

# PepinNini Minerals

## Investor Presentation

ASX:PNN

### A diversified explorer pursuing world-class discoveries

Managing Director  
Rebecca Holland-Kennedy

NOOSA MINING  
& EXPLORATION  
INVESTOR CONFERENCE

PEPPERS NOOSA RESORT  
11-13 NOVEMBER 2020

**PepinNini**  
ABN 55 101 714 989



# DISCLAIMER & COMPETENT PERSONS STATEMENT



- *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 on the Musgrave Project has been prepared with information compiled by Phil Clifford, MAusIMM. Phil Clifford 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 2012 edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”. Phil Clifford consents to the inclusion in the presentation of the matters based on his information in the form and context in which it appears.*
- *Marcela Casini MAusIMM is the Exploration Manager-Argentina 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 2012 edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”. Marcela Casini consents to the inclusion in the report of the matters based on her information in the form and context in which it appears.*

# PepinNini

# Corporate Snapshot

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

Shares on issue  
**2.75m**

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

Options on issue  
(unquoted & exercisable at  
various prices)  
**12,751,251**

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**

Chart generated on 9/11/2020 at 9:52 pm



# Projects

## AUSTRALIA



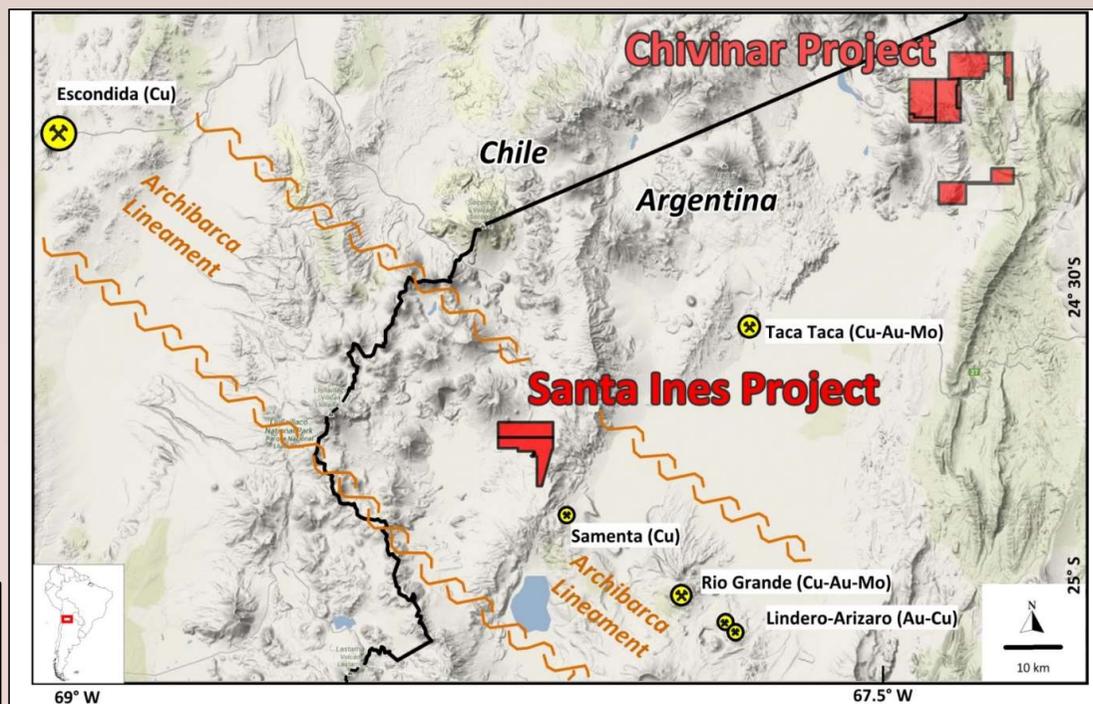
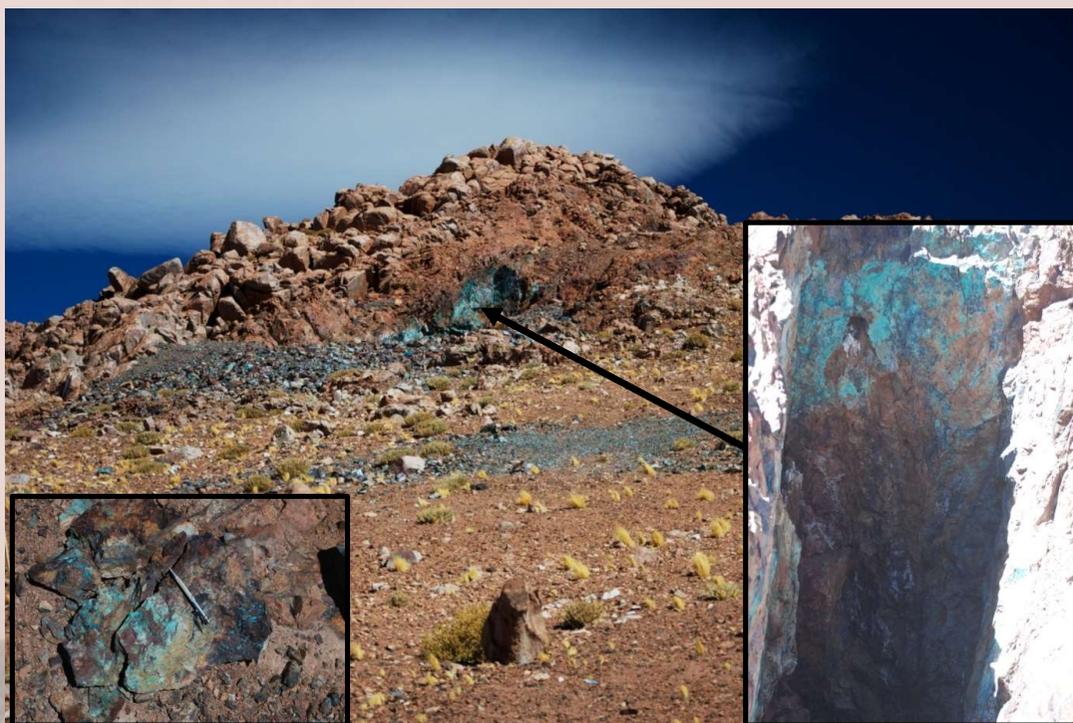
## ARGENTINA



