

PepinNini Minerals

Investor Presentation

A diversified explorer pursuing world-class discoveries

ASX:PNN

Managing Director
Rebecca Holland-Kennedy

**NOOSA MINING
& EXPLORATION
INVESTOR CONFERENCE**

PEPPERS NOOSA RESORT
11-13 NOVEMBER 2020

PepinNini
ABN 55 101 714 989



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Corporate Snapshot

Share Price (10/11/20)
\$0.17

Shares on issue
32.75m

Market cap (10/11/20)
\$5.6m

Options on issue
 (unquoted & exercisable at
 various prices)
12,711,251

52 week low/high
0.001/0.30

Top 20 holders
41.13%

Board Management

Chair & Managing Director
Rebecca Holland-Kennedy

Argentina

Non Executive Director
Andre Wessels

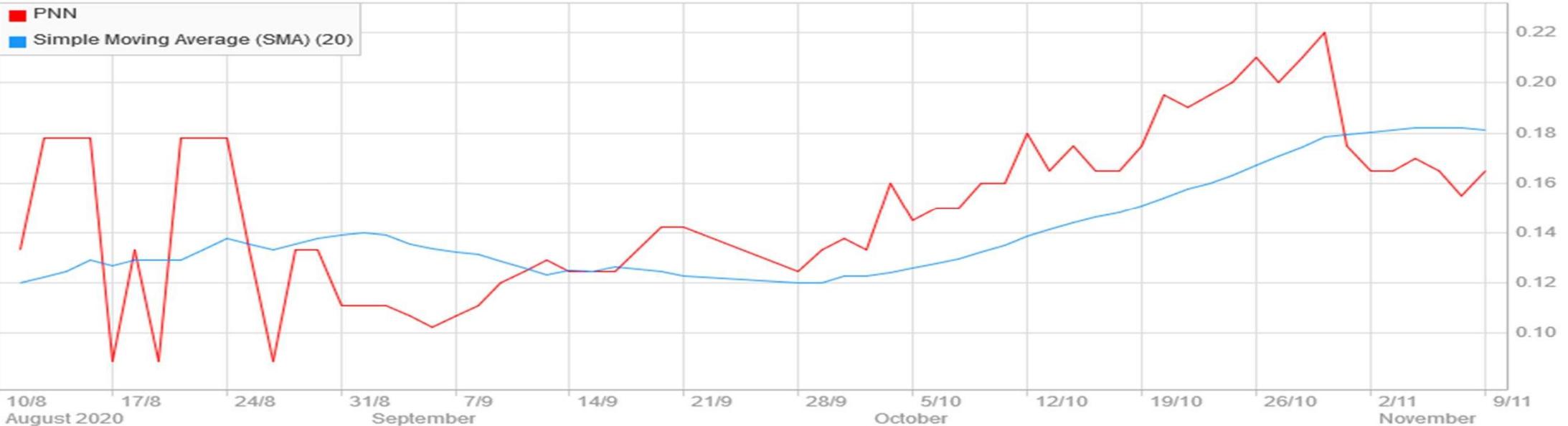
Director
Ignacio Celorrio

Non Executive Director
Luis Kennedy

Exploration Manager
Marcela Casini

Company Secretary
Dom Francese

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Projects

AUSTRALIA



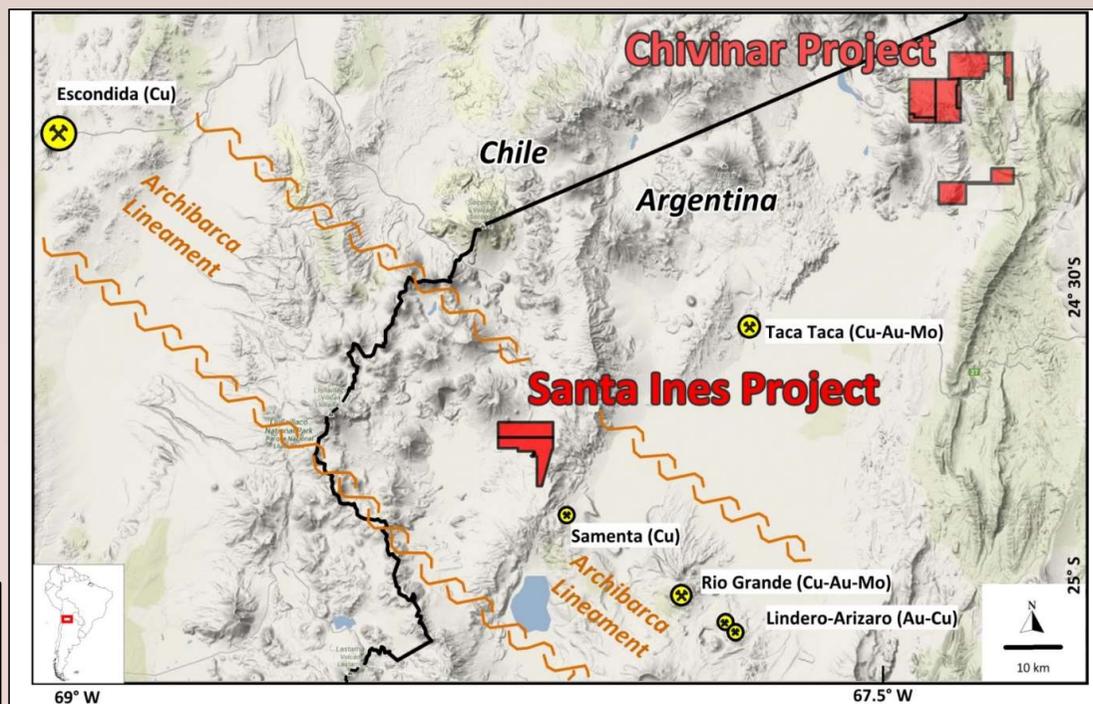
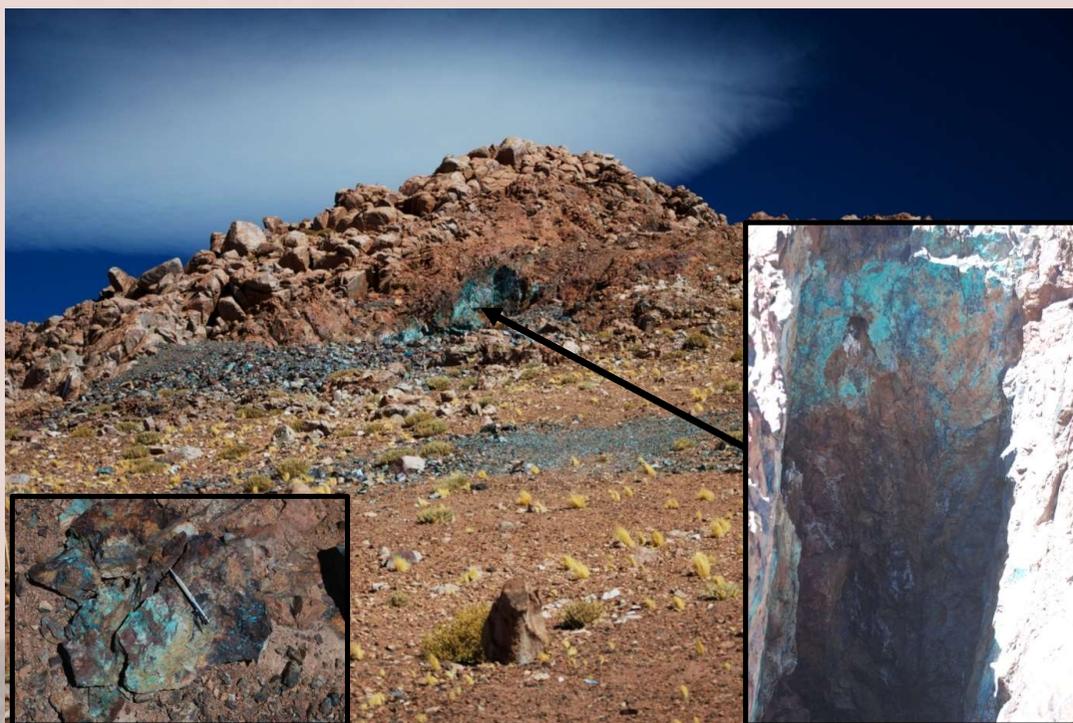
ARGENTINA



