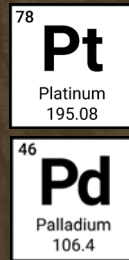
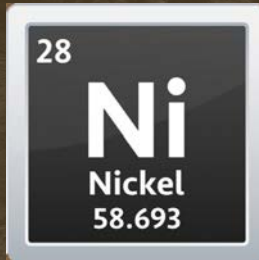
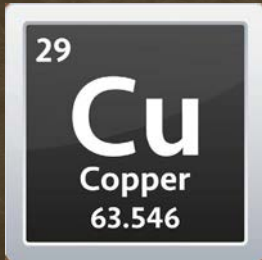




**Superior**  
Resources

# Discovering QLD's new future-facing metals provinces



Noosa Mining and Investor Conference  
November 2022

ASX:SPQ





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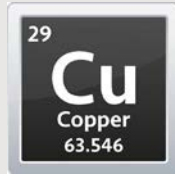
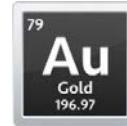
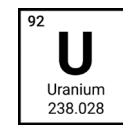
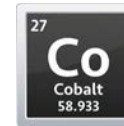
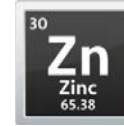
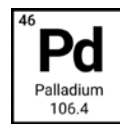
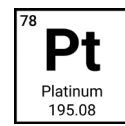
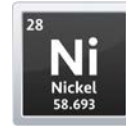
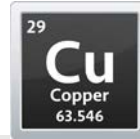
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Growth through discovery – multiple tier 1-potential exploration projects

# SPQ – a compelling investment case

Leveraging the green transition



## Undisputed most critical element for Zero-Carbon Target

### Target requires\*:

- US\$23B investment per year in new projects
- 9.7 Mt of new supply within 10 years – Unattainable!

### Underpins\*:

- Copper price rally to >US\$11,000/t within 5 years  
(\* Wood Mackenzie, Oct 2022)



## Perfect timing

Transformational advances towards major discoveries at Bottletree, newly recognised porphyry Cu belt and numerous Ni-Cu-PGE sulphide systems



## Future-facing focus on copper, nickel

- Large portfolio of Tier-1 potential Cu, Ni-PGE, Co, Zn, U projects
  - No stocking fillers!
- Project transactional, JVs, De-merger

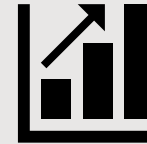


## Newly recognised Cu-Au porphyry province

## Newly recognised Ni-Cu-PGE sulphide province



**First mover advantage**  
Australia's best Ni-Cu-PGE sulphide opportunity in a practically unexplored, yet proven Voisey's Bay system province



## Ramping up Cu, Ni-PGE drilling

- Roll out pipeline of significant porphyry Cu-Au systems, additional to Bottletree
- Huge Ni-Cu-PGE opportunity



**Early revenue potential**  
Feasibility study progressing at Steam Engine

# Corporate snapshot

1. As at 4 November 2022



## Carlos Alberto Fernicola

Non-Executive Chairman

*B.Com, FCA, F Fin, FCIS, FCSA, GradDipAdvAcctg, GDippAppFinInv, GDipAppCorpFin*

30+ years experience in accounting, taxation, audit and the financial services industry. Fellow of Institute of Chartered Accountants ANZ, Fellow of the Governance Institute of Australia and Fellow of the FSIA.



## Peter Henry Hwang

Managing Director

*B.Sc.(Hons), LLB, MAIG, MGSA, MQLS*

12+ years experience as a gold, base metals and diamond geologist in Australia, Venezuela and Brazil and 21 years experience as a lawyer at Queensland and national law firms, specialising in mining, M&A, mining infrastructure, regulatory and native title.



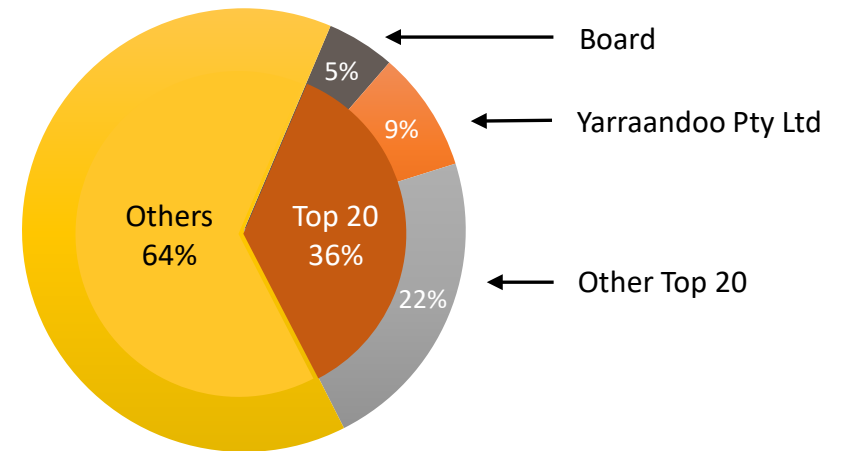
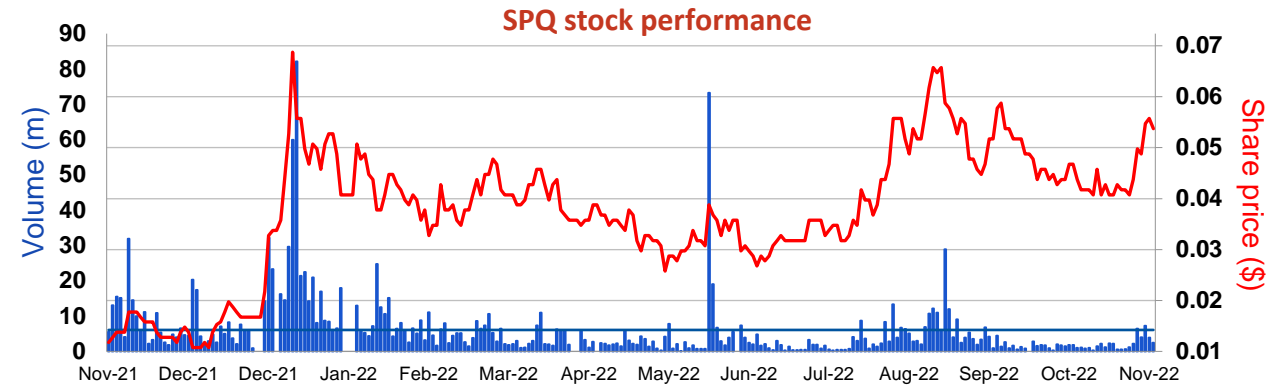
## Simon James Pooley

Non-Executive Director

*MAusIMM, GAICD*

Currently General Manager Geology at Northern Minerals Limited. Formerly Chief Operating Officer for Novo Resources Corp., General Manager Operations for Millennium Minerals Limited and General Manager Exploration and Business Development for CopperCo Limited.

Share Price <sup>1</sup> <b>\$0.058</b>	Issued Shares <b>1,701m</b>	Market Cap <b>\$98m</b>
Cash <b>\$1.8M</b>	Debt <b>\$nil</b>	Top 20 Holdings <b>36%</b>