PepinNini

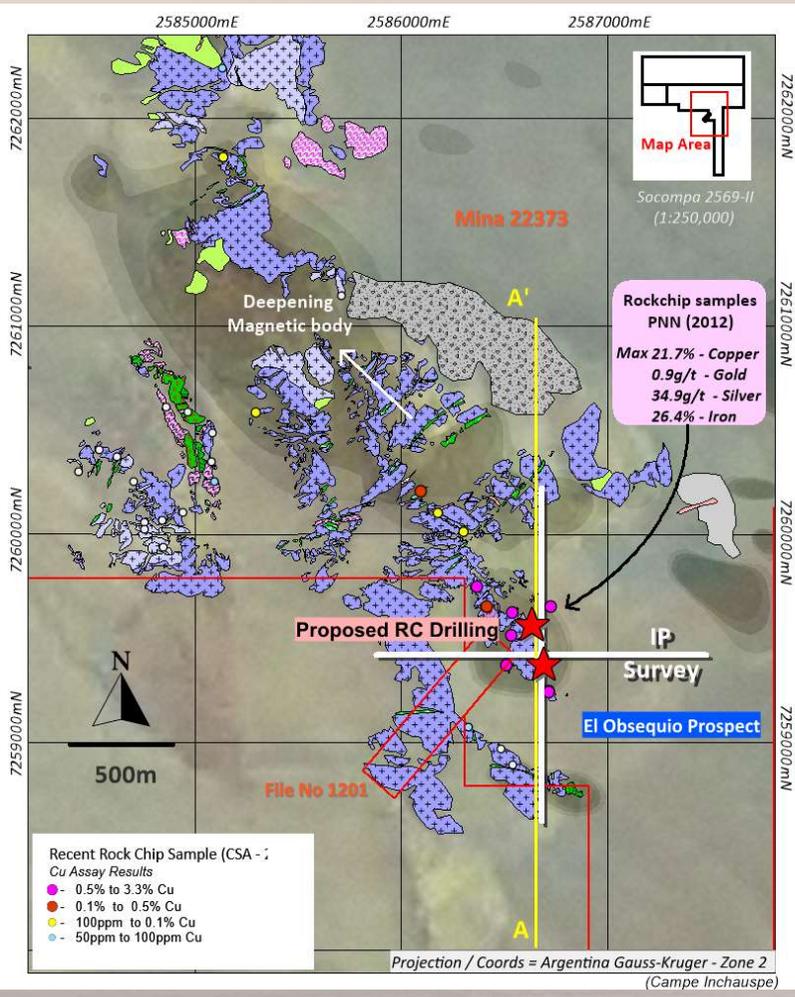
# Santa Ines Copper Gold Project – Strategic Location

