



# PepinNini Minerals Ltd

*Applying innovation to explore untapped terrain*

**Presentation to RIU Melbourne Resources Round-up, 25 September 2014**

*Rebecca Holland-Kennedy – Managing Director*

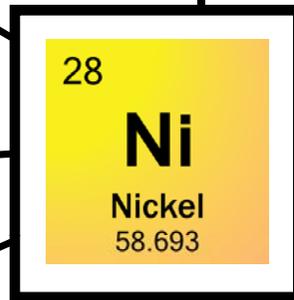
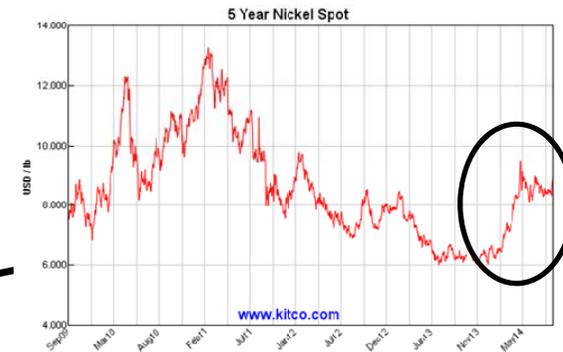
*Todd Williams – Project Manager*

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# Nickel – a sleeping giant?



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# PepinNini (PNN) – Overview

*Low-cost explorer with a strong portfolio, and proven record for innovation*

- Established 2002, listed on ASX in 2005
- Quality portfolio of exploration assets
  - Diversified commodity exposure - Ni, Cu, Au, Ag, PGE, Fe, U
  - Strategic position in emerging Musgrave province (SA/WA) (Ni-Cu-PGE)
  - Promising tenements in Andean belt (Cu-Au-Ag)
  - Strong JV partners – Rio Tinto, Phosphate Australia
- Proven low-cost, innovative exploration model
  - Company-owned infrastructure – drill rig, field camp (Musgrave)
  - CSIRO R&D partnership
- Secure funding position
  - Exploration program funded over medium term
- Experienced leadership team



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# Financial snapshot

	Jun 2014	Sep 2014
Shares on issue	143,731,600	170,047,389
Options on issue	41,158,105	41,158,105
Top 20 shareholders	64.05%	66.19%
Cash PNN reserves	\$1.066m	\$3.0m

	FY14
Revenue from operations	\$0.8m
Exploration expenditure	\$1.6m
Net assets (equity), period end	\$20.2m

