

ASX ANNOUNCEMENT

30 May, 2013

Cooperinna Project - Exploration Update Musgrave Project, SA

- Preliminary Ground EM targets identified for testing, drilling commenced.

PepinNini Minerals is pleased to announce that ground electromagnetic surveying within the Cooperinna Block of EL4587 (100% PepinNini) has been completed and the preliminary geophysical interpretation has provided at least seven conductivity targets worthy of drill testing.

The work contributes to the Company's ongoing search for magmatic Nickel-Copper sulphide deposits across the Musgrave Province of South Australia (*figure 1*).

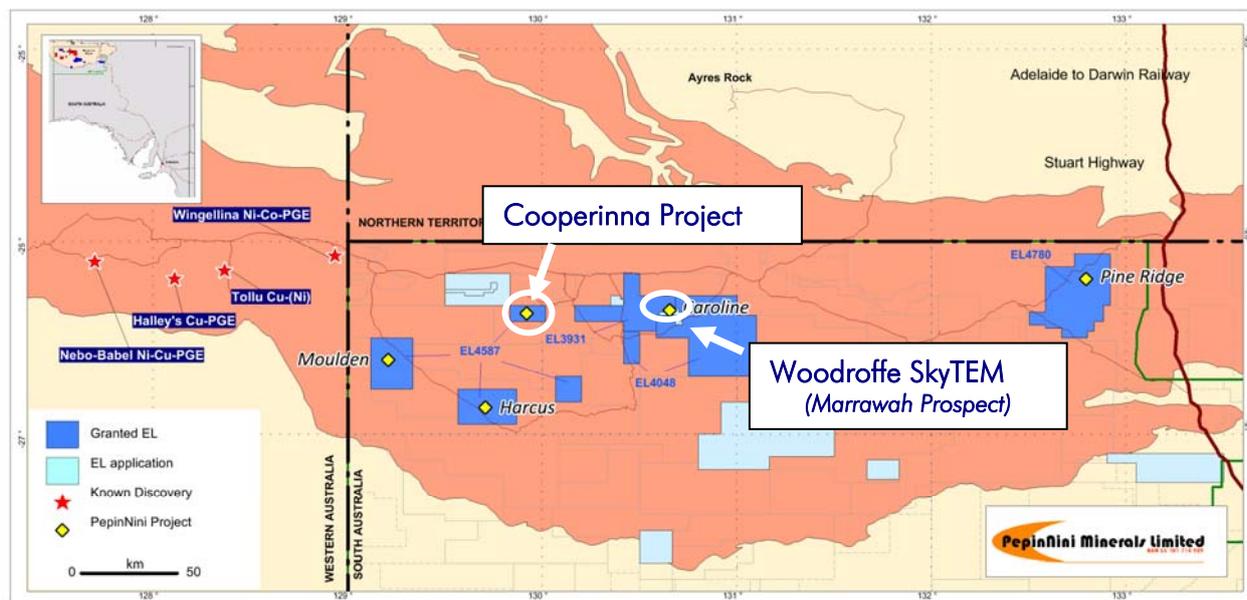


Figure 1: Tenement Location Plan

Five lines of moving loop electromagnetic (MLEM) surveying and eleven fixed loop electromagnetic (FLEM) surveys were completed for a combined total of approximately 1200 station readings covering some 20.6 km of linear profiles across the selected targets. The data acquisition was undertaken across anomalous conductivity features identified from the airborne V-TEM / SkyTEM⁵⁰⁸ surveys flown during 2012. The detailed ground surveys have enabled PepinNini to refine and prioritise at least seven of the prospective targets for further drill testing. Diamond drilling of the targets has commenced.

