



## **ASX ANNOUNCEMENT**

29<sup>th</sup> April, 2010

### **Robinson Range Iron Ore Project Encouraging Surface Sampling Results**

- Initial reconnaissance surface sampling and preliminary geological mapping has confirmed encouraging iron mineralisation at twelve prospect sites investigated within the project area.
- Very encouraging surface sample assay results of up to 67.3% Fe.
- 179 surface rock samples collected during the program returned assays of >55% Fe.
- Twelve prospect areas with samples averaging >60% Fe identified for priority investigation.
- PepinNini is in discussions to finalise a Joint Venture Agreement to facilitate progressing the exploration and development of the identified Direct Shipping Ore (DSO) potential within the project tenements.
- An extensive initial RC drilling program is scheduled to commence as soon as possible.

The Robinson Range Iron Ore Project lies in the Midwest region of Western Australia. The project is located 850kms north of Perth and 550kms north east of the planned Oakajee Port and Rail development near Geraldton. The region has emerged as Western Australia's next major iron ore province (second to the Pilbara) and holds considerable potential for the discovery of both iron-ore and manganese deposits. Sinosteel-Midwest in particular has been actively exploring adjoining exploration licences to identify iron ore resources during 2009.

The proposed Joint Venture covering 7 tenements of approximately 700 km<sup>2</sup> would investigate the project area for potential exploitation of Direct Shipping Ore (DSO) resources.

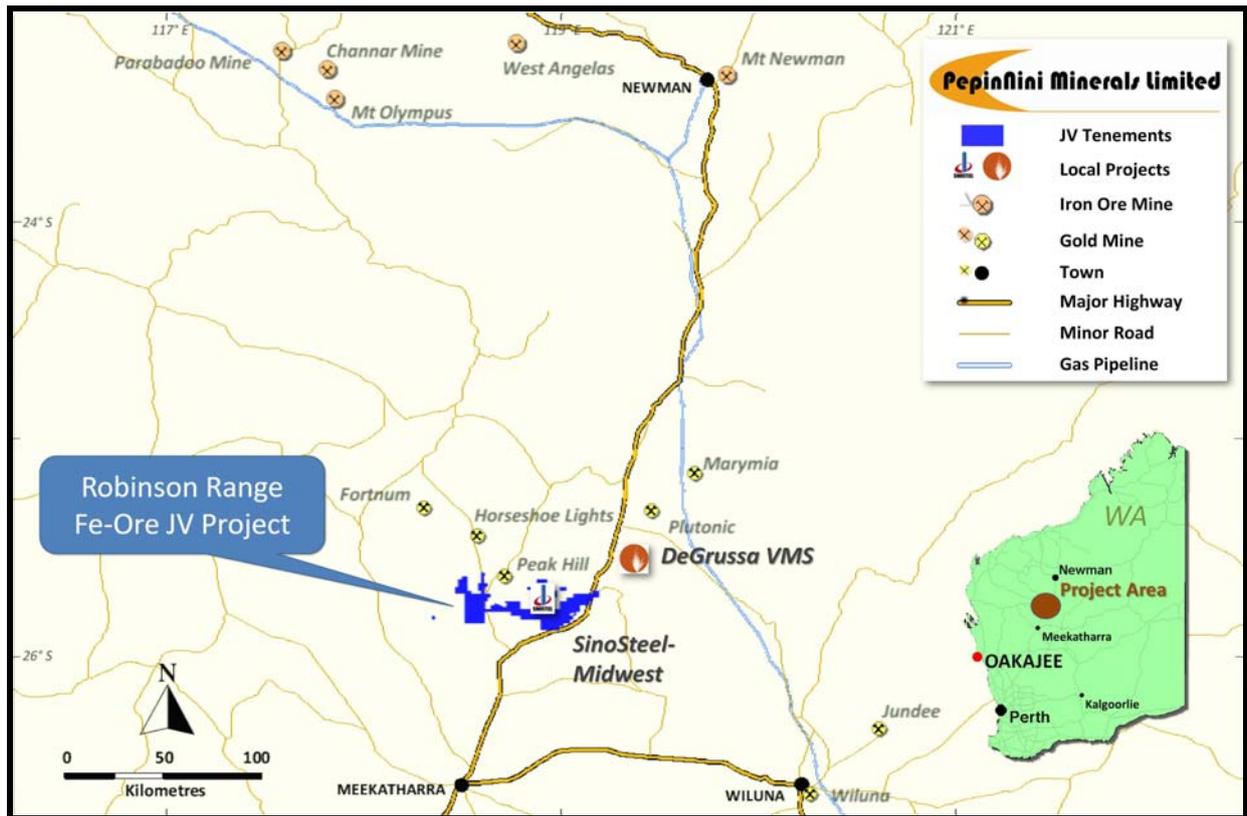


Figure 1. Location of the Robinson Range Iron Ore Project.