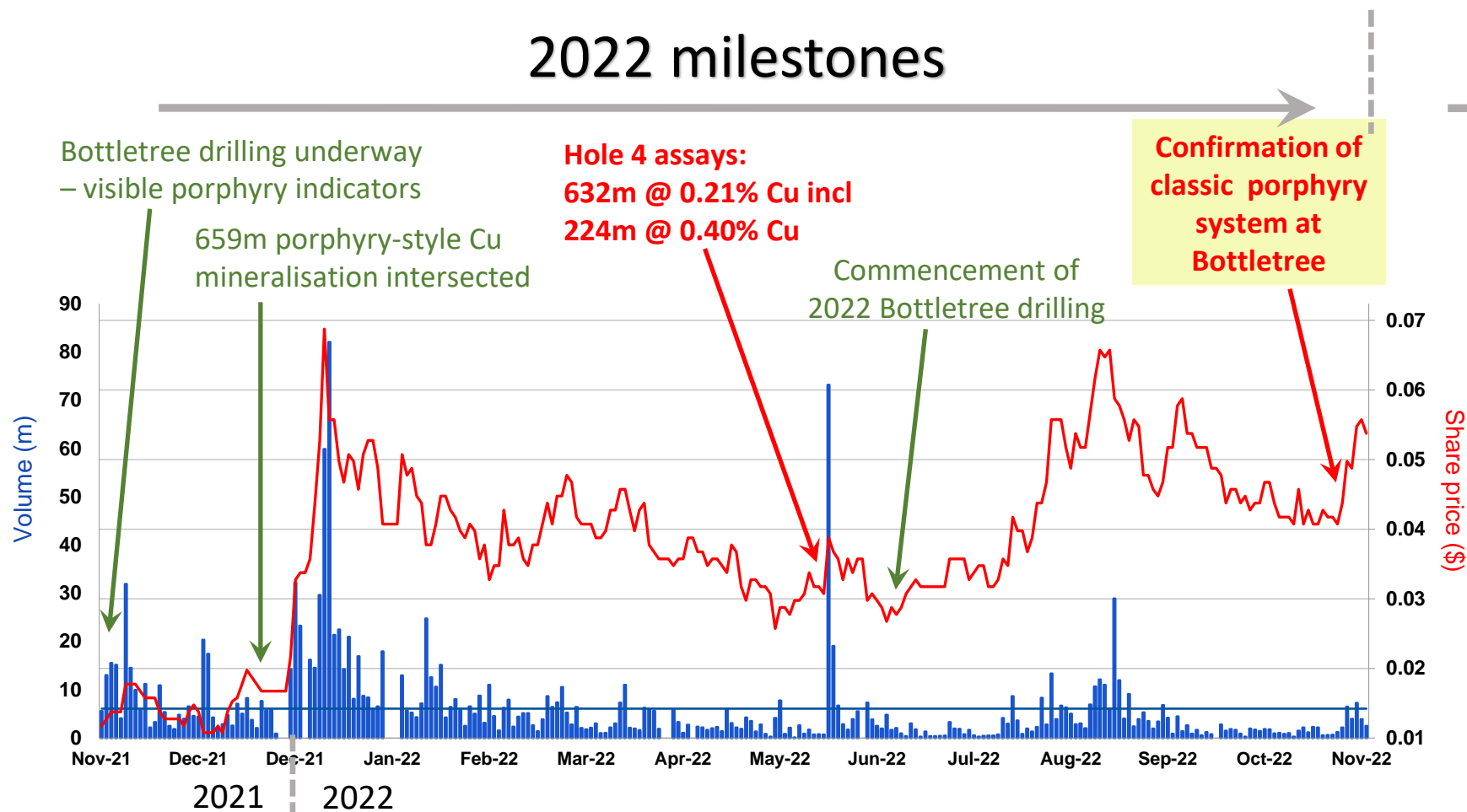


# Performance 2022 | Looking Ahead 2023

Ramping up in 2023 | Newly recognised porphyry Cu belt | New Ni-Cu-PGE province

## 2022 milestones

## Moving forward

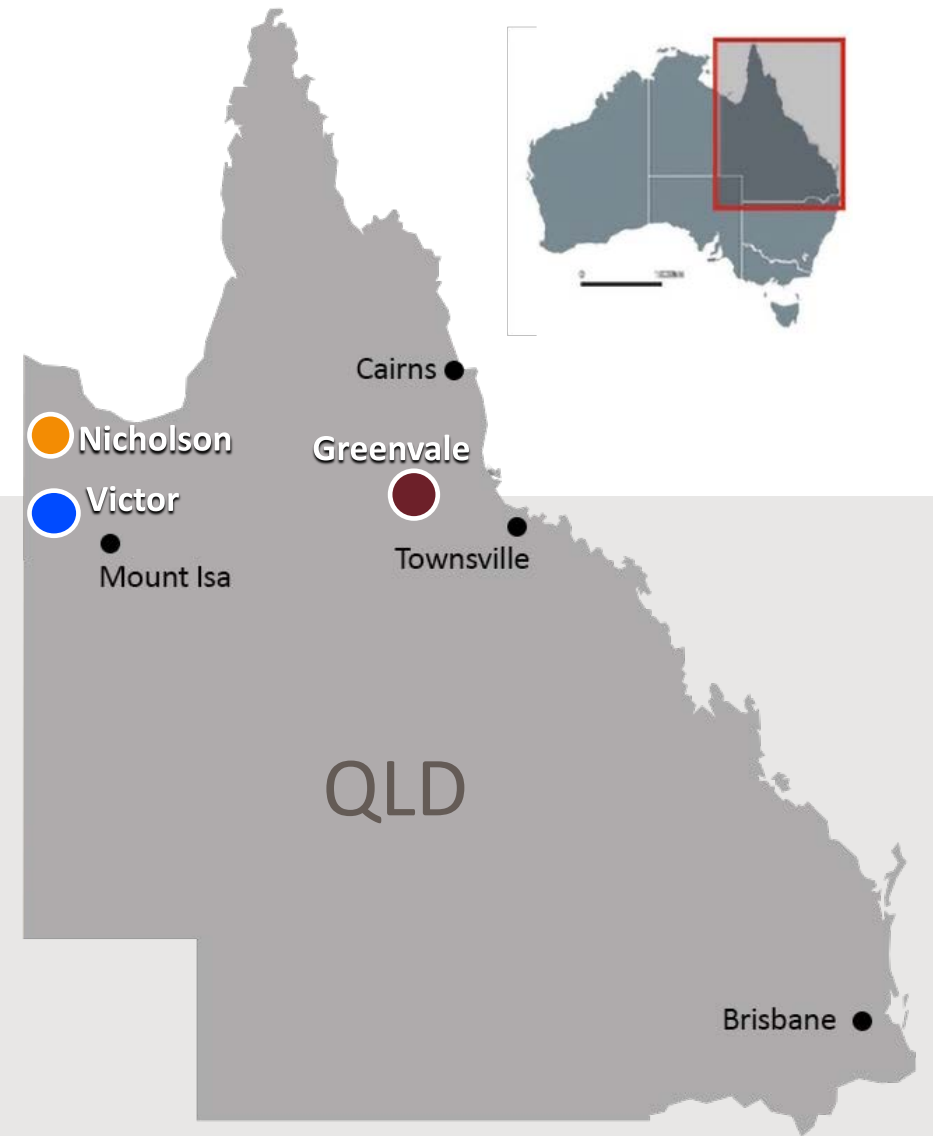
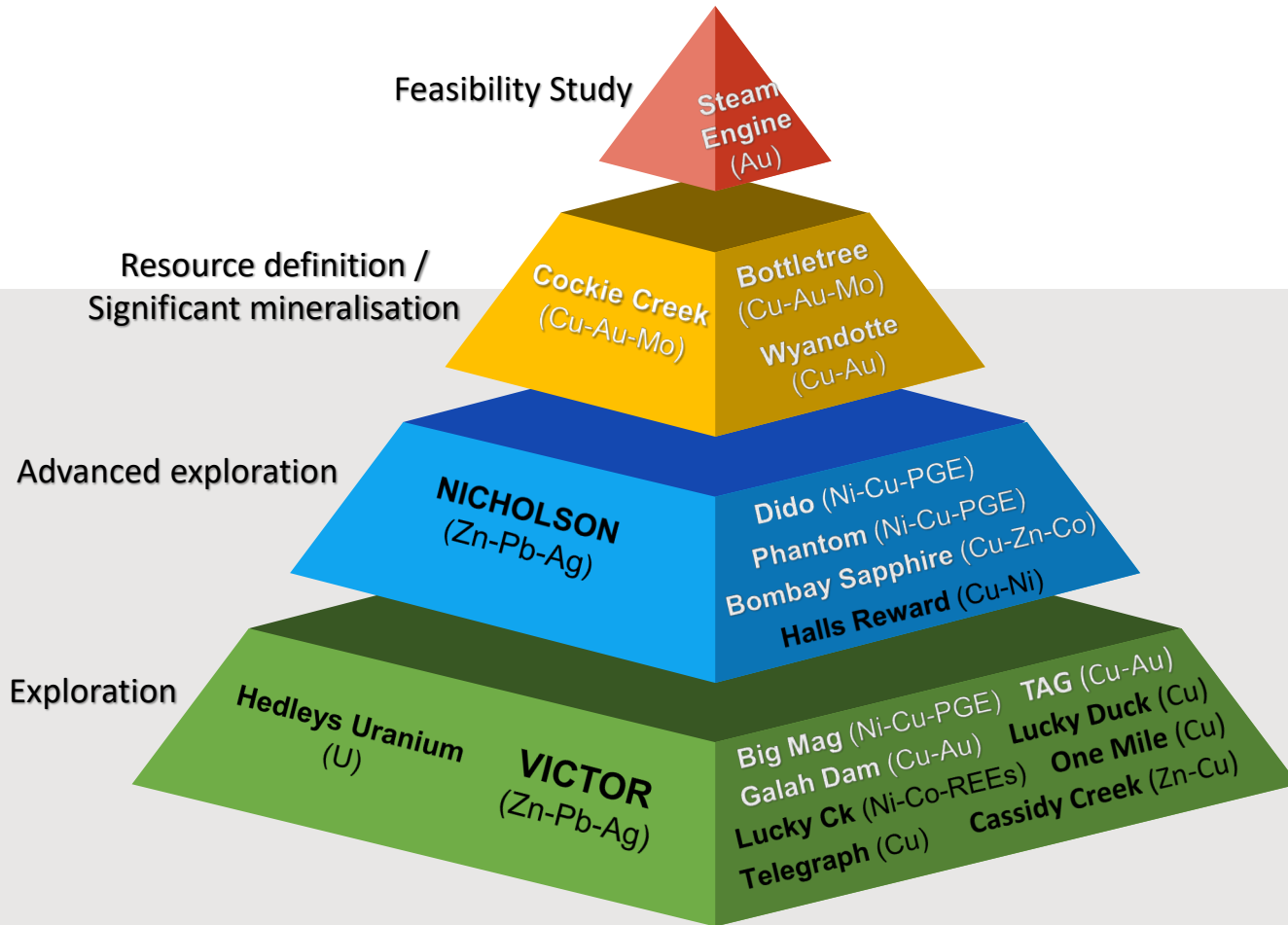


