



## Fraser Range Project: New Nickel - Copper Targets

- **New Nickel - Copper targets defined by infill soil sampling of regional geochemical anomalies.**
- **Heli-borne geophysical survey to be flown in April to accelerate Fraser Range massive sulphide search.**
- **The Fugro HeliTEM system is considered to be the most powerful helicopter time-domain electromagnetic system in the world.**

### SUMMARY

Enterprise Metals Limited (“Enterprise” or “the Company”, ASX: “ENT”) is pleased to announce that it has received analytical results from its recent infill soil sampling program, completed over a number of broad Ni/Cu anomalies identified in its previously reported regional soil sampling program. The Company’s **100% owned Fraser Range project** in Western Australia is located approximately 40 km from Sirius Resources NL’s Nova and Bollinger high grade nickel-copper discoveries.

The geochemistry from the new 2,479 infill samples, collected over six grids at a nominal 200m x 100m pattern, has identified six relatively discrete targets for immediate ground follow up.

The Company has also commissioned *Fugro Surveys* to complete a 1,400 line km HeliTEM survey over parts of the project area. (Refer page 4 for details) The HeliTEM survey is designed to cover areas of anomalous soil geochemistry, several unusual magnetic targets and some areas where soil sampling be ineffective. It is expected that the soil and HeliTEM targets will be followed up with ground IP or EM, and subsequently drill tested in May/June 2013 following heritage surveys.

### TECHNICAL COMMENTARY

The Company’s most prominent coincident Ni-Cu-Co soil anomaly, **Plato**, (800m x 2,500m) was identified by the Company’s 800 metre by 400 metre regional geochemical soil sampling program, and then better defined by infill (200m x 100m) soil sampling in late 2012. This infill soil sampling not only better defined Plato, but also demonstrated a coincidence between anomalous Ni/Cu geochemistry and an unusual magnetic anomaly, thought to be either a mafic (gabbro) or ultramafic intrusive.

The Company has now completed infill sampling over a further 6 regional geochemical anomalies, four of which occur northeast of Plato, one southwest of Sirius’ new “*West Nova EM*” target (NW of Yardilla) and one of which (EH3) occurs over an Archaean greenstone belt. The Company has collected and assayed to date a total of 5,630 soil samples within its Fraser Range project. Basic statistics for this dataset are: Nickel values: Min: 3ppm, Max: 252ppm. Copper values: Min: 1ppm, Max: 95ppm.

The latest **gridded nickel and copper soil geochemistry**, draped over the 1<sup>st</sup> vertical derivative magnetic imagery, is shown overleaf in Figures 1 and 2. The red colour in each Figure outlines the anomalous nickel and copper areas which are broadly coincident with each other, and associated base metals.

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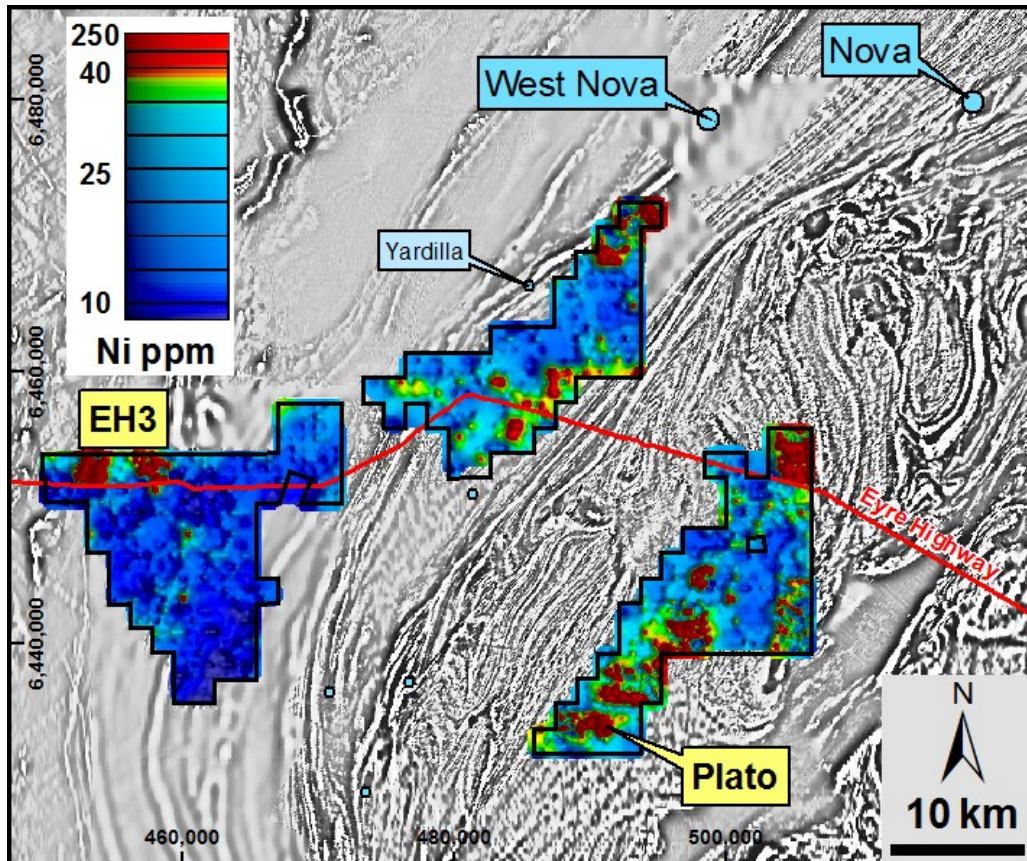


