

Capital Structure

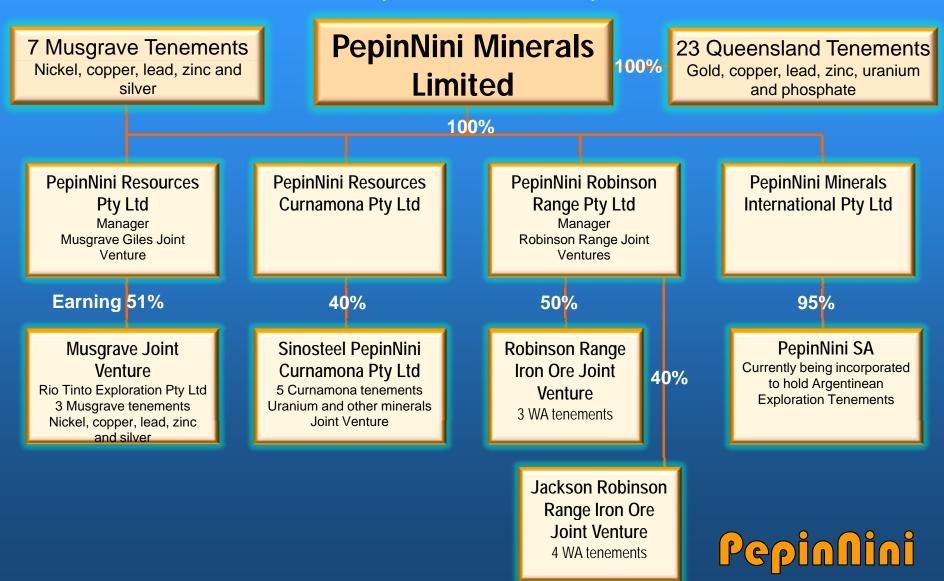
(21st November, 2010)

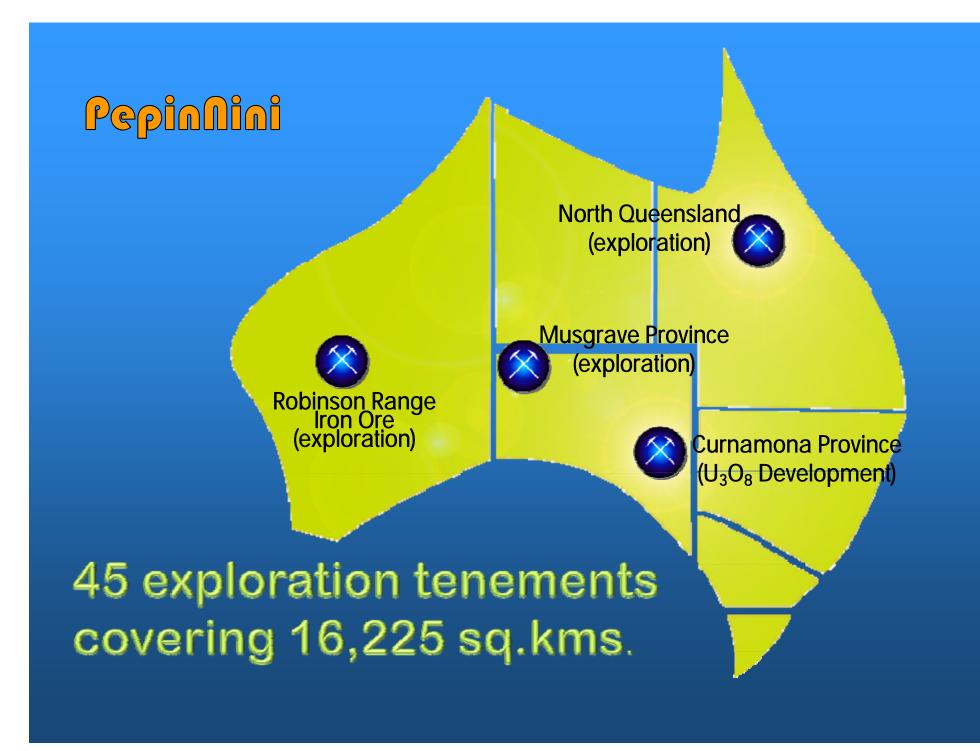
- 78,202,499 shares on issue
- Currently 1,880 shareholders
- 54% of issued capital held by top 20 shareholders
- Currently capitalised at AUD\$15.6 million
- Current cash AUD\$4 million
 (+ AUD\$5 million expenditure from Sinosteel)



Corporate Structure

(21st November, 2010)





Currently incorporating an Argentinean entity to acquire exploration tenure and assessing opportunities in Argentina and other South American countries