- 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



PepinNini

# Santa Ines Copper Gold Project – Work done and planned



## Santa Ines Project - El Obsequio Prospect Planned Drilling Activities

### Stratigraphic Legend

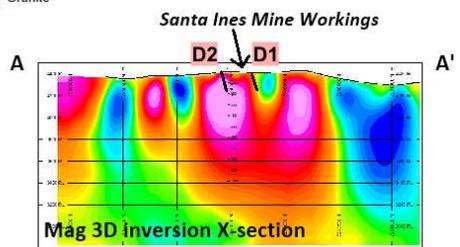
- Post - Santa Ines Volcanic Complex deposits**
- Mine dump material
  - Unconsolidated, mainly volcanogenic deposits (block and ash deposits, bedded sediments)
  - Monzonite/trachyte dykes - porphyritic
  - Basalt - lava to hypabyssal intrusions

### 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



**PepinNini SA**

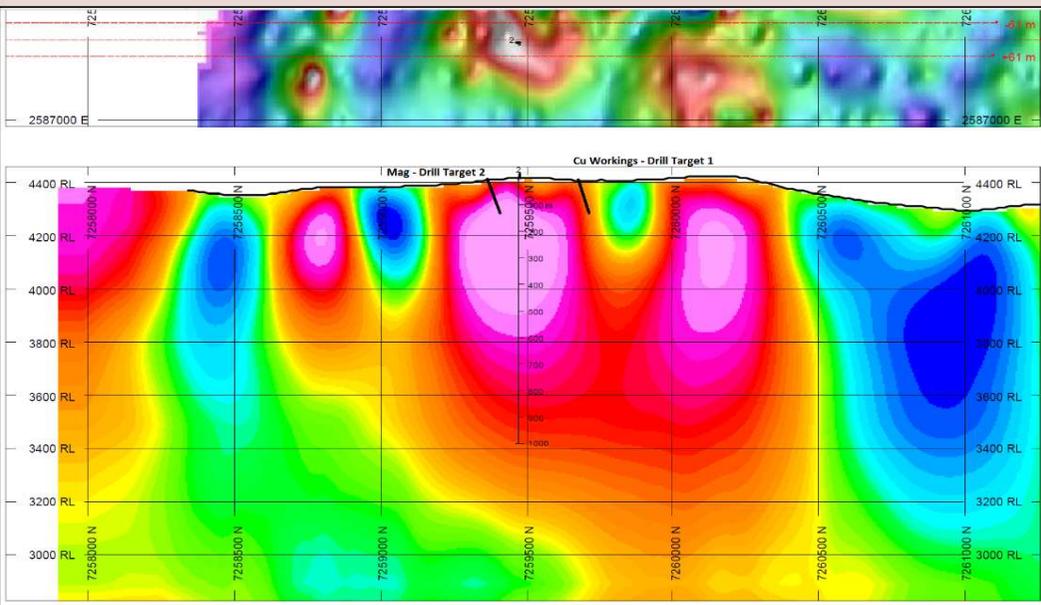
- Ground IP geophysical survey indicated potential targets for drilling
- Drilling permit expected before the end of the year
- Drilling planned initially two boreholes – January 2021



