



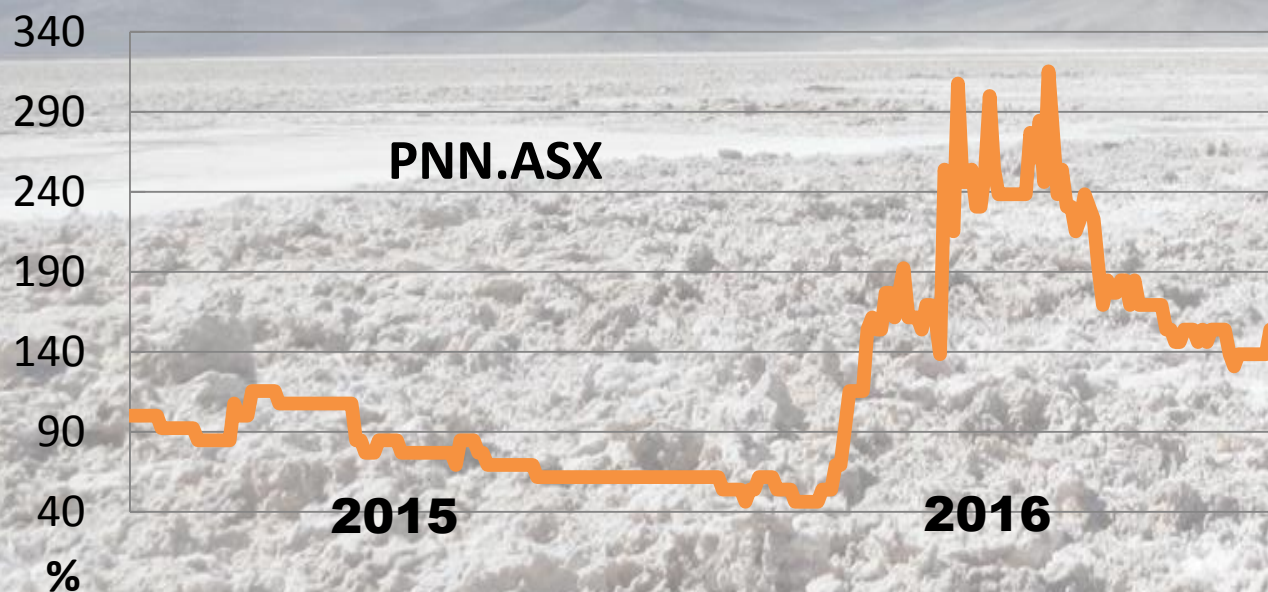
Rebecca Holland Kennedy
Chairman and Managing Director



Presentation to AGM - 3 November 2016
New Horizons

2016 Highlights

- ❑ ***Establish Lithium Brine project in Argentina***
- ❑ ***Share price more than doubles over the year and market cap increases from \$3.5m to \$8.5m***
- ❑ ***Commence AEM, Musgrave Project, South Australia***



We Explore

2015-2016 – *What we did*

- ❑ **Completed assessment of West Musgrave Spinifex Range Prospect and withdrew from Option agreement**
- ❑ **Withdrew from WA Iron Ore JV and retained a gross iron ore royalty**
- ❑ **Completed evaluation of QLD gold and uranium prospect Georgetown inlier and downgraded prospectivity to divest all QLD tenements**
- ❑ **Progressed co-funded collaboration with CSIRO and SA DSD for an airborne electromagnetic survey over SA Musgrave project**
- ❑ **Successfully applied for 8 mining leases over Lithium Brine prospective salt lakes in Argentina**

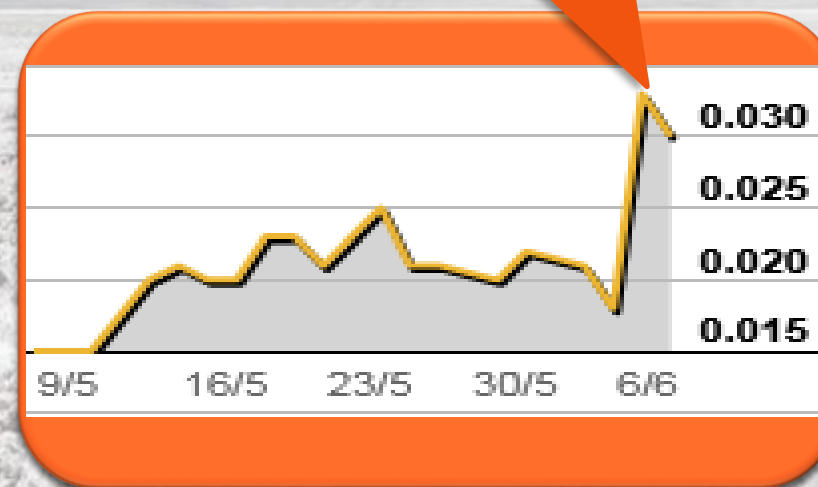


We Explore

PepinNini - *where we are*

2016	
Shares on issue	309,739,774
Options on issue(unquoted)	8,100,000
No. shareholders	1,663
Top 20 shareholders	60.3% of capital
Working Capital	\$0.9m
Funds raised from equity to July 2016	\$1.7m
Exploration assets impaired 2015-2016	\$1.6m
Exploration expenditure 2015-2016	\$1.6m

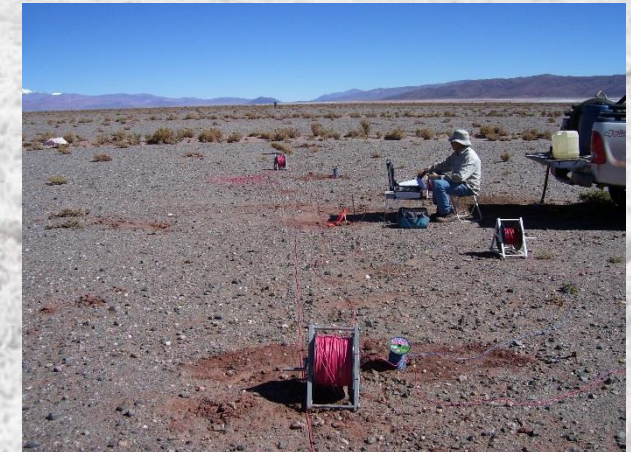
*The biggest mover was PepinNini Minerals, which soared 83% to 3.3c after securing lithium ground in Argentina.
Mining News 7 June 16*



