ENTERPRISE METALS LIMITED

ASX ANNOUNCEMENT **21 June 2013**

Three High Priority Nickel Sulphide Targets Defined at Fraser Range

- **Nickel soil anomalies, located in E63/1281, 20-40km south of Sirius' Nova nickel discovery, now supported by bedrock EM conductors.**
- **Further EM and soil data awaited from E63/1282, due within one week.**

SUMMARY

Enterprise Metals Limited ("Enterprise" or "the Company", ASX: **"ENT"**) wishes to announce that it has received final heli-borne EM data over its **100% owned Exploration Licence 63/1281 within the Fraser Range** in Western Australia.

This HeliTEM data has been integrated with the Company's regional and infill soil geochemical data, and three high priority targets for follow up, ***Highway, Heart*** **and** ***Plato,*** have been selected on the basis of geochemistry and more conductive basement. The Company is still awaiting final HeliTEM data over Exploration Licences 63/1282 and 1283.

FRASER RANGE SOIL RESULTS

In 2012, the Company completed regional 800m x 400m grid based multi-element soil sampling over the four tenements of the project area, which defined a number of nickel/copper anomalous areas. (Figure 1) In late 2012 the Company commenced 200m x 100m grid based multi-element soil sampling over these anomalous areas and this infill sampling continued in early 2013, and results from this work in E63/1281 are now available.

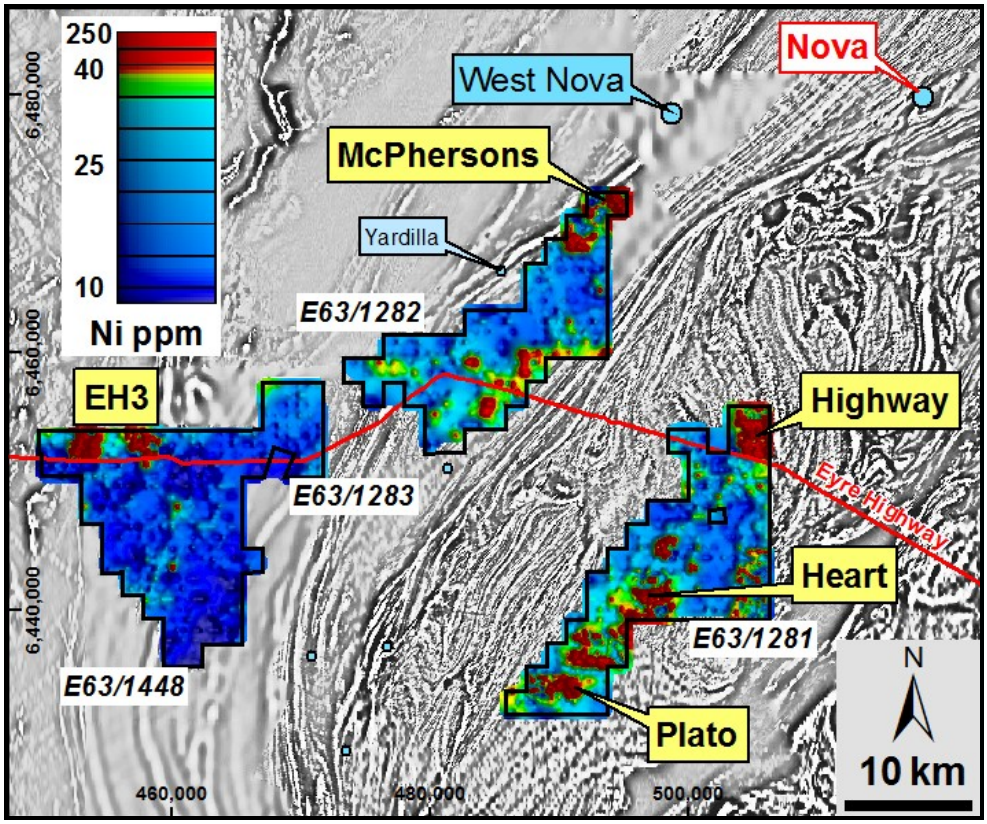

Figure 1. Regional Nickel Soil Geochemistry, 800m x 400m Sampling

HELITEM SURVEY

In March 2013, the Company completed a helicopter borne electromagnetic survey ("HeliTEM") designed to cover the areas of anomalous nickel/copper soil geochemistry. The final processed HeliTEM data has revealed a number of late-time electromagnetic responses coincident with nickel soil anomalies. **Late-time EM responses in airborne EM data are typically reflective of bedrock conductors rather than near surface influences.**

