ASX ANNOUNCEMENT

27 November 2012

Significant Nickel and Copper grades intersected in drilling at Canegrass Project

Canegrass Project, Western Australia

highlights

- *Maiden drilling on new Canegrass nickel and copper targets discovers mineralised sulphide system*
- *Includes sulphide intersections of up to 1.2% Ni and 0.7% Cu*
- *Sulphide mineralisation identified in all seven Reverse Circulation (RC) drill holes*
- *Follow up drilling at existing and new Canegrass Ni and Cu targets once analysis of new discovery completed*

Canegrass Project, WA

Flinders Mines Limited (FMS) 100%

Flinders Mines Limited (ASX: FMS) is pleased to announce that it has discovered significant nickel and copper sulphide mineralisation in its maiden drilling program for those metals at its wholly owned Canegrass Project, located 60km southeast of Mount Magnet, in Western Australia's Mid-West region (Figure 1).

The program consisted of 7 RC drill holes and all holes intersected sulphides at two discrete targets, CG02 and CG39.

Flinders commenced the drill program targeting copper and nickel mineralisation on the basis of geophysical data analysis conducted by the Company earlier in 2012 that showed the potential for the existence of sulphide mineralisation in the Canegrass area.

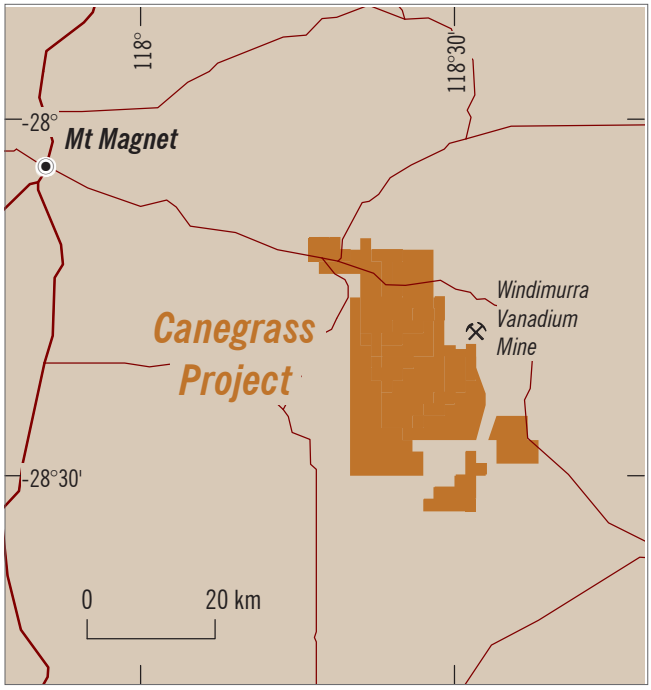

Figure 1 *Canegrass Project located near Mt Magnet, WA.*

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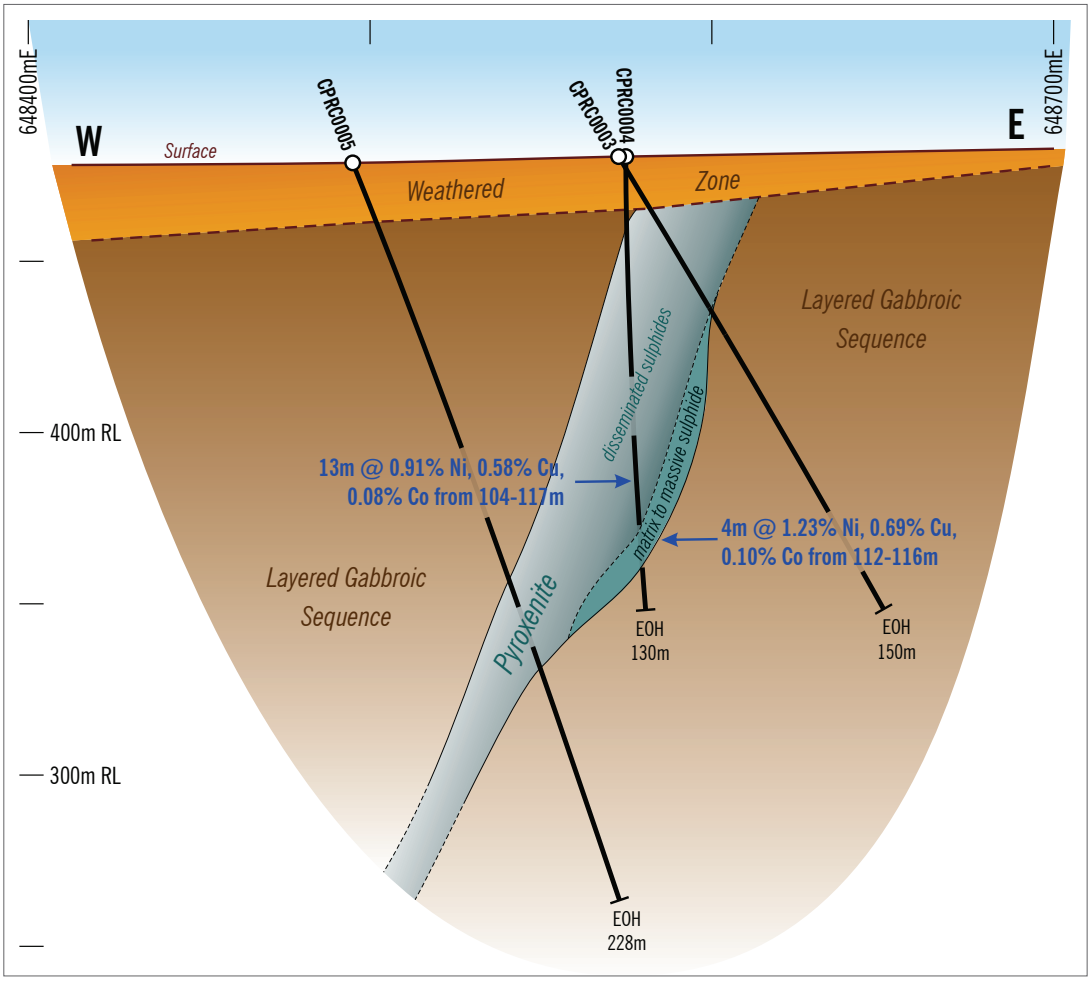

Figure 2 *Cross section 6846375mN through target CG02, showing intersected pyroxenite unit and zone of sulphide mineralisation.*

