

## ASX ANNOUNCEMENT

23 September 2014

### West Musgrave Spinifex Range Ni-Cu-PGE Project Exploration Strategy

PepinNini Minerals Limited (PNN) is pleased to provide an update on exploration strategy for the Option Deed with Phosphate Australia Ltd (ASX:POZ) to explore the Spinifex Range Project in the West Musgrave Province of Western Australia (ASX announcement 15th September, 2014).

The Spinifex Range Project is comprised of an exploration licence E69/2864 and an exploration licence application E69/3191 totalling 785.7km<sup>2</sup>. The tenement holding is strategically located within a key trend of geological formations that have an established endowment of Ni-Cu-PGE mineralisation, the most significant being Cassini Resources Ltd (ASX: CZI) Nebo-Babel (446Mt @ 0.33% Ni and 0.35% Cu) which is 14km to the south of tenement E69/3191.

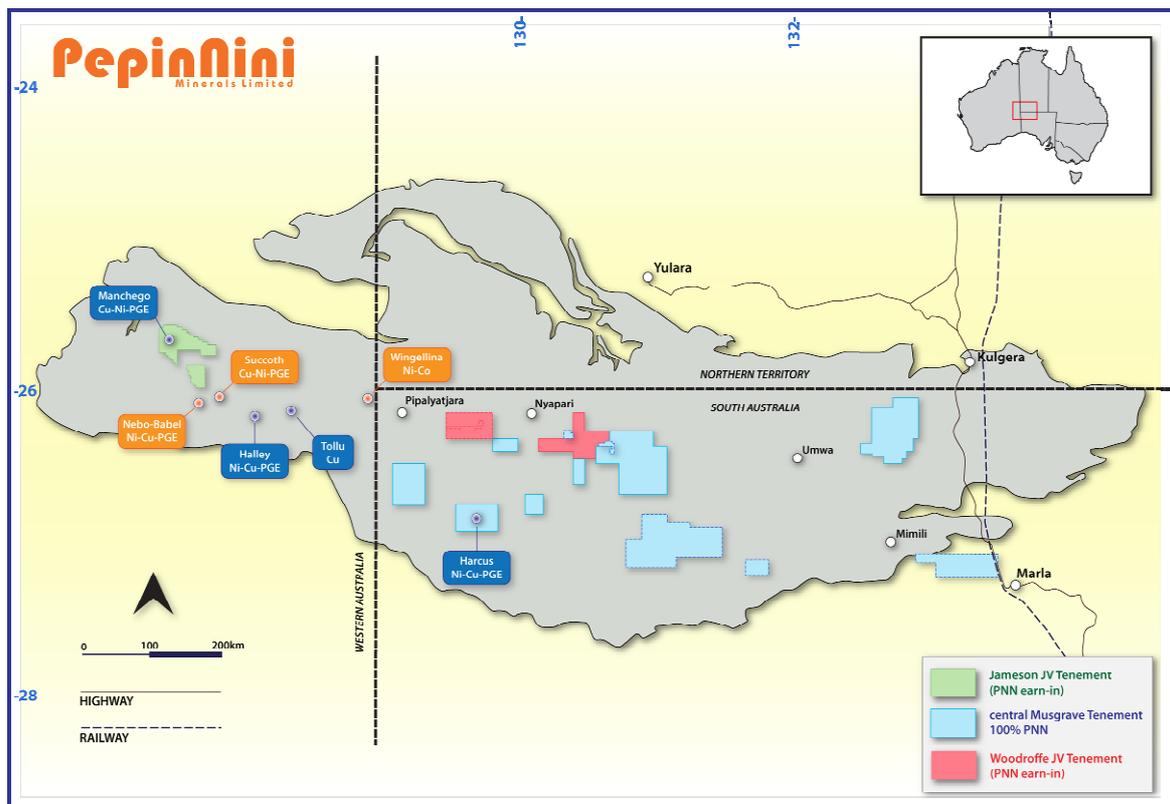


Figure 1: PepinNini Minerals Musgrave Project Exploration Tenements Location Plan

Spinifex Range is highly prospective and contains known Ni-Cu sulphide and titanium-vanadium-platinum group element (Ti-V-PGE) mineralisation associated with mafic rocks within the Jameson Intrusion. It is also known to host Cu mineralisation at the Manchego Prospect, where drilling by Anglo American Exploration intercepted fertile mafic rocks yielding 4m @ 0.53% Cu, 0.34% Ni and 0.34 g/t PGE. The mineralisation at Manchego extends over an area approximately 350 x 400

metres remaining open in all directions. (As reported by POZ to ASX 28 October 2013 and 3 January 2014)

Following a recent review of historical exploration data, PNN's technical team has identified a number of geological environments that are analogous to the nearby Nebo-Babel deposits and are considered highly prospective for Nickel-Copper mineralisation. The most encouraging of these geological targets is located in the North West part of E69/2864 some 7km north of the Manhego Prospect.

