



ASX ANNOUNCEMENT

24th August, 2010

Robinson Range Iron Ore Project Signing of Joint Venture Agreement

PepinNini Minerals Limited (PepinNini) is pleased to announce that its wholly owned subsidiary, PepinNini Robinson Range Pty Ltd, has entered into a Joint Venture Agreement (JVA) with Grosvenor Gold Pty Limited (Receivers and Managers Appointed) (Grosvenor) to explore and develop the iron ore potential of three tenements covering approximately 311km² in the Midwest region of WA. Another separate Joint Venture Agreement is currently being finalized for an additional four tenements covering approximately 390km².

Key Points

- The JVA gives effect to a Heads of Agreement signed in December 2007 and is essentially on the same terms and conditions contained within that agreement.
- PepinNini will hold a 50% interest in the iron ore contained within the three tenements subject to the executed agreement.
- PepinNini will manage exploration on behalf of the Joint Venture (JV) which will be funded equally by both JV partners.
- The formalisation of the JV, after long and detailed negotiation, sets a new level of cooperation between PepinNini and Grosvenor and facilitates the exploration and development of the identified Direct Shipping Ore (DSO) potential of the tenements.
- Twelve prospect areas with samples averaging >60% Fe have been identified for priority investigation within tenements explored by PepinNini during the Farm-in period.
- Field exploration will now be possible on tenements which were previously excluded from field investigations because of legal impediments.
- The JV intend to commence an extensive RC drilling program of approximately 5,000m as soon as possible with the objective of defining an initial JORC compliant resource and to investigate the potential for additional iron ore resources.

The Robinson Range Iron Ore Project (Project) is situated in the Midwest Region of Western Australia approximately 550kms north east of the Oakajee Port and Rail development at Geraldton. The Midwest Region has emerged as Western Australia's next major iron ore province (second to the Pilbara) Figure 1.

In December 2007 PepinNini entered a farm-in agreement with Grosvenor (formerly Eagle Gold Mines Pty Limited) covering seven exploration licences E51/1033, E52/1613, E52/1670, E52/1672, E52/1723, E52/1910 and E52/1964. During the farm-in period PepinNini undertook exploration activities which included a review of historical data, geophysical compilation reprocessing and modelling, detailed gravity surveying, surface sampling and reconnaissance mapping. This work resulted in the identification of twelve potential iron ore prospects. Although ongoing legal issues delayed some exploration, with the signing of the JVA, these impediments are now removed and the immediate intention of the JV is to commence drill testing some of the identified targets as soon as possible and to investigate the potential for additional iron ore resources.

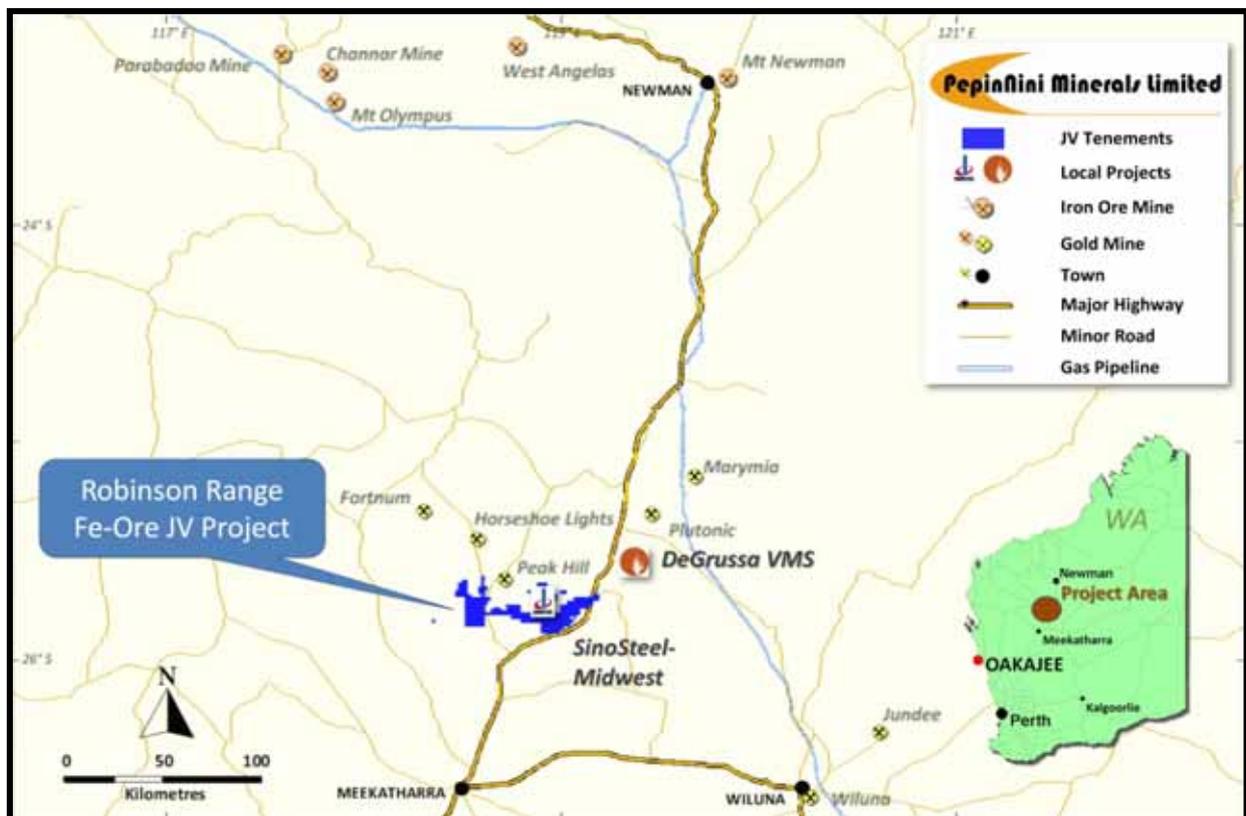


Figure 1. Location of the Robinson Range Iron Ore Project.