**PepinNini**

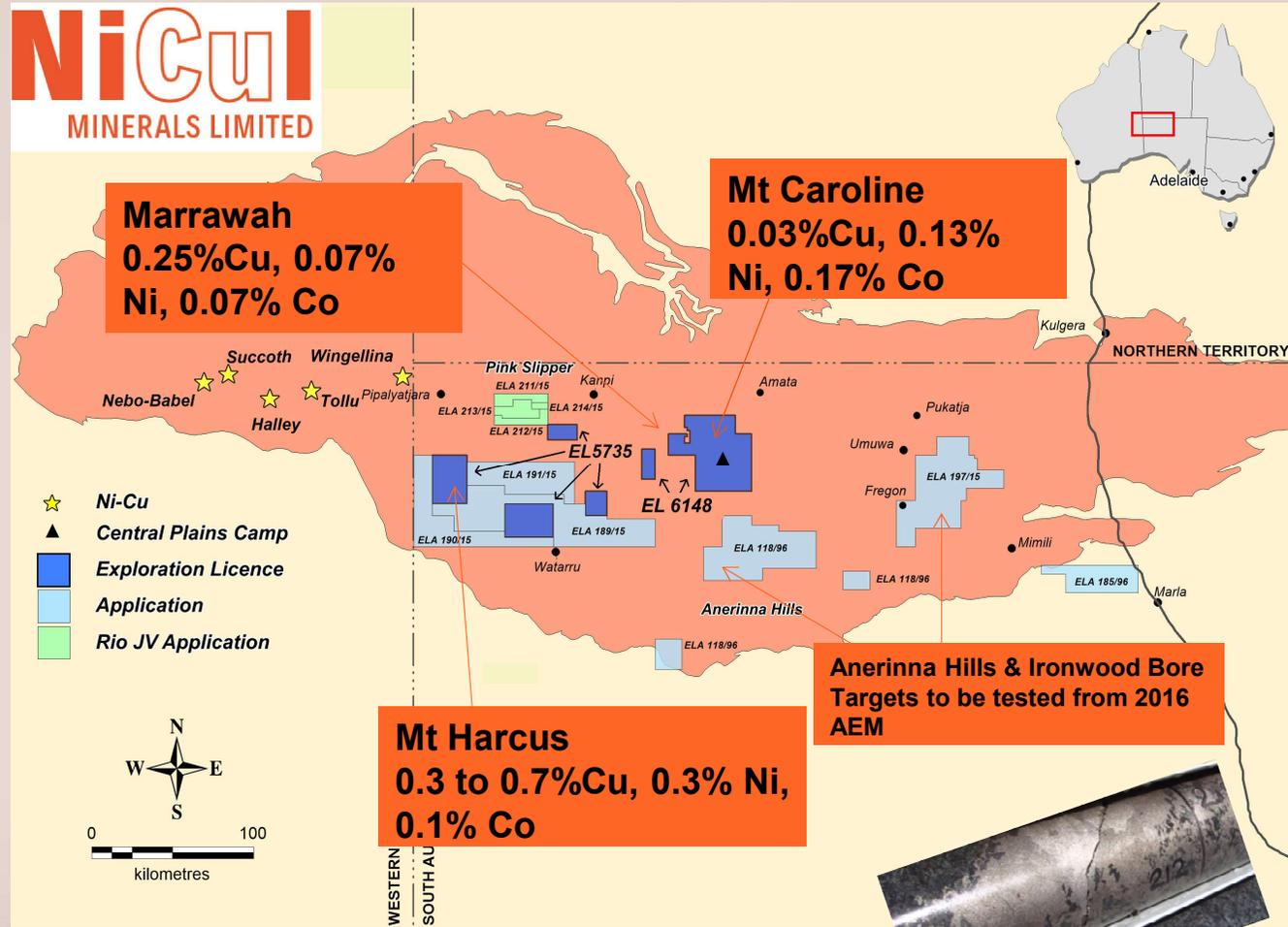
# Santa Ines Copper Gold Project – Drilling Targets

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



PepinNini

# Musgrave Project - Overview



- Project is 100% owned by PepinNini subsidiary NiCul Minerals Ltd
- 10 tenements 100% NiCul covering 14,003 km<sup>2</sup>
  - 2 granted exploration licences(EL)
  - 8 applications (ELA)
- 4 Farm-in JV (to 51%) ELAs with Rio Tinto, covering 615km<sup>2</sup>
- 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



