

ASX ANNOUNCEMENT ACN 123 567 073 1 May 2014

# PLATO NICKEL PROSPECT, RC DRILLING UPDATE

- RC drillhole PLRC003 intersects disseminated sulphide mineralisation, including chalcopyrite, from 208-242m, open at depth
- Caution: the Company considers that holes PLRC002 and PLRC003, which have both intersected disseminated sulphides, have NOT intersected any ore grade intervals, and laboratory assays will not be available for at least 10-14 days.

Enterprise Metals Limited ("Enterprise"; "the Company", ASX: ENT) advises that after close of business on Wednesday 30 April 2014 it received a brief drilling status report from the field regarding reverse circulation ("RC") drill hole **PLRC003**.

### The Drilling report reads:

"Today we drilled to 242m, still all gabbro but a significant amount of disseminated sulphides intersected. Sulphides increase and decrease locally, a quartz free system 208-242m and open to depth. Not an orebody, but very interesting mineralisation. The more sulphides, the less plagioclase in the gabbro. I can clearly see the texture of chalcopyrite replacing the pyrite cube-crystals and edges of pyrrhotites. I told the drillers to go as deep as they can, they have 276m rods at present. Once this hole is completed, we will move 200m to the west to the next drillsite. Attached photos might give you some idea of the style of mineralisation." Dr Changshun Jia

**Cautionary note:** These chips are not necessarily representative of the 1 metre interval from which they came, nor are they representative of all intervals containing disseminated pyrrhotite and chalcopyrite.



Tel: (+61 8) 9436 9200

Fax: (+61 8) 9436 9220

Email: admin@enterprisemetals.com.au

Plate 1. Drill chips, hole PLRC003, interval 208-210m

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Plate 2. Drill chips, hole PLRC003, Interval 213-214m



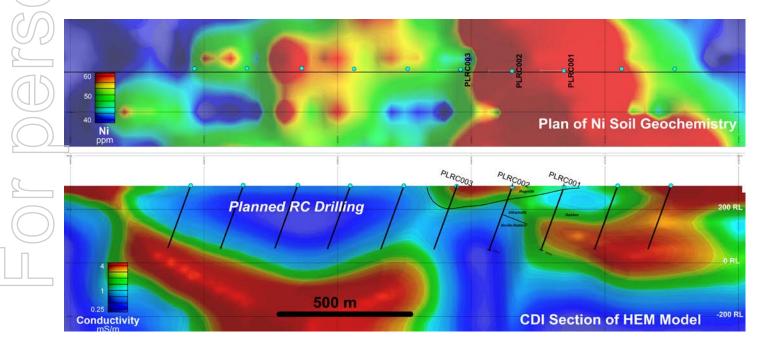
Plate 3. Drill chips, hole PLRC003, Interval 227-230m







Figure 1. Actual and planned RC Holes over Image of Nickel Soil Geochemistry and HeliTEM Conductivity Depth Image (Cross Section 6434150N)



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#### **COMMENTS**

While the Plato drilling program is still at an early stage, the Company is encouraged by these early visual results of disseminated sulphide mineralisation.

It appears that iron sulphides (pyrrhotite) and trace copper sulphides (chalcopyrite) are associated with gabbro only in hole PLRC003, whilst in hole PLRC002, disseminated sulphides were associated with both ultramafic rocks and gabbro.

Of significance is the apparent trend of chalcopyrite content increasing to the west and at depth.

However, the Company cautions that it does not consider that either hole PLRC002 or PLRC003, which have both intersected disseminated sulphide mineralisation, have intersected any ore grade intervals, and laboratory assays will not be available for at least 10-14 days.

Dermot Ryan

**Managing Director** 

Contact:

Telephone: 08 9436 9200 Facsimile: 08 9436 9220 Email: admin@enterprisemetals.com.au

#### **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.

**Table 1. Drill Collar Attributes** 

Hole	Easting	Northing	RL	Dip	Azimuth	Depth
Name			(m)	(degrees)	(degrees)	(m)
PLRC001	490846	6434158	310	-70	270	250
PLRC002	490652	6434153	310	-70	270	252
						In progress at
PLRC003	490454	6434150	312	-70	270	242m