Figure 2a illustrates the **early time** HeliTEM data over E63/1281 which is mapping surficial geology. The deep blue colours represent outcropping and/or subcropping Proterozoic gneiss, and the mapped GSWA geology supports this interpretation. The warmer colours (green, yellow and red) are mapping the shallow Quaternary/Cainozoic cover sequence and hitherto unknown palaeochannels. Figure 2b shows that the **late time** HeliTEM data which is mapping basement beneath the cover sequence. The warmer colours (green, yellow and in particular red) are mapping more conductive basement rocks.

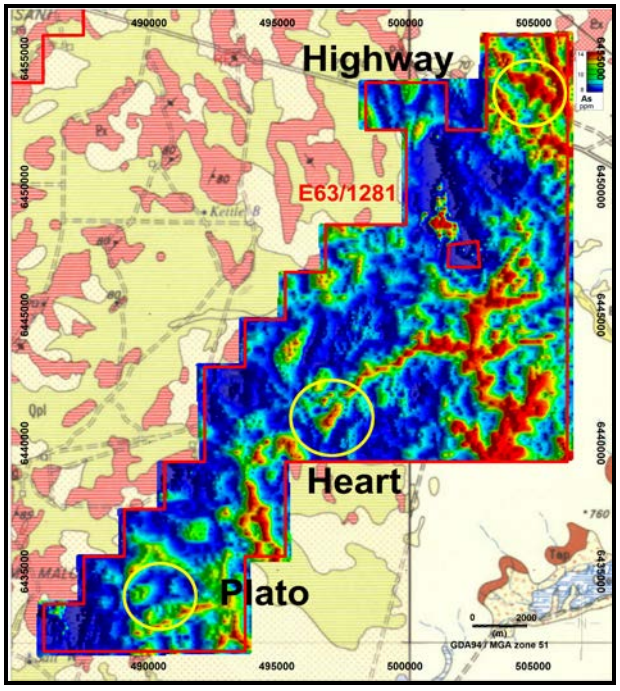

Figure 2a. Shallow Conductivity Image

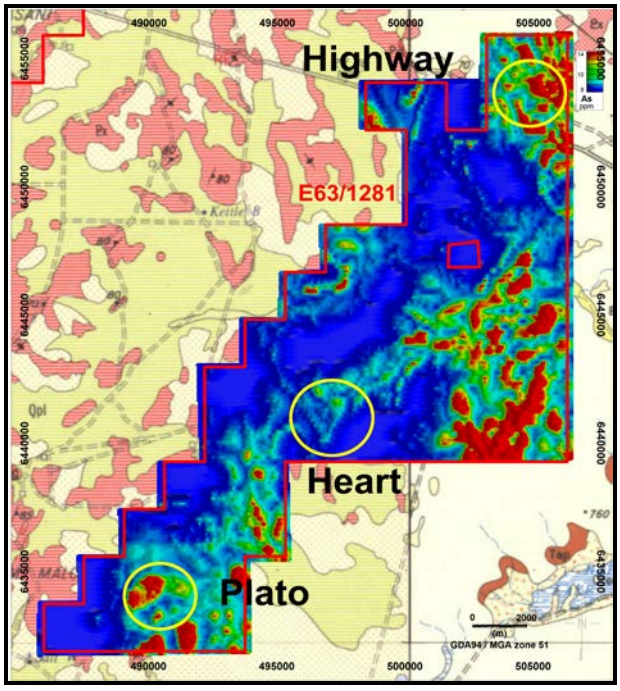

Figure 2b. Deep Conductivity Image

PLATO NICKEL TARGET

The HeliTEM over Plato displays a more conductive basement lithology (Figure 3) associated with the anomalous nickel geochemistry in soils (Figure 4).