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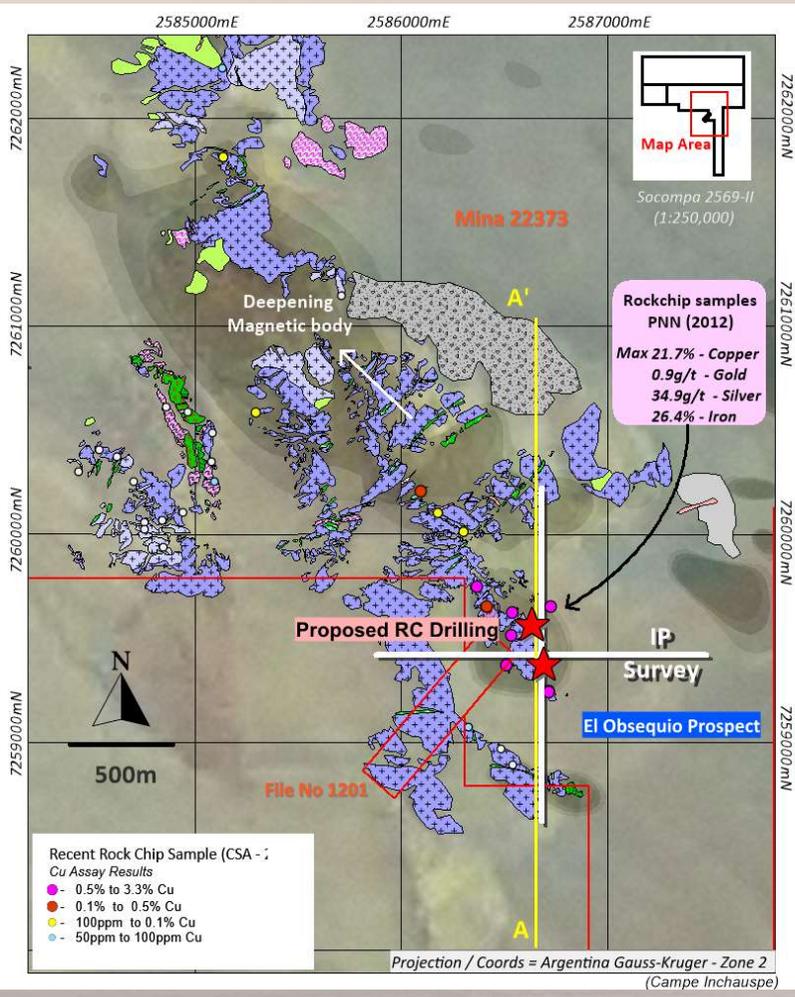
Santa Ines Copper Gold Project – Strategic Location

- Located 80km from Copper Mine Escondida (BHP) on same geological structure
- High grade surface samples from historic workings – 21.7% Copper, 0.91g/t Gold, 34.9g/t Silver,
- Subsequent surface sampling 3.25% Copper, 0.8g/t gold, 12.5g/t Silver & 91.1ppm Molybdenum



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Santa Ines Copper Gold Project – Work done and planned



Santa Ines Project - El Obsequio Prospect Planned Drilling Activities

Stratigraphic Legend

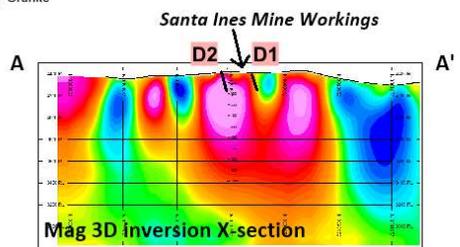
- Post - Santa Ines Volcanic Complex deposits
- Mine dump material
 - Unconsolidated, mainly volcanogenic deposits (block and ash deposits, bedded sediments)
 - Monzonite/trachyte dykes - porphyritic
 - Basalt - lava to hypabyssal intrusions

Santa Ines Volcanic Complex (Eocene?)

- Rhyolite - dykes and lavas (some may be younger than Santa Ines Volcanic Complex)
- Dacite - dykes and high level plugs
- Andesite - intrusions, mainly dykes
- Andesite lava, massive porphyritic or flow-banded
- Andesite volcanic breccias (polymict)
- Mafic Breccia - grade from shear zones to fluidized breccias (age? post-granite, pre-andesite)

Llullaillaco Plutonic Complex (Permo-Triassic)

