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PepinNini Minerals Ltd

Applying innovation to explore untapped terrain

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

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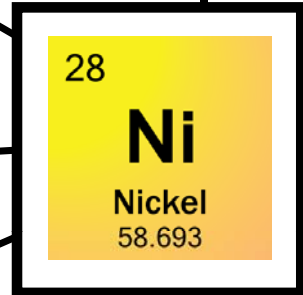
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Nickel – a sleeping giant?



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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

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	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)

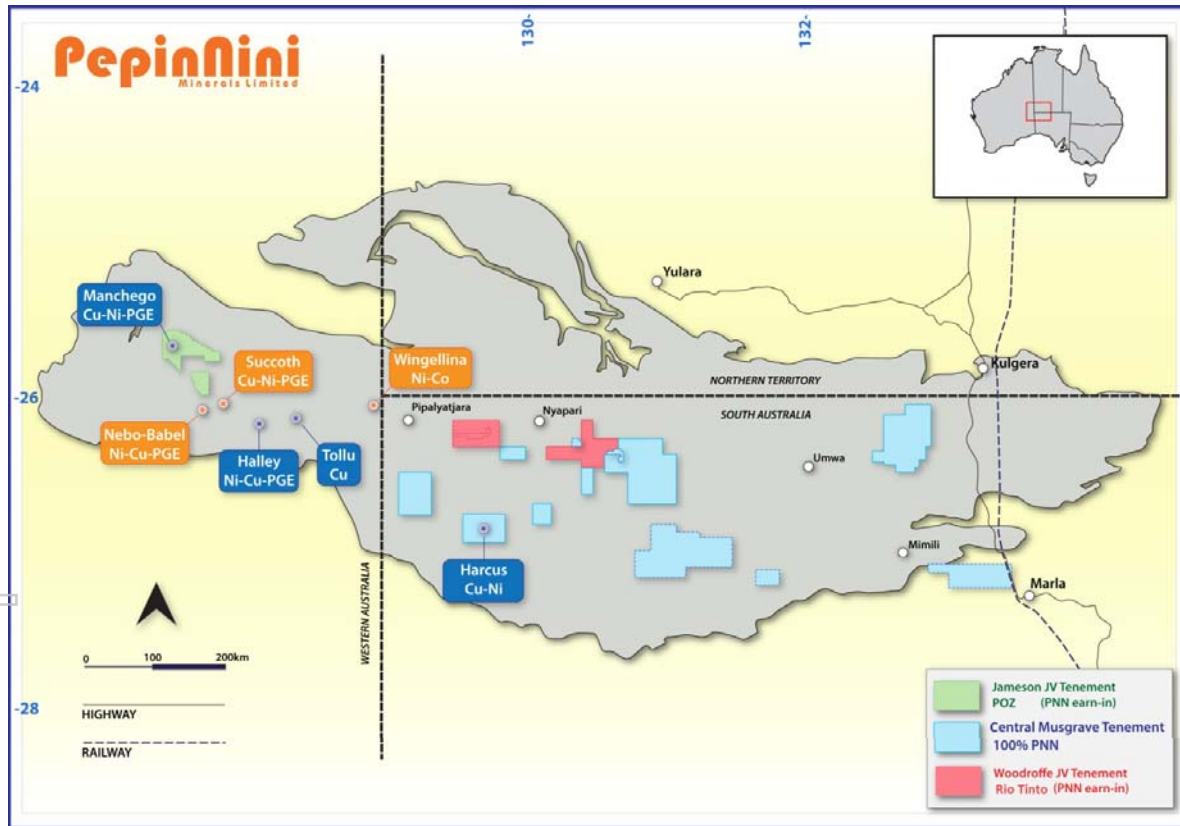
PNN exploration program fully funded through to FY17

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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