Figure: 1. Gridded Nickel in Soils over 1<sup>st</sup> VD Magnetics

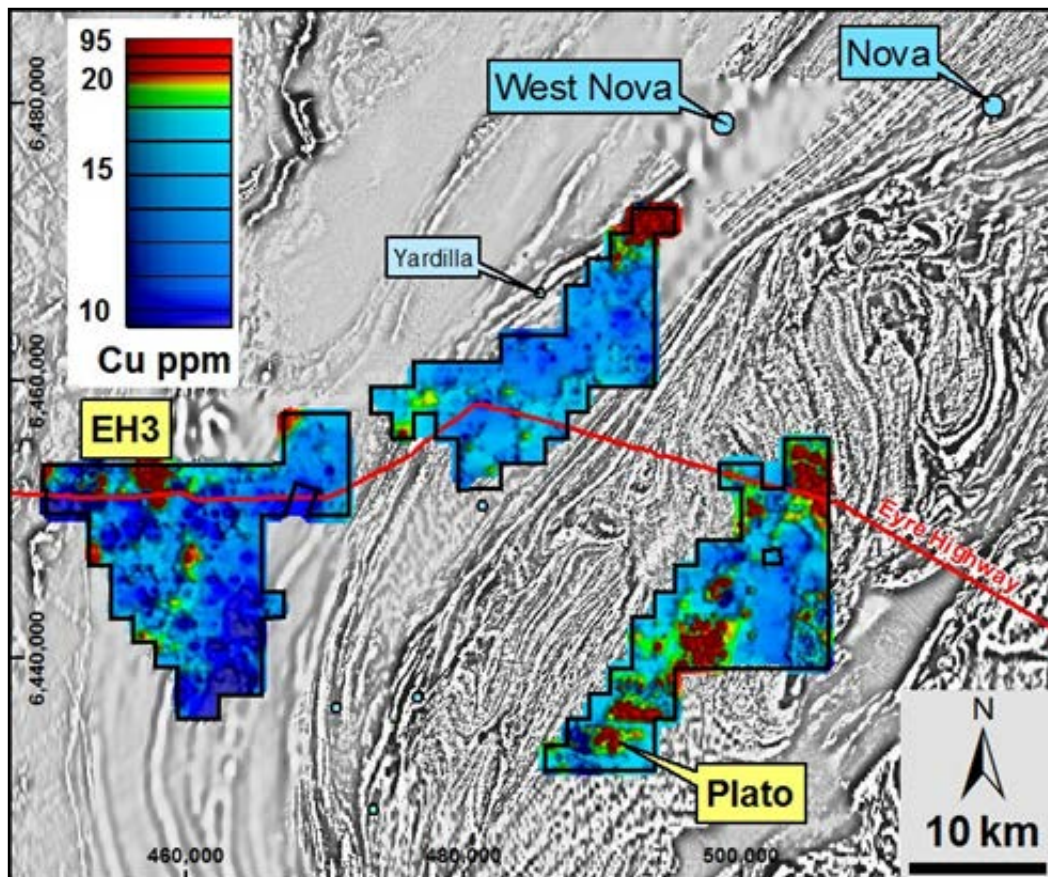


Figure: 2. Gridded Copper in Soils over 1<sup>st</sup> VD Magnetics



## ABOUT THE ALBANY-FRASER OROGEN

The Albany-Fraser Orogen is now considered to be broadly similar in geological setting, lithologies and age to the Meso-Proterozoic Nain Plutonic Suite in Canada, which is host to the Voisey's Bay nickel-copper-cobalt deposit. However, historically, the Albany-Fraser Orogen has received little attention from exploration companies due to the remoteness of the region, generally poor outcrop, and the lack of known mineralisation. The high metamorphic grade of the basement rocks obscures the original rock types, making it difficult to interpret the original rock types.