- **Hole 10 currently @ 200m depth targeting potassic core of Bottletree porphyry Cu-Au system**
- Commence drilling 2<sup>nd</sup>, more advanced porphyry Cu-Au prospect ASAP (Cockie creek)
- Commence drilling 3<sup>rd</sup> porphyry Cu-Au prospect in 2023 (Wyandotte)
- Roll out drilling programs on Ni-Cu-PGE project in 2023

Growth through discovery – multiple tier 1-potential exploration projects

# Project portfolio – 100% SPQ

Leveraging the green transition

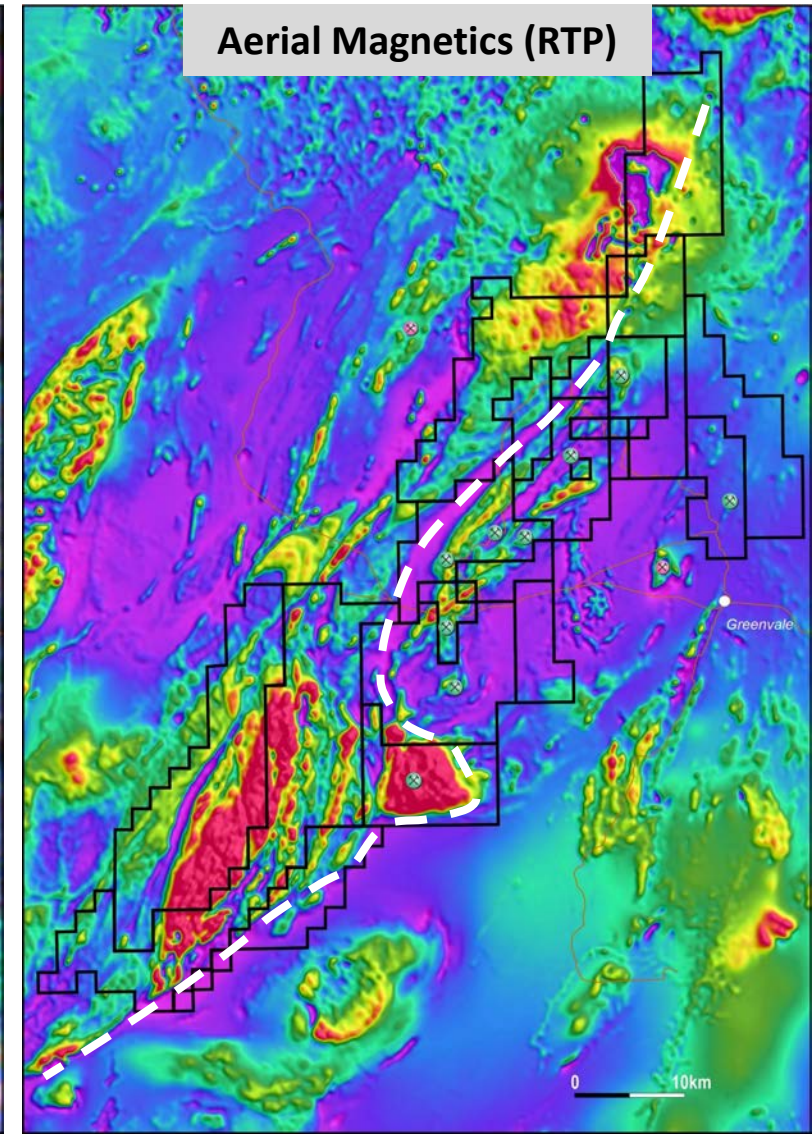
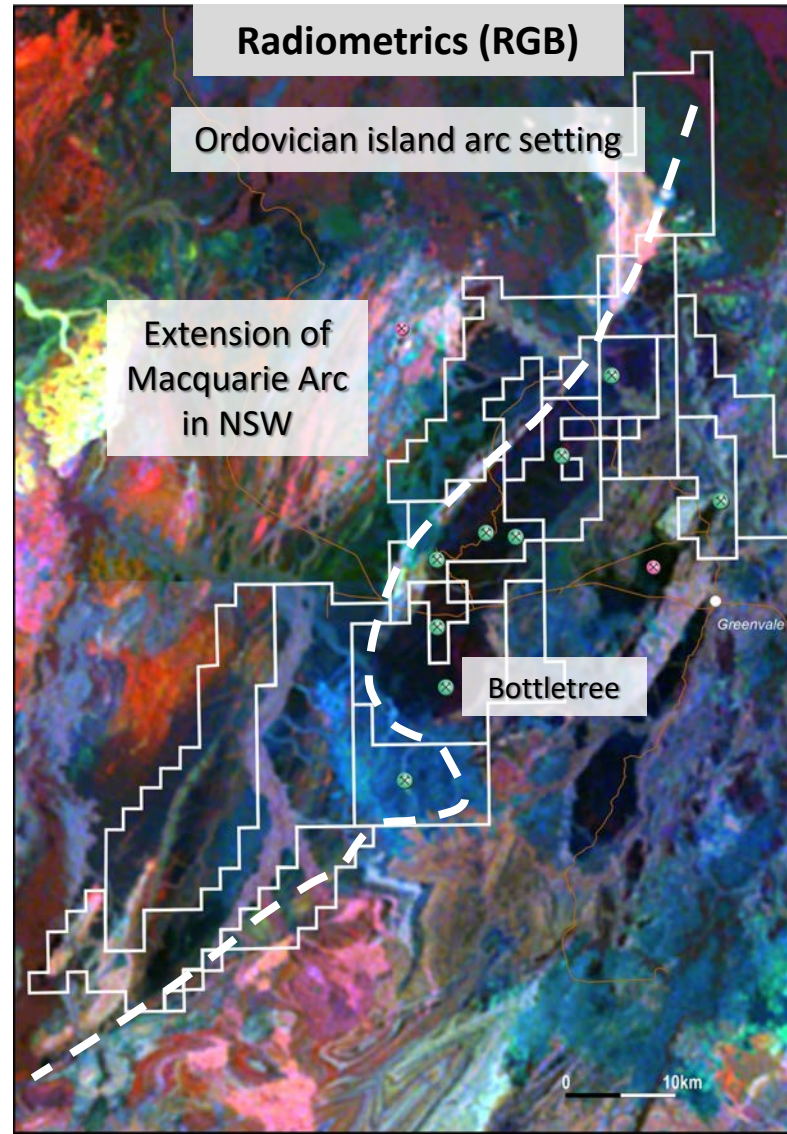
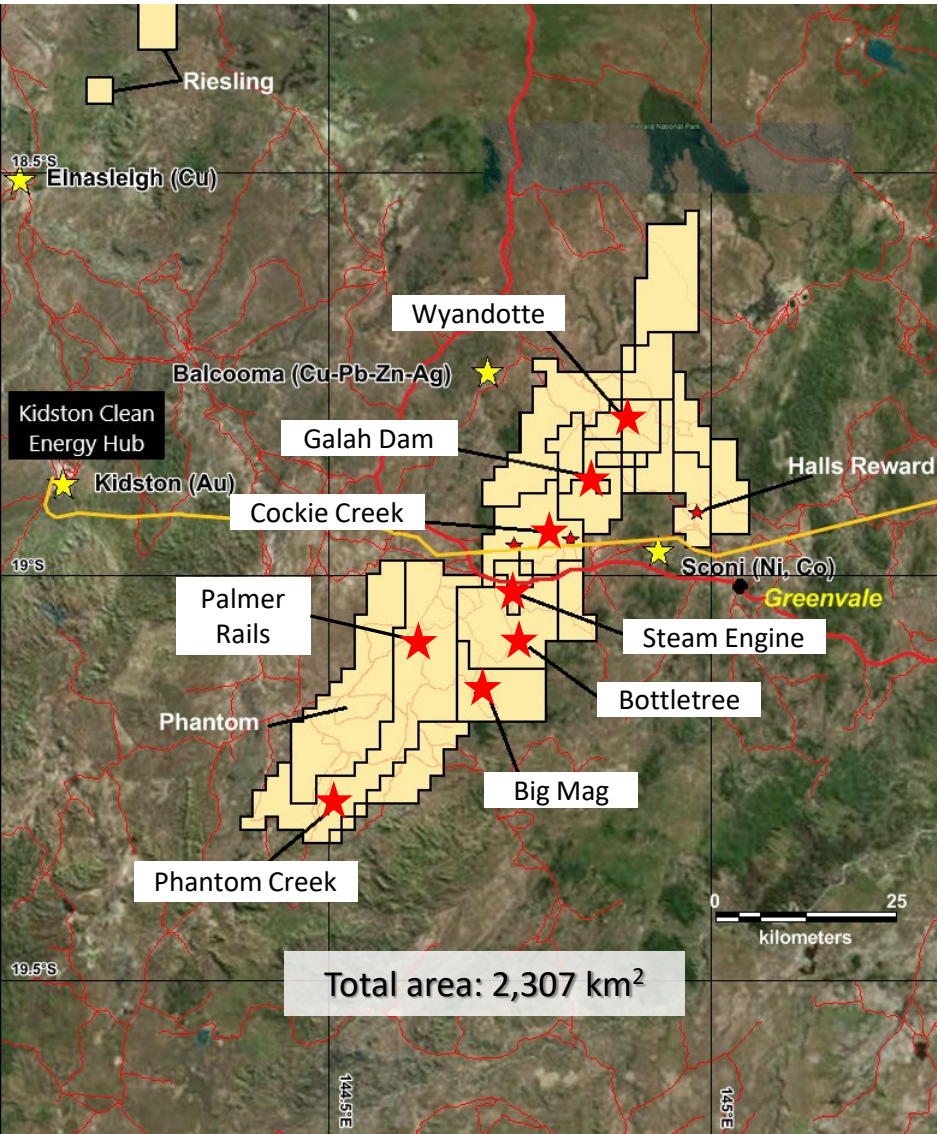




Growth through discovery

# Greenvale Project

Porphyry Copper, Nickel Belt – Why the concentration of copper and nickel?