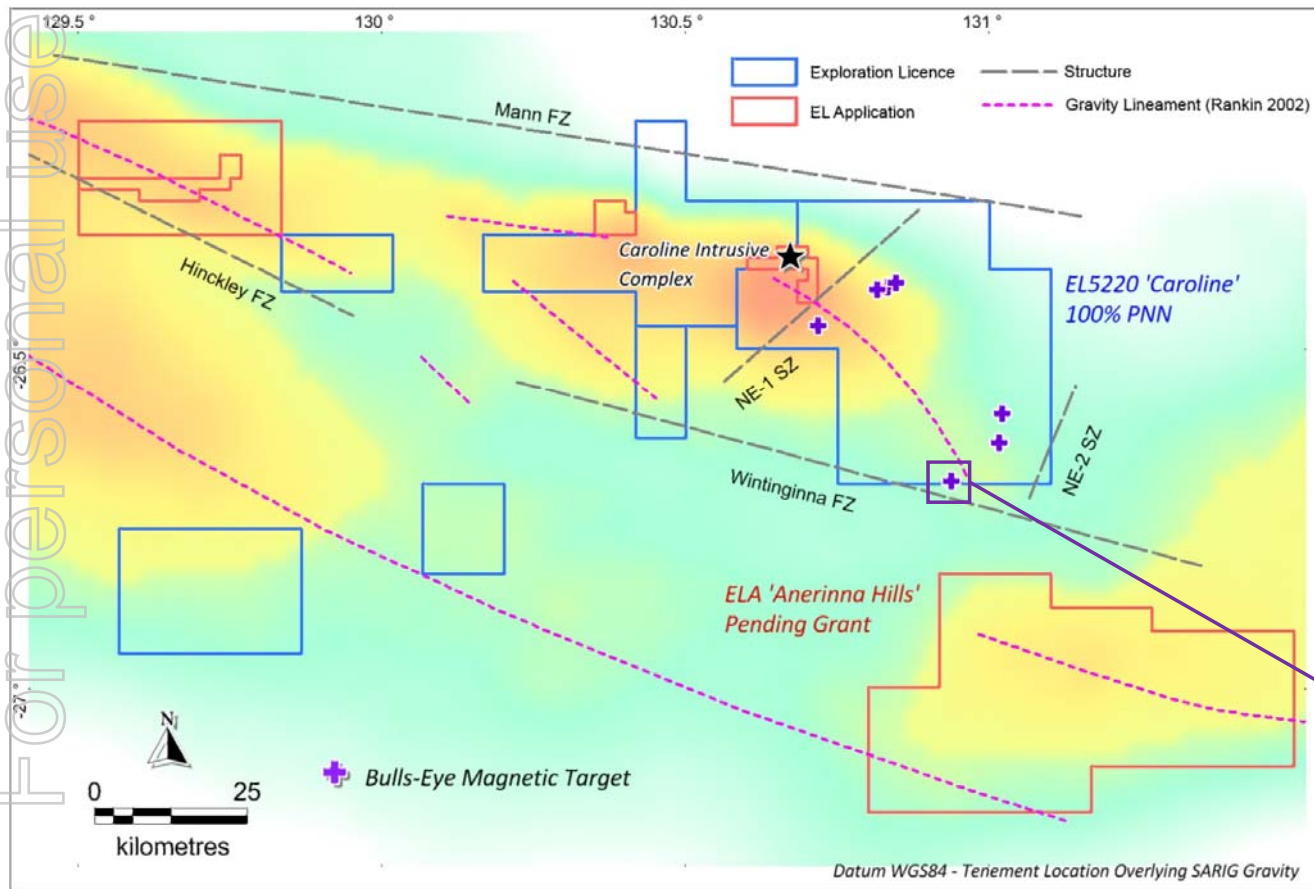
- CSIRO co-funded regional airborne EM
 - \$500k funding commitment
- Cost-effective and rapid delineation of target areas
- Developed by Anglo American for regional target generation
- Instrumental in 2013 discovery of Manchego Ni-Cu system in West Musgrave (ASX: POZ)

Planned for Q1 2015

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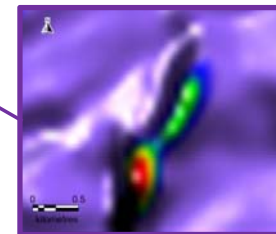
High-potential terrain revealed in Central Musgrave