Robinson Range Iron Ore Project

The 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 (Figure 2). Supergene enriched Hematite and Hematite-Goethite mineralisation associated with these units form the primary target of the project.

Surface sampling and mapping at the twelve prospect sites investigated during the farm-in period confirmed that strong iron mineralisation occurs within the project area. Rock chip sample results of up to 67.3% Fe (Figure 3) have been returned with all areas sampled returning some values in excess of 60% Fe (Table 1). In total 179 samples returned results in excess of 55% Fe.

The JV intends to undertake reverse circulation drilling across at least seven prospects where iron mineralisation is outcropping and where potential extensions to the mineralisation may be concealed beneath shallow alluvial sediments.

PepinNini on behalf of the JV will immediately seek land access agreements and approval for drilling from the Nharnuwangga, Wajarri and Ngarla Native Title Holders through the Jidi Jidi Aboriginal Corporation. It is anticipated that Heritage Clearance will be required prior to the commencement of the drilling program.

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%

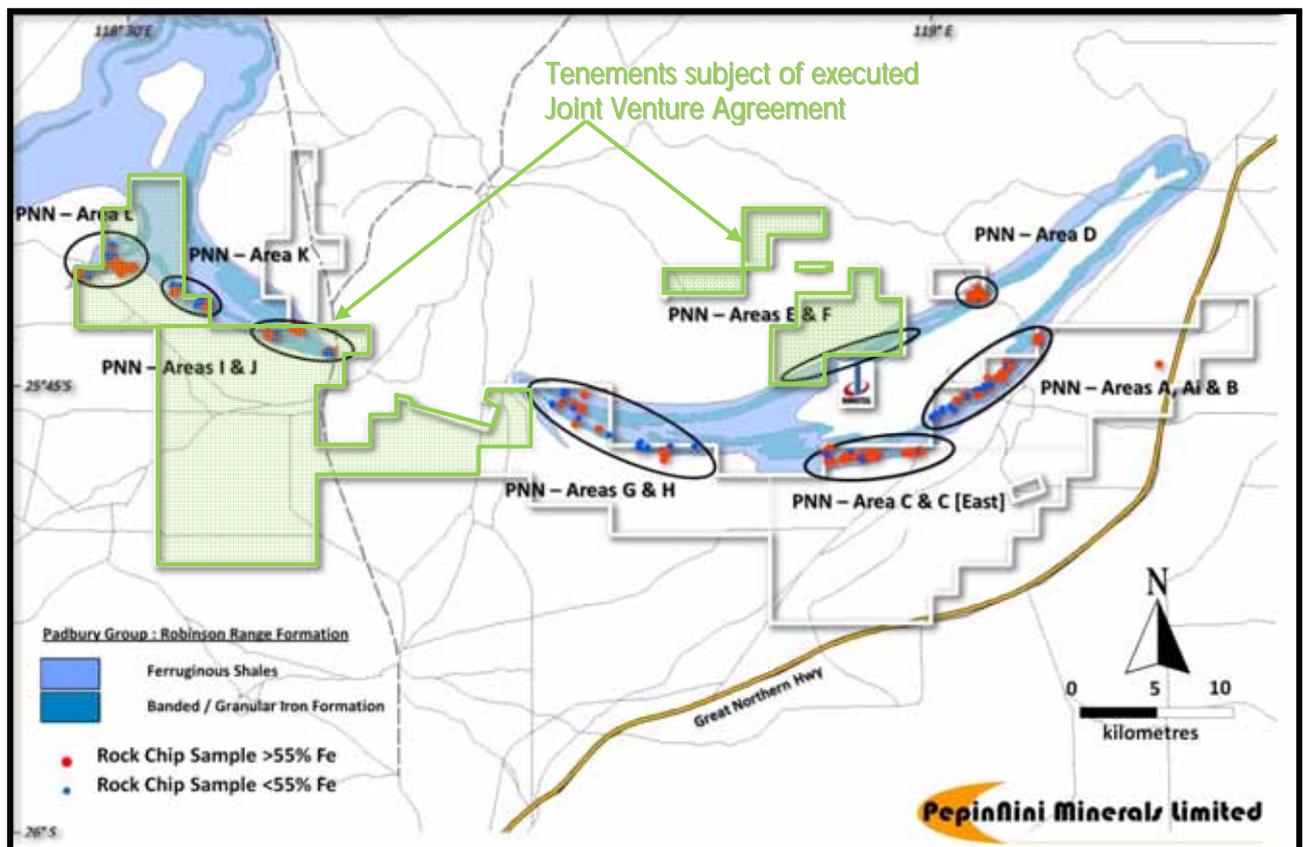


Figure 2. Robinson Range Iron Ore Project - Prospect Location & Surface Sample Results



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

The 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