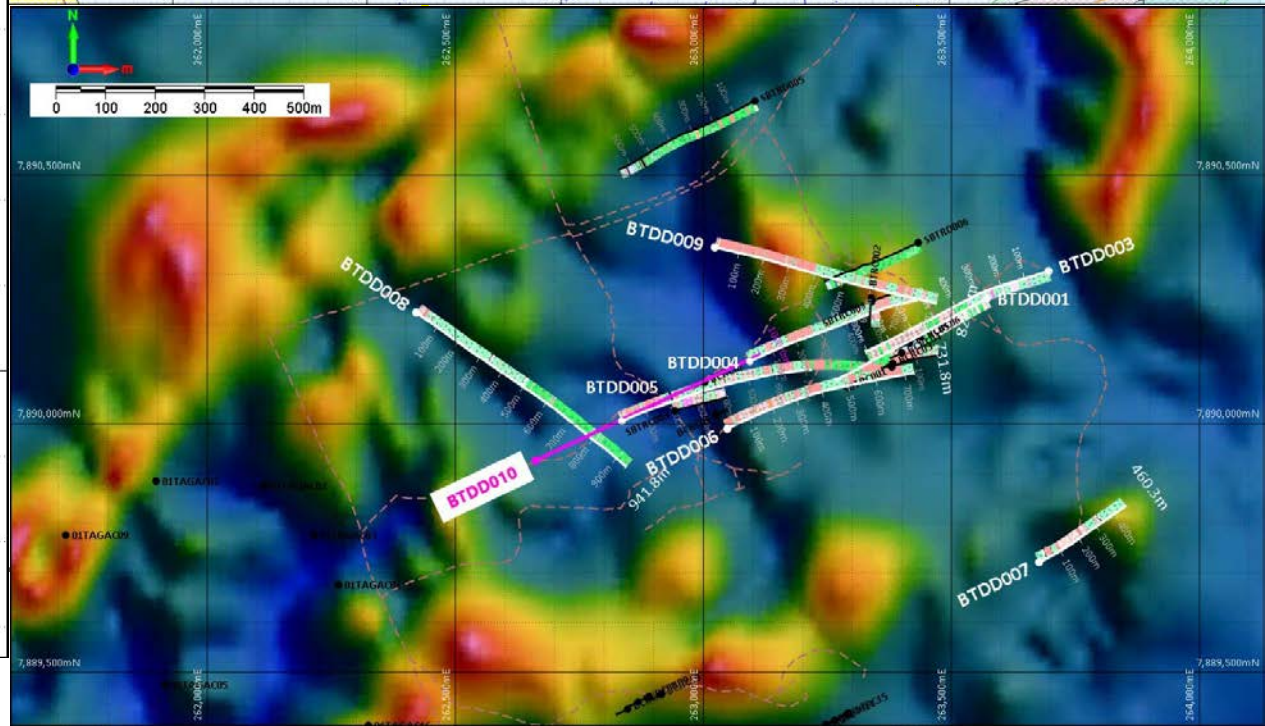
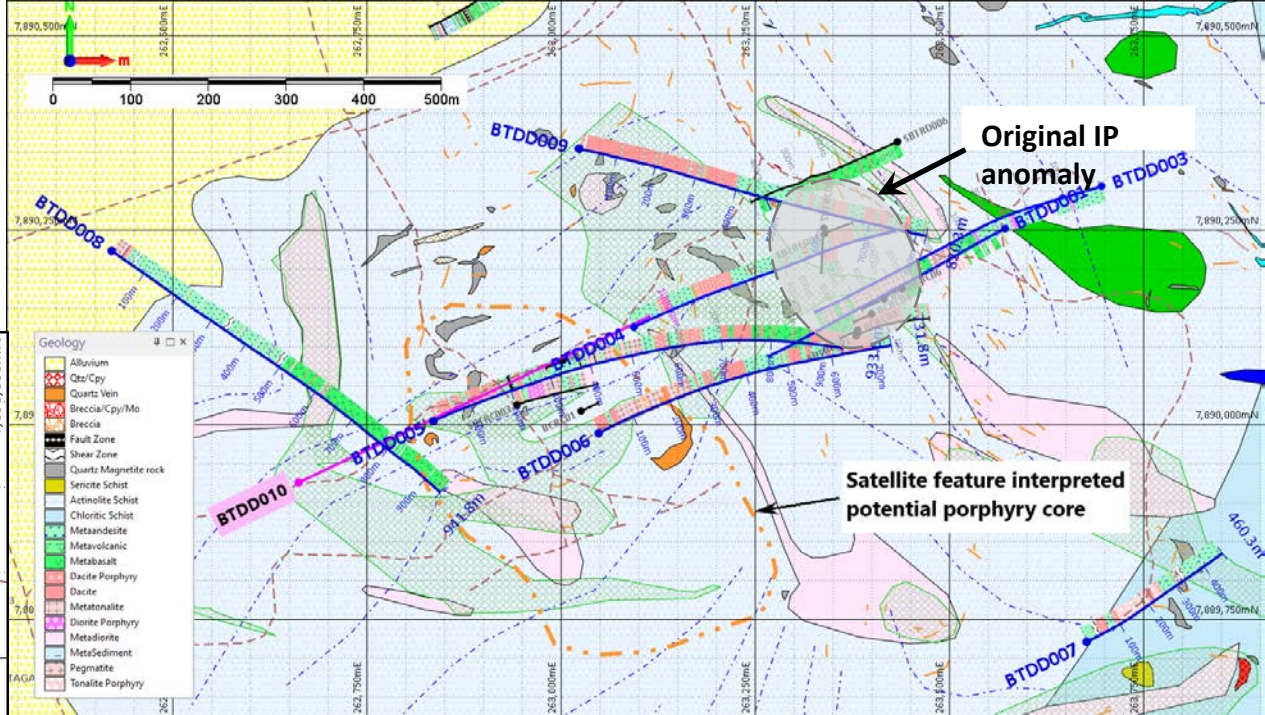
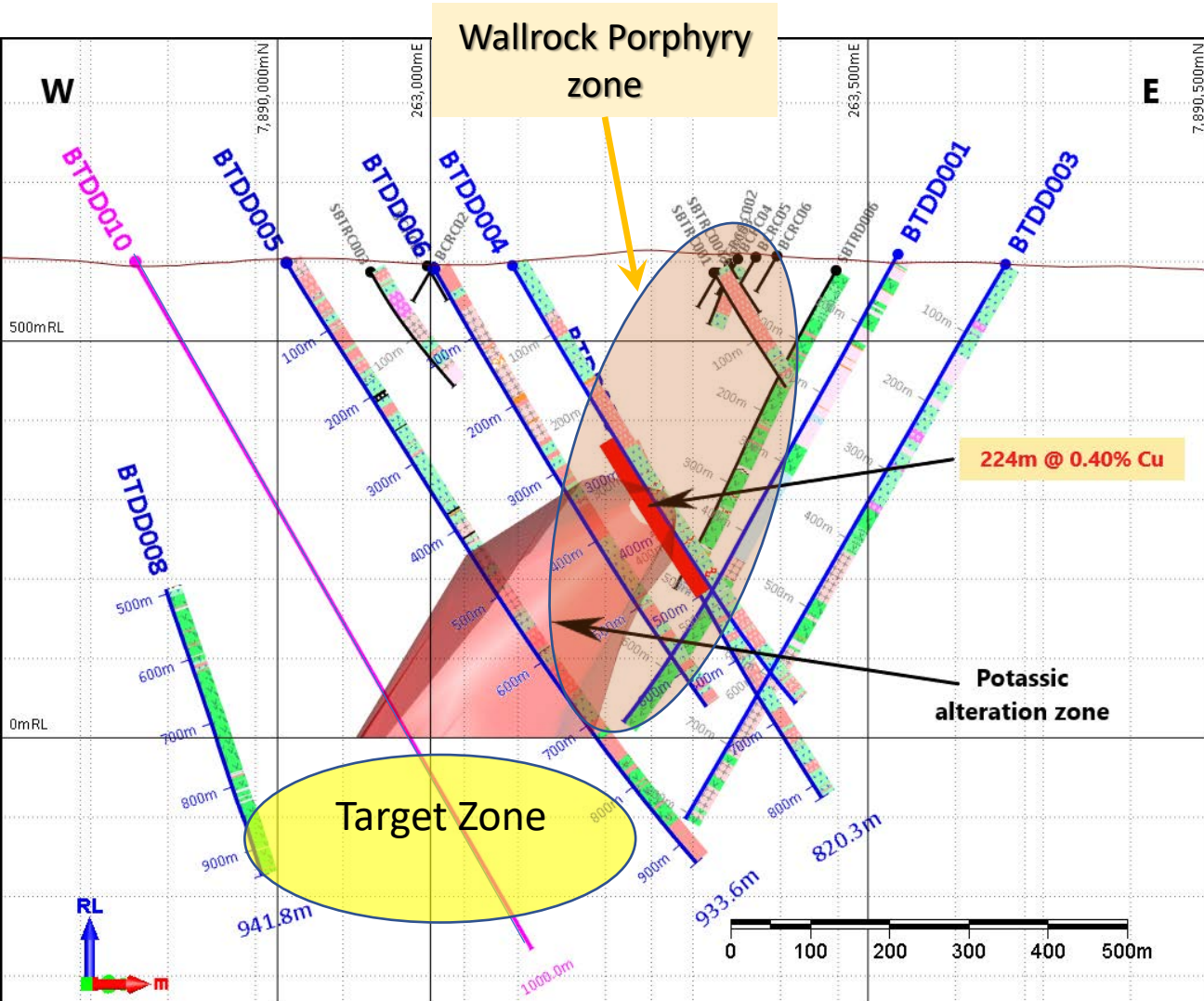






# Bottletree

Buried Cu-Au-Mo porphyry system discovery!