PNN is planning to undertake a high-resolution airborne magnetics survey across these priority target areas to clarify the geology and better define these conceptual targets. This work will be followed by targeted Moving Loop Electromagnetic (MLEM) surveying to locate concealed conductive bodies that may represent Ni-Cu mineralisation.

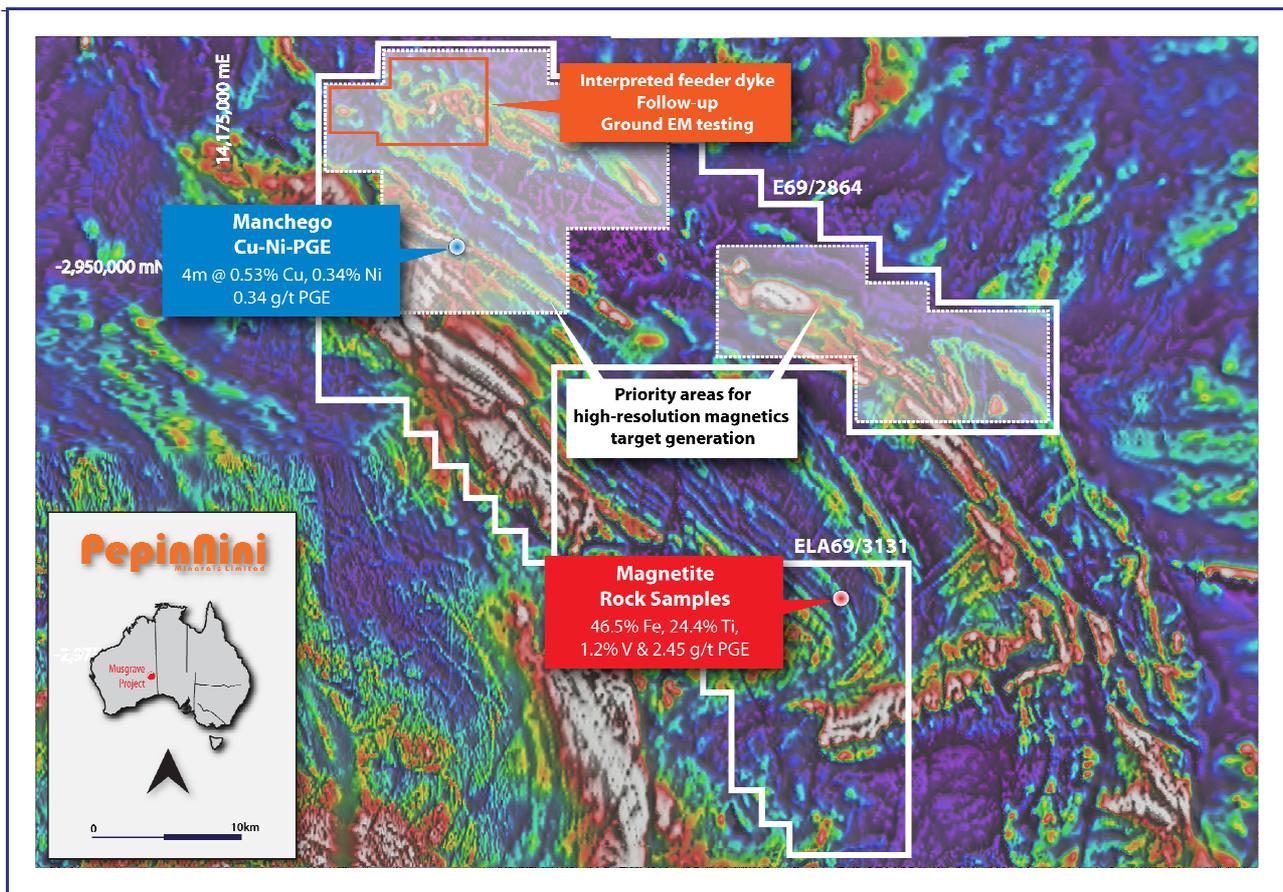


Figure 2: Spinifex Range work program location plan on colour gridded airborne magnetics (Geoscience Australia)

PNN considers that Spinifex Range contains all the key ingredients for a significant mineralised system and will initially focus on applying geological concepts and geophysical mapping to locate prospective host environments which will be assessed using ground electromagnetic studies, capable of identifying conductive material such as massive Ni-Cu sulphide at depth.