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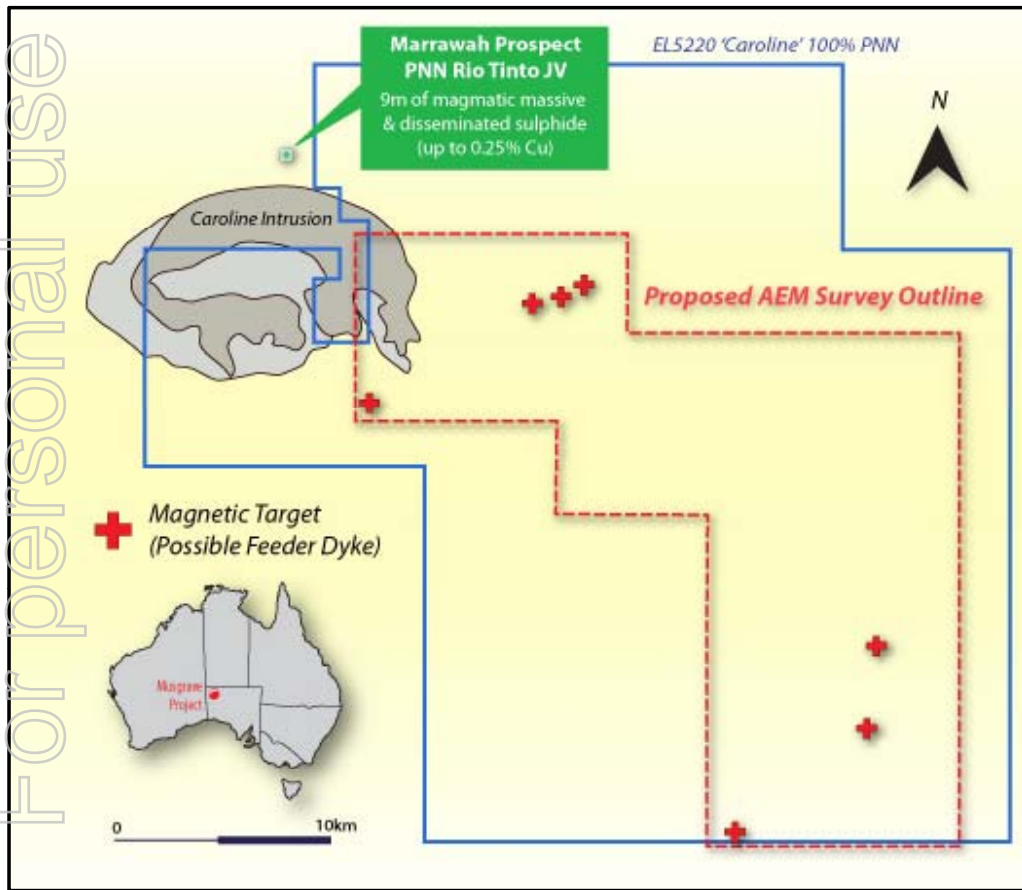
More than 85% of EL5220 'Caroline' and ELA 'Anerinna Hills' unexplored

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



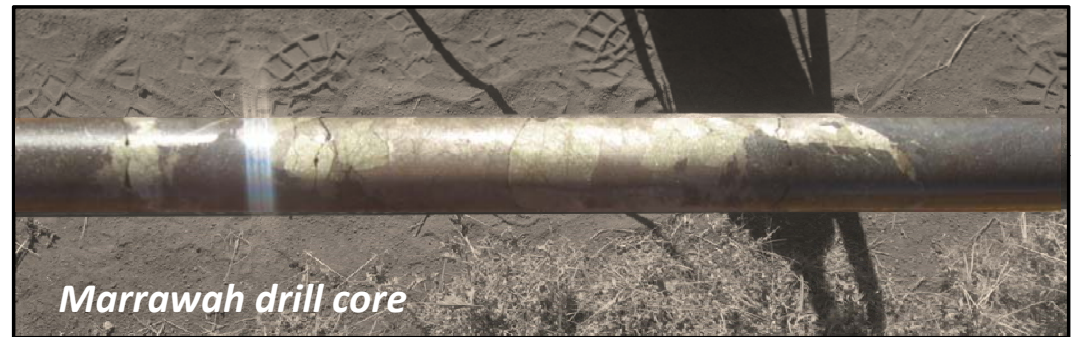
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Marrawah sulphides – Ni-Cu potential established (2013)