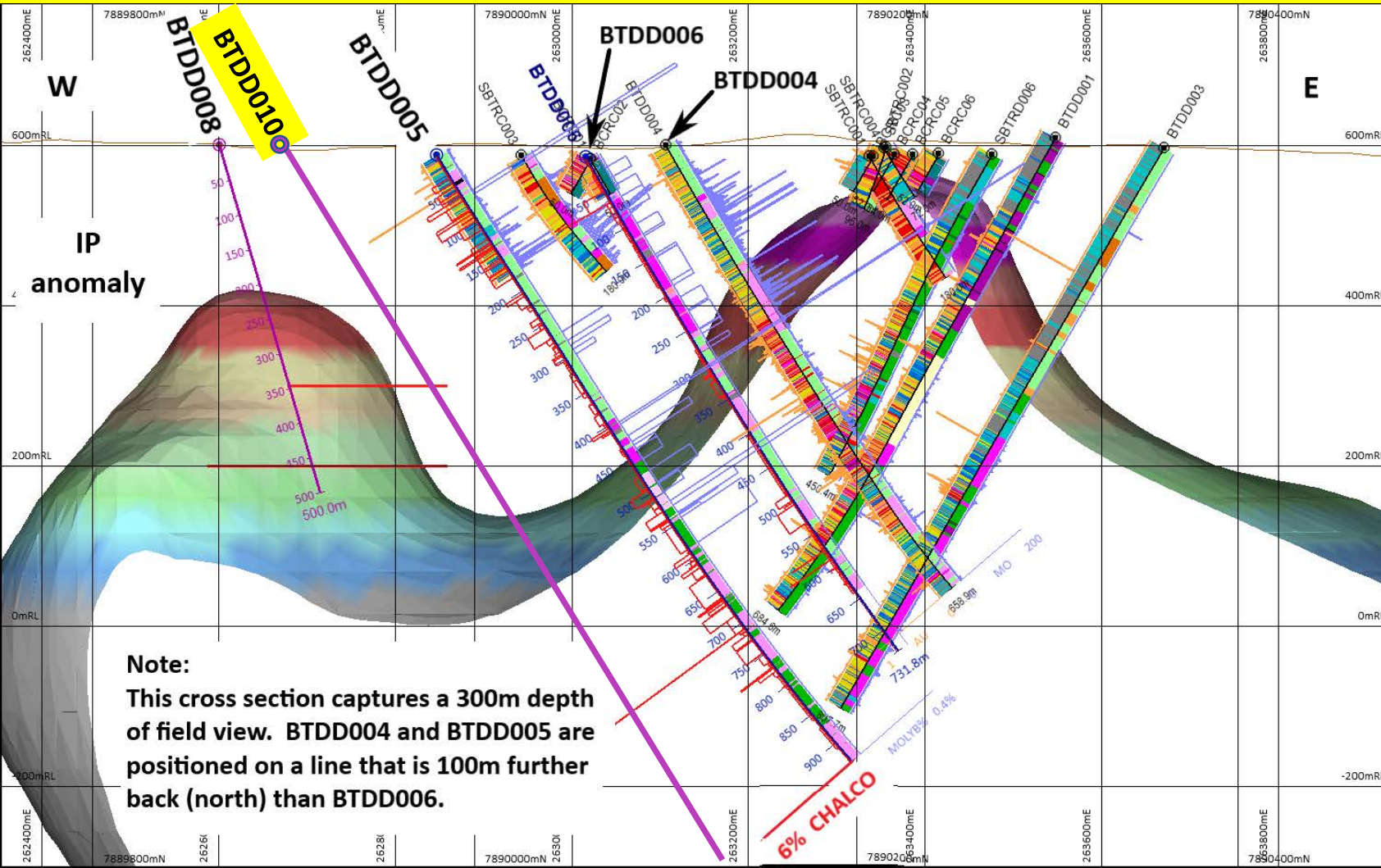




# Bottletree – Buried Cu-Au-Mo porphyry system discovery!

Refer ASX announcement dated 24 August 2022

We are targeting alteration – alteration is the key porphyry pathfinder at this stage – Not Cu% !



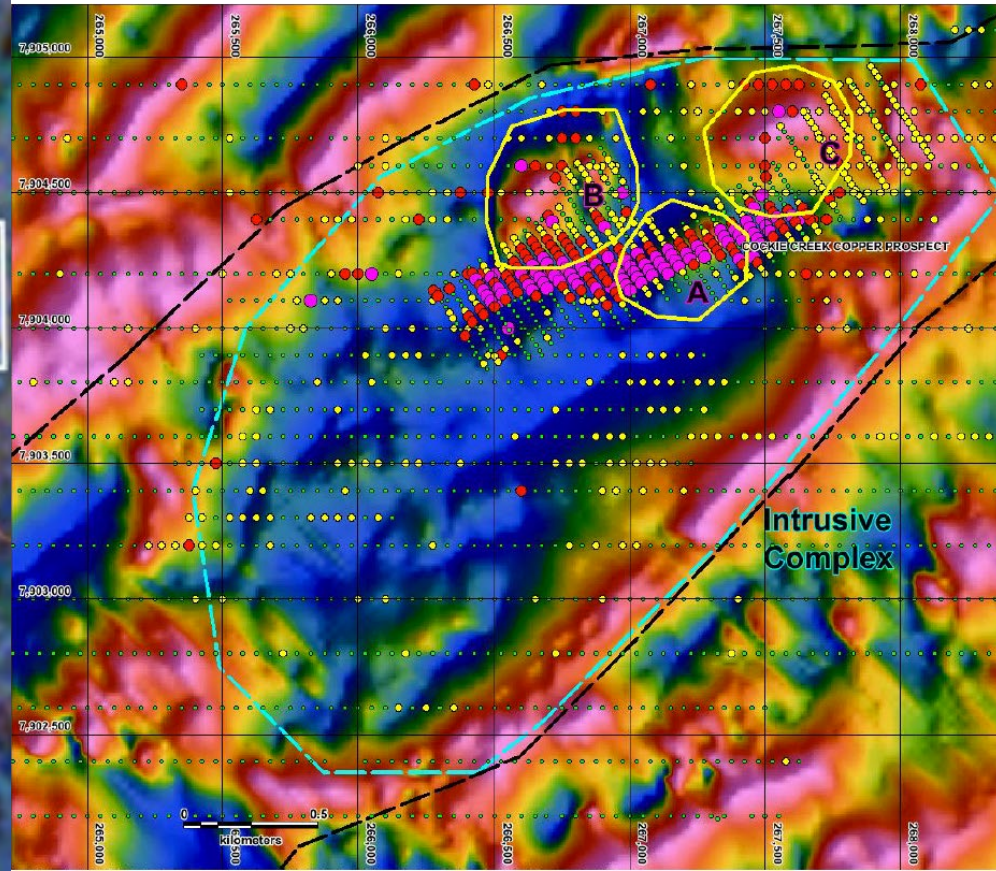
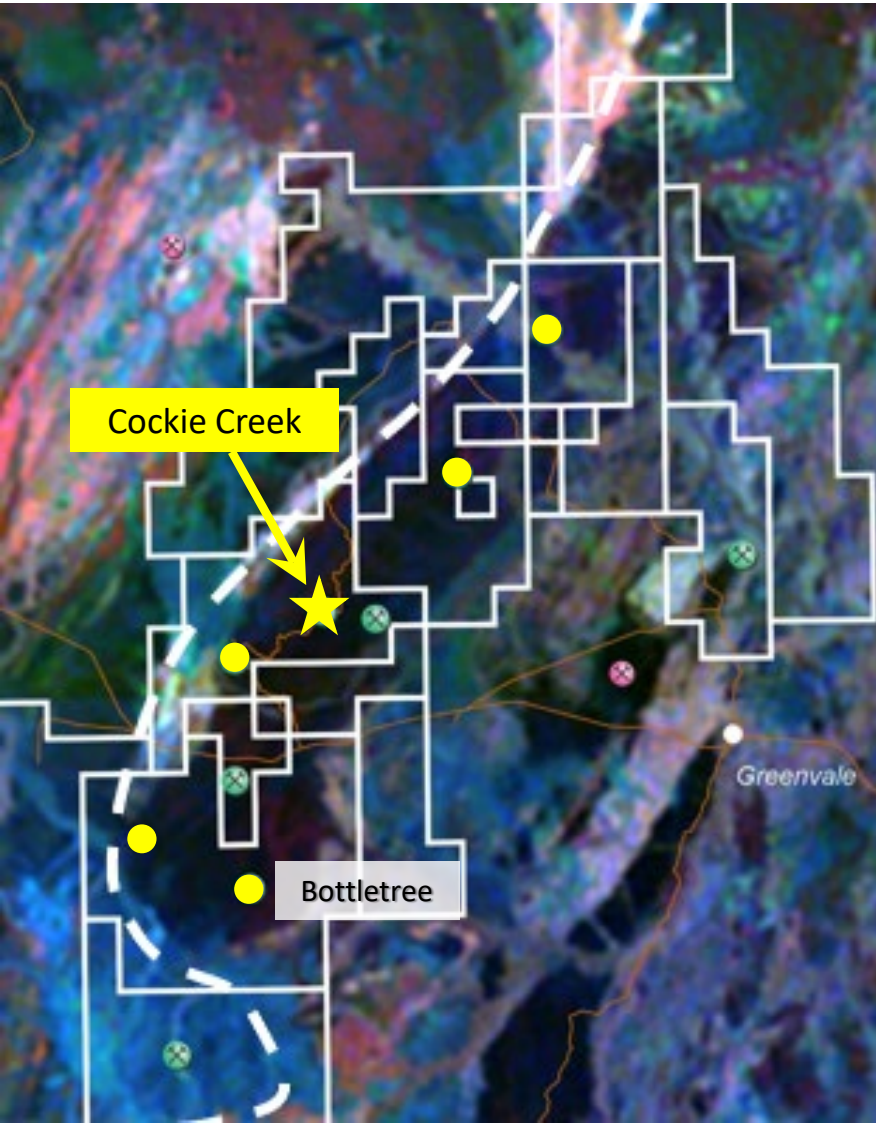