We Explore

Recent activity

- ❑ Completion of regional AEM within infill helicopter SkyTEM underway over NiCul tenements Musgrave
- ❑ Target development from AEM data for 2017 testing - Musgrave
- ❑ Doubled tenure - additional mining leases acquired with Lithium Brine potential Salta
- ❑ Field reconnaissance trip completed and four priority project areas declared for Lithium Brine exploration Salta
- ❑ Geophysical - Vertical Electrical Sounding(VES) campaign commenced Salta



We Explore

Where we are exploring

AUSTRALIA



- 16 tenements, 16,608 km²
- Musgrave Focus >90% holding
- Nickel, Copper, PGE, Diamonds & basemetal targets

ARGENTINA

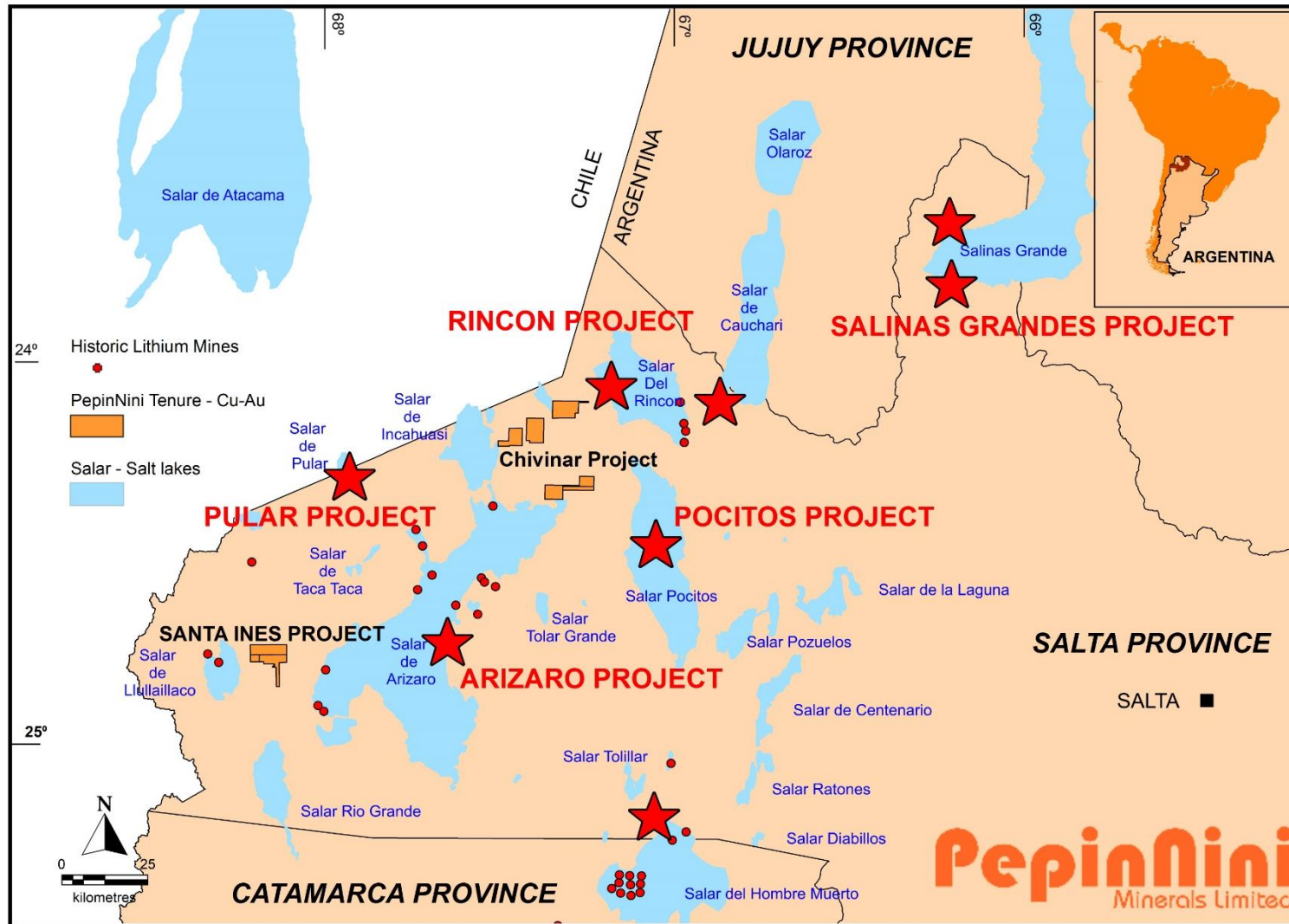


- 21 tenements, 492 km²
- Lithium project focus 60% holding
- Copper, Gold and Lithium Brine



We Explore

Salta Lithium Project – *Location, location, location*



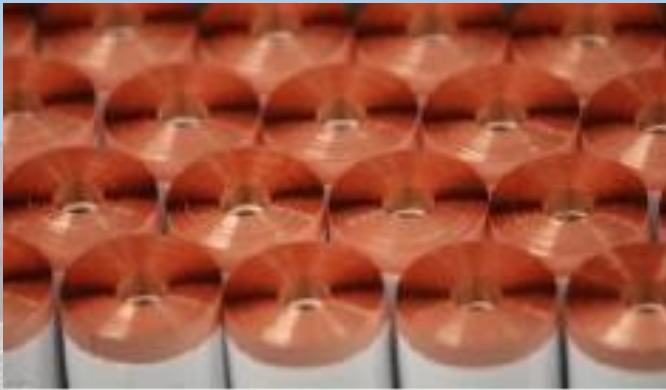
- 12 mining leases held 100% PNN 27,965 hectares or 280 square kilometres
- All mining leases in areas of Salt Lakes (Salars) with recorded historical lithium brine occurrences
- Salta is mining friendly and well administered



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Energy metal demand to outpace output in wake of \$20bn battery build boom



Lithium-ion batteries being manufactured

Photo by Reuters

“The megafactories are coming.”