Robinson Range Iron Ore Project

Completion of Farm-in obligations to earn a 50% interest in 3 tenements and a 40% interest in 4 tenements with iron ore potential in the Midwest of WA. Execution of a JV Agreement to explore and develop the identified Direct Shipping Ore (DSO) potential. Substantial iron mineralisation identified in outcrop at 12 prospect sites with surface sample grades of up to 67.3% Fe



North Queensland Project

- Drilling program of 25 RC boreholes completed on Queensland tenements targeting high grade gold and copper. Encouraging early results including:
 - 2 metres @ 10.1g/t gold, 33g/t silver and 0.6%copper
 - 1 metre @ 20.3 g/t gold, 35g/t silver and 0.6% copper
 - 3 metres @ 7.2 g/t gold, 13g/t silver and 0.2% copper
 - 1 metre @ 14.9g/t gold and 223g/t silver
 - 4 metres @4.7g/t gold and 70g/t silver
 - 2 metres @ 3.5g/t gold and 4.7g/t silver

Musgrave Project

Awarded an additional two exploration licence applications in the Musgrave Province through a tender process conducted by Primary Industries & Resources South Australia (PIRSA). The areas are considered highly prospective as they are dominated by Giles Complex mafic-ultramafic which is prospective for Ni-Cu sulphide mineralisation.



Musgrave Project (cont.)

- Completion of a 8 diamond boreholes and 327 vacuum boreholes within EL 4048 Mt Caroline. Disseminated sulphides and favourable lithologies for Ni-Cu sulphide mineralisation were observed in all diamond boreholes
- Ten diamond boreholes drilled within EL 3931
 Woodroffe. Elevated nickel, copper and chromium
 values were assayed for a number of intervals including
 6metre @ 0.14% nickel, 0.10% copper and 0.12%
 chromium and 53metres @ 0.09% nickel, 0.06% copper
 and 0.15% chromium

Curnamona Project

An independent JORC compliant estimate of the mining recoverable uranium resources of the Crocker Well Uranium Project was completed. At a cutoff grade of 150ppm U₃O₈ the combined deposits at Crocker Well consists of an Indicated Resource totalling 13,250,000 tonnes at 283 ppm U_3O_8 for 3,750 tonnes (8.27 Mlbs) contained U₃O₈, and an Inferred Resource totalling 5,590,000 tonnes at 275 ppm U_3O_8 for 1,537 tonnes (3.39 Mlbs) contained U_3O_8

Musgrave Project Summary

- 10 tenements covering 9,601 kms²
- Long term commitment to explore potential for world class size mineral deposits
- Targeting Giles Complex mafic-ultramafic intrusions – prospective for Ni-Cu sulphide & PGE mineralisation
- JV alliance with Rio Tinto to explore potential for large nickel copper sulphide deposits in 3 tenements