Cooperinna EL4587 : Ground EM Target Locations

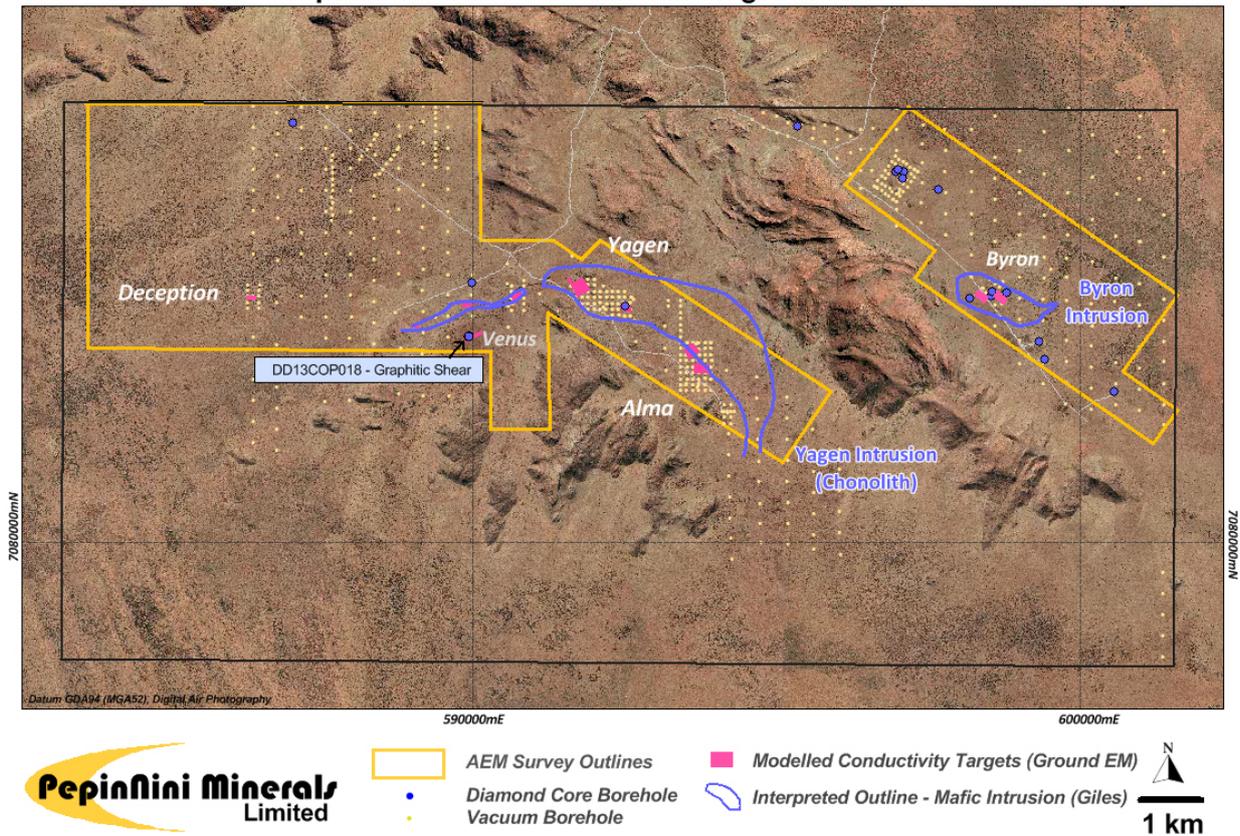
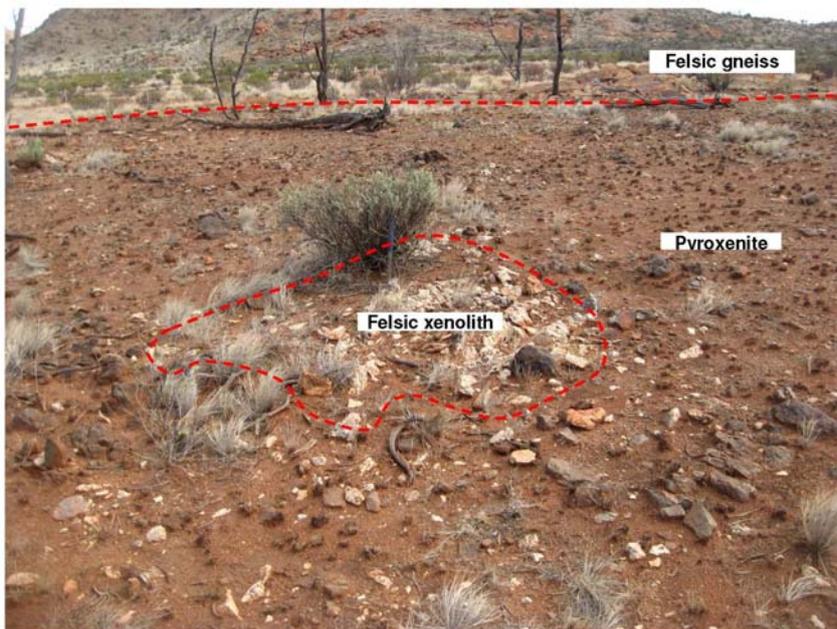


Figure 2: Location of ground EM targets, Cooperinna block (EL4587)

Most of the modelled ground EM drill targets are closely associated with a discordant 4.5km x 500m curvilinear magnetic response that is interpreted to represent a large irregular “chonolith” intrusion of Giles Complex mafic rocks (*figure 2*). The interpreted outline of the Yagen Intrusion



represents the concealed extension of intrusive mafic rocks (*pyroxenite and gabbro*) mapped at the Yagen Prospect (*figure 3*). Major and trace element geochemical analysis of sub-cropping rocks at the Yagen Prospect have confirmed highly encouraging similarities with the rocks linked to the Ni-Cu mineralisation at the Nebo-Babel Deposit in the western Musgrave Region thus confirming the Ni-Cu potential of these targets.

Figure 3: Sub-cropping Giles Complex Intrusion, Yagen Prospect, Cooperinna block (EL4587)

One conductivity target identified in the southern part of the Venus Prospect has just been tested by the drilling of DD13COP018 (TD=206.9m) in the past week. The source of the conductivity anomaly was conclusively determined to be a graphitic gneiss package within a magnetically prominent, yet localised shear zone which is unrelated to the interpreted Yagen Intrusion.

Drilling of the remaining ground EM targets using the Company owned diamond drill rig is ongoing.

Geochemical results from infill vacuum drill samples from across the Yagen, Alma, Pegasus, Cactus and Deception Prospects during the past few months are awaited to allow for a complete interpretation of the regolith geochemical distributions. The last batch of these sample results are expected soon.

In addition to the ongoing exploration work within the Cooperina Project it can also be reported that Heritage Clearance approvals received have allowed geophysical surveying to be undertaken across a priority-1 target identified from the airborne SkyTEM⁵⁰⁸ survey flown across the Caroline Intrusion during 2012. The target area "Marrawah Prospect" (*figure 1*) is located within EL5185 "Woodroffe" (*formerly EL3931*) which is part of the Rio Tinto Joint Venture Agreement where PepinNini is in the process of earning 51% of the project. The prospect was covered using fixed loop ground electro-magnetics which has defined a category 1 target recommended for bedrock drill testing.

The information in this report that relates to Exploration Results is based on information compiled by Phil Clifford BSc MAusIMM. Phil Clifford is the Exploration Manager of PepinNini Minerals Limited and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration 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". Phil Clifford consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

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Note: Additional information on PepinNini Minerals Limited can be found on the website: www.pepinnini.com.au