This is the mantra of market analyst, founder and MD of Benchmark Mineral Intelligence Simon Moores, citing research showing more than **\$20-billion currently committed to creating new, or expanding existing lithium- (Li-) ion battery cell plants.**

This will take global production capacity from megawatt to gigawatt territory.... While Australia, Chile and Argentina are the significant sources of lithium equivalent feedstock

VANCOUVER (miningweekly.com) 14th October 2016



We Explore

mining

Hard v Soft

Spodumene



By Rob Lavinsky, iRocks.com

v

Lithium Brine



Brine projects have inherently lower costs and greater economies of scale

—
Deutsche Bank Market Research May 2016



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Lithium demand – Batteries - Electric Vehicles – Alternate Energy



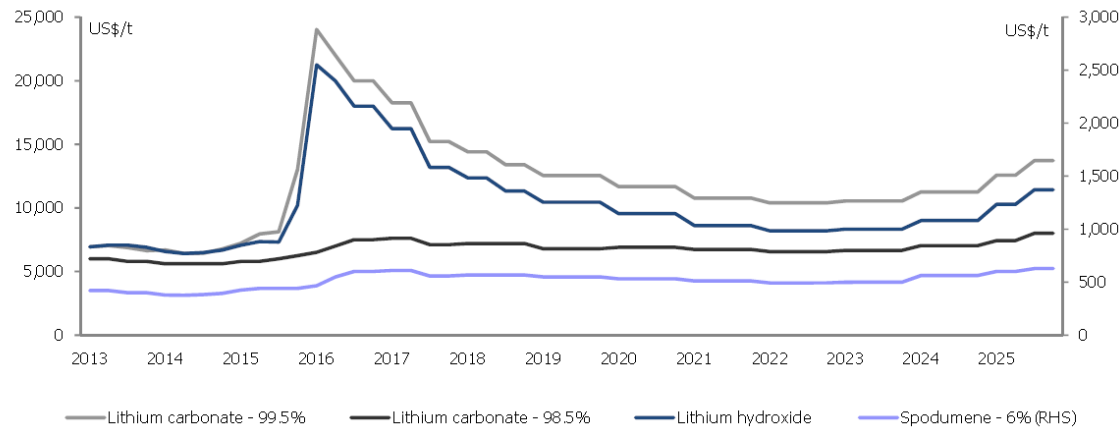
We expect global lithium demand will increase from 181kt Lithium Carbonate Equivalent(LCE) in 2015 to 535kt LCE by 2025.

Deutsch Bank Market Research – May 2016

**76% of global lithium reserves are brine-based deposits -
Deutsch Bank Market Research – May 2016**

We believe brines will reclaim market share after 2018 and spodumene pricing will be linked to the marginal cost of a brine asset producing lithium carbonate, not the other way round

Deutsch Bank Market Research – May 2016



We Explore

Why Argentina?

✓ Lithium Triangle location



Source: Deutsche Bank; Company data; USGS

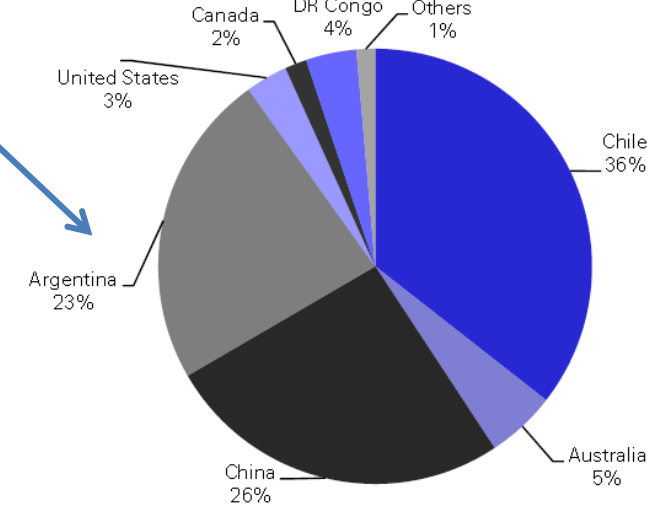
✓ Large Reserves



✓ High Grade Reserves

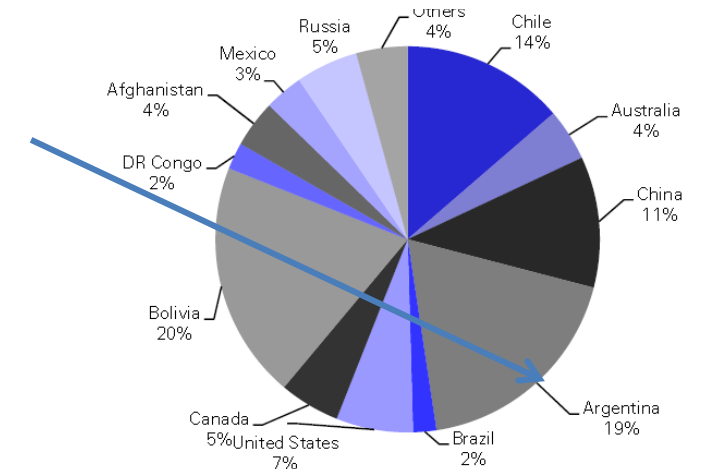
- ✓ Change of government in Argentina in November 2015
- ✓ Floating exchange rate for the peso has liberated foreign investment inflow