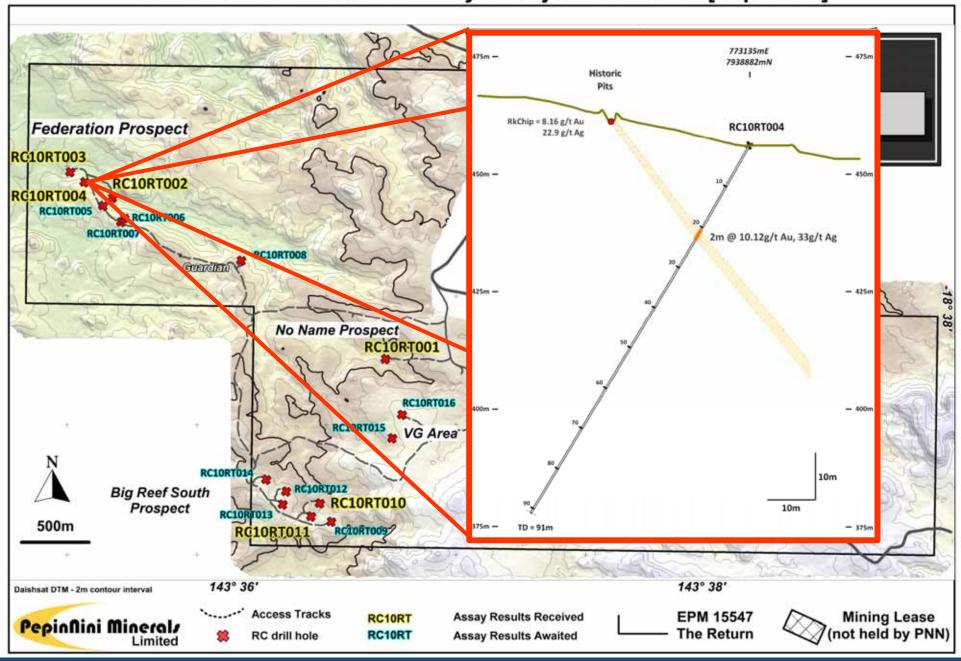


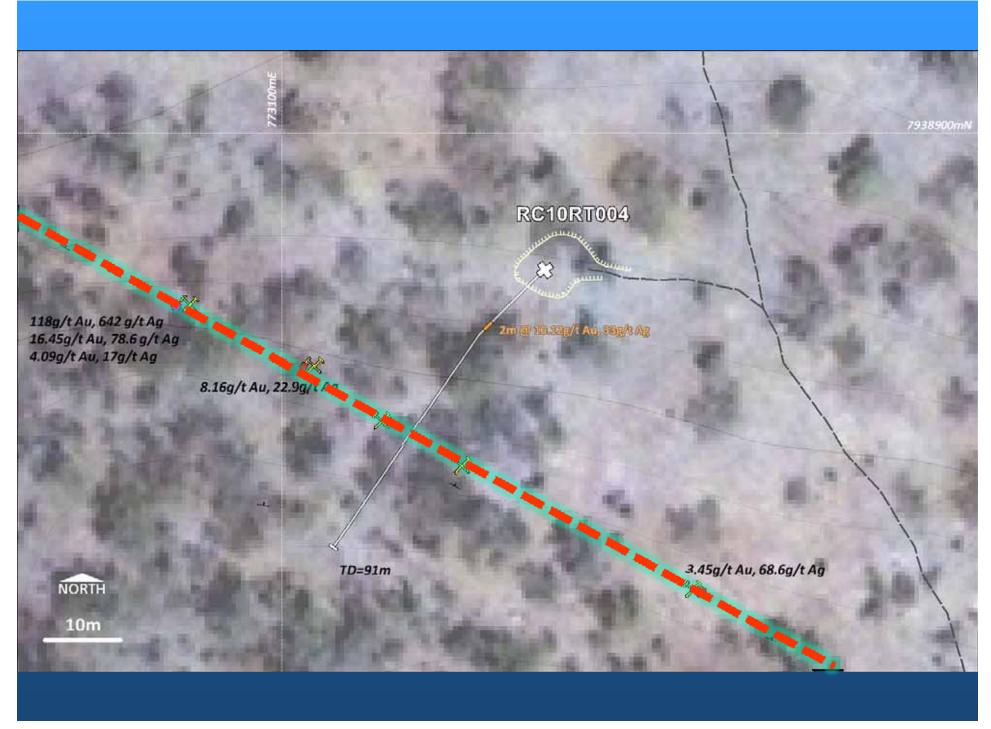
- Long term commitment to explore potential for world class size mineral deposits
- Company owned drilling rigs and support equipment
- Company owned field camp
- Cost effective exploration



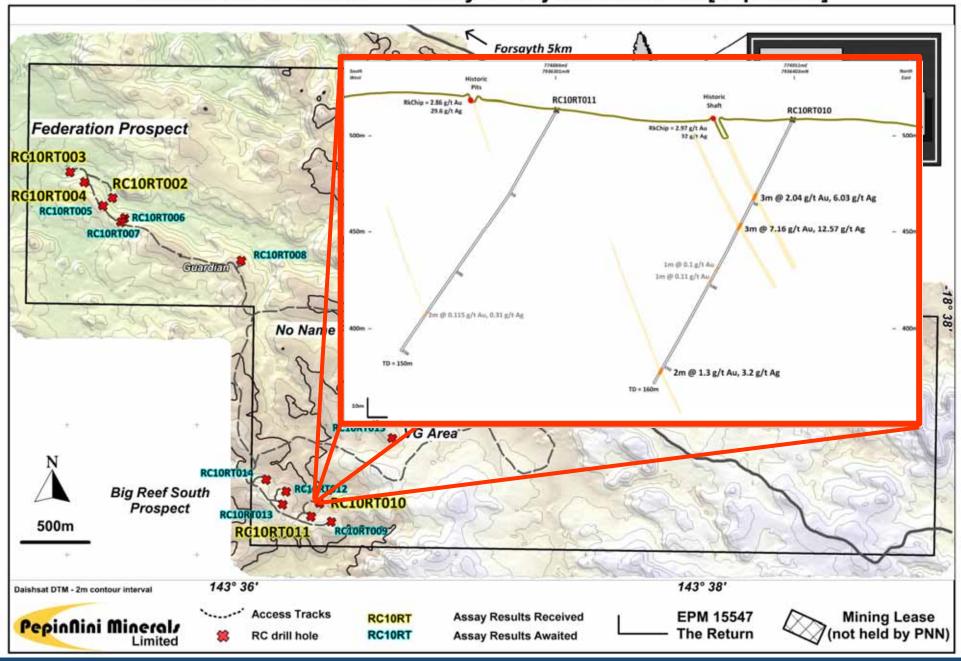


The Return EPM15547 - Forsayth Project Drill Holes [Sept 2010]