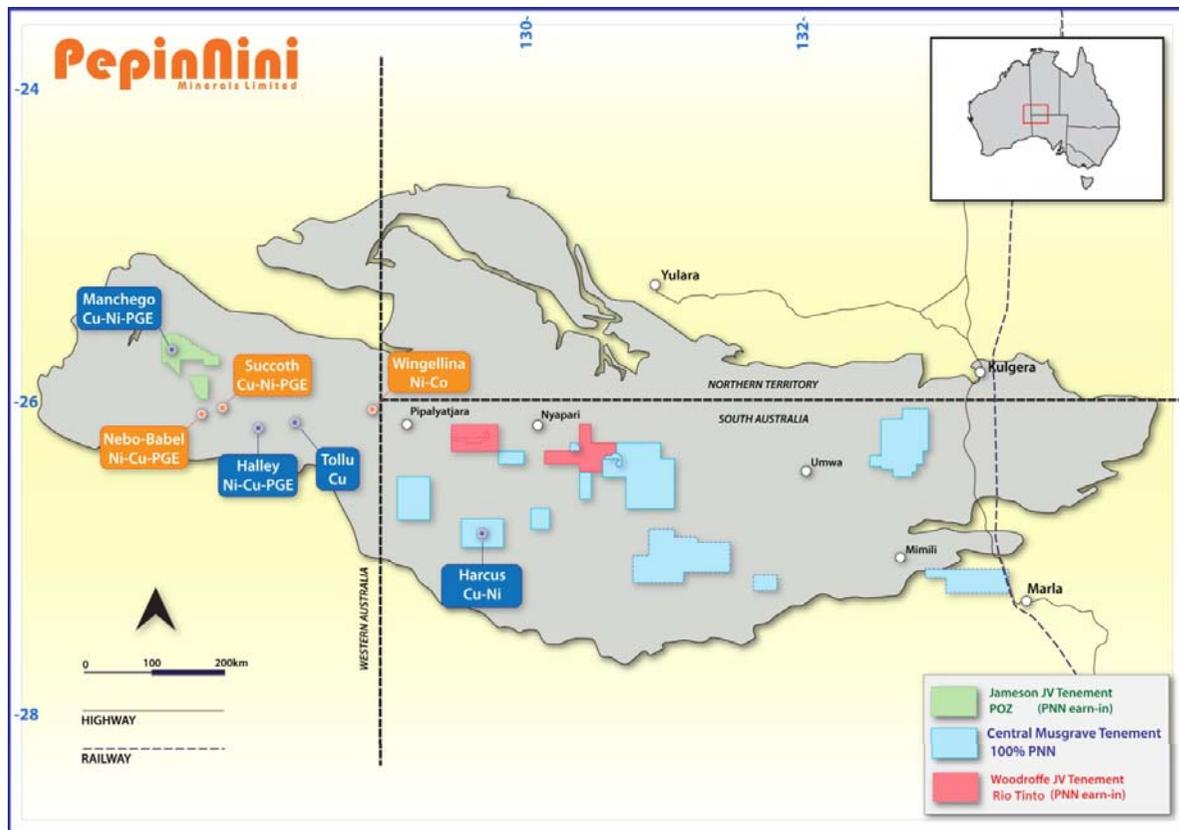
## Highlights

- Cash position
  - \$3.0m reserves
  - \$0.5m CSIRO R&D collaboration
- Recent injections from:
  - Proceeds of entitlements issue – \$0.94m (Aug 14)
  - Sale of Curnamona project - \$2.3m (Sep 14)

*PNN exploration program fully funded through to FY17*

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# Musgrave - an untapped Ni-Cu-PGE resource



## ***PNN well located in high-potential area***

- Large tenement area in Central Musgrave
  - Evidence of Ni-Cu, PGE mineralisation
  - Multiple early-stage exploration targets
- JV farm-in option in West Musgrave
  - Spinifex Range - Phosphate Australia
  - \$150k commitment for two years, then \$500k for 80% equity
- Leverage to rising Ni, PGE prices
- Infrastructure planned (Cassini)

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# CSIRO partnership - Refining Musgrave targets