Global lithium reserves – 102Mt LCE



Source: Deutsche Bank; USGS; Company data

Global lithium reserves – 273Mt LCE



Source: Deutsche Bank; USGS; Company data

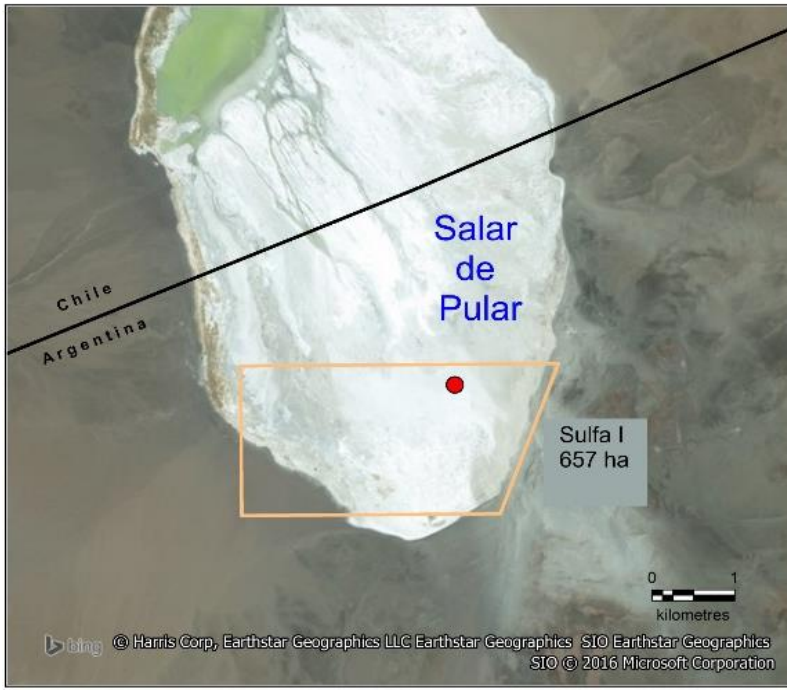


We Explore

Source – Deutsche Bank Markets Research – May 2016

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Salar de Pular – Exploration Commenced



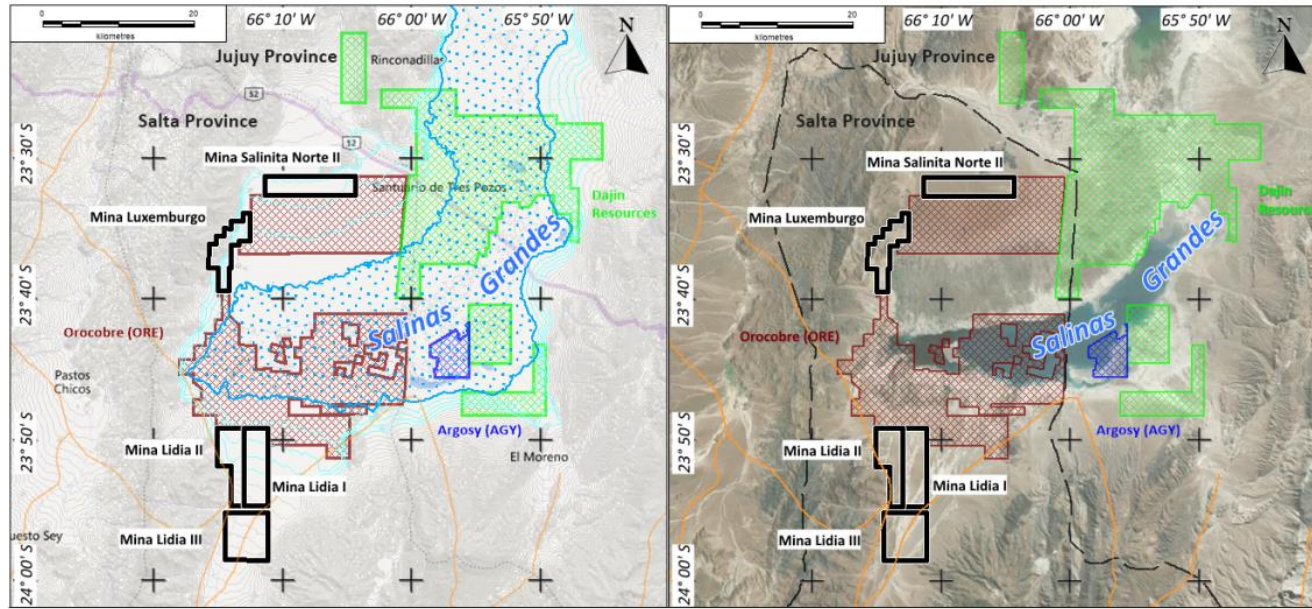
- ❑ Salar de Pular is located close to Salar de Atacama which is the world's largest and purest active source of lithium