### **Robinson Range Iron Ore Project**

The Robinson Range Iron Ore Project covers part of the Bryah-Padbury Basin and contains approximately 40km strike length of Robinson Range Formation considered highly prospective for iron ore. The sequence includes banded iron and granular iron formation units which variably outcrop within the licences. Supergene enriched Hematite and Hematite-Goethite mineralisation associated with these units form the primary target of the project.

Fourteen prospect locations situated within the prospective terrain were targeted for initial field investigations. Twelve of the prospects were visited during field reconnaissance operations at the end of 2009. Surface outcrop mapping and sampling was undertaken to gather information for the prioritisation of the targets.

Initial reconnaissance surface sampling and preliminary geological mapping has confirmed strong iron mineralisation at twelve prospect sites investigated within the project area. Results of up to 67.3% Fe have been returned from rock chip samples with all prospect areas returning values in excess of 60% Fe. In total 179 samples returned results in excess of 55% Fe.

PepinNini has also undertaken reprocessing and 3D modelling of geophysical data to complement the detailed gravity surveying it commissioned in 2008. Modelling is aiding the ranking and identification of prospect areas.

The reconnaissance investigations identified considerable areas of outcropping and sub-cropping surface iron mineralisation at most of the prospect sites. True strike extent of the Hematite and Hematite-Goethite enriched units could not be accurately established due to discontinuous nature of outcrop and intermittent areas of sand, talus and colluvium. However, indications are encouraging that substantial bodies of mineralised rock will lie beneath the surface veneer and drilling is being planned to resolve this.

Table 1: Summary and distribution of rock chip sample results

	No. Samples	No. with Fe > 55%	Maximum Fe
PNN-Area Ai	9	8	65.5%
PNN-Area A	30	17	64.0%
PNN-Area B	32	8	64.5%
PNN-Area C	44	32	67.3%
PNN-Area C [east]	16	14	66.4%
PNN-Area D	23	21	65.1%
PNN-Area E	-	-	-
PNN-Area F	-	-	-
PNN-Area G	24	6	62.4%
PNN-Area H	17	8	62.8%
PNN-Area I	11	4	60.7%
PNN-Area J	25	16	64.3%
PNN-Area K	26	12	64.8%
PNN-Area L	44	32	66.5%