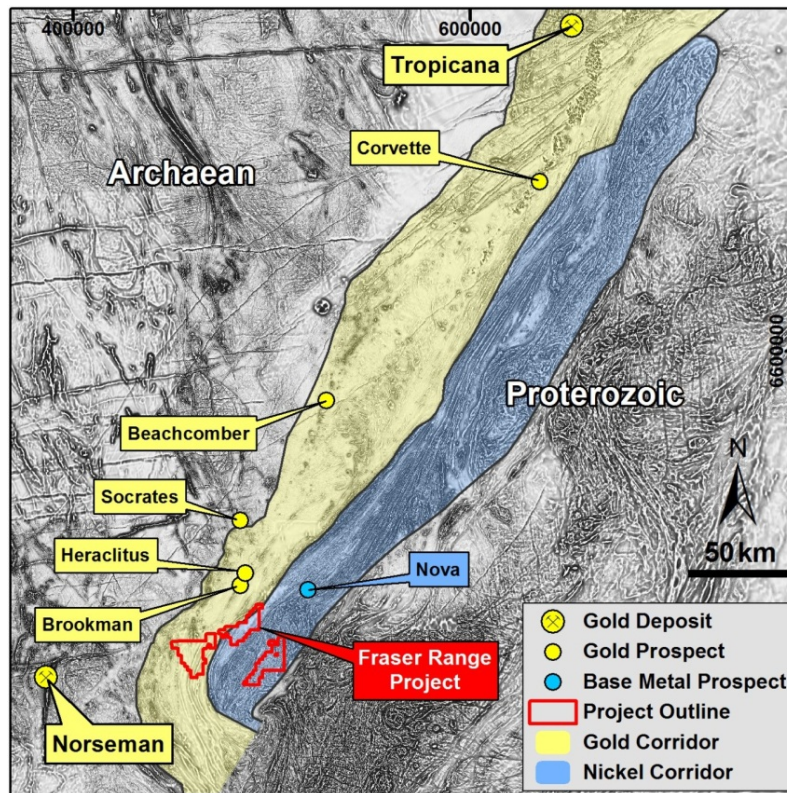


Figure: 3. Magnetic Image Showing Location of Enterprise's Fraser Range Project

## PROPOSED WORK BY ENTERPRISE

Ground follow up (including prospecting and mapping) of the new geochemical targets will commence in April. Some additional soil sampling will also be necessary to define the limits of some targets. It is expected that the soil and HeliTEM targets will be followed up with ground IP or EM surveys in May to define drill targets. Heritage Surveys will be required prior to the commencement of drilling, which is anticipated to be in late May/June.

**Dermot Ryan**  
Managing Director

**Contact:**

Telephone: 08 9436 9200

Facsimile: 08 9436 9220

Email: [admin@enterprisemetals.com.au](mailto:admin@enterprisemetals.com.au)

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### Competent Persons statement

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Mr Dermot Ryan, who is an employee of the Company. Mr Ryan is a Fellow of the Australasian Institute of Mining & Metallurgy, a Fellow 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 2004 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.

Exploration results are based on standard industry practice, with appropriate quality assurance and quality control (QAQC) measures. Sample preparation and base metal analyses of soil samples for 13 elements was completed by Minanalytical Laboratory Services Australia, using a four acid digest and inductively coupled plasma mass spectrometry (AR10MS) and inductively coupled optical emission spectrometry (AR10OES) as shown below.

### Analytical details:

Method	AR10MS								
Elements	Ag	As	Au	Bi	Cd	Co	Pb	Sb	Tl
Unit Codes	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm
Lower Detection	0.01	0.5	1	0.01	0.01	0.1	0.2	0.05	0.02
Upper Detection	100	10000	500	10000	1000	10000	10000	10000	1000

Method	AR10OES			
Elements	Cu	Mn	Ni	Zn
Unit Codes	ppm	ppm	ppm	ppm
Lower Detection	1	2	1	2
Upper Detection	10000	10000	10000	10000

### ABOUT FUGRO'S HELITEM® TECHNOLOGY

Fugro's HELITEM system is the world's most powerful helicopter time-domain electromagnetic system. With a transmitter dipole moment up to 2.0 million Am<sup>2</sup>, HELITEM is significantly more powerful than any competitor.

The high power of HELITEM, coupled with the unique low noise receiver, ensures the greatest depth of exploration possible for any airborne EM system, which is especially important when exploring in areas with conductive regolith or palaeochannels.

Fugro's HELITEM is the only commercially available system routinely providing X, Y and Z receiver coil measurements for both the dB/dt and B-Field. Systems only offering Z-axis suffer from ambiguity of interpretation results for conductors. The X and Y axes data provided by HELITEM allow for more complete and definitive interpretation of conductors and allow for the discrimination of conductors by orientation. The high quality B-Field data de-emphasize the conductive overburden response while enhancing the response of strong bedrock conductors.



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