**PepinNini**

# 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*

**PepinNini**

# AEM - Unlocking new discovery targets at Musgrave



Helicopter mounted SkyTem<sup>312</sup> Fast AEM



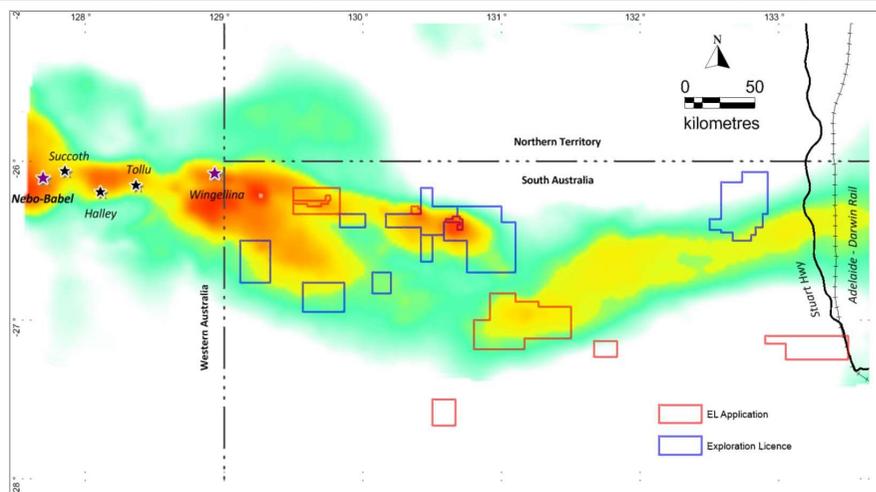
Fixed Wing Tempest® AEM

- ❑ Collaboration of PNN, CSIRO, SA Govt and Geoscience Australia for airborne electromagnetic(AEM) survey over 31,000km<sup>2</sup> of Musgrave Province
- ❑ Targeting areas previously never surveyed including 50% of PNN tenure

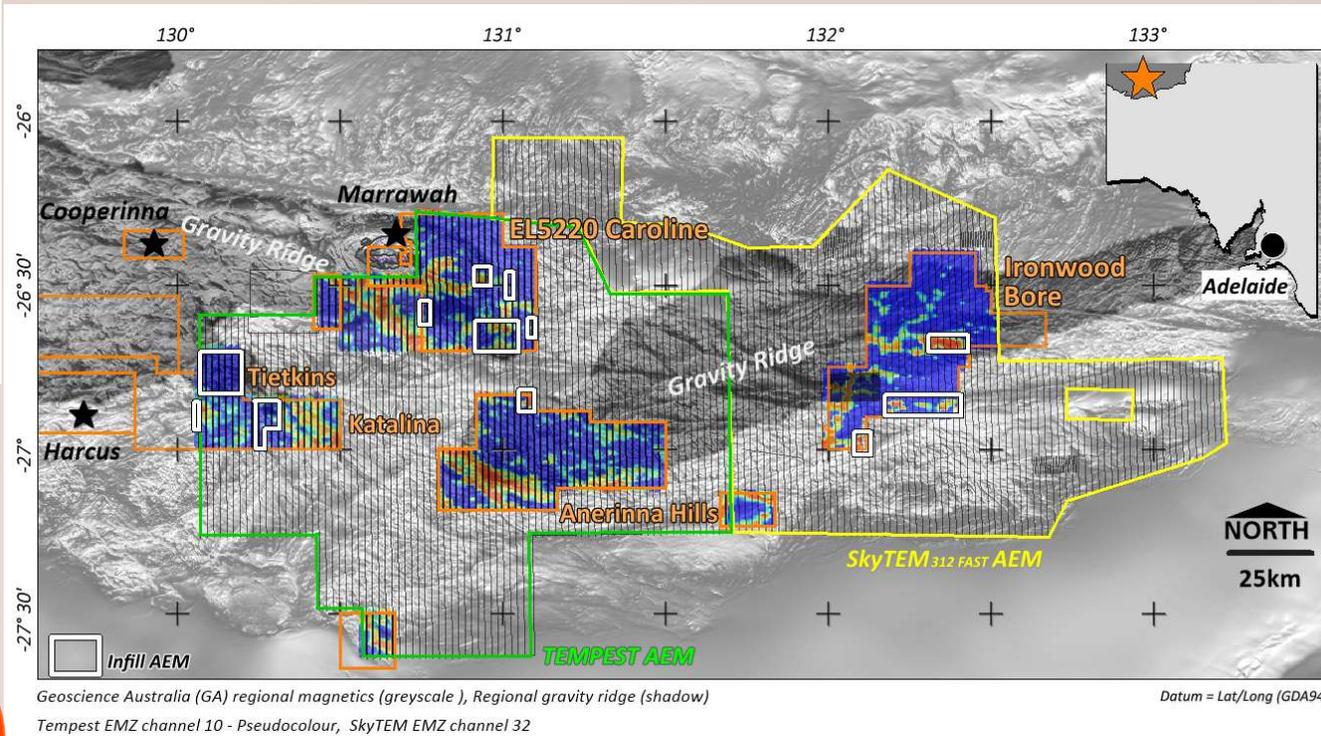
Delivered accelerated target definition for PepinNini