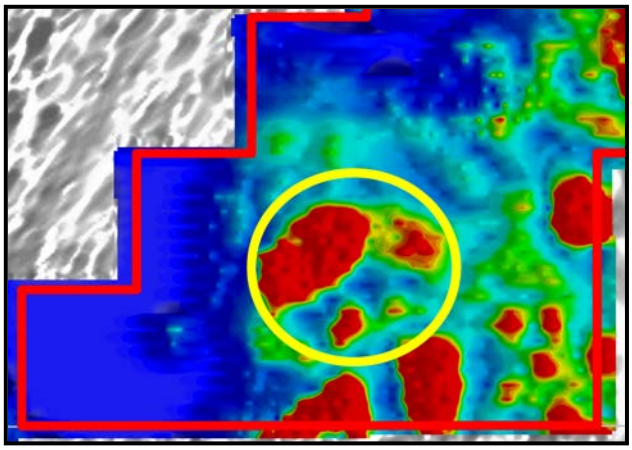

Figure 3. *Plato* Basement EM Conductors

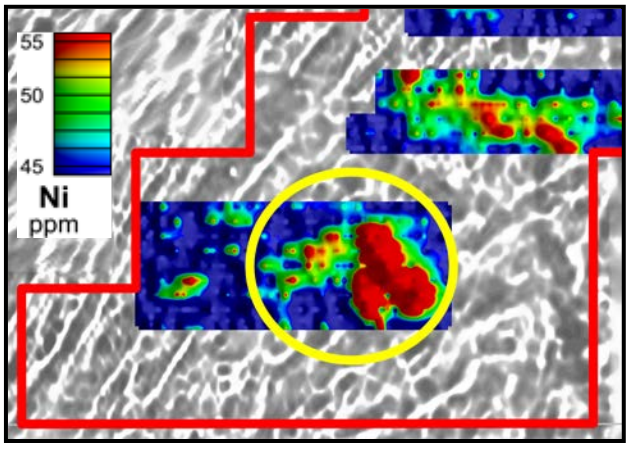

Figure 4. *Plato* Surface Ni Soil Geochemistry

The infill soil sampling program defined a coherent area of Ni-Cu-Co anomalism, with individual maximum values of up to 252ppm Ni, 46ppm Cu and 32ppm Co. The program also returned 14 samples in excess of 100ppm Ni. Refer Table 1 below.

Table 1. Plato Infill Soil Geochemistry - Statistics

	Minimum (ppm)	Maximum (ppm)	Mean (ppm)
Nickel	14	252	46.1
Copper	1	46	16.8
Cobalt	6.4	32	15

HEART NICKEL TARGET

The HeliTEM over the Heart anomaly also displays a more conductive basement, which appears to be structurally and/or lithologically controlled. (Figure 5)