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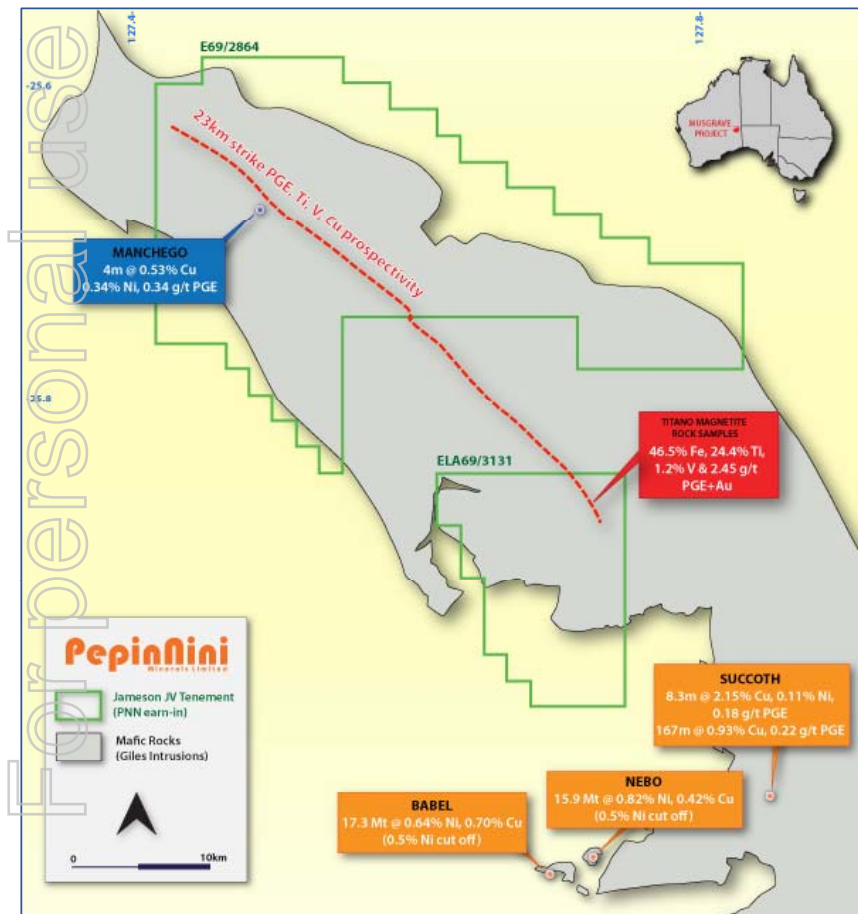
West Musgrave - A de-risked Ni-Cu-PGE exploration opportunity

