

ASX ANNOUNCEMENT

2nd April, 2012

Exploration Update

1. Robinson Range Iron Ore Project – Midwest Western Australia

The drilling program designed to extend the current iron ore resource at PNN Area C as well as investigate other prospects has been completed. The program of thirty five boreholes for a total 2,446m concludes the drilling activities which were suspended in October last year due to mechanical failure of the drill rig. Samples have been dispatched for analyses and results are awaited.



Drilling Robinson Range Iron Ore Project – February, 2012

2. Curnamona Province Project – South Australia

Braemar Iron Formation Project

A total of 10 RC percussion drillholes, for a total of 1,533m, have been completed along 2 drill traverses across interpreted magnetic Braemar Iron Formation at the Macdonald Corridor Magnetite Prospect located within EL 4375. Drillhole locations were based on geophysical interpretation and modelling of aeromagnetic data. Drilling intersected variably magnetic well bedded/laminated fine to very fine-grained silty sandstone and siltstone. A total of 256 five metre composite samples were submitted for multi-element analysis and subsequently a total of



183 samples were then submitted for DTR (Davis Tube Recovery) analysis. Magnetite intersections are summarised in the following table.

Hole_Number	From(m)	To(m)	Length(m)	Fe %
RC11BIM001	29	124	95	17.1
RC11BIM002	23	82(EOH)	59	20.9
RC11BIM003	50	118(EOH)	68	17.4
RC11BIM004	15	55	40	14.7
RC11BIM005	103	105(EOH)	2	20.2
RC12BIM001	48	68	20	22.9
RC12BIM002	20	90	70	22.6
	165	180	15	19.7
	190	199(EOH)	9	18.2
RC12BIM003	20	199(EOH)	179	21.0
RC12BIM004	26	211	185	19.0
RC12BIM005	32	157	125	21.7

Preliminary DTR results from 5 samples submitted to determine initial optimum recovery parameters produced a DTR sample concentrate with low impurities (SiO2 < 5%), relatively high mass recovery (average 20%, min 15.72%, max 26.9%) and high Fe content (average 68%, min 66.1% Fe, max 69.9%Fe). DTR results are awaited for a further 183 samples.

Initial results for the drilling program at the Macdonald Corridor Prospect confirm the potential for a very large magnetite iron ore resource which could be beneficiated to a high grade blast furnace feed product.



Location Plan: Regional Braemar Ironstone magnetite prospects (green stars) and prospective Braemar Ironstone prospect regions in relation to Sinosteel PepinNini Joint Venture tenements (black polygons



Regional Drilling Project

Six RC percussion drillholes, for a total of 912m, were completed to follow up on previously intersected anomalous aircore results at the T3, T8 and Dayanna Prospects

At the T3 Project a single inclined RC percussion drillhole was completed to 145m depth to test beneath an iron (Fe) rich unit intersected in aircore drillhole AC10KAL028 (11m@ 44.19%Fe). A total of 145 one metre samples were submitted for multielement analysis. Hole RC12T3A001 intersected 31m @ 36.4%Fe from 5m within highly weathered basement lithologies. Both intersections are weakly magnetic suggesting that the iron most likely occurs as goethite.

At the Dayanna Project two inclined RC percussion holes for a total of 248m were completed to test highly anomalous Zn values intersected in aircore drilling for development of high grade zones (AC11KAL032: 25m @ 0.51% Zn; AC11KAL041: 13m @ 0.21%Zn; AC11KAL051: 11m @ 0.52%Zn; AC11KAL094: 24m @ 0.24%Zn). A total of 256 samples including duplicates were submitted for multielement analysis. Hole RC12DAY001 intersected 9m @ 0.64%Zn from 81m whilst hole RC12DAY002 intersected 13m @ 0.31%Zn from 3m and 12m @ 0.19%Zn from 24m within zones of broadly anomalous Zn values (500ppm Zn), confirming the low grade intersections encountered in the aircore drilling.

At the T8 Project three inclined RC percussion drillholes for a total of 519m were completed to test anomalous units defined by previous aircore drilling (AC11KAL203: 24m @ 0.158%Cu). A total of 535 samples including duplicates were submitted for multielement analysis. Significant results are tabulated below.

Hole_Number	From(m)	To(m)	Length(m)	Cu %
RC12T8A002	101	121	20	0.17
RC12T8A003	83	90	7	0.89
incl	83	87	4	1.36
	97	109	12	0.15
	121	127	6	0.18
	132	150	18	0.33

Anomalous cobalt (max. 723ppm), arsenic (max. 9170ppm) and molybdenum (max. 231ppm) was also intersected in drilling of the prospect area.

3. Musgrave Province Project – South Australia

The Musgrave Project is currently targeting nickel-copper sulphide mineralisation and base metal mineralization. Vacuum drilling and diamond drilling programs are continuing within the Cooperinna block of EL 4587. Visible sulphide mineralization primarily in the form of pyrrhotite has been intersected in all recently completed boreholes. Samples are being prepared for analysis.

A SkyTEM airborne electromagnetic survey (AEM) of approximately 1,300 line kms has been successfully completed over the Caroline Intrusion, the Hanging Knoll Area and the Cooperinna Block located within tenements held by PepinNini Minerals.

A number of strong features which could represent massive sulphide mineralization are identifiable in preliminary conductivity images. The data is currently being processed and assessed to identify priority drill targets.





Drilling and SkyTEM Survey in Progress on Cooperinna Block EL 4587 – March, 2012

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.

For further information please contact:

Mr Norman Kennedy Chairman and Managing Director, PepinNini Minerals Limited Phone: +61 (0)8 8218 5000 **Note:** Additional information on PepinNini Minerals Limited can be found on the website:www.pepinnini.com.au