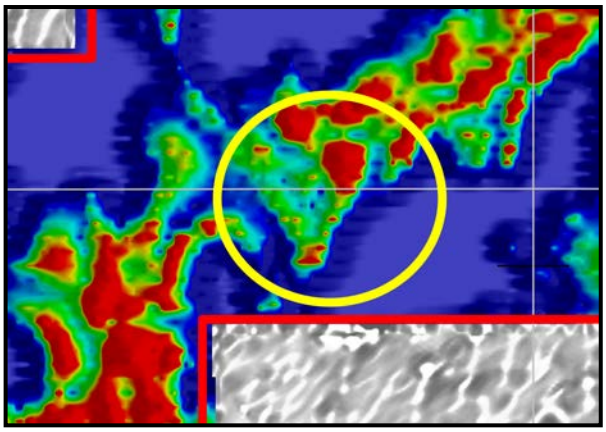

Figure 5. *Heart* Basement EM Conductors

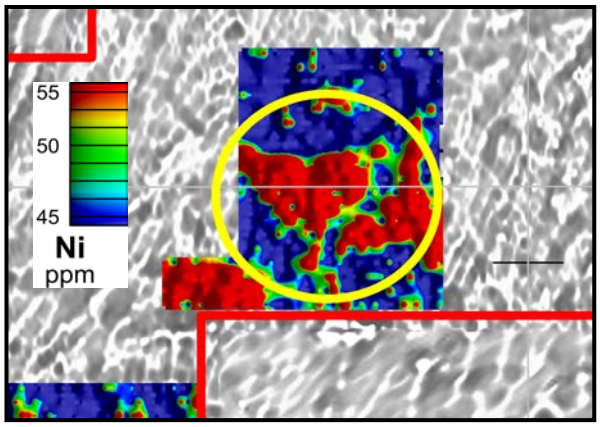

Figure 6. *Heart* Surface Ni Soil Geochemistry

A total of 583 infill soil samples were taken from the Heart anomaly area. Line spacing of the sampling program was 200m apart north/south, with samples taken every 100m east/west. The infill soil sampling program at Heart has defined a coherent "heart shaped" area of Ni anomalism with associated Cu-Co anomalism, with individual maximum values of up to 141ppm Ni, 48ppm Cu and 43ppm Co.

Table 2. Heart Infill Soil Geochemistry - Statistics

	Minimum (ppm)	Maximum (ppm)	Mean (ppm)
Nickel	17	141	50.7
Copper	4	48	22.3
Cobalt	10	43	22

HIGHWAY NICKEL TARGET

At the Highway anomaly, just north of the Eyre Highway within tenement E63/1281, the HeliTEM image displays a more conductive basement lithology (Figure 7) spatially consistent with the nickel soil geochemical target.

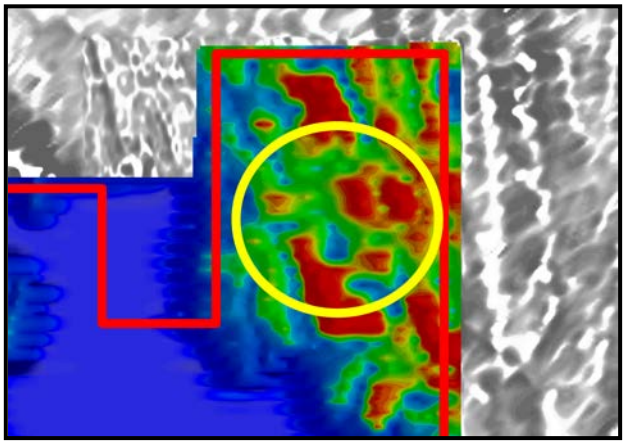

Figure 7. *Highway* Basement EM Conductors

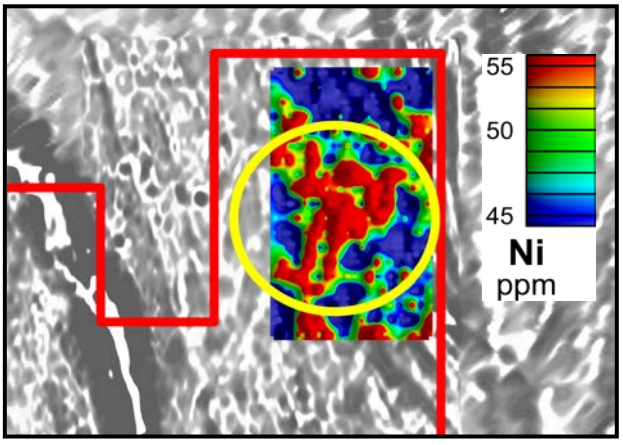

Figure 8. *Highway* Surface Ni Soil Geochemistry

A total of 418 infill soil samples were taken at Highway. Line spacing of the sampling program was 200m apart north/south, with samples taken every 100m east/west. The infill soil sampling program has defined a coherent area of Ni anomalism. (Figure 8) The 4 acid digest analysis yielded individual maximum values of up to 114ppm Ni, 56ppm Cu and 27ppm Co.