Growth through discovery

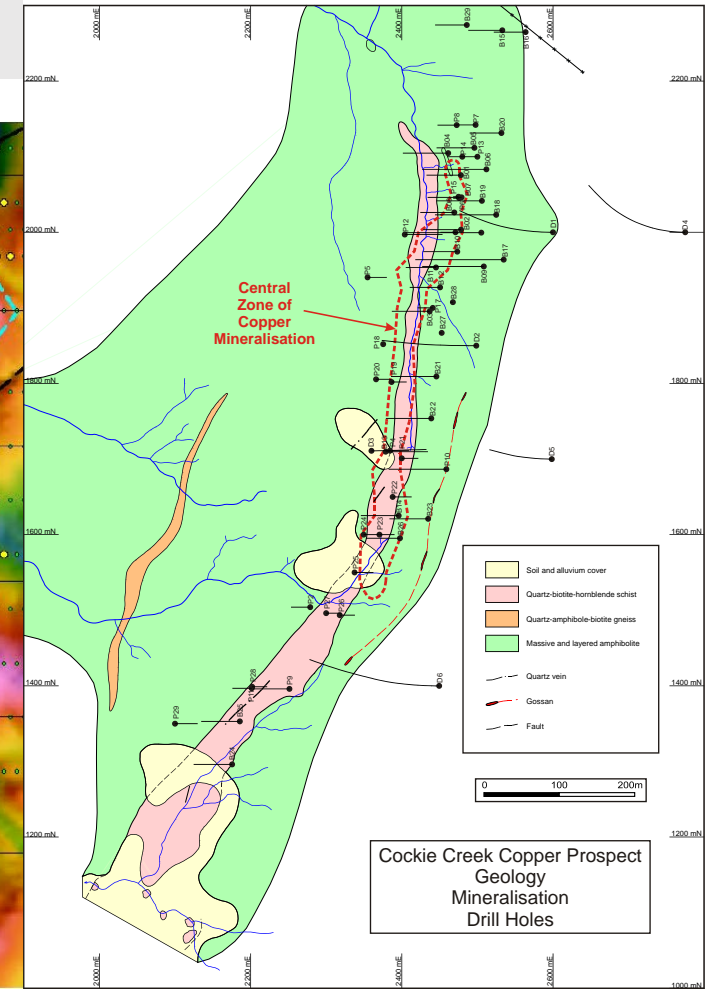
# Greenvale Project

Cockie Creek Porphyry Copper

- Porphyry Cu-Au Mineral Resource above a large IP chargeability anomaly
- Surrounded by three interpreted buried porphyry intrusions
- **13Mt @ 0.42% Cu<sup>2</sup>** (JORC 2004), based on strike length of 1.2kms and down to 250m maximum depth
- Potential for significant porphyry Cu-Au-Mo deposit



