the southern portion of Enterprise's tenement. These 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 in July 2009 located hematite mineralisation (up to 66.3%Fe) transgressing the Rio Tinto/Enterprise Metals tenement boundary. A northerly bedding dip was also recorded, suggesting potential for repetition of the Brockman Iron Formation on the south limb of a syncline in the tenement. The area is poorly exposed and there is limited scope to advance the search by geological mapping. Scout RC drilling is planned for 2010.

#### **BOOYLGOO RANGE PROJECT**

This tenement application is centered approximately 38 kilometres south east of Lake Mason homestead in Western Australia and covers an area of approximately 91 km<sup>2</sup>. The tenement covers greenstones and granites along the western margin of the Archaean Booylgoo Range greenstone belt. The greenstone sequence is tightly folded into the Mt Anderson syncline, and comprises a layered succession of metamorphosed mafic igneous rocks, minor felsic volcanics with BIF and other sedimentary rocks. Metamorphic grades are believed to be lower greenschist facies.

It is considered that potential exists in the area for substantial deposits of iron ore, and possibly gold and base metals. Mapping and rockchip sampling is planned for when the tenement is granted, which is expected to be in March 2010.

#### **EARAHEEDY PROJECT**

The Earahedy Project consists of two elongate exploration licence applications in the vicinity of the Earahedy Homestead, covering an area of approximately 640 km<sup>2</sup>. It is considered that potential exists in the project area for substantial channel iron deposits ("CIDs") concealed below thin Cainozoic cover.

Enterprise has imaged processed and interpreted GSWA supplied 400 metre line spaced airborne magnetics for the Earahedy 1:250,000 map sheet. The BIF's of the Earahedy area are characterized by strong E -W linear magnetic responses. Enterprise's tenement applications overly a series of major magnetic paleo channels draining south easterly from the BIF's of the Lee Steere Ranges. These interpreted channels have the potential to host channel iron deposits of significant tonnage. Gravity surveys will commence following the grant of the tenements

#### **BURGESS PROJECT**

This project area is centred on the small township of Burracoppin, approximately 70km west of the main Southern Cross greenstone belt which hosts the Mt Caudan iron deposit recently discovered by Cazaly Resources Ltd.

Four tenements (E70/3637, 3638, 3815 & E77/1752) cover an area of approximately 586 km<sup>2</sup> and overlie a portion of the poorly known Burracoppin greenstone belt, which is surrounded by post-tectonic intrusive granites. Based on previous mapping and shallow drilling, the greenstone belt is

known to contain mafic, ultramafic and sedimentary rocks, including BIF. Outcrop within the area is scarce due to a widespread cover of Tertiary laterite, aeolian sand and soil.

The Company considers that potential exists for substantial deposits of iron ore and possibly gold and base metals concealed below laterite and other thin Cainozoic soil and sand cover.



**Figure 3. Enterprise Metals Ltd – Iron Exploration Projects**



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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.*