Strategically, the new base metals mineralisation is in areas separate to Canegrass' magnetite iron and vanadium resources and thus adds substantially to the mineral potential of the Canegrass holding.

Assays have been received for only the first two of the seven drill holes, including an intersection in CPRC4 (Figure 2) of:

- 13m at 0.91% Ni, 0.58% Cu, 0.08% Co between 104-117m, including;
- 4m at 1.23% Ni, 0.69% Cu, 0.10% Co between 112-116m.

All drill holes intersected distinctive ultramafic (pyroxenite) units, which are host to sulphide mineralisation of varying intensity and composition within a zone of disseminated to massive sulphides.

The similarity of geophysical responses, observed geology and sulphide mineralisation at CG02 and CG39 suggests that these targets may be part of a wider mineralised intrusive system. Indeed, reference to Figure 3, which displays Total Magnetic Intensity, highlights several other associated anomalies. These anomalies will be further investigated during upcoming field activities.

BACKGROUND

The Canegrass exploration tenements, which cover an area of approximately 700km^2, were acquired by Flinders Mines from Maximus Resources Limited (MXR) in mid-2009. The acquisition was made because of the known abundance of magnetite mineralisation within a regionally extensive gabbroic rock sequence.

In 2010, Flinders embarked on an RC drilling program that culminated in the announcement of a maiden Inferred Mineral Resource for the Canegrass Magnetite Project (refer ASX Announcement dated 10th August 2011). An iron ore resource of 216Mt grading 25.4% Fe was estimated for the magnetite mineralisation, along with a separate vanadium resource of 107Mt grading 0.62% V_2O_5.