We Explore

Salinas Grandes – Increased tenure over strategic ground

Salinas Grandes Project



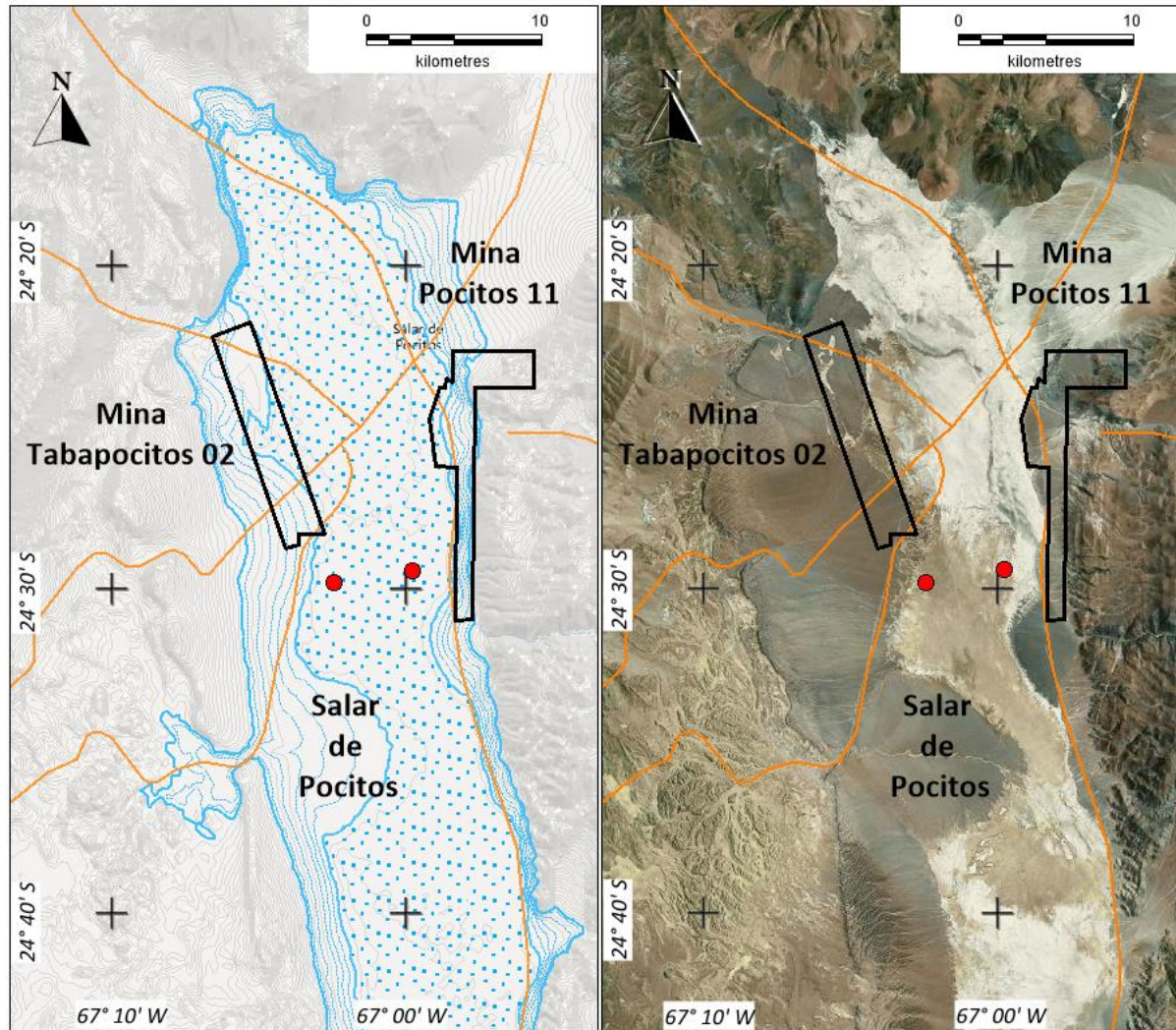
- ❑ 14,943ha over 5 mining leases(mina) held by PNN SA
- ❑ Salinas Grandes is the second largest Salar in the world 6,000km²
- ❑ Grade quoted as 795mg/l by other developers – good grade



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Pocitos Project – NEW ground – Strategic holding

Salar de Pocitos Project



- Two minas(recent addition)
- 6,470ha
- Unique Priority standing for application over ground in between tenure