PNN will first focus on obtaining statutory approvals for the proposed work program and will look to commence exploration during Q1 2015.

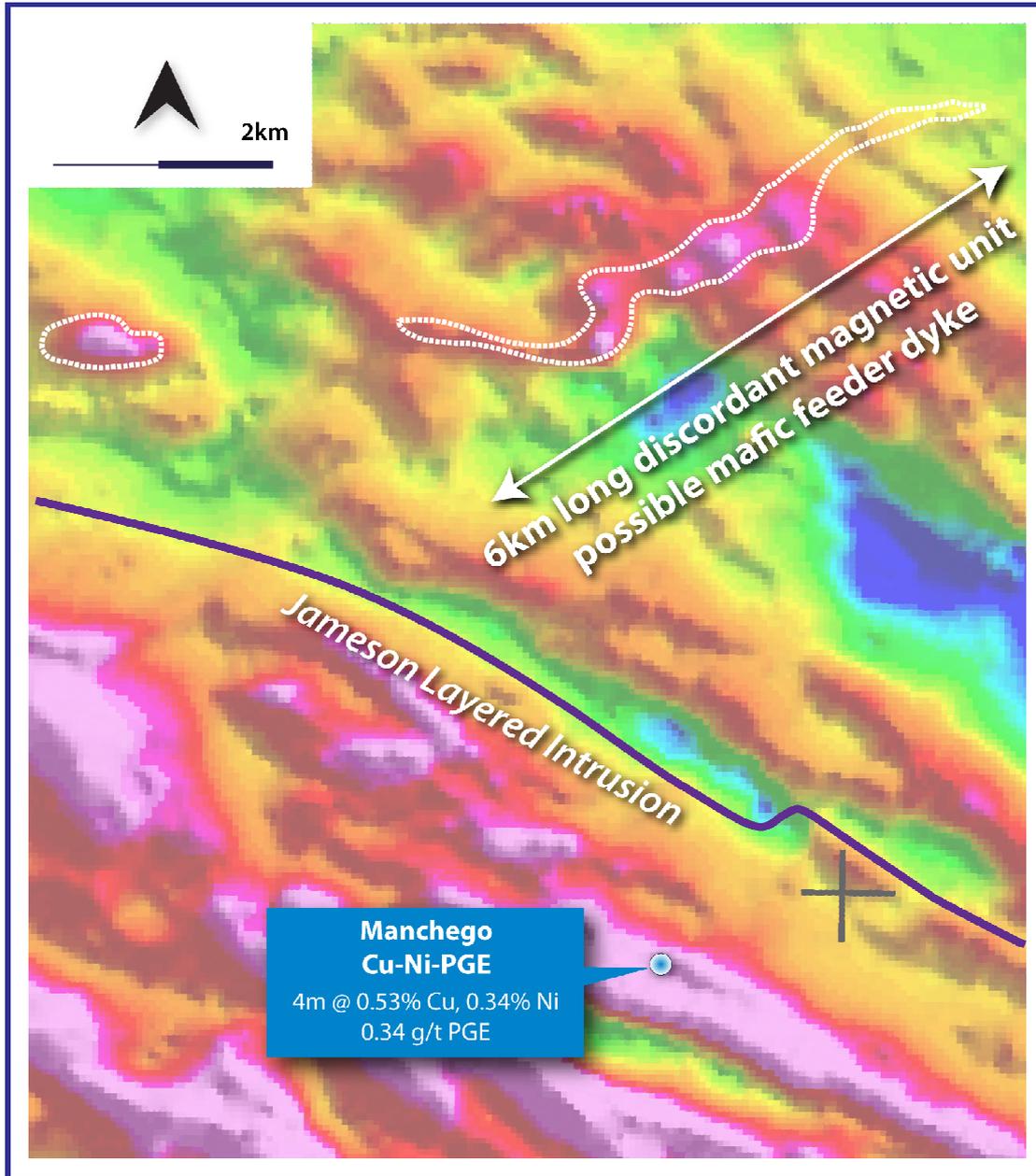


Figure 3: Detailed gridded Total Magnetic Intensity image showing the size and geometry of interpreted mafic feeder dyke prospective for Ni-Cu mineralisation similar to that intercepted at the nearby Manchego prospect.

*The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Phil Clifford BSc MAusIMM. Phil Clifford is the Technical Director 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 2012 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. This information was prepared and first disclosed by Phosphate Australia Ltd under JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.*

**For further information please contact:**

Rebecca Holland-Kennedy  
Managing Director, PepinNini Minerals Limited  
Phone: (08) 8218 5000

Note: Additional information on PepinNini Minerals Limited can be found on the website:  
[www.pepinnini.com.au](http://www.pepinnini.com.au)