- Leucogranite
- Granite



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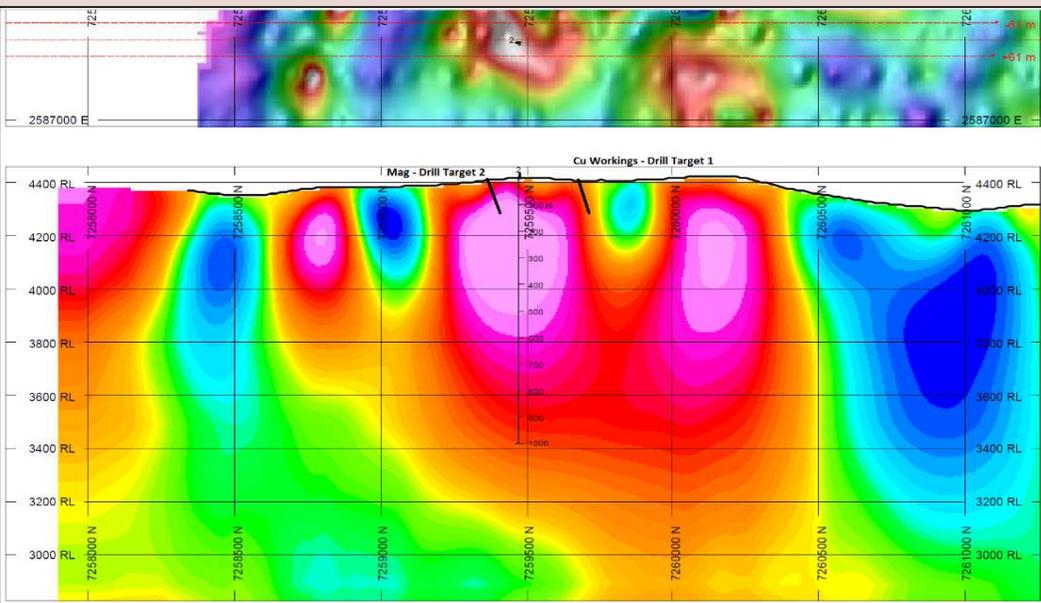
- Ground IP geophysical survey indicated potential targets for drilling
- Drilling permit expected before the end of the year
- Drilling planned initially two boreholes – January 2021



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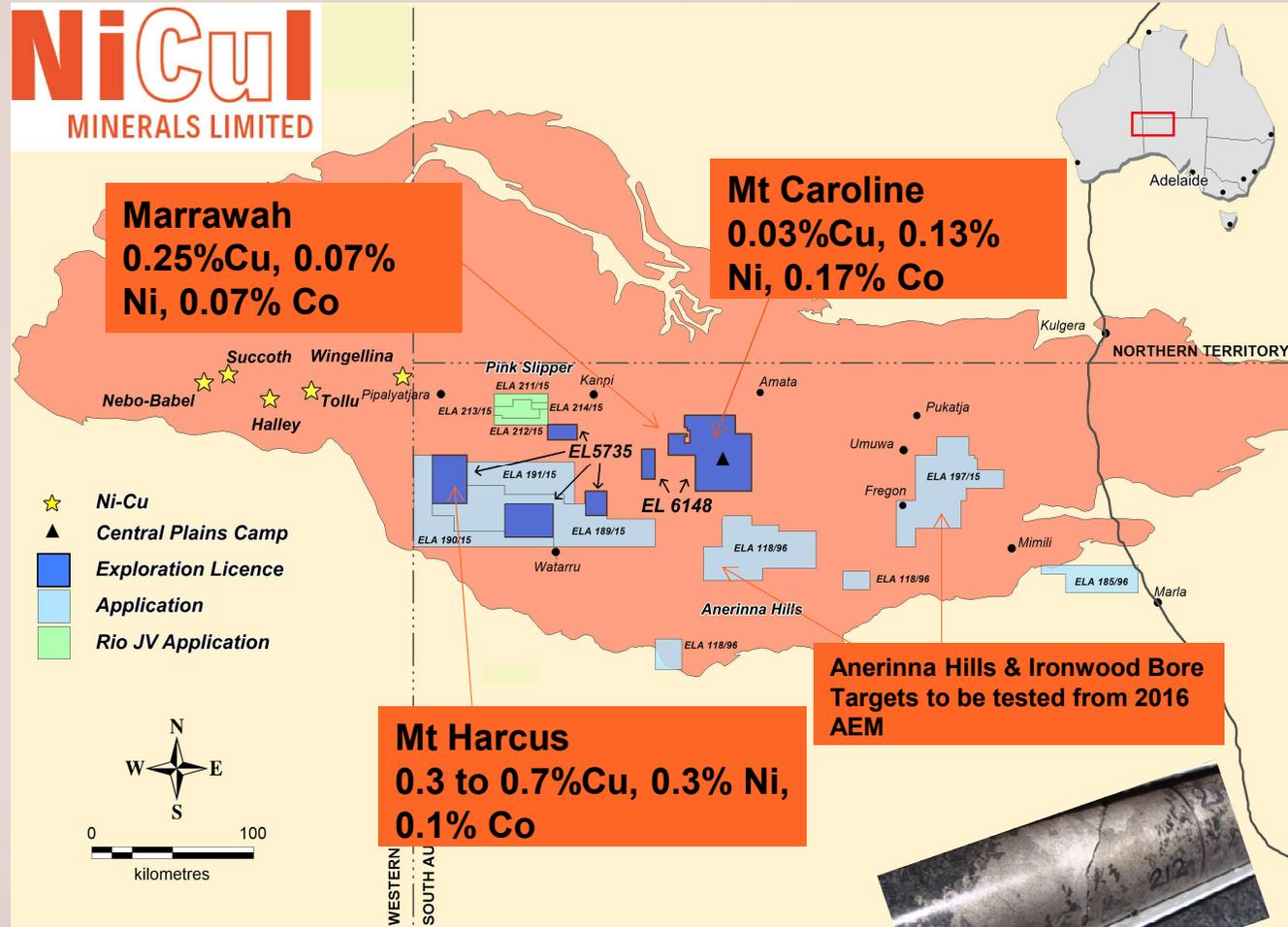
Santa Ines Copper Gold Project – Drilling Targets