The Return EPM15547 - Forsayth Project Drill Holes [Sept 2010]



Curnamoma Project Summary

- 40% interest in 5 tenements covering 3,778 kms²
- Joint Venture alliance with Sinosteel Corporation

Advanced Uranium Project - Crocker Well

JORC compliant uranium resource of 11.66million lbs. BFS currently on hold until there is an improvement in the uranium price and US dollar.

Other Projects

- 26 additional known uranium prospects to be investigated
- More than 30 Base Metal (Copper/Lead/Zinc) and Gold targets ready to drill (AUD\$6million expenditure commitment by Sinosteel under JV agreement)
- Rare Earths Element (REE) potential.

JORC Resource Crocker Well Deposit

(estimated by Hellman & Schofield April, 2010)

Category	Pounds (U ₃ O ₈)	Tonnes (U ₃ O ₈)	Cut-off Grade	Ave. Grade
Indicated	8,270,000 lbs	3,750 tonnes	150ppm	283ppm
Inferred	3,390,000 lbs	1,537 tonnes	150ppm	275ppm







Encouraging drill intersections by previous explorers include 10m @ 2.07g/t Au, 0.74% Cu, 5.6m @ 8.5% Cu and 32m @ 0.66% Zn

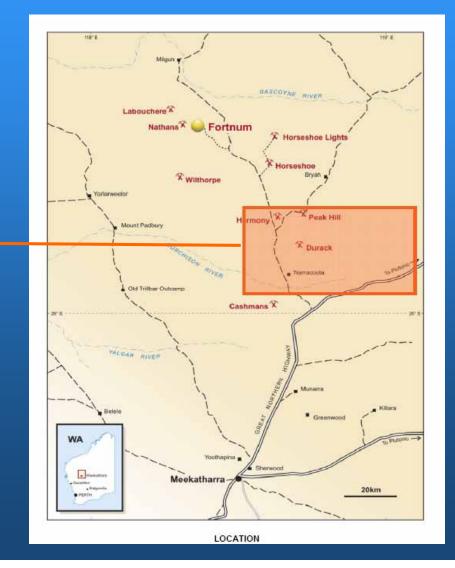
Robinson Range Iron Ore Project Summary

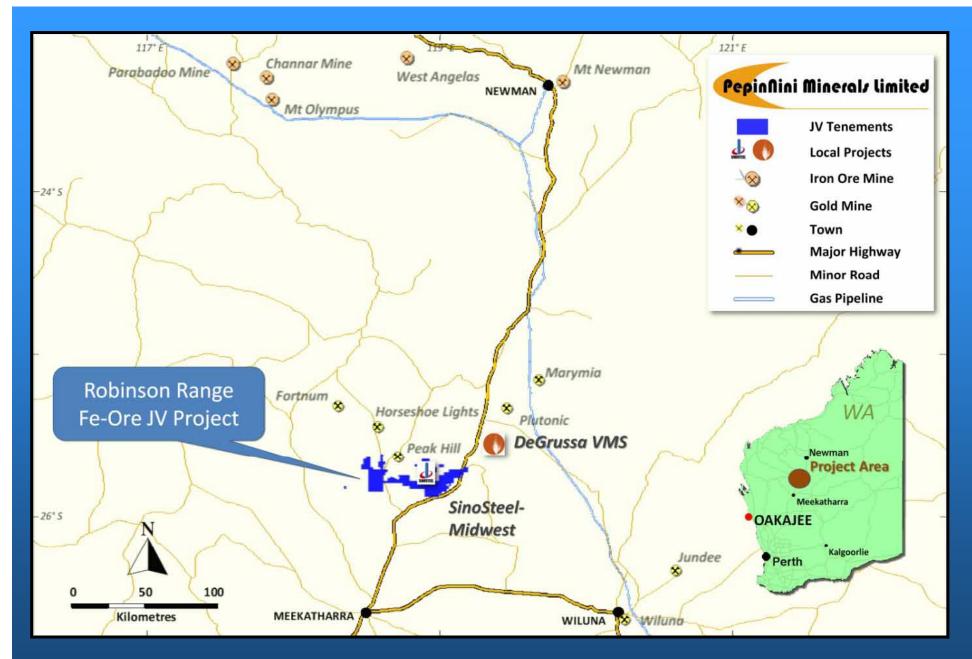
- 7 tenements covering 700km² Fe prospective ground in Midwest Province
- PepinNini has a 50% interest in the iron ore rights of three tenements and 40% interest in an additional four tenements
- DSO grades, >60%Fe, low phosphorous and other contaminants
- At least 12 outcropping iron ore prospects identified