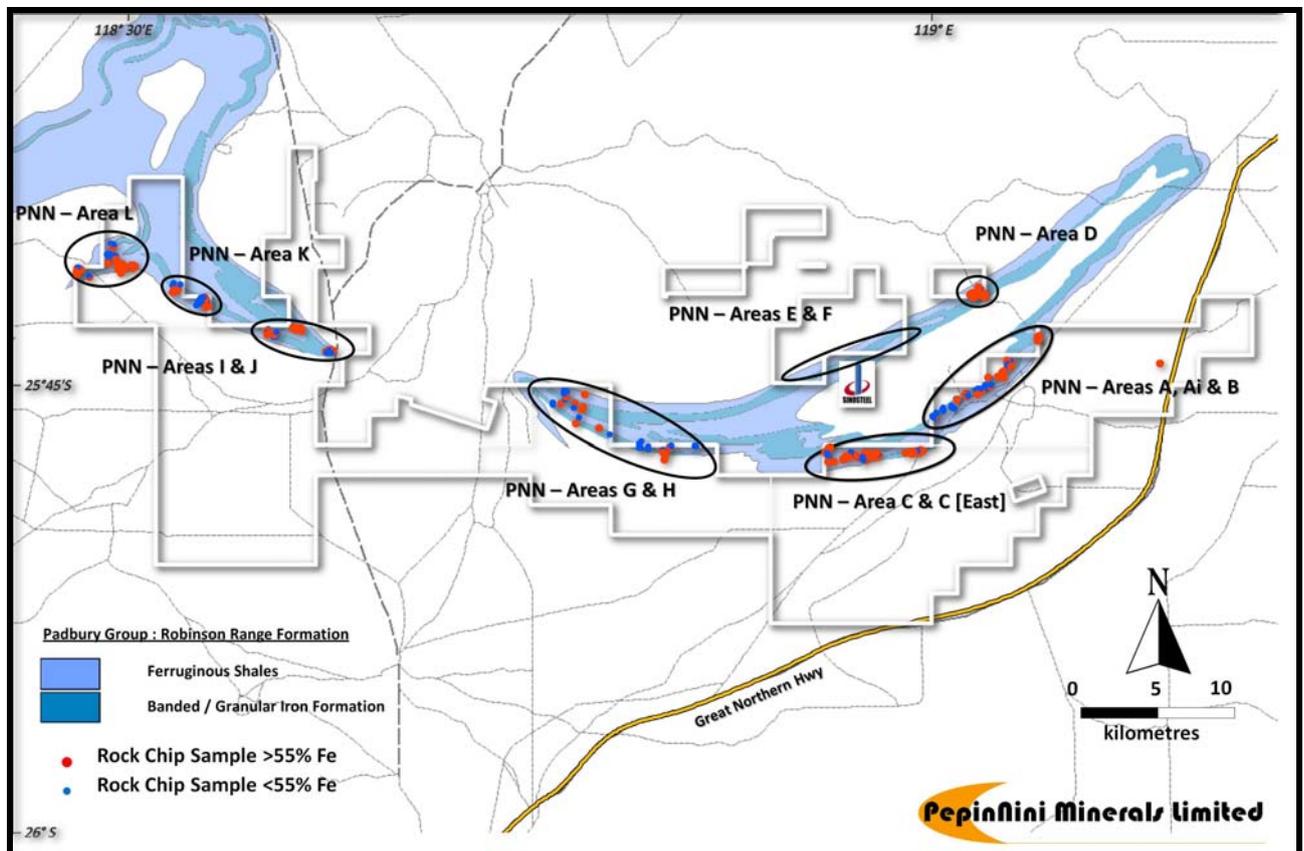


Figure 2. Robinson Range Iron Ore Project - Prospect Location & Surface Sample Results



*Figure 3. PNN-Area C Prospect – Iron enriched outcrop*

The proposed Joint Venture would undertake reverse circulation drilling across at least seven prospects where iron mineralisation has been confirmed and where potential extensions to the mineralisation may be concealed by the shallow alluvial sediments. The intention of the drilling will be to define the depth, thickness, volume, grade and quality of the confirmed and interpreted zones of supergene iron enrichment.

During the initial reconnaissance program PepinNini opened dialogue with the Jidi Jidi Aboriginal Corporation which represents the native title holders of the land. It is the intention of the proposed Joint Venture to seek land access agreements and approval for drilling from the Nharnuwangga, Wajarri and Ngarla Native Title Holders through the Jidi Jidi Aboriginal Corporation in preparation of Heritage Clearance and protection work prior to the implementation of the proposed drilling program.

Figures 4 and 5 demonstrate the distribution of surface iron results from the reconnaissance sampling across the eastern prospects [PNN-Areas A, Ai, B, C, C (East) & D] and the western prospects [PNN-Areas K & L] respectively.

*The information in this report that relates to Exploration Results is based on information compiled by Norman Kennedy BSc MAusIMM. Norman Kennedy is the Chairman and Managing 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 2004 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Norman Kennedy 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](http://www.pepinnini.com.au)