- Drilling target 1 to test historic workings
- Drilling target 2 to test deeper geophysical target El Obsequio



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Musgrave Project - Overview



- Project is 100% owned by PepinNini subsidiary NiCul Minerals Ltd
- 10 tenements 100% NiCul covering 14,003 km²
 - 2 granted exploration licences(EL)
 - 8 applications (ELA)
- 4 Farm-in JV (to 51%) ELAs with Rio Tinto, covering 615km²
- PepinNini owned & operated drilling equipment and camp
- Company has extensive track record at the Project
 - 24,474m - 83 cored holes drilled, 12,252 samples analysed
 - 41,258m - 4,195 Geochem non-core holes drilled



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Musgrave Project Highlights



- The most under-explored region of Australia*
- Targeting magmatic Ni-Cu-Co sulphide discoveries*
- Priority targets generated from 2016 CSIRO-SA Gov-PNN – airborne electromagnetic survey(AEM)*
- Core Target: the Pink Slipper Target – a Farm-in JV with Rio*

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AEM - Unlocking new discovery targets at Musgrave



Helicopter mounted SkyTem³¹² Fast AEM



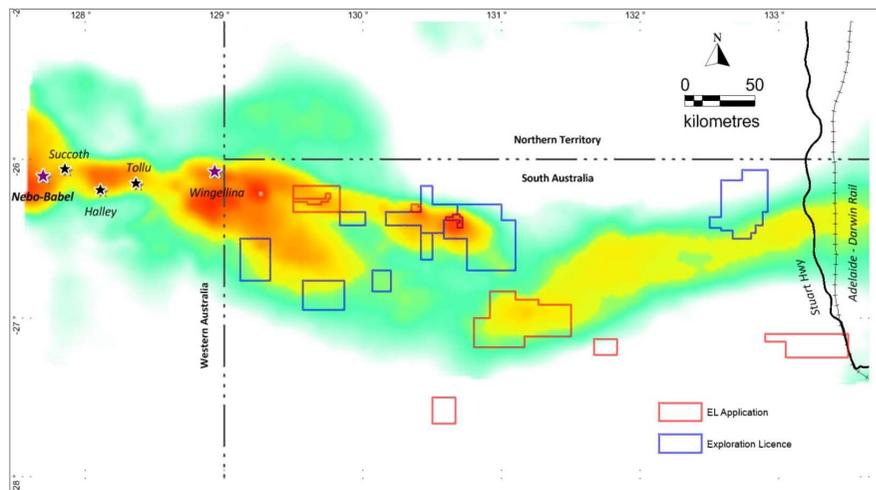
Fixed Wing Tempest® AEM

- ❑ Collaboration of PNN, CSIRO, SA Govt and Geoscience Australia for airborne electromagnetic(AEM) survey over 31,000km² of Musgrave Province
- ❑ Targeting areas previously never surveyed including 50% of PNN tenure