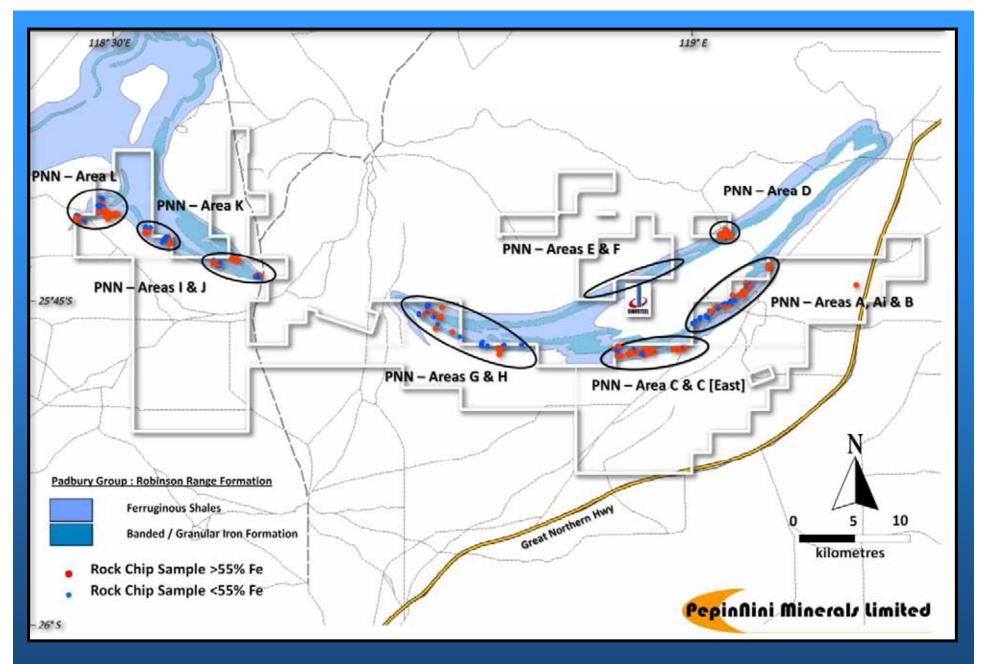
Infrastructure and project location







Robinson Range Project Location



Identified Iron Outcrops Robinson Range Project



Iron Outcrop Robinson Range Project



Robinson Range Iron Ore

- 70 RC boreholes for 5,000 metres about to commence at Robinson Range Project in WA.
- Initially targeting an Inferred JORC resource of at least 10 million tonnes DSO grade hematite and delineation of the potential for a resource of at least 100 million tonnes

Queensland Project

- Assess results from recently completed drilling program. Follow up encouraging early results with additional drilling to determine continuity of high grade gold intercepts
- Investigate additional high grade gold and copper targets



Curnamona Province Project

- 4 deep(500m) precollared diamond cored boreholes investigating base metal targets to commence before end of 2010.
- 4,000m aircore program also to commence before the end of the year targeting shallow gold, base metal and uranium mineralisation.
- Assess the Crocker Well Uranium
 Project with regard to prevailing uranium
 price and value of the US dollar.

Musgrave Province Nickel Project

 On going drilling program using company rigs exploring for large nickel copper sulphide deposits and base metal deposits



Argentina Project

- Establish a portfolio of projects through the application for prospective exploration tenure and the acquisition of quality existing projects
- Commence field exploration activities within Argentina
- Pursue opportunities in other South American countries



Disclaimer:

- The information in this presentation is published to inform you about PepinNini Minerals Limited and its activities. All reasonable effort has been made to provide accurate information, but we do not warrant or represent its accuracy and we reserve the right to make changes to it at any time without notice.
- To the extent permitted by law, PepinNini Minerals Limited accepts no responsibility or liability for any losses or damages of any kind arising out of the use of any information contained in this presentation. Readers are advised to consult a stockbroker or professional adviser before making any investment decisions.
- The information in this presentation that relates to Exploration Results and Mineral Resources is based on information compiled by Norman Kennedy BSc MAuslMM. Norman Kennedy is the 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