PepinNini

# Technical innovation delivers enhanced targets



Targets generated by collaboration AEM to be drill tested ↓



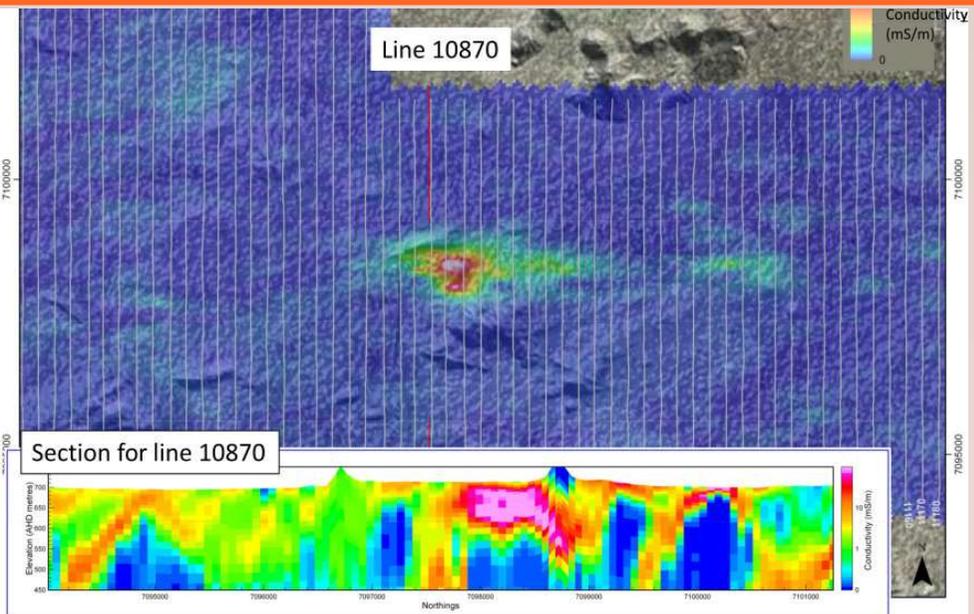
↑ Musgrave Province Regional Gravity Image pre-2016 collaboration AEM