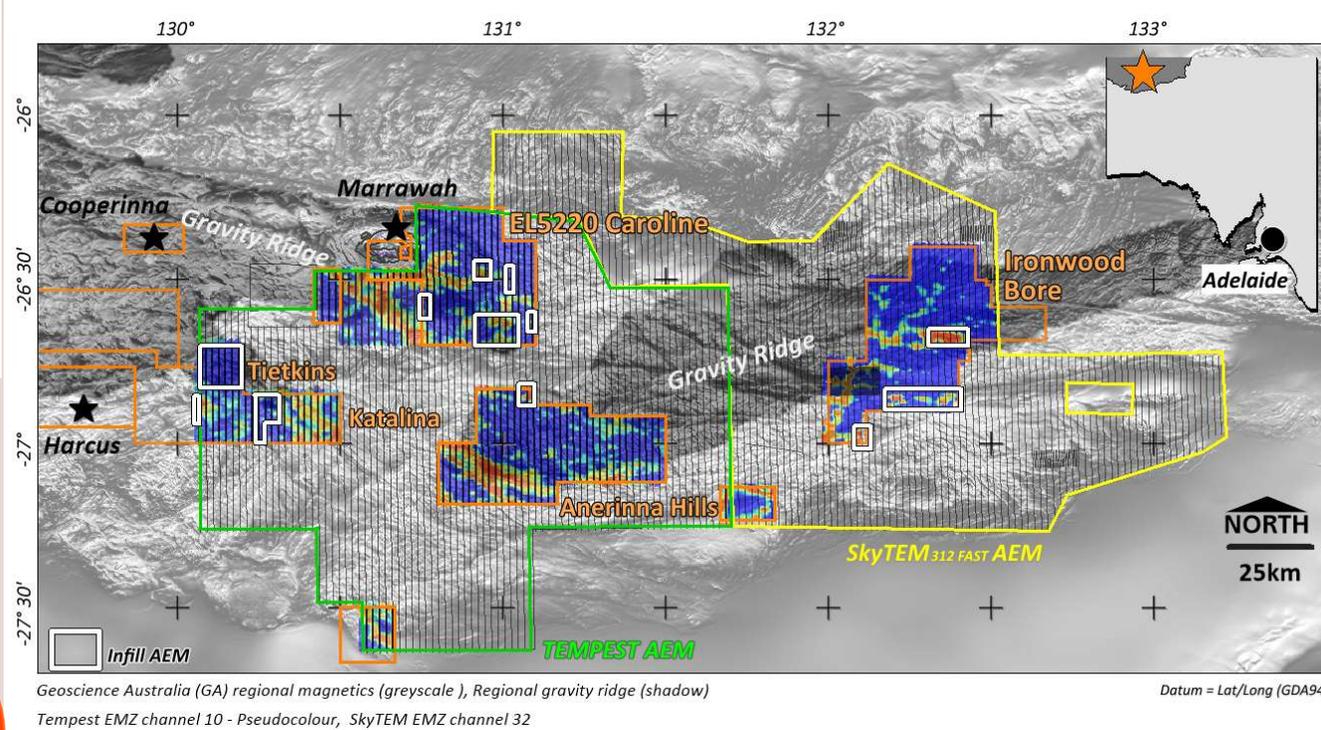
Delivered accelerated target definition for PepinNini

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Technical innovation delivers enhanced targets