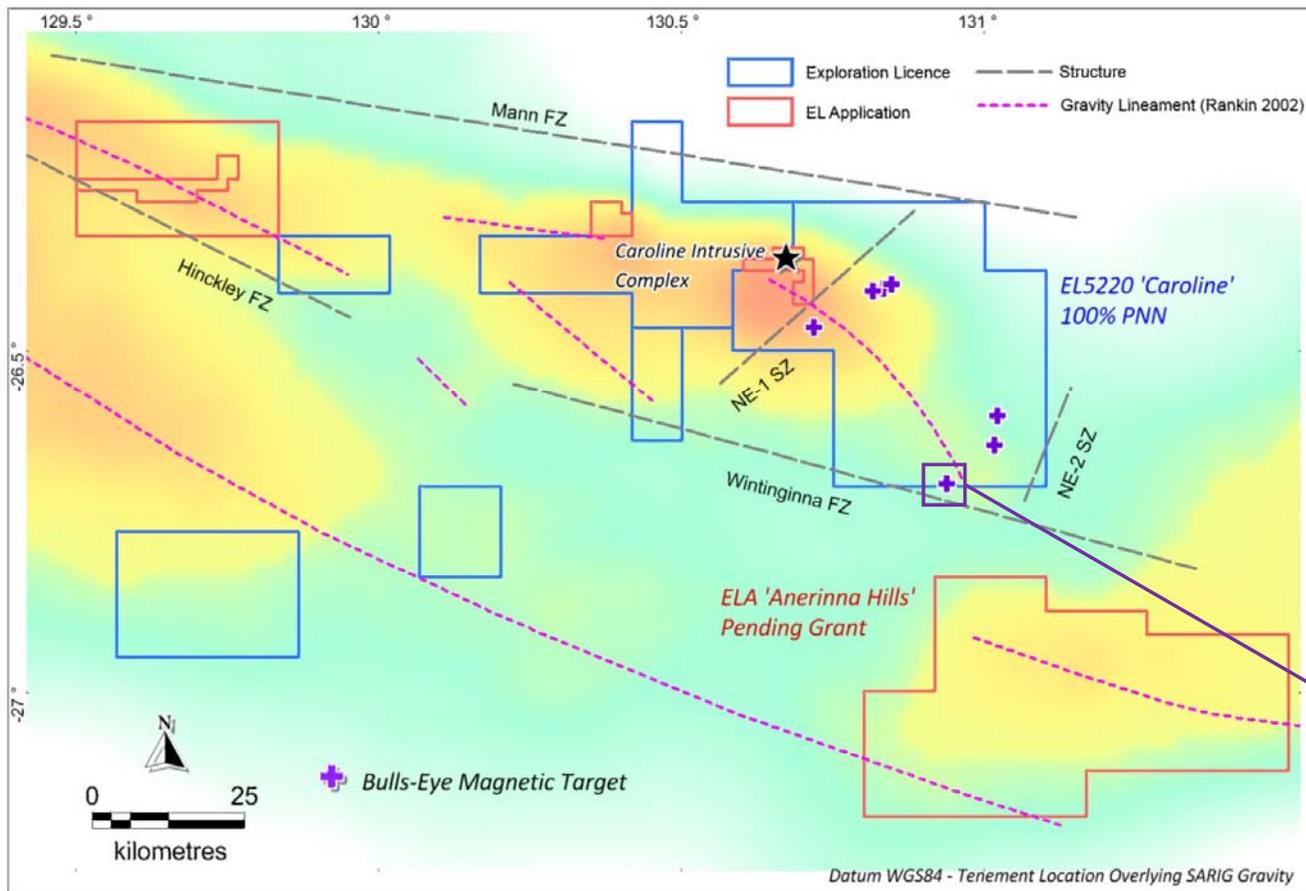
## ***SPECTREM2000 EM Survey Technique***

- CSIRO co-funded regional airborne EM
  - \$500k funding commitment
- Cost-effective and rapid delineation of target areas
- Developed by Anglo American for regional target generation
- Instrumental in 2013 discovery of Manhego Ni-Cu system in West Musgrave (ASX: POZ)

***Planned for Q1 2015***

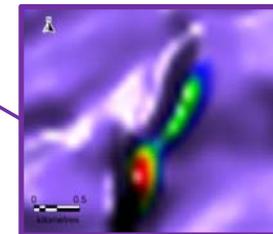
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# High-potential terrain revealed in Central Musgrave