We Explore

Argentina - Salta Project – Infrastructure

PepinNini SA

Salta Projects : Regional Infrastructure



Infrastructure available

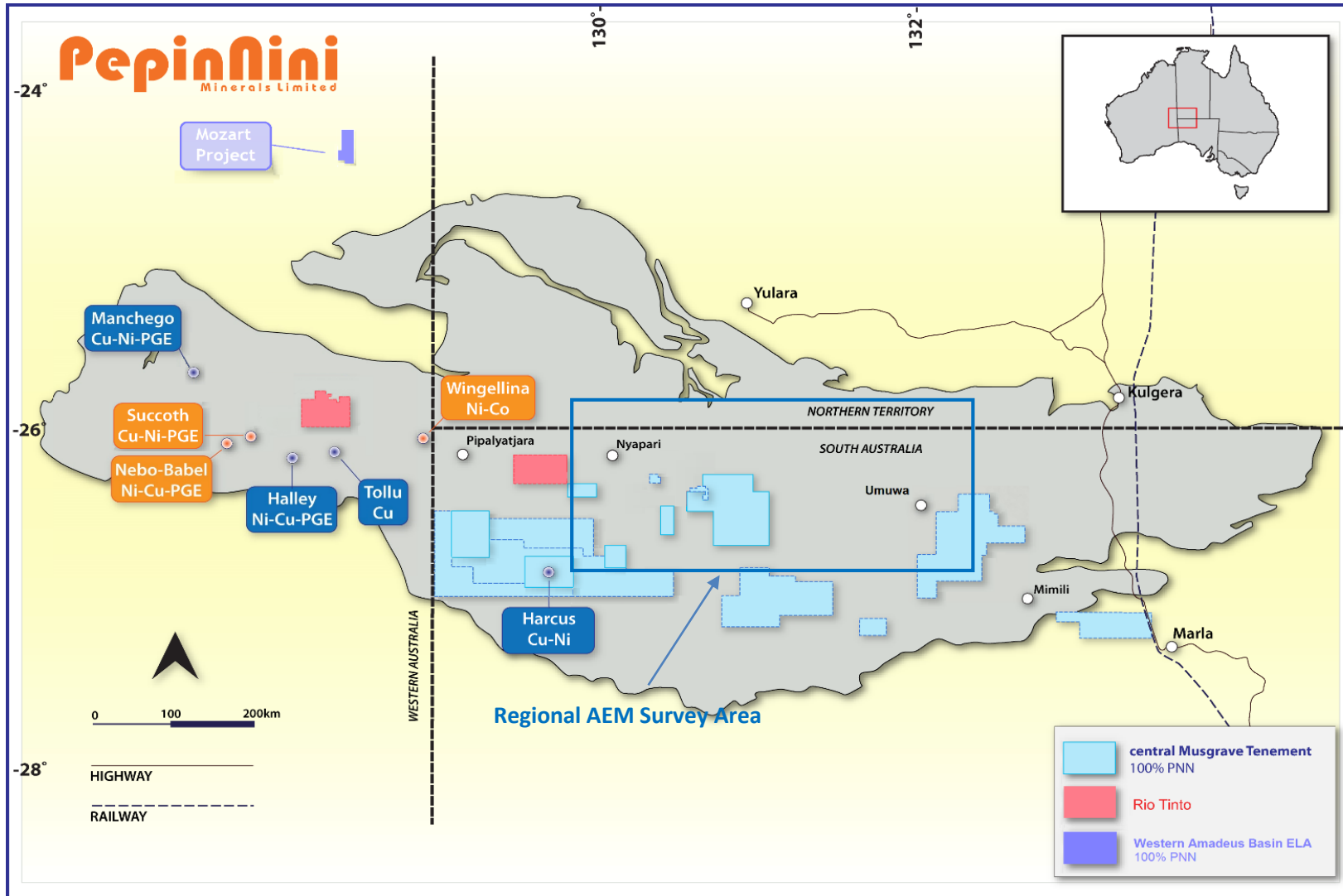
- ☐ Railway
- ☐ Power
- ☐ Gas



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Musgrave Project

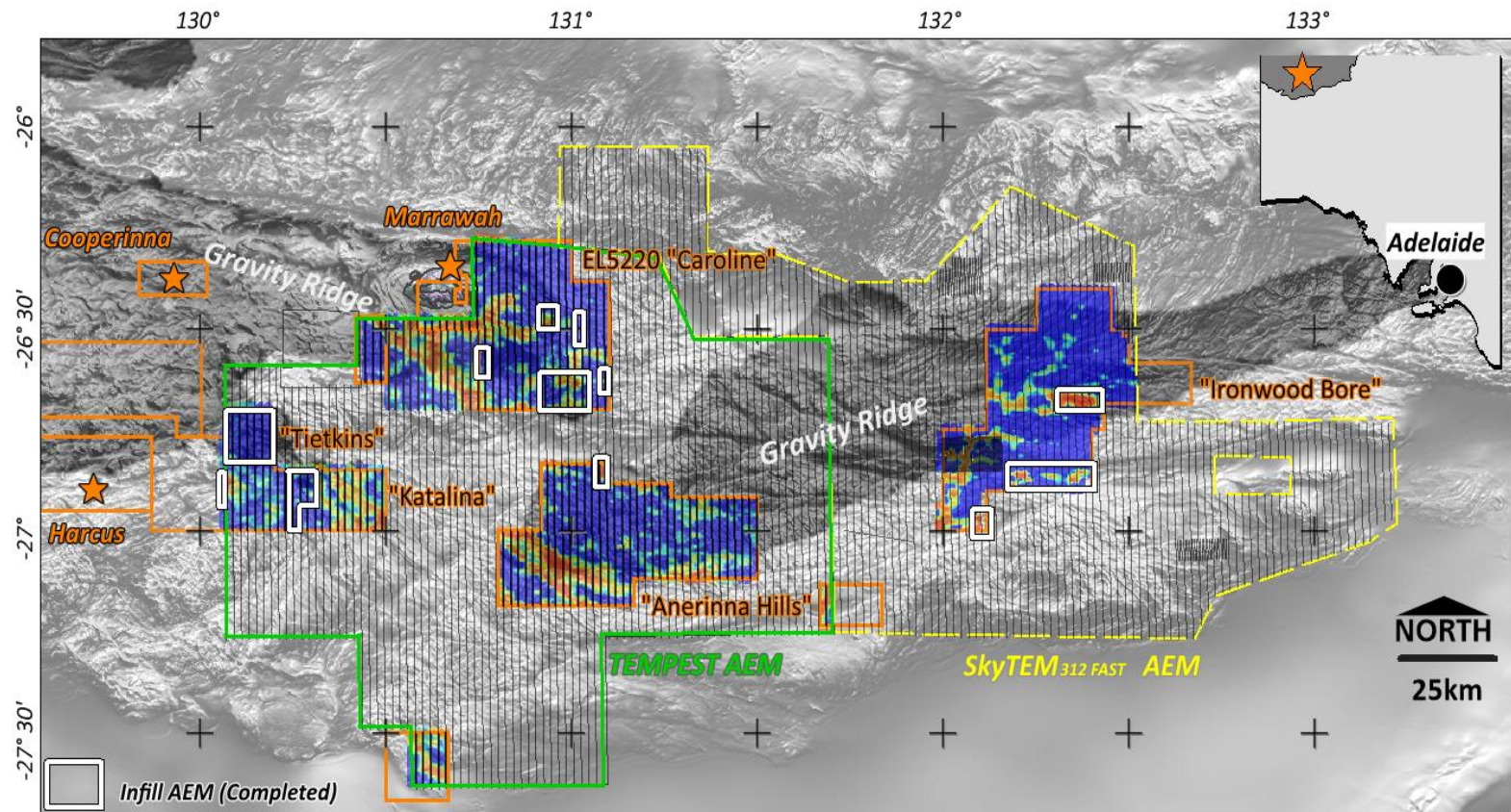


- 15 tenements of 16130 km² *major foothold*
- Prospective for Copper, Nickel and Platinum Group Elements(PGEs)
- AEM collaboration with CSIRO, SA DSD and Geoscience Australia and PepinNini
- PNN contribution \$200k
- PNN will receive \$80k of SA DSD PACE funding & \$50k of R&D federal funding



We Explore

Musgrave Project – targeting progress



Geoscience Australia (GA) regional magnetics (greyscale), Regional gravity ridge (shadow)

Tempest EMZ channel 10 - Pseudocolour, SkyTEM EMZ channel 32

Datum = Lat/Long (GDA94)