As part of ongoing exploration activities, Flinders was aware of the potential also for base metal mineralisation in the area and embarked on geophysical data analysis

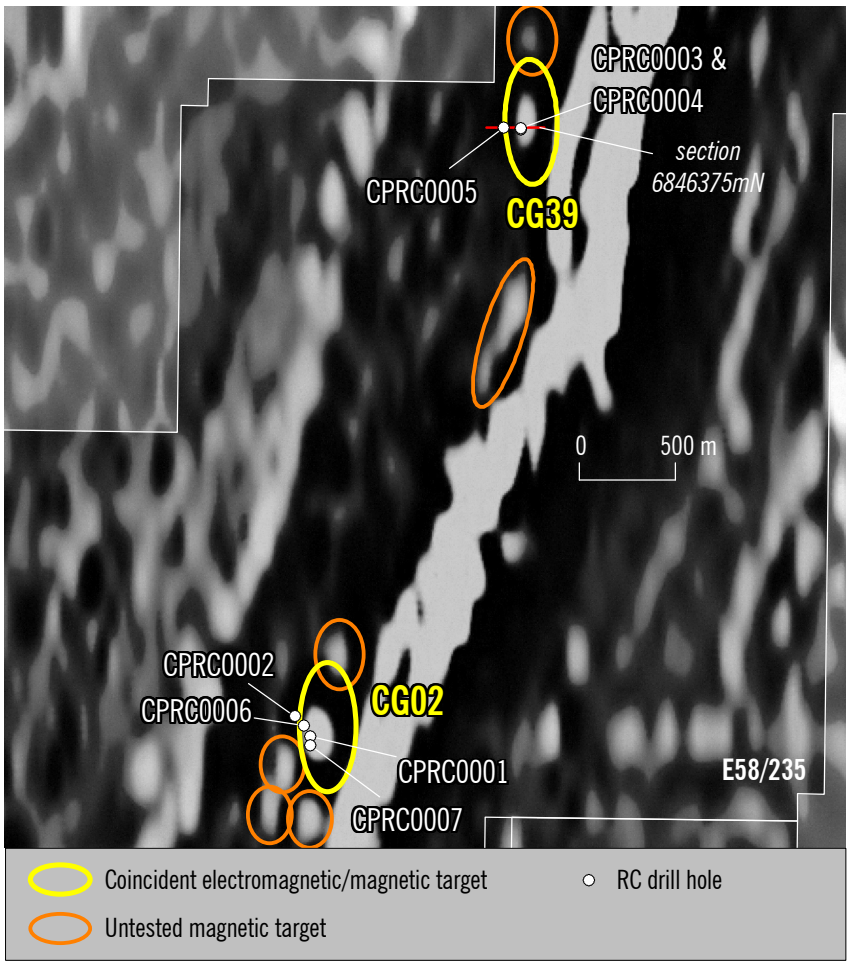

Figure 3 *Total Magnetic Intensity image displaying anomalous areas targetted (CG02 & CG39), with additional anomalous zones yet to be investigated.*

to assist in understanding the wider Canegrass footprint. Results from geophysical analysis and soil sampling were positive with Flinders electing to conduct follow-up exploration drilling activities over the area.

GEOLOGY AND EXPLORATION

The area currently being explored is dominated by the Windimurra Complex – a large differentiated layered mafic to ultramafic intrusion, dissected by large-scale shear zones. The Windimurra Complex has been identified as having significant potential for basal nickel-copper sulphides, as well as chromite and platinum group elements (PGEs). The area is also very prospective in terms of gold mineralisation, due to the presence of the large-scale, deep-seated shear zones.

Previous exploration drilling has been limited to relatively ineffectual, shallow, regional aircore and RC drilling. Prior to Flinders acquiring the Canegrass tenements, Maximus Resources Limited carried out an extensive Airborne Electromagnetic (AEM) survey at 400m line spacing. A thorough review of the data from this survey identified a number of anomalies which warranted further follow up. Surface soil sampling conducted at target CG02 late in 2011 defined anomalous levels of nickel, copper, cobalt and gold, coincident with the AEM anomaly.