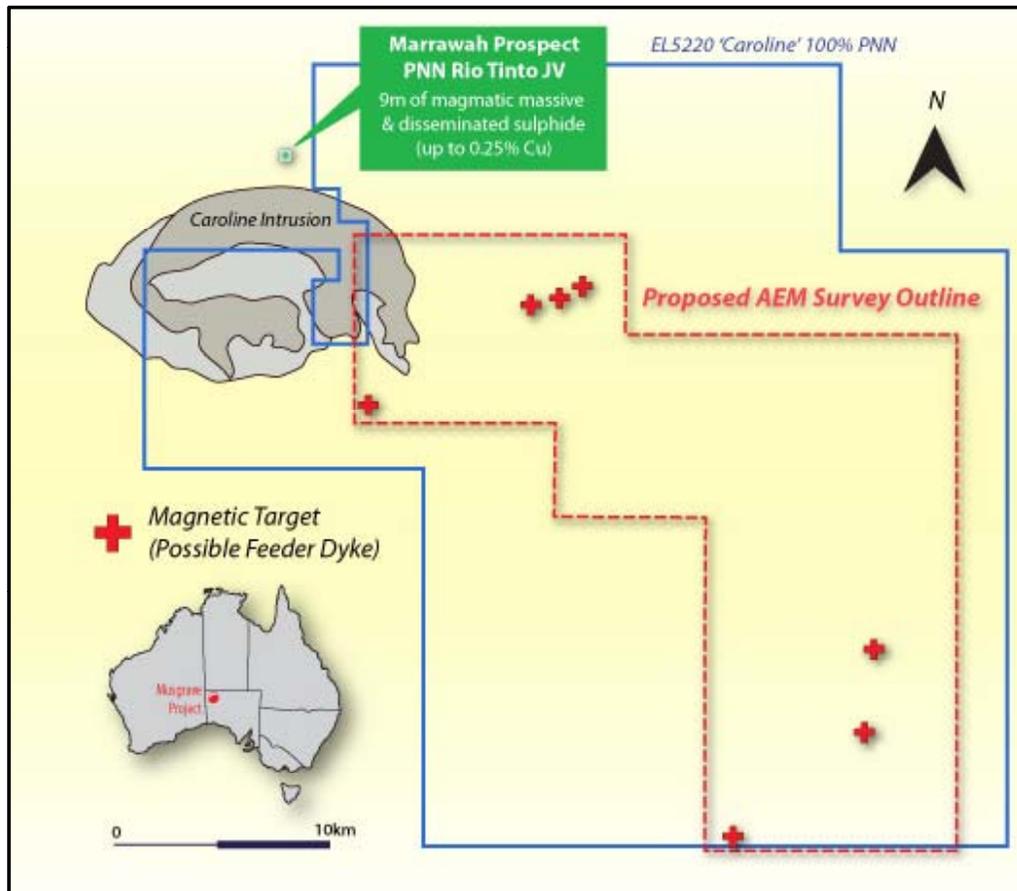
## **More than 85% of EL5220 'Caroline' and ELA 'Anerinna Hills' unexplored**

- No existing regional airborne EM
- Untested gravity lineament
- Favorable geological setting
- Multiple magnetic dipole 'bulls-eye' features (Possible Ni-Cu host rocks)



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# Marrawah sulphides – Ni-Cu potential established (2013)



**Drilling at Marrawah (Q4 2013) identified magmatic sulphide system 5km from unexplored South Caroline project area**

- PepinNini's conceptual targeting validated at Marrawah
- Significant sulphides intercepted within the 'right rocks'
- Six additional Ni-Cu targets to follow up



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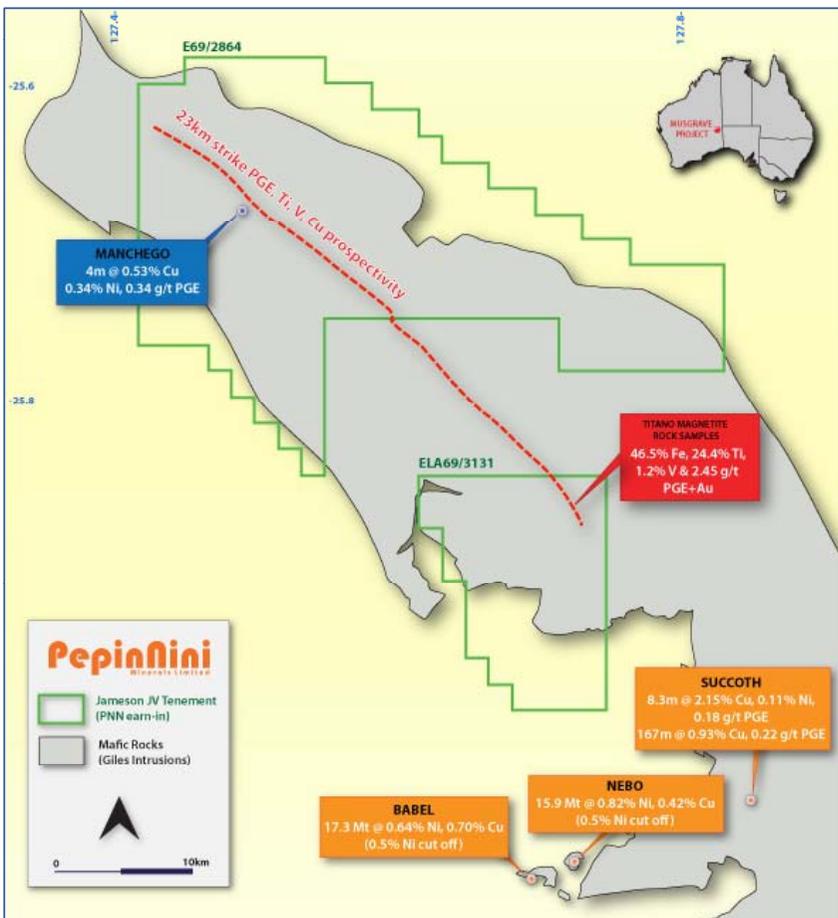
# West Musgrave - A de-risked Ni-Cu-PGE exploration opportunity