Grid system is GDA94(MGA), zone 51

## JORC Code, 2012 Edition – Table 1 report

# **Section 1 Sampling Techniques and Data**

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

>>	Criteria	JORC Code explanation	Commentary
	Drillingtechnique	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	Reverse Circulation (RC) drilling with face sampling hammer bit accounts for all of Enterprise's drilling at the Plato prospect.
) (2) (3) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	RC recoveries were logged visually as a volume percentage.  Each RC sample was split into 10% (for laboratory analysis) and 90% into a large green plastic bag throug a triple tier splitter.  Not applicable as whole sample obtained.
	Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>RC drilling has been geologically logged to a level of detail deemed appropriate for mineral exploration.</li> <li>RC drill logs record lithology, mineralogy, mineralisation, weathering, colour and other appropriate features.</li> <li>All RClogging is quantitative.</li> <li>First 2 RC drill holes reported were logged in full</li> </ul>
	Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>No core drilling undertaken.</li> <li>RC samples were cyclone split. Samples were collected mostly dry.</li> <li>4m composite samples have been sent to Minanalytical Laboratory for geochemical analysis.</li> <li>The sample preparation of RC samples follows industry best practice. All samples will be pulverized to a minimum of 85% passing 75 microns.</li> <li>RC samples are collected at 1m intervals from a cyclone and split into 10% and 90% representative samples.</li> <li>4mSamples of equal volume are composited from 1 metre 90% green bag samples using a spear. In house blank and duplicate samples are inserted as 1 in 20 samples to be analysed with each batch of samples.</li> <li>Samples sizes are appropriate to the size of the RC chips.</li> </ul>
	Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul> <li>The proposed analytical technique will use mixed acid digest on 4m composite samples and 4 acid digest on 1 metre samples.</li> <li>Not applicable at this stage.</li> </ul>

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Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying  Location of data points	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Not applicable as no chemical assays available yet.</li> <li>Significant intersections of the RC chips were visually verified by the Managing Director and an independent technical consultant.</li> <li>There have been no been twinned holes to date.</li> <li>Primary sampling and logging data was collected by excel templates using flat files.</li> <li>No Adjustments or Calibrations were made to the assay data reported.</li> <li>Drillhole collars were located by GPS. Elevation values were in AHD. Expected accuracy is +/-3m for northing and easting and +/-10m for elevation coordinates.</li> <li>The grid system is GDA94(MGA), zone 51</li> <li>The GPS is +/-5m.A digital terrain model has beenderivedfromdatacollectedduring the airborne magnetic survey of the whole tenement.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral resource and Ore reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	The nominal drill hole spacing is 200m on northings at Plato prospect.  There is insufficient data to establish geological and grade continuity at this stage.  There has been no compositing applied to the exploration results as no laboratory assays are available as yet.
Orientation of data in relation to geological structure  Sample security	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.      If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.      The measures taken to ensure sample security.	There is no outcrop on which to base geological control. The drill section is arbitrarily eastwest  Drill intersections are not true widths.  Chain of custody is managed by Toll Ipec and
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	then Minanalyical Laboratory. Samples are stored at drill site and then delivered by Enterprise personnel to a Toll Ipec for transport to the Perth laboratory.  No audits or reviews have been set up at this stage.

## **Section 2 Reporting of Exploration Results**

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as jointventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	The drilling is located wholly within Exploration Licence E63/1281. The tenement is 100% owned by Enterprise Metals Ltd  The tenement is granted and in good standing with no known impediments to exploration.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	No known exploration by other parties on Plato Prospect.
Geology	Deposit type, geological setting and style of mineralisation.	Plato occurs within the Albany-Fraser Orogen which consists of gneiss, mafic rocks including gabbro with significant garnet in the metamorphic rocks.  Further drilling and assaying is required to fully assess the geologyand style of mineralisation. Mineralogy and petrology studies are planned.
Drill hole Information	Asummary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:  Beasting and northing of the drill hole collar  Belevation or RL (reduced Level — elevationabove sea level inmetres) of the drill hole collar  Belevation of the hole  Belevation hole length and interception depth  Belevation hole length  Belevation of the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	refer to Table 2. All drill hole locations.
Data aggregation methods	In reporting Exploration results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.  Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.  The assumptions used for any reporting of metal equivalent values should be clearly stated.	Not applicable, as no laboratory assays yet obtained.  No use of metal equivalents has been used inthis report
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration results.  If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.  If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	The geometry of mineralisation is not known at this early stage. Intercepts are of holes drilled at -70 dip. These are not true thicknesses.  Downhole lengths only are reported. These are not true widths.

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	Criteria		JORC Code explanation		Commentary
<u></u>	Diagrams	•	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	•	Cross section not yet available as only 2 drill holes completed to date.
	Balanced reporting	•	Where comprehensive reporting of all Exploration results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration results.	•	All significant results are reported.
	Other substantive exploration data	•	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	•	Previous exploration results at Plato reported in ENT:ASX releases dated: 21/06/2013 19/03/2013 20/11/2012 17/09/2012
	Further work	•	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale stepout drilling).  Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	•	At this stage, geology and mineralisation at Plato are not understood. Further RC drilling, and then diamond core (DC) drilling to allow effective DHEM surveys will be planned once reconnaissance RC drilling is complete.