Follow up ground electromagnetic (GEM) surveys confirmed the presence of discrete electromagnetic anomalies. Subsequent ground magnetics have shown the targets also display discrete magnetic anomalies at each location, coincident with the presence of conductive anomalies.

Greenfields exploration activities commenced on the ground late in September and are ongoing. Exploration targets generated during the previous phase of data review and interpretation have been prioritised and remain the focus of a range of activities, including: geological mapping; soil sampling; surface geophysical surveys; and most recently, RC drilling.

DRILLING

Seven RC drill holes have been completed for a total of approximately 1,470m across two priority targets. These targets, labelled as CG02 and CG39 in Figure 3, represent discrete coincident geophysical and geochemical anomalies.

The second drill hole, CPRC3, intersected mineralisation with elevated Ni and Cu grades of 0.44% and 0.27%, respectively.

Sulphide composition has been noted as being pyrrhotite (iron sulphide) dominant. However, varying quantities of chalcopyrite (copper sulphide), pyrite (iron sulphide) and pentlandite (nickel sulphide), have been visually identified in drill chips.

The dimension and orientation of the pyroxenite units are yet to be fully defined. However, down-hole intersections combined with the geophysics suggest that these units are dipping moderately to the west and may also have a plunge component to the northwest.

FUTURE ACTIVITIES

It is important to note that the pyroxenite unit intersected in the drilling to date, combined with the associated assemblage of sulphide minerals in the abundances observed, does not fully explain the geophysical responses that have been obtained. The focus for immediate exploration activities in the area of targets CG02 and CG39 will be on obtaining additional high quality down-hole electromagnetic (DHEM) and GEM data to further constrain the location of any further sulphide mineralisation, for drill testing.

Valuable information gained from this first phase of exploration activities will be combined with available geophysical data on a broader scale to generate additional drill targets.

Significant upside potential exists for the Canegrass Project. The AEM data set that was used to define first-pass targets, including CG02 and CG39, was flown at relatively broad spacing (400m lines), and was fairly weak in terms of its strength, having a maximum depth penetration of around 100m. Flinders recognises the potential exists to utilise a high powered versatile time domain electromagnetic (VTEM) system on a tighter line spacing, to identify smaller and deeper anomalous bodies for further follow-up.

Flinders intends to conduct follow-up drilling over the existing anomalies as well as other targets generated during the first quarter of 2013 in conjunction with additional geophysical analysis. Although this exploration program is at an early stage, the Company is excited about the potential for high grade base metals mineralisation within this lightly drilled area.

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Forward Looking Statements

This release may include forward-looking statements. These forward-looking statements are based on management's expectations and beliefs concerning future events as of the time of the release of this document. Forward-looking statements are necessarily subject to risks, uncertainties and other factors, some of which are outside the control of Flinders Mines Limited, that could cause actual results to differ materially from such statements. Flinders Mines Limited makes no undertaking to subsequently update or revise the forward-looking statements made in this release to reflect events or circumstances after the date of this release.

Exploration Targets

Exploration Targets are reported according to Clause 18 of the JORC Code. This means that the potential quantity and grade is conceptual in nature and that considerable further exploration, particularly drilling, is necessary before any Identified Mineral Resource can be reported. It is uncertain if further exploration will lead to a larger, smaller or any Mineral Resource.

Competent Persons

The information in this report that relates to Exploration Results is based on information compiled by Mr Nick Corlis who is a member of the Australian Institute of Geoscientists and a full-time employee of Flinders Mines Limited. Nick Corlis has sufficient experience that is relevant to the styles of mineralisation and types of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Nick Corlis consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Mineral Resources is based on information compiled by Dr Graeme McDonald who is a member of the Australian Institute of Mining and Metallurgy and a full-time employee of Flinders Mines Limited. Graeme McDonald has sufficient experience that is relevant to the styles of mineralisation and types of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Graeme McDonald consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.