## *PNN in new JV in West Musgrave ('Spinifex Range') with Phosphate Australia (ASX: POZ)*

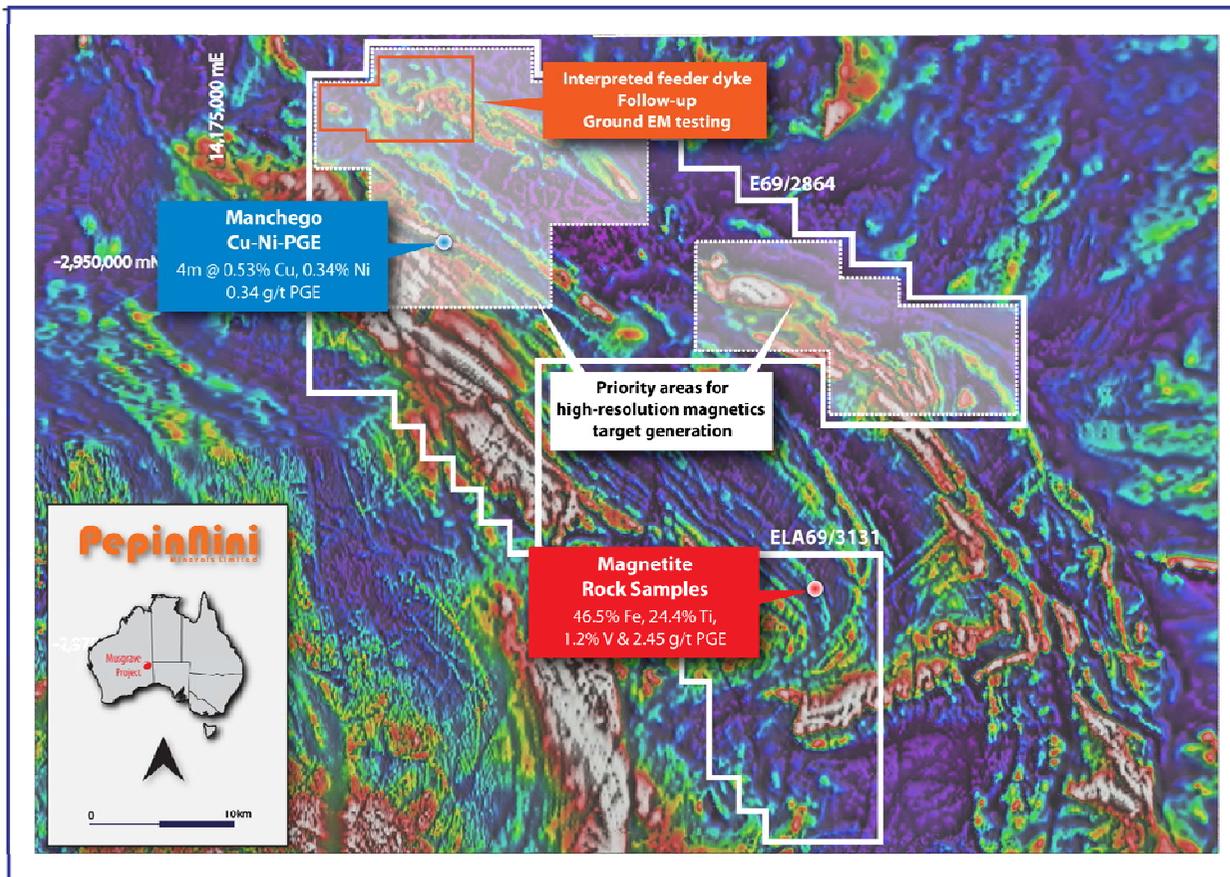
- Located 45km from Nebo-Babel deposit (Cassini)
  - 1.47Mt contained Ni, 1.56 Mt contained Cu
- Ni-Sulphide potential supported by Manchego discovery
  - 4m @ 0.53% Cu, 0.34% Ni, 346 ppb PGE
- Potential for large tonnage PGE mineralisation
  - Up to 2.45ppm PGE in magnetite outcrop