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

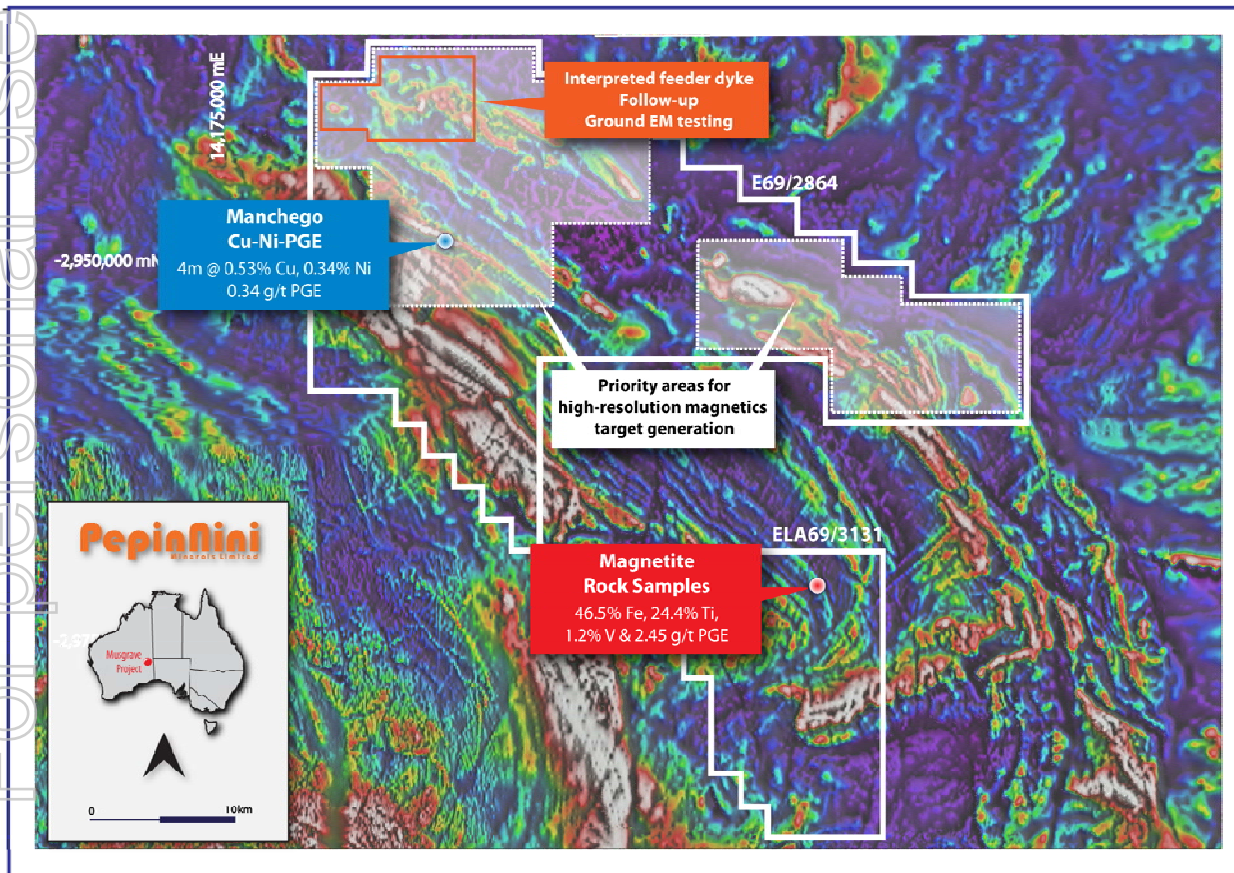
- Located 45km from Nebo-Babel deposit (Cassini)
 - 1.47Mt contained Ni, 1.56 Mt contained Cu
- Ni-Sulphide potential supported by Manchecho discovery
 - 4m @ 0.53% Cu, 0.34% Ni, 346 ppb PGE
- Potential for large tonnage PGE mineralisation
 - Up to 2.45ppm PGE in magnetite outcrop