Targets generated by collaboration AEM to be drill tested ↓

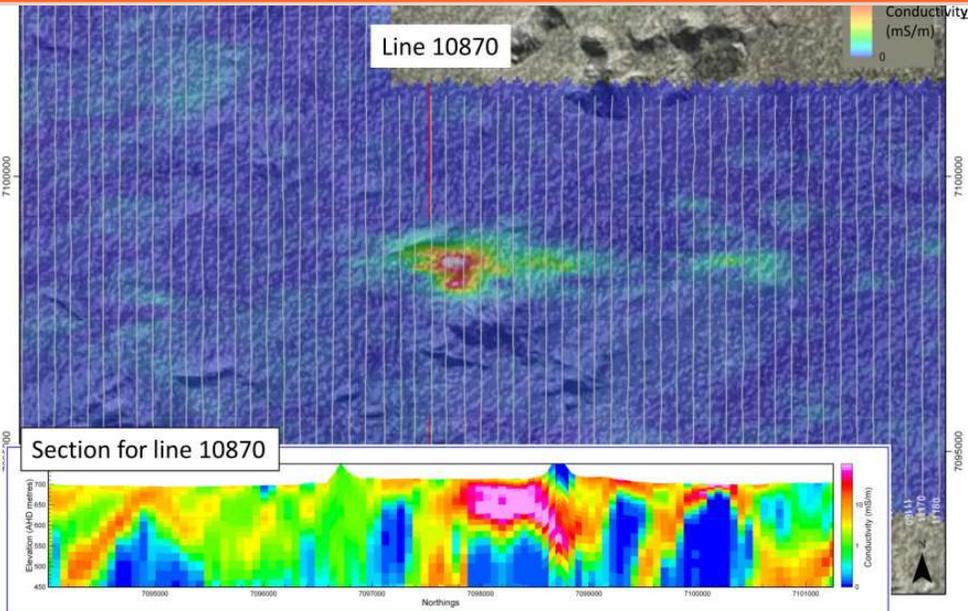


↑ Musgrave Province Regional Gravity Image pre-2016 collaboration AEM

Collaboration AEM is a game changer – delivers enhanced geophysical targets

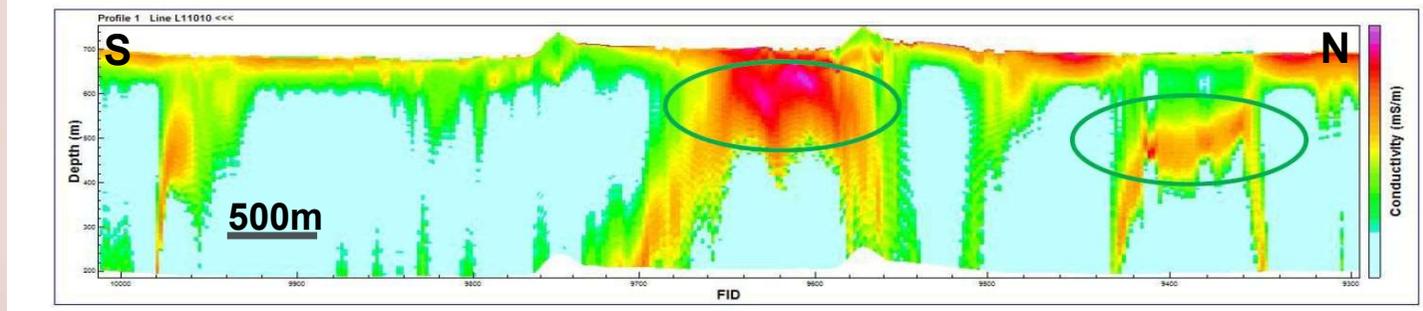
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The Pink Slipper – a once in a century target



Pink slipper target is a bedrock anomaly coincident with the base of a large ultramafic intrusion - a good candidate for sulphide accumulation - the equivalent model to Voisey's Bay, Canada 124mt @ 1.66% Ni discovered in 1993 and 10 x Nova Bollinger