***Farm-in opportunity, with potential for PNN to assume  
80% of equity in project within two years***

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# Multiple Ni-Cu targets at Spinifex Range



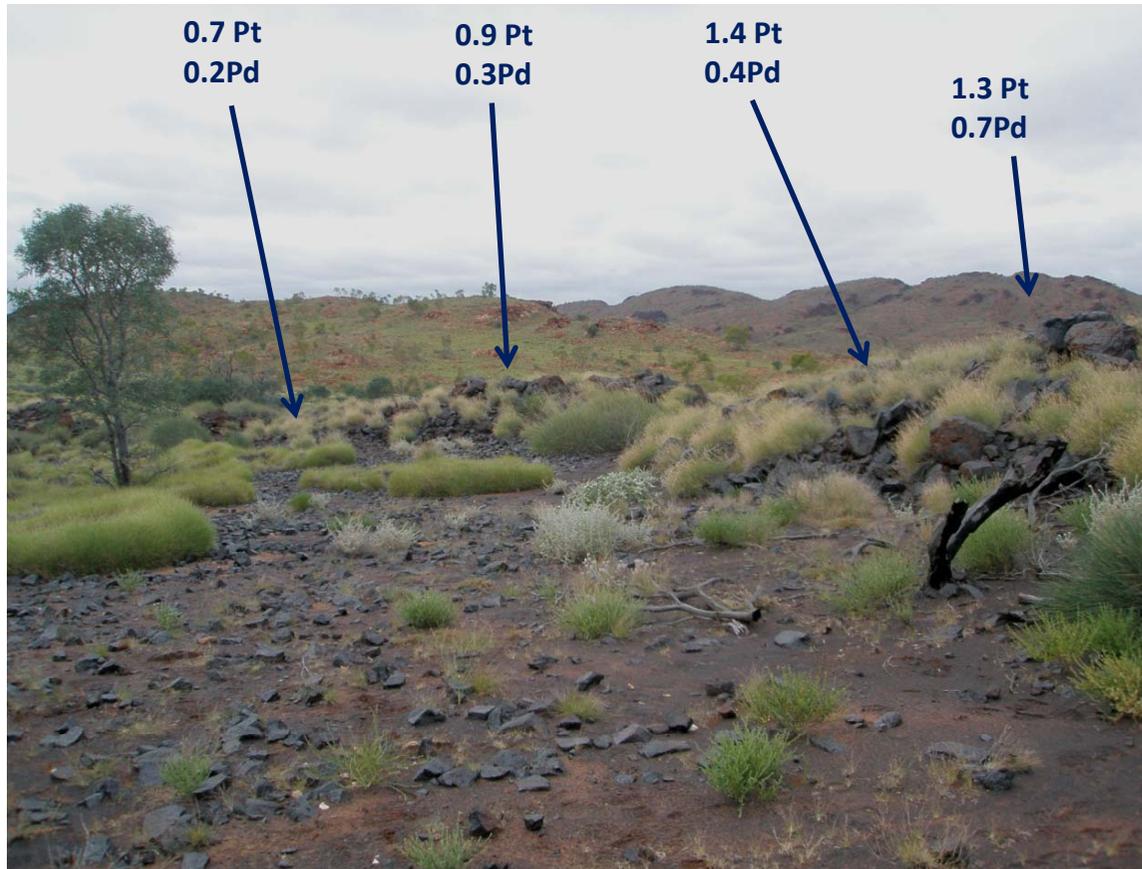
Nebo-Babel style targets identified

- Regional Ni-Cu hotspot
- Key structural lineaments
- Multiple magnetic targets
- 7km from known mineralisation
- High-impact low-cost exploration

**High-Resolution magnetics & Ground  
Electromagnetic Survey planned for  
Q2 2015**

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# Quality PGE-Cu targets at Spinifex Range