*Collaboration AEM is a game changer – delivers enhanced geophysical targets*

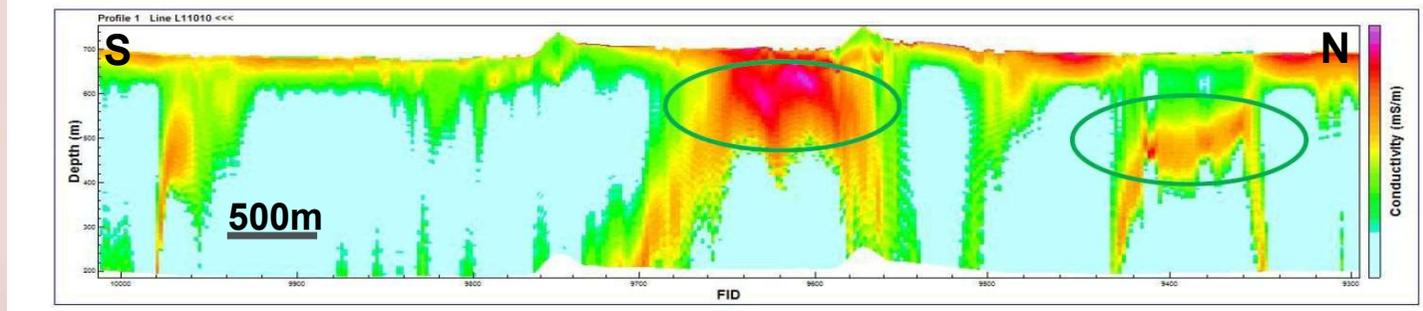
PepinNini

# 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*



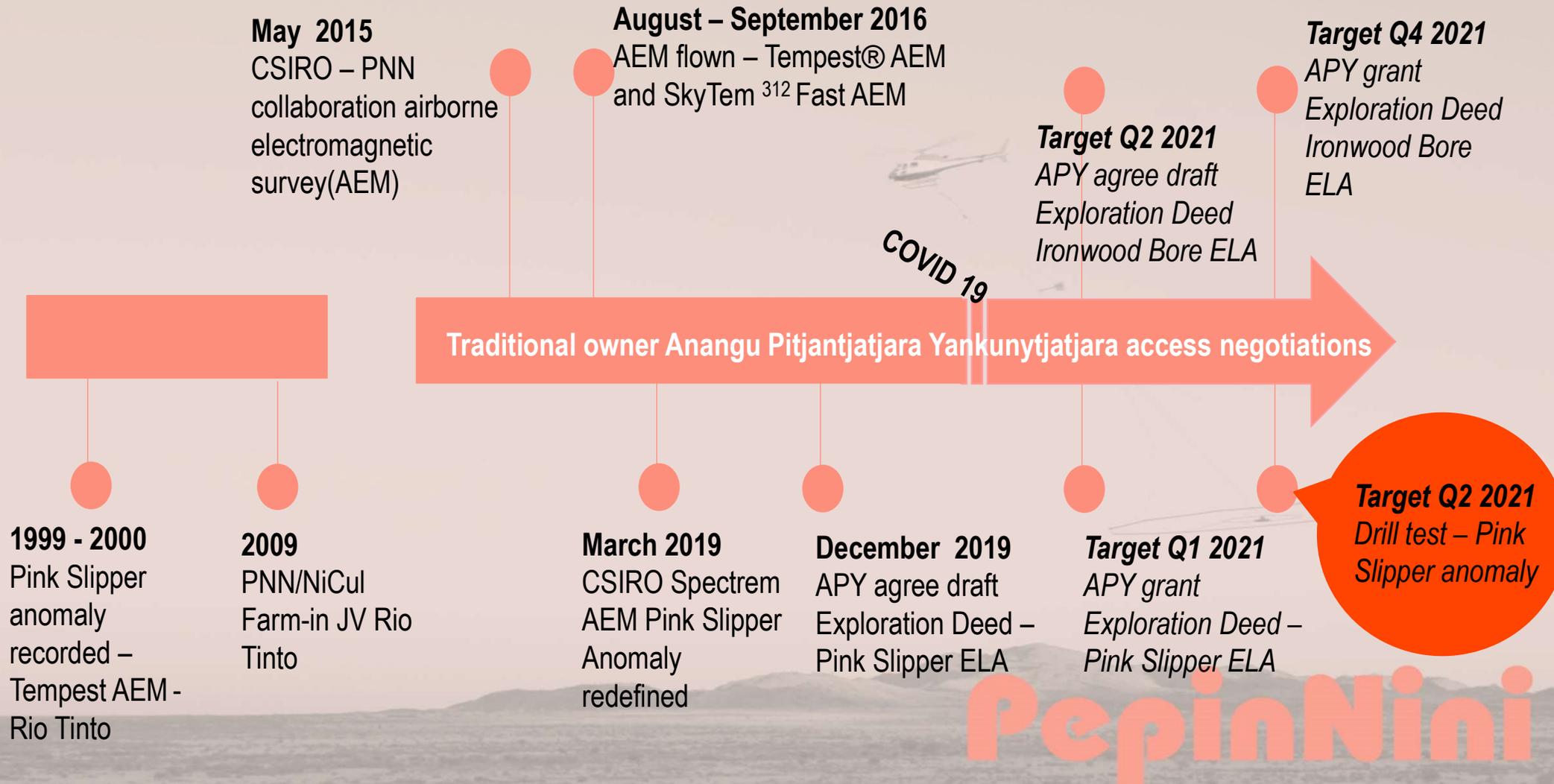
1999 – 2000 ↑  
Tempest® AEM – Pink Slipper geophysical anomaly defined



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

PepinNini

# 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

PepinNini

# Land access Anangu Pitjantjatjara Yankunytjatjara Lands



**Strong Relationship - Positive Social Impact**

**PepinNini**

# 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



PepinNini

# 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( $\text{CaSO}_4$ )

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

# PepinNini

## Contact

Rebecca Holland-Kennedy

Managing Director

PepinNini Minerals Limited

T: +61 8 8218 5000

E: [Rebecca.holland@pepinnini.com.au](mailto:Rebecca.holland@pepinnini.com.au)

TARGETING,  
EXPLORATION,  
DISCOVERY.