2: Refer ASX announcement dated 27 March 2013

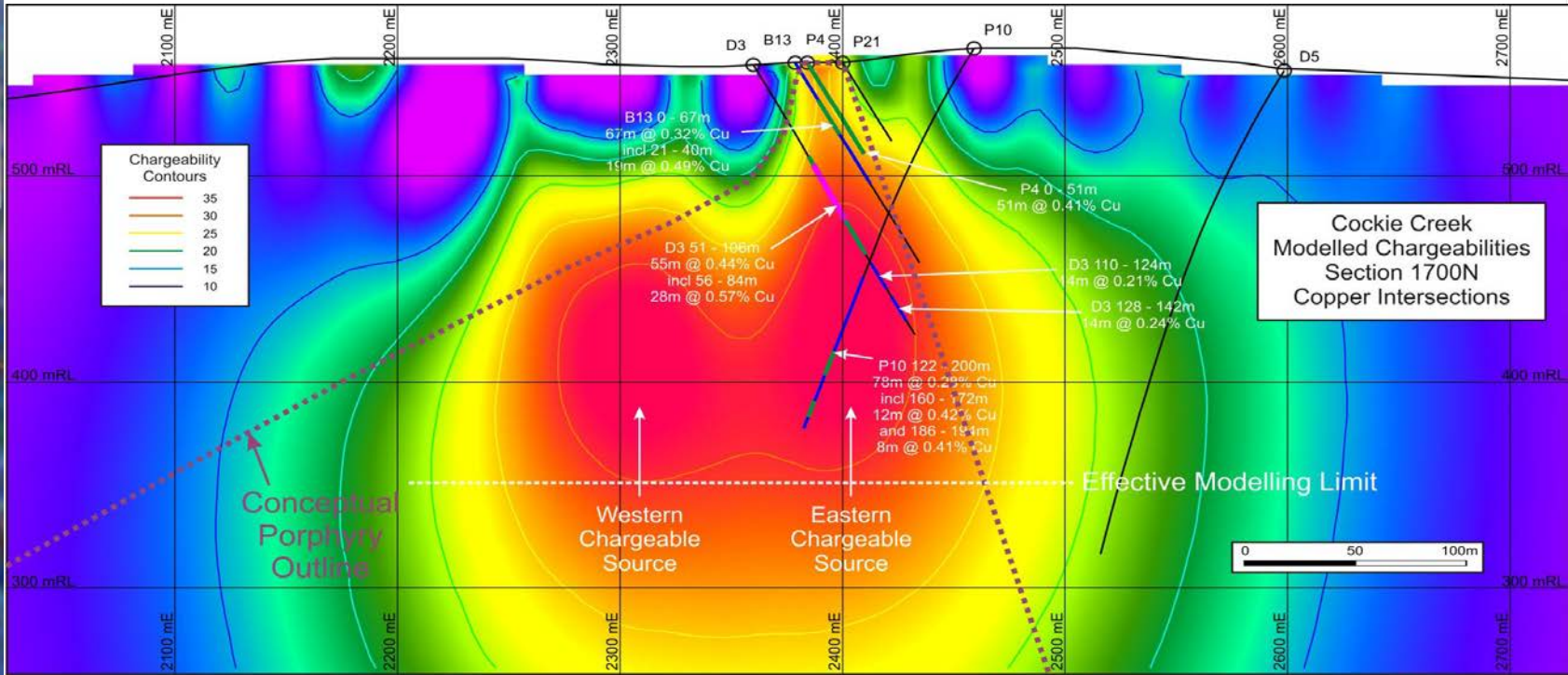
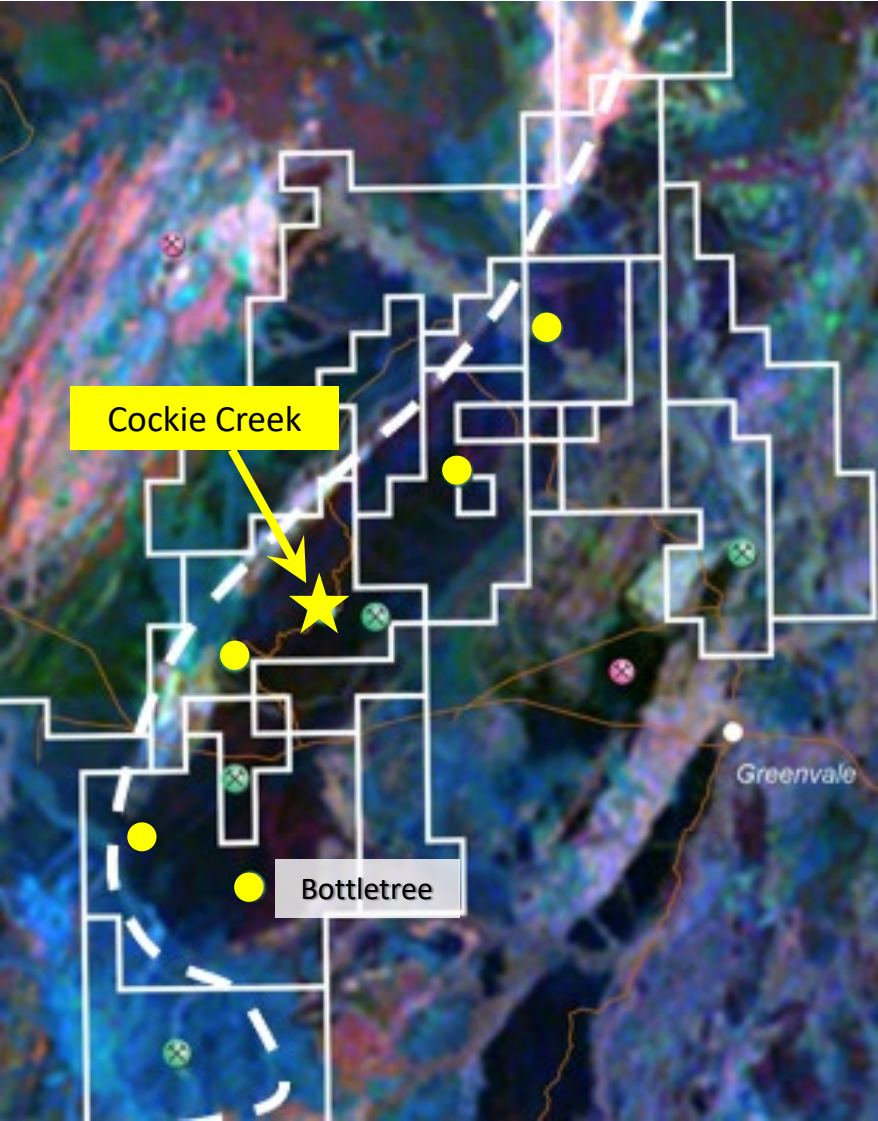
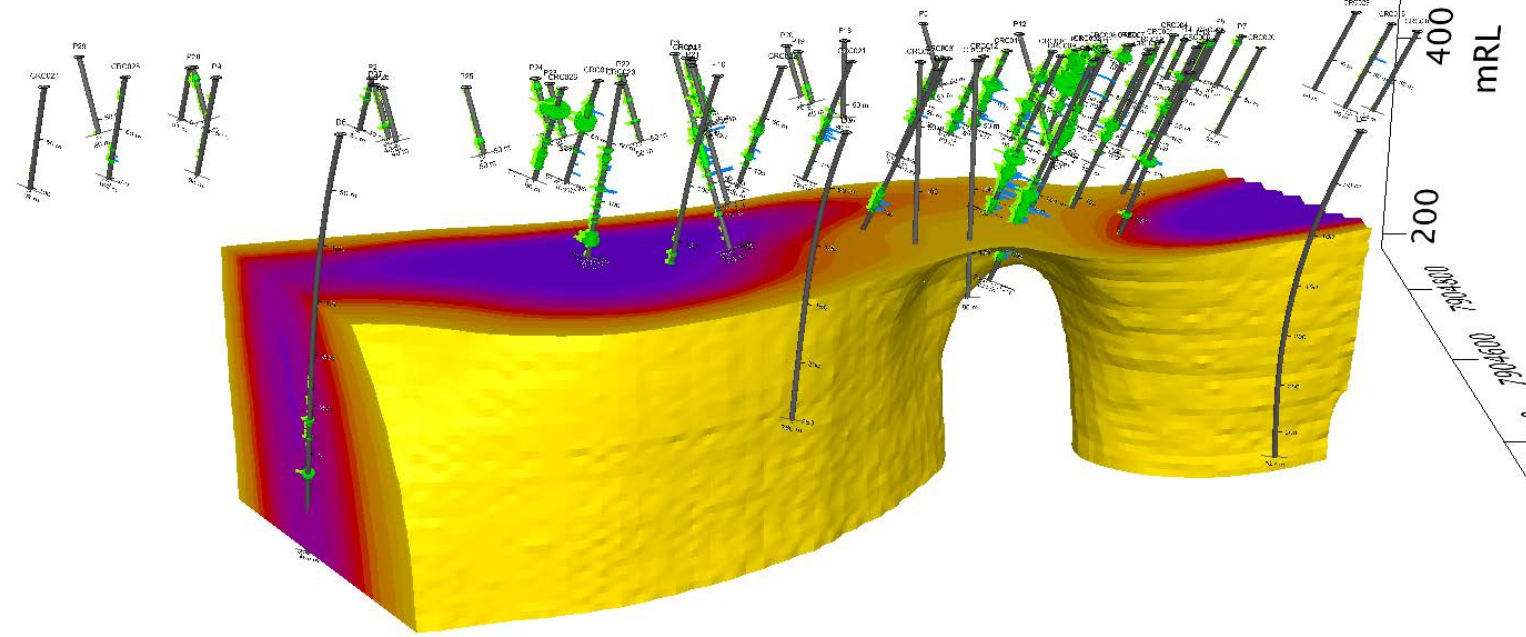