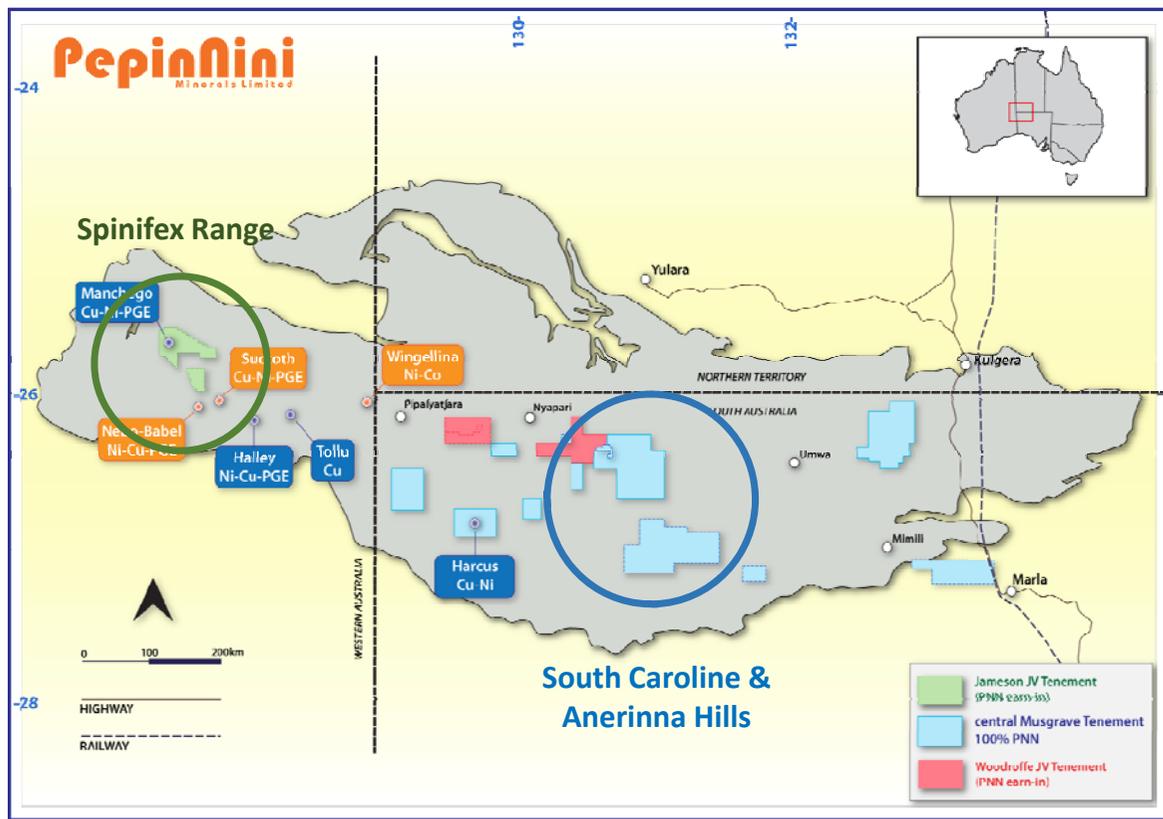


- 5 m wide (true width) magnetite seam assayed up to 2.14 ppm Pt+Pd+Au and 0.2% Cu
- 23 kilometer strike of untested PGE, Cu, Ti-V potential
- Potential for bulk tonnage
- Near surface

***Scout drilling planned to test PGE potential below shallow cover***

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# Musgrave project - 2015 program



## Central Musgrave (PNN tenements)

- Refine South Caroline and Anerinna Hills target area (7 conceptual Ni-Sulphide targets)
- Partner with CSIRO to accelerate target generation