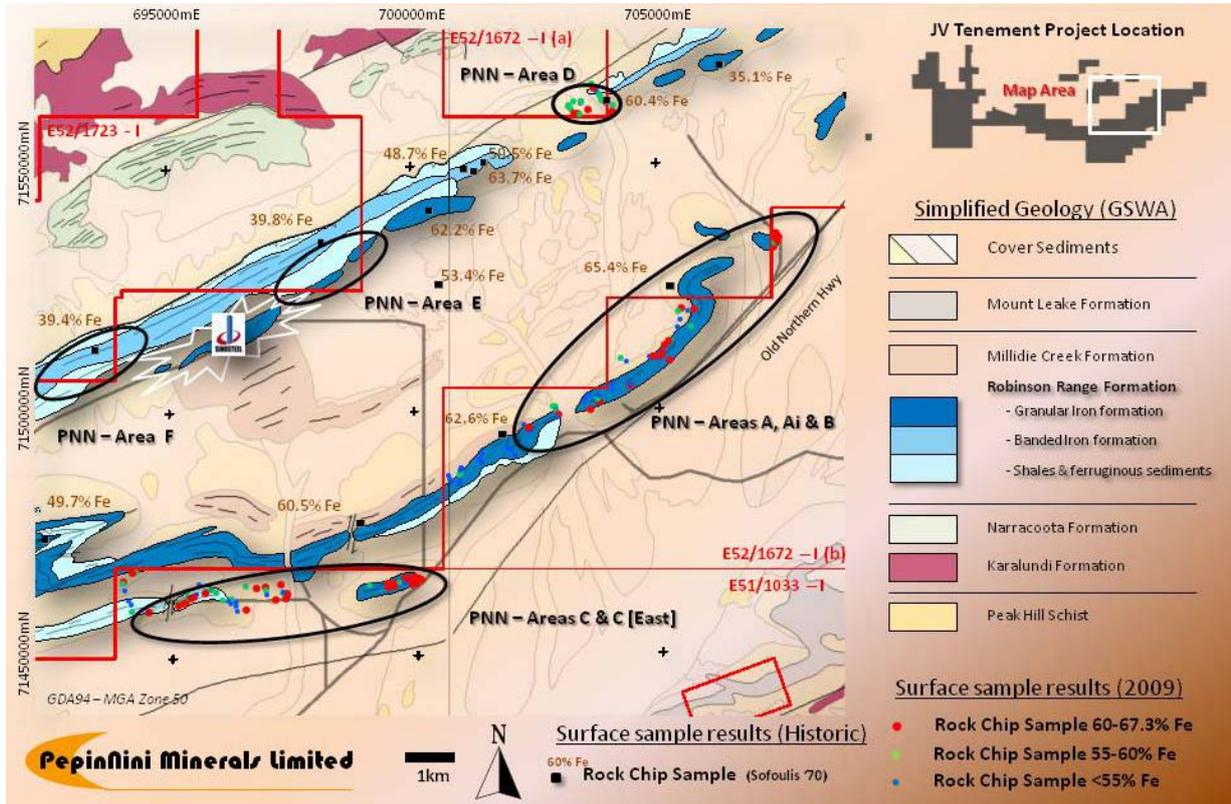


Figure 4. Robinson Range Iron Ore Project – Eastern Prospects

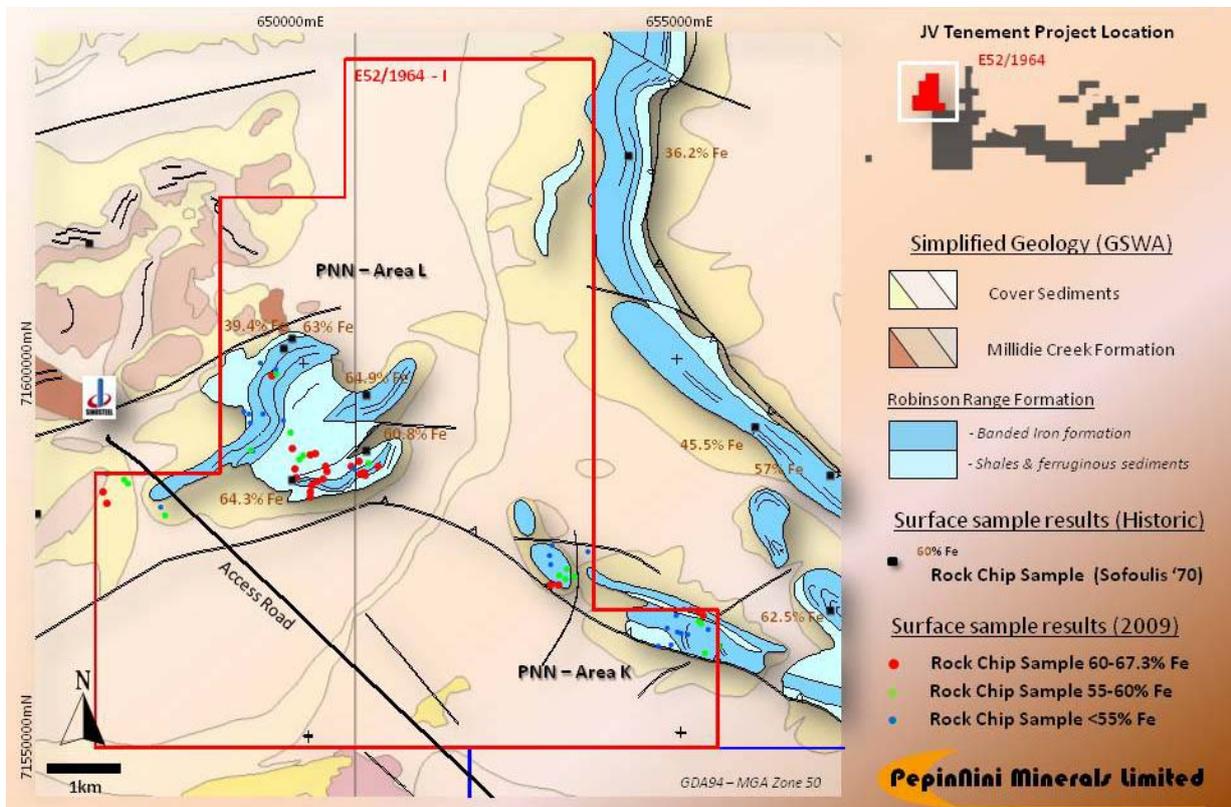


Figure 5. Robinson Range Iron Ore Project – Western Prospects