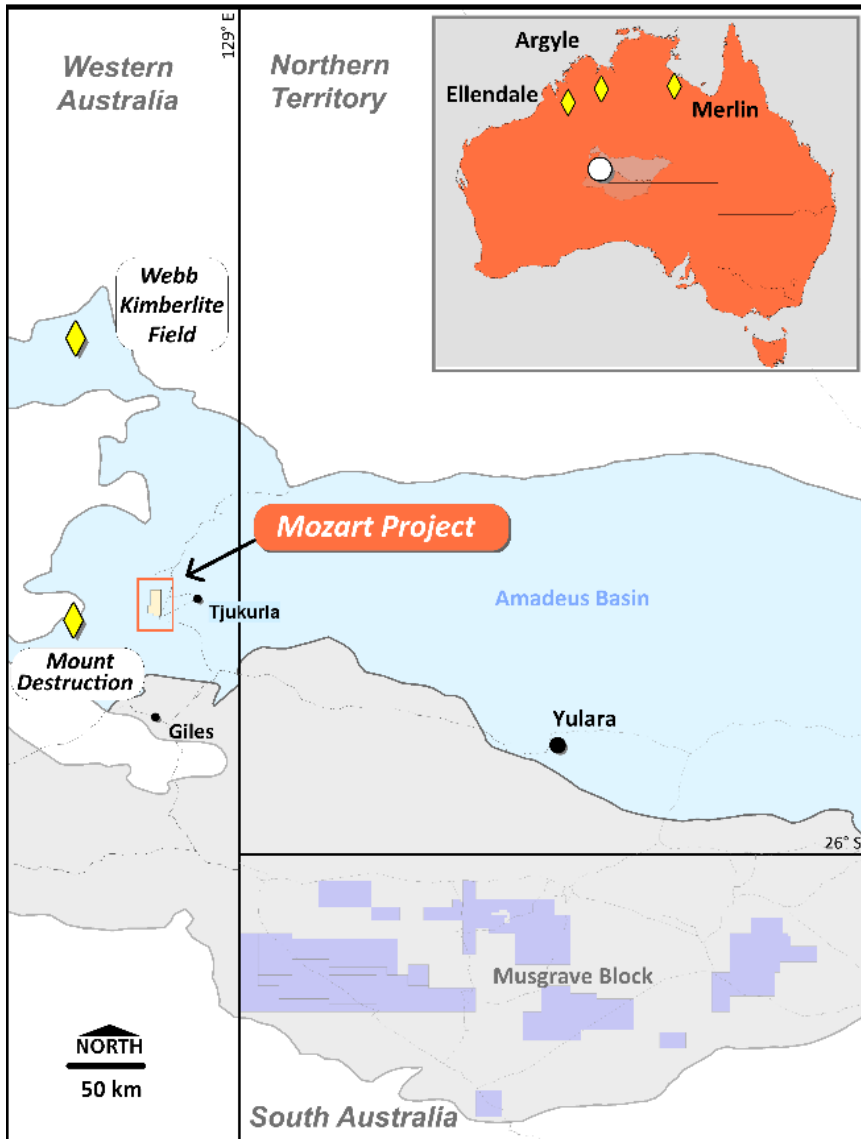
- First time EM systems flown in this area
- Regional data - 16,000km of AEM data
- Fixed wing west and helicopter surveys east
- Data evaluation and target refinement underway - 12 areas selected
- Target testing 2017



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Western Amadeus Basin – Mozart Diamond Project

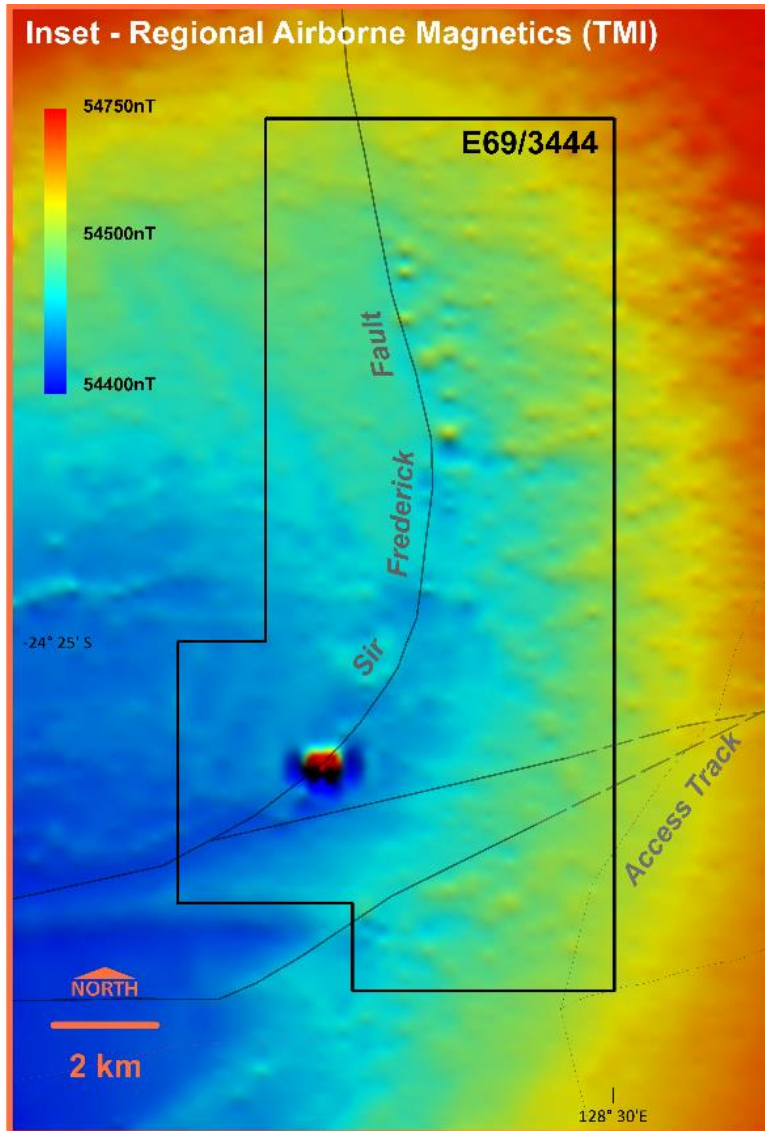


- ❑ Diamonds, base metals and gold potential
- ❑ Unexplored region well located
- ❑ Operational synergy with PNN's Musgrave Project



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Western Amadeus Basin – Mozart Diamond Project



- ❑ Untested discrete "bullseye" magnetic anomaly
- ❑ Ground unexplored since 1996 airborne regional geophysical survey
- ❑ Logistically feasible and accessible



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Leadership Group – experience and integrity



Rebecca Holland-Kennedy

B.Sc., B.Arts, MAusIMM, GAICD

Executive Chairman and Managing Director, Co-founder

Geologist with more than 35 years experience in exploration and management.



Phil Clifford

B.Sc., MAusIMM

Executive Technical Director and Exploration Manager

Geologist with more than 25 years experience in exploration management within Australia; 15 years with Rio Tinto.



Sarah Clifton-Brown

B.Arts,(Hons) Accountancy, FCCA, GAICD

Executive Finance Director

Fellow of the Chartered Certified Accountants with more than 12 years experience in company administration, financial reporting and analysis



Robert (Wei) Sun

M.Econ (Commerce), M.Econ (IEM)

Non-Executive Director

Resource investment analyst with more than 12 years experience in international trade and the resource industries of China, Canada and Australia.



Justin Nelson

B.Arts(Jurisprudence)LLB

Company Secretary

Lawyer, previously ASX State Manager, SA and Manager, Listings (Adelaide). He has extensive knowledge of ASX listing rules and is a Principal with DMAW Lawyers.

Management is fabulous! They manage to give 1000% return in a few years in nuclear boom (used to offer dividend).

And now they are in Lithium boom. I believe the management is a great team.

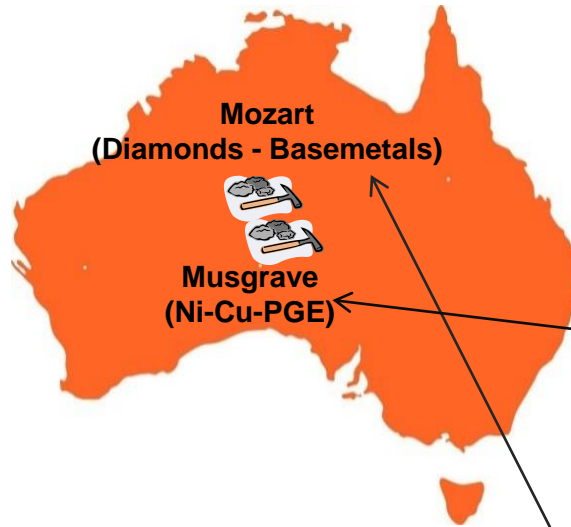
Independent Shareholder Blog



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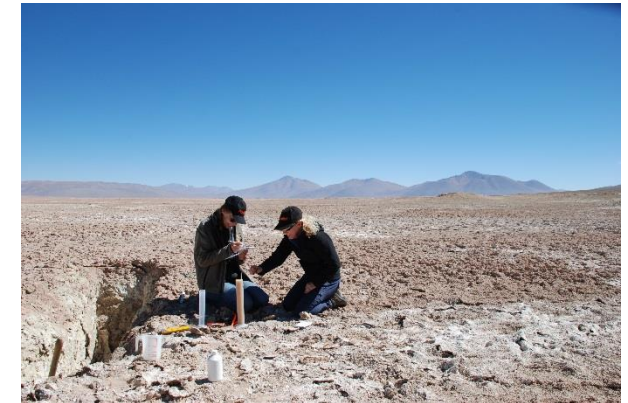
Portfolio Strategy – FY 2017 and beyond



Argentina
Exploration – geophysics,
trenching, drilling, sampling
Increase Prospective tenure
Resource definition

Musgrave
Data review & target refinement
Ground Geophysics
Regolith Vacuum Drilling
Diamond Core Drill Testing

Mozart
Progress tenement granting
Native title negotiations
Exploration planning



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Who will do the work 2017



pepinini



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Strategic Pathway for shareholder reward

- ❑ *Expand, test and consolidate asset portfolio*
- ❑ *Maintain and seek strategic equity partnerships*
- ❑ *Lean, efficient and diligent exploration*
- ❑ *Commitment to maintain corporate and social standards and respect communities in which we work*
- ❑ *Ingenuity to be smart and look for opportunity to gain shareholder value*

PNN – feel proud to be part of us



We Explore



PepinNini Minerals Limited

A diversified Australian exploration company
in developing and
mining major new
deposits in Argentina
and Australia

August 2016

309,739,774
1,800,000 (unquoted)
16 Tenements; 15,349km²
16 Tenements; 352km²
Cu, Ni, Co, Fe, Au, PGE, Li

STRATEGY

on greenfields exploration projects.
with significant potential and diversity.
e to projects through mineral discovery.
d out with professional integrity and skill.

PepinNini Minerals Limited

PepinNini Minerals Limited

ARGENTINA



SALTA PROJECT
Buenos Aires



PepinNini

ARGENTINA

SALTA LITHIUM PROJECT

PepinNini SA (Argentine PNN entity) has
a 100% interest in the Salta Lithium Project
(lease) covering 15,212ha in the Salta
Province, Argentina. The project has
different depths and Li concentrations.

PepinNini Minerals Limited

Wxp

AUSTRALIA



MOZART PROJECT
MUSGRAVE PROJECT
Darwin
Perth
Adelaide

ARGENTINA



SALTA PROJECT
Buenos Aires

CORPORATE

A diversified Australian
exploration company
Listed on ASX (PNN)



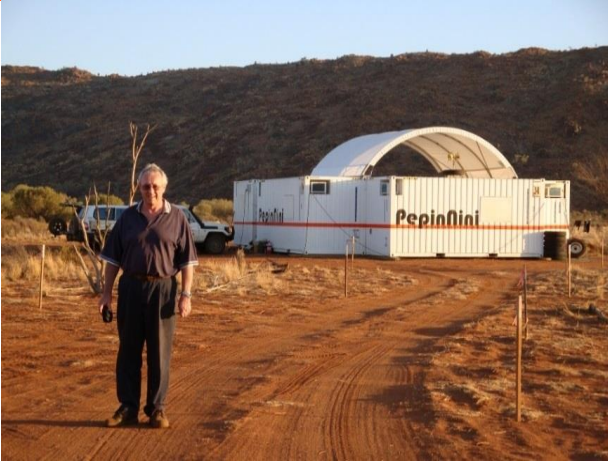


Annual Report 2016



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Thank you



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- The information in this presentation that relates to Exploration Results and Mineral Resources is based on information compiled by Philip Clifford BSc MAusIMM. Mr Clifford is the Technical 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 2012 edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”. Mr Clifford consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.
- PepinNini acknowledges and wishes to clearly advise investors that Lithium Brine Projects are a liquid resource and as such they are NOT covered under the current JORC Code 2012 for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The company will however endeavour to report project results at the same professional standard expected in the spirit of the code.



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Exploration

We Explore

- ✓ **Lithium Brine - Argentina**
- ✓ **Nickel Copper - Musgrave**
- ✓ **PepinNini – excitement ahead**