***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



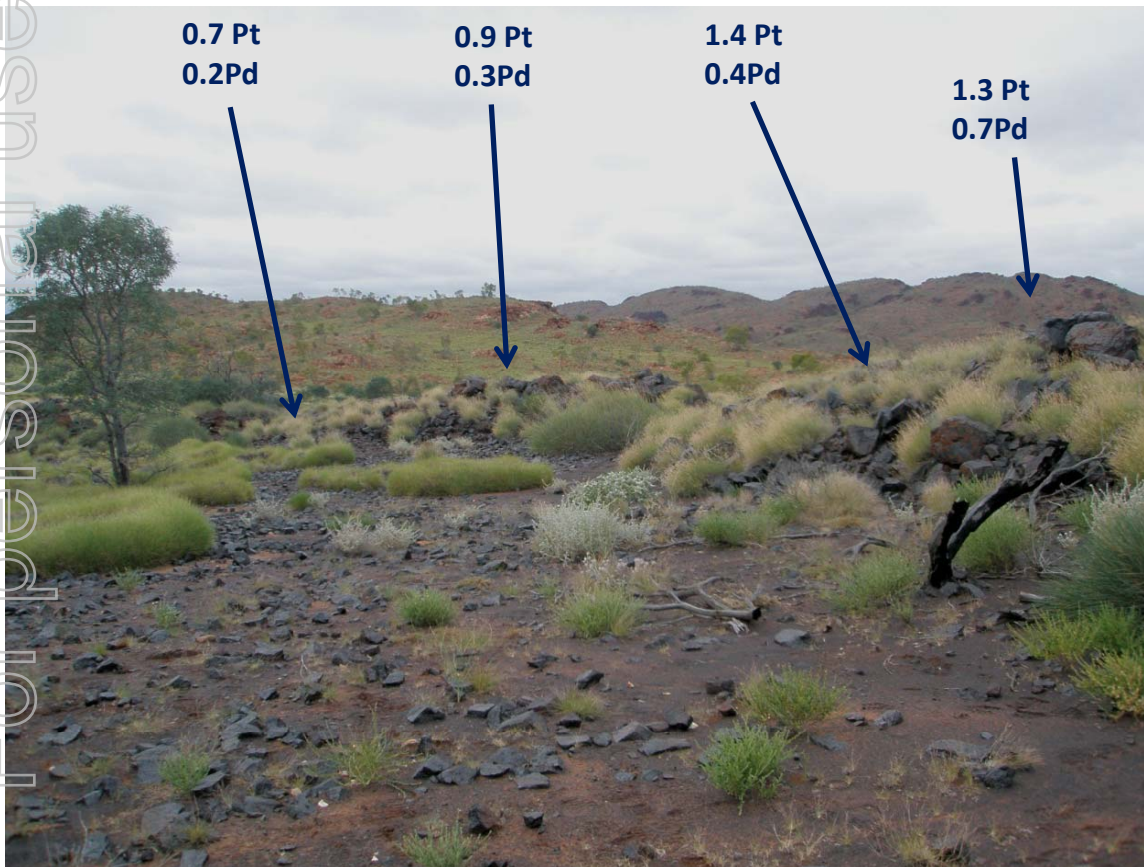
Nebo-Babel style targets identified

- 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

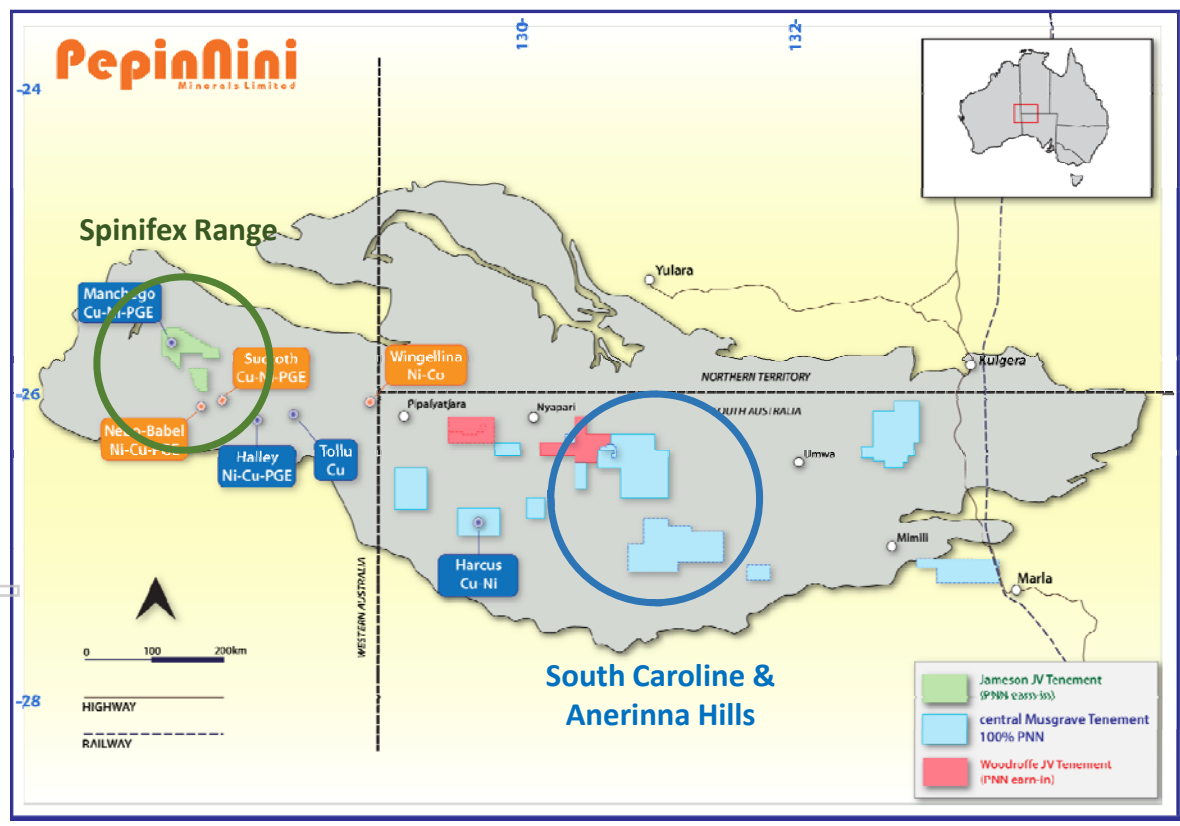
Scout drilling planned to test PGE potential below shallow cover