Table 3. Highway Infill Soil Geochemistry - Statistics

	Minimum (ppm)	Maximum (ppm)	Mean (ppm)
Nickel	24	114	49
Copper	9	56	25
Cobalt	9	27	15

The Highway target is anomalously high in **arsenic (As) with values up to 212ppm**. The As anomaly is coherent and coincides with anomalous Bi, Mo, Ni, Pb and Sb and is centred over a large magnetic low. On the periphery of the magnetic low, other anomalous elements include Cd, Co, Cu, Mn, Sc, Sn, Ti and W.

Table 4. Highway Infill Soil Geochemistry – Statistics

	Minimum (ppm)	Maximum (ppm)	Mean (ppm)
Arsenic (As)	1	212	9
Bismuth (Bi)	0.05	0.21	0.11
Molybdenum (Mo)	0.39	2.55	1.04
Lead (Pb)	1	37	17
Antimony (Sb)	0.02	0.91	0.26

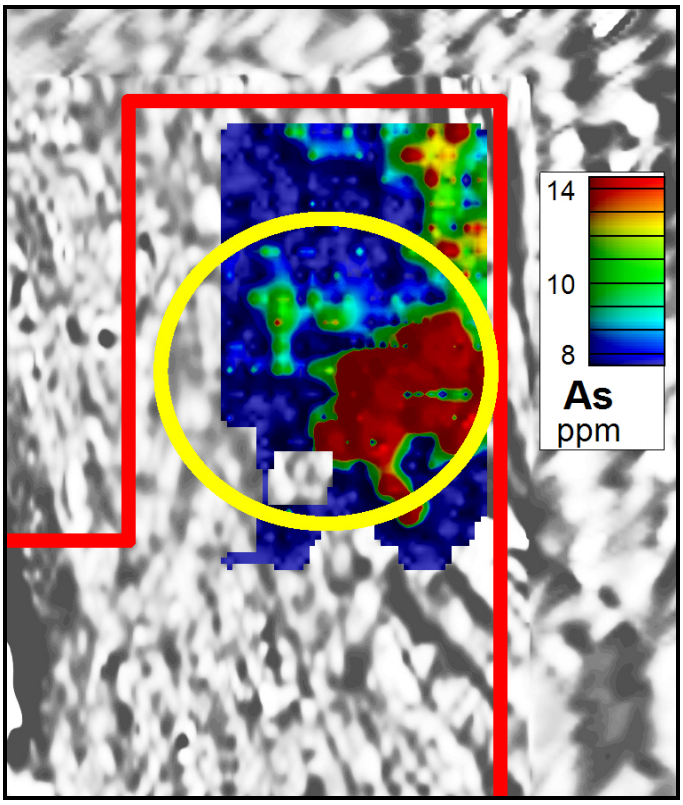

Figure 9. *Highway* Surface Arsenic from Infill Soil Geochemistry

OTHER REGIONAL GEOCHEMICAL TARGETS

Within E63/1282, follow-up infill soil sampling has also been completed over the McPherson's anomaly, and final geochemical results and heli-borne EM data are awaited. The McPherson's anomaly lies SW along strike from the West Nova ground EM anomaly recently announced by Sirius Resources NL.

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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 employed as the Managing Director of the Company through geological consultancy Xserv Pty Ltd. 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 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.

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 a variety of elements were completed by Minanalytical Laboratory Services Australia, aqua digest and inductively coupled plasma mass spectrometry (AR10MS) and inductively coupled optical emission spectrometry (AR10OES) for the following elements: Au, Ag, As, Bi, Cd, Co, Pb, Sb, Tl, Cu, Mn, Ni, Zn.

Sample pulps were then reanalysed with 4 acid digest by Minanalytical Laboratory Services Australia for the following elements: Ag, As, Bi, Cd, Co, Pb, Sb, Sc, Sn, Tl, Cu, Mn, Ni, Zn. Four acid digestion is a mixture of hydrofluoric, nitric, perchloric and hydrochloric acids. This digest is suitable for dissolving silica based samples and approaches total dissolution for most minerals.