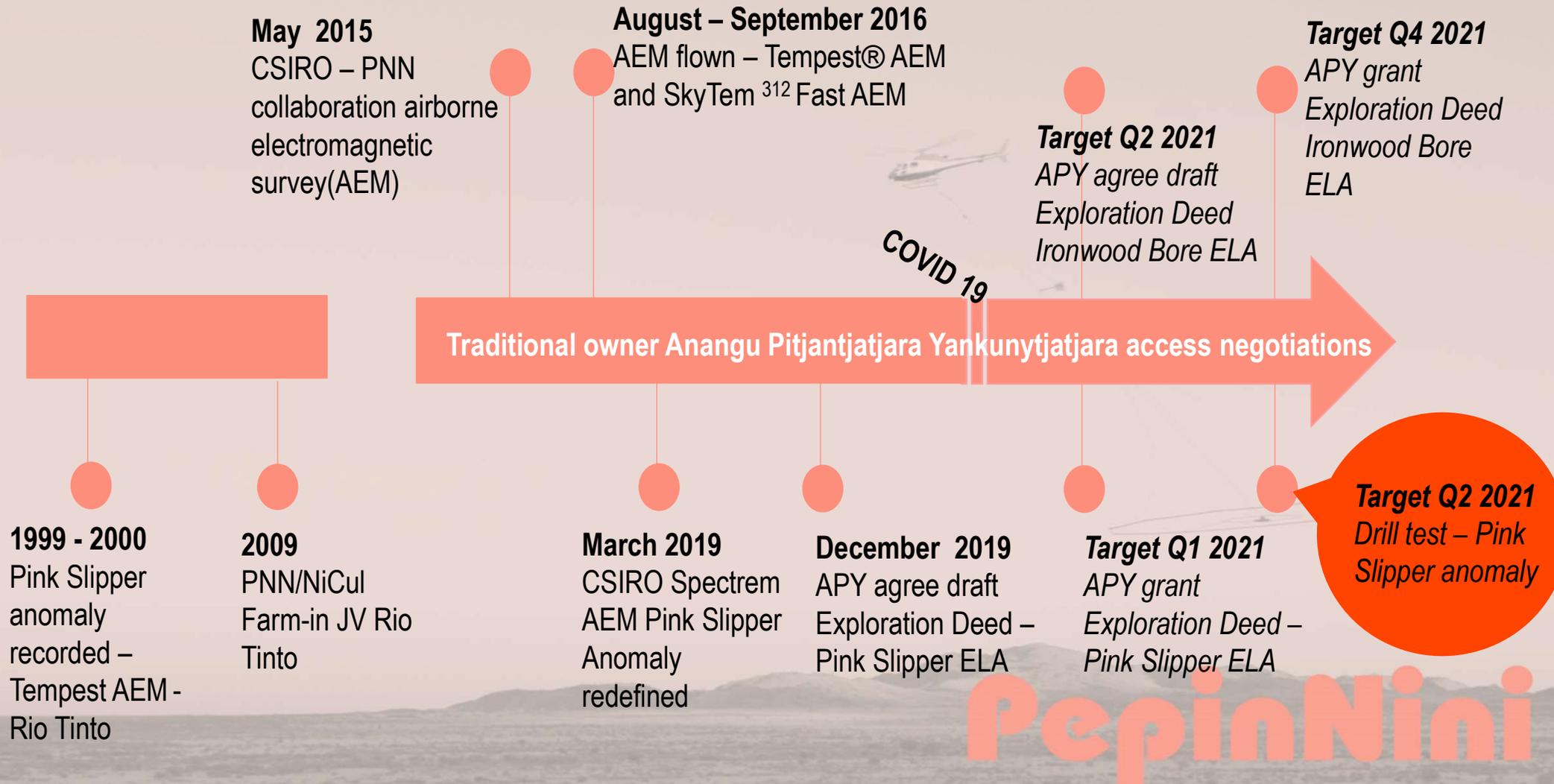
1999 – 2000 ↑
Tempest® AEM – Pink Slipper geophysical anomaly defined



March 2019 - Spectrem AEM – CSIRO
Pink Slipper geophysical anomaly confirmed and refined

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Project highlights timeline update – Momentum building



Highly efficient exploration model



- ❑ Company owned infrastructure – drilling rigs, equipment and field camp
- ❑ Immediate rig availability
- ❑ No time lags and delays for camp set up/ rig deployment
- ❑ Low cost exploration – with major upside potential

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Land access Anangu Pitjantjatjara Yankunytjatjara Lands



Strong Relationship - Positive Social Impact

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Investment Highlights – Musgrave: a high potential Project

- ✓ **Large tenement holdings** – significant terrain, promising geology
- ✓ **Successful exploration methodology** - massive sulphides identified within prospective rocks
- ✓ **Value-accretive exploration** – with Traditional Owners to grant access with drilling of Pink Slipper target planned for 2021
- ✓ **First-mover advantage** - unlocking access to previously untested ground
- ✓ **Technical innovation** – CSIRO collaboration AEM unlocks high priority targets
- ✓ **Cost-effective exploration** – company-owned and operated drilling equipment



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Salta Lithium Brine Project - Argentina

ARGENTINA

JORC 2012 compliant Lithium carbonate (LCE) Resources announced on two projects totalling 239,000 tonnes – 63% Measured & Indicated
Grade up to 313mg/l Lithium –

Brine blend simulation indicates enriched brine evaporate of 3.05% Lithium



Lithium Carbonate Resource

Lithium Carbonate Resource
Brine chemistry - high gypsum(CaSO_4)

Surface trench brine sampling program, brine chemistry - high calcium content

Lithium Carbonate Resource

Plan for 2021 – brine blending evaporation testing to confirm potential for a high grade lithium product

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TARGETING,
EXPLORATION,
DISCOVERY.