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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

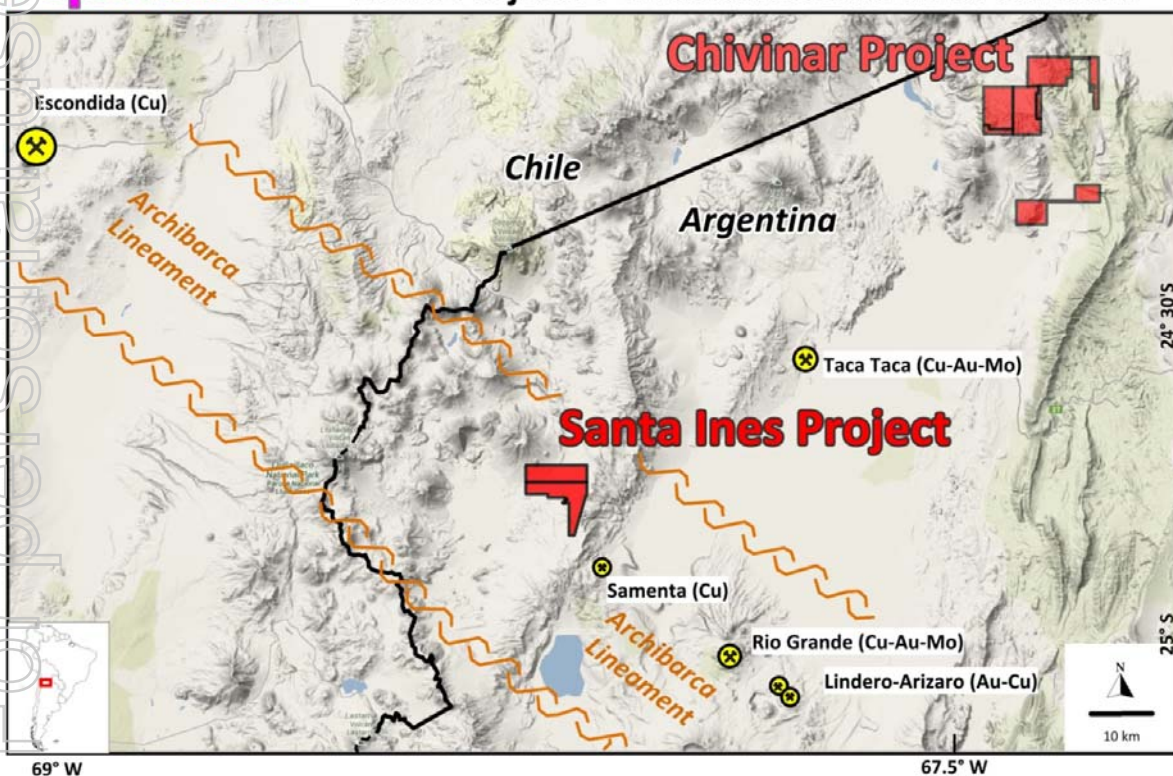
PGE scout vacuum drilling - TBC



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