**Regional airborne EM study - Q1 2015**

## West Musgrave (JV – Phosphate Australia)

- High-impact Ni-Sulphide and PGE exploration at Spinifex Range

**Ground EM survey, Snelling – Q2 2015**

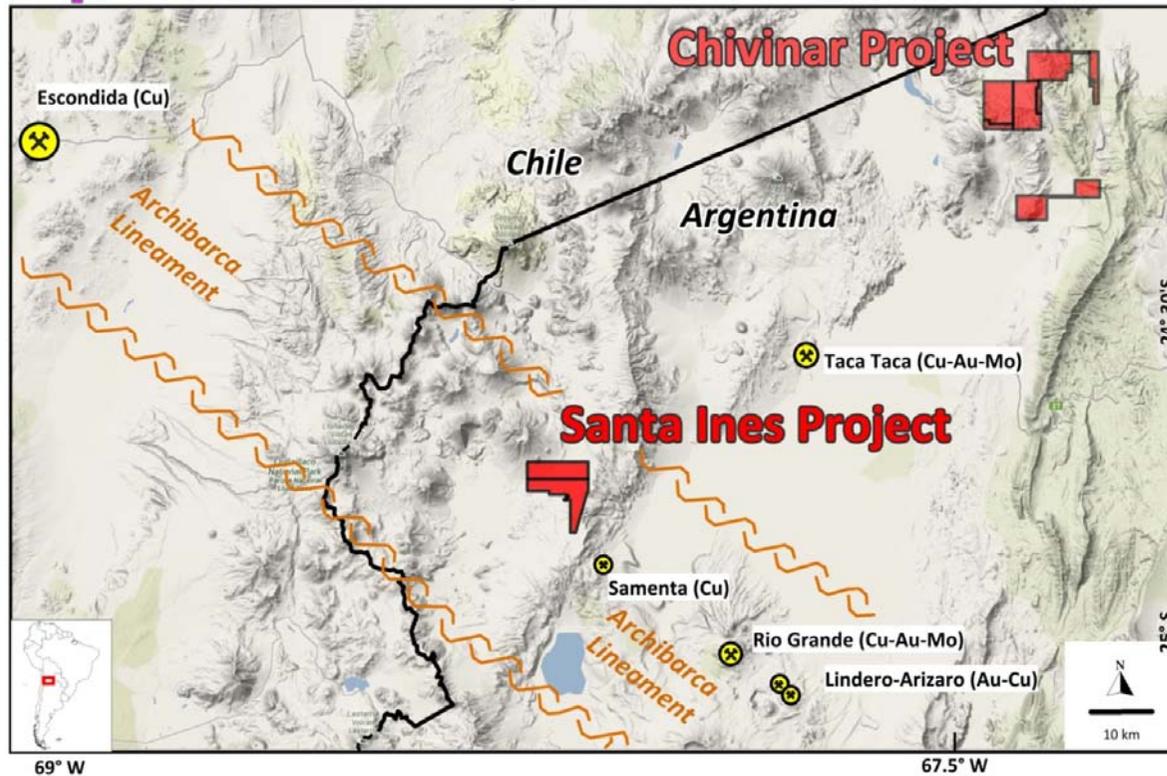
**PGE scout vacuum drilling - TBC**

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# Update on Salta Province (Argentina)

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Salta Projects : Archibarca Structural Corridor



## Overview

- Two projects, 100% owned
- Close to BHP Escondida Cu-Au porphyry deposit
- Supported by infrastructure, transport links

## Targeting

- Cu-Au-Mo porphyry deposits, epithermal Ag deposits, iron ore
- Two targets delineated:
  - El Obsequio - max values Cu 21.7%, Au 0.9g/t, Ag 26.4% at outcrop
  - La Recompensa - deeper body
- Completed IP survey
  - Weak chargeable response extends Cu-Au Anomaly at El Obsequio

**Exploration at El Obsequio to resume Q4 2014**



# PNN – offering unique upside potential

- ✓ **Strategic tenement holdings** – Large areas, promising geology, key minerals (Ni, Cu, Au)
- ✓ **First-mover advantage** – Mapping and unlocking previously untested ground
- ✓ **Technical innovation** - Airborne EM surveys for accelerated targeting
- ✓ **Proven exploration methodology** - Massive sulphides identified within targeted areas
- ✓ **Cost-effective operations** - PNN-owned and operated drilling equipment
- ✓ **Momentum building** - Ambitious target-generation and drill-test program for 2015
- ✓ **Sound financial position** – Cash to fund exploration through to FY17

***PNN - an opportunity for investors to gain early-stage exposure to a portfolio of highly promising exploration assets***

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*Thank you*



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