Growth through discovery

# Greenvale Project

Cockie Creek Porphyry Copper

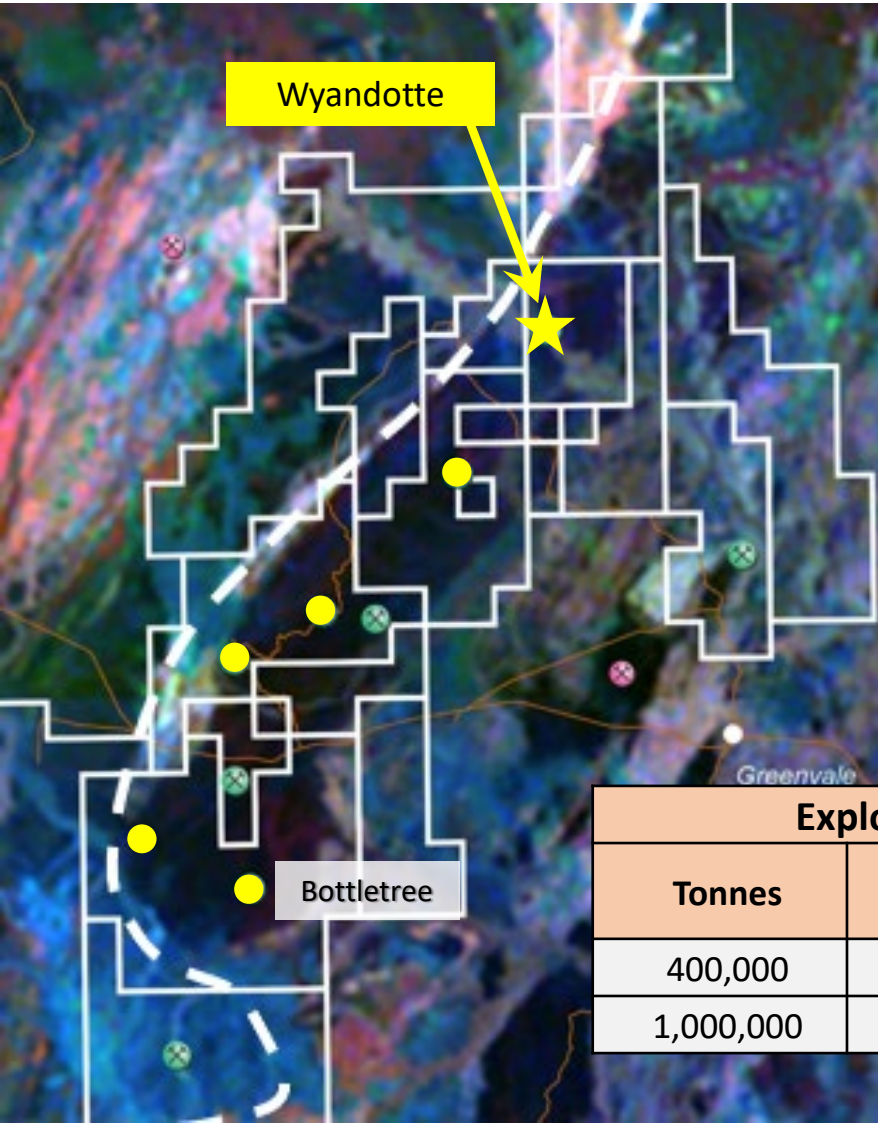




Growth through discovery

# Greenvale Project

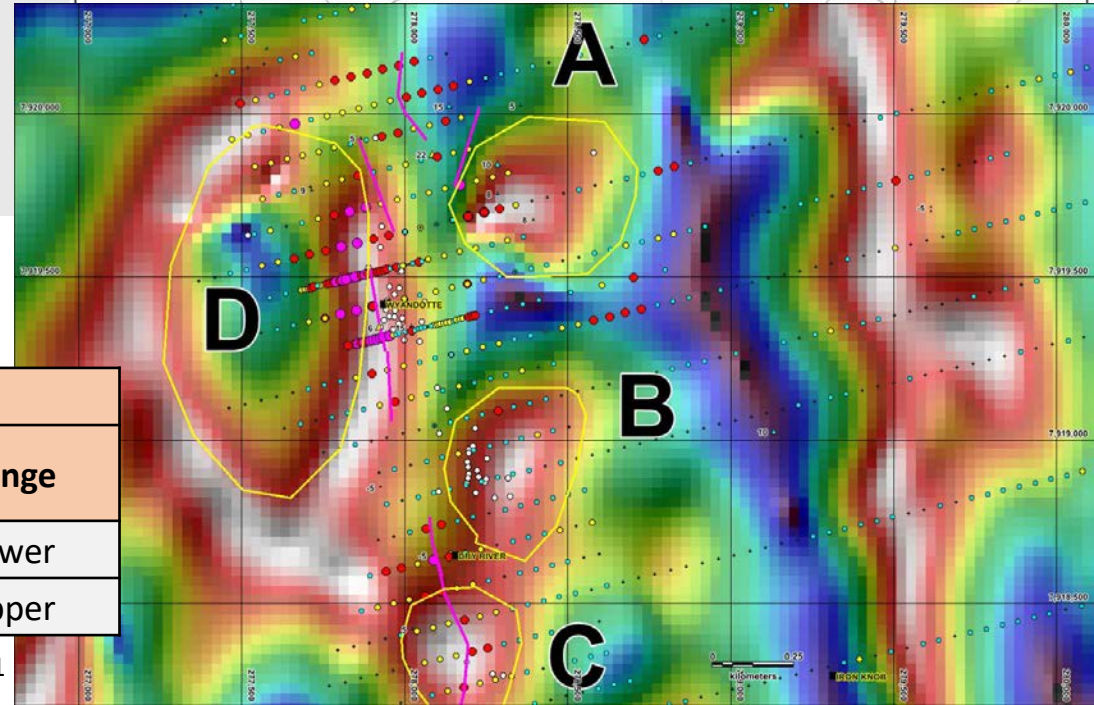
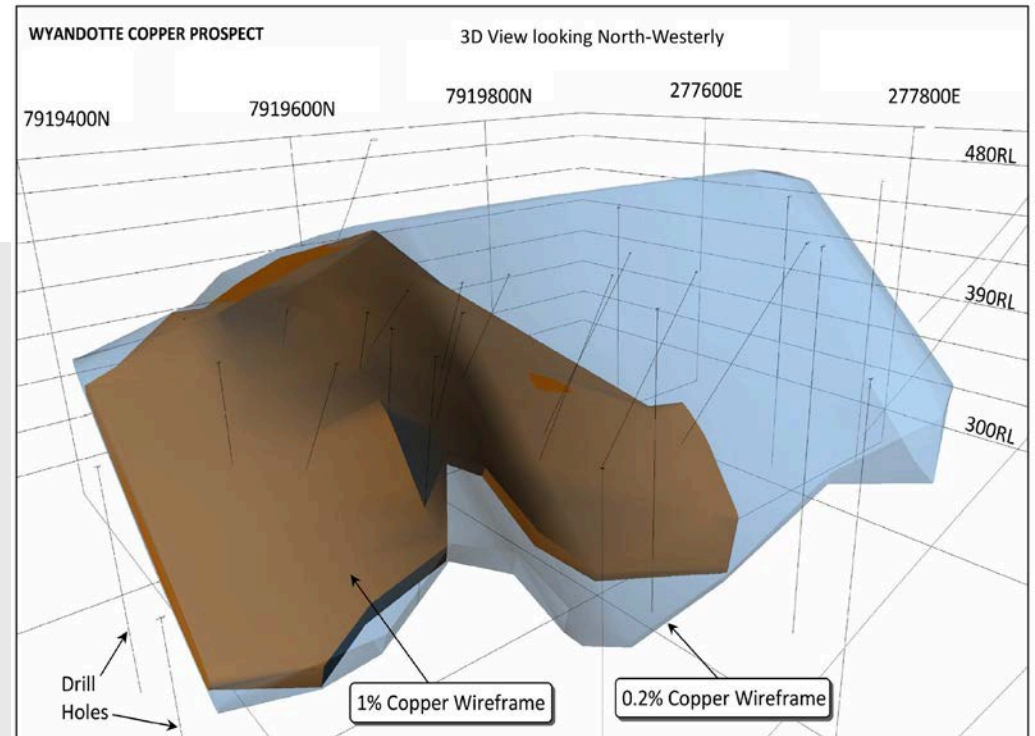
## Wyandotte Copper Deposit



- Shallow, high grade Cu lode (semi-massive chalcopyrite-bornite)
- Surrounded by four interpreted buried porphyry intrusions
- potential for significant Cu-Au-Mo porphyry system, as well as high sulphidation epithermal Au-Cu-Ag
- Potential for down-dip extension of lode
- No exploration since 1975

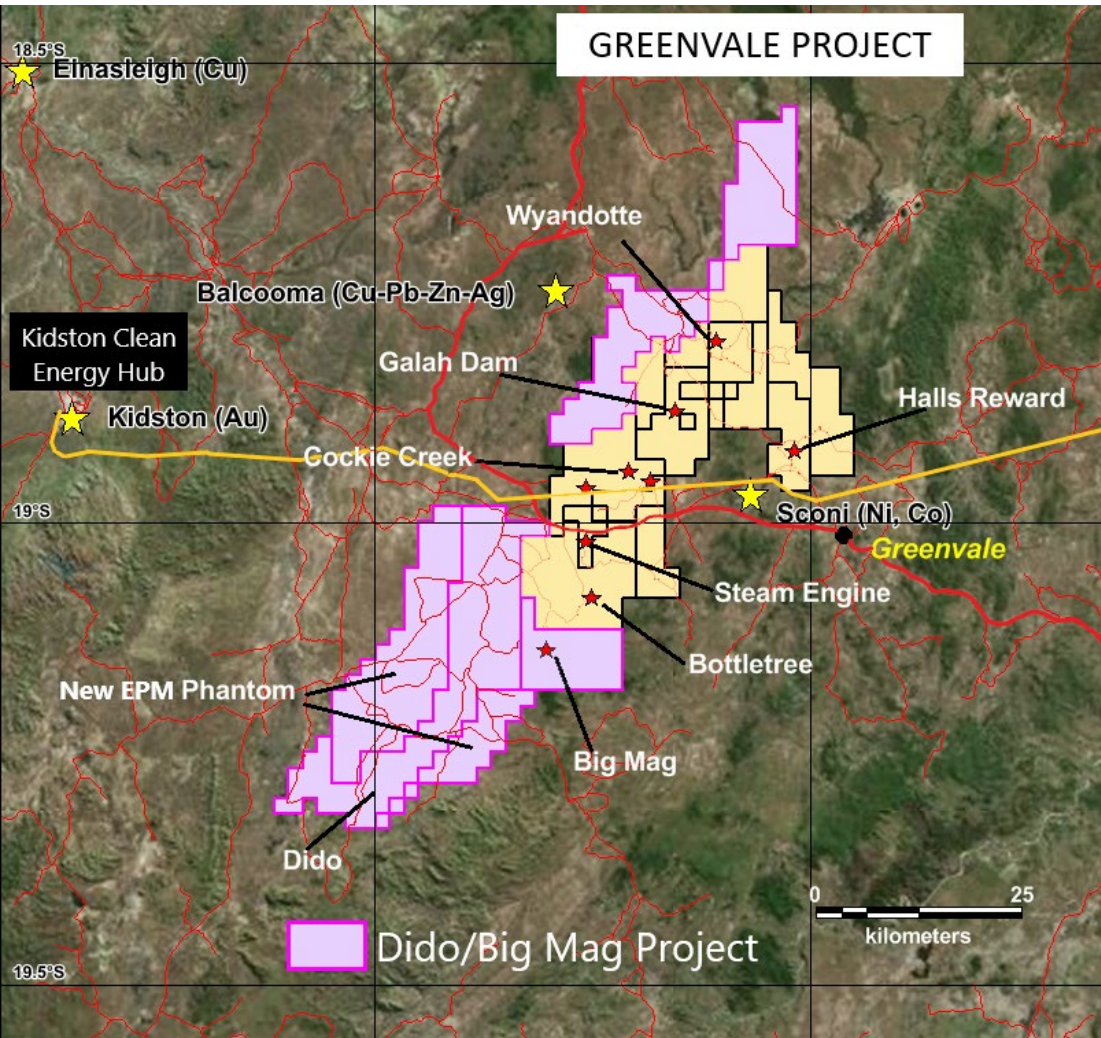
Exploration Target <sup>2</sup> – Surface Lode				
Tonnes	SG	Cu %	Cu tonnes	Range
400,000	2.7	2.2%	8,800	Lower
1,000,000	3.0	1.9%	19,000	Upper

2: Refer ASX announcement dated 15 June 2021





# Ni-Cu-Co-PGE magmatic sulphide project



## Proven Nickel-Copper-PGE sulphide province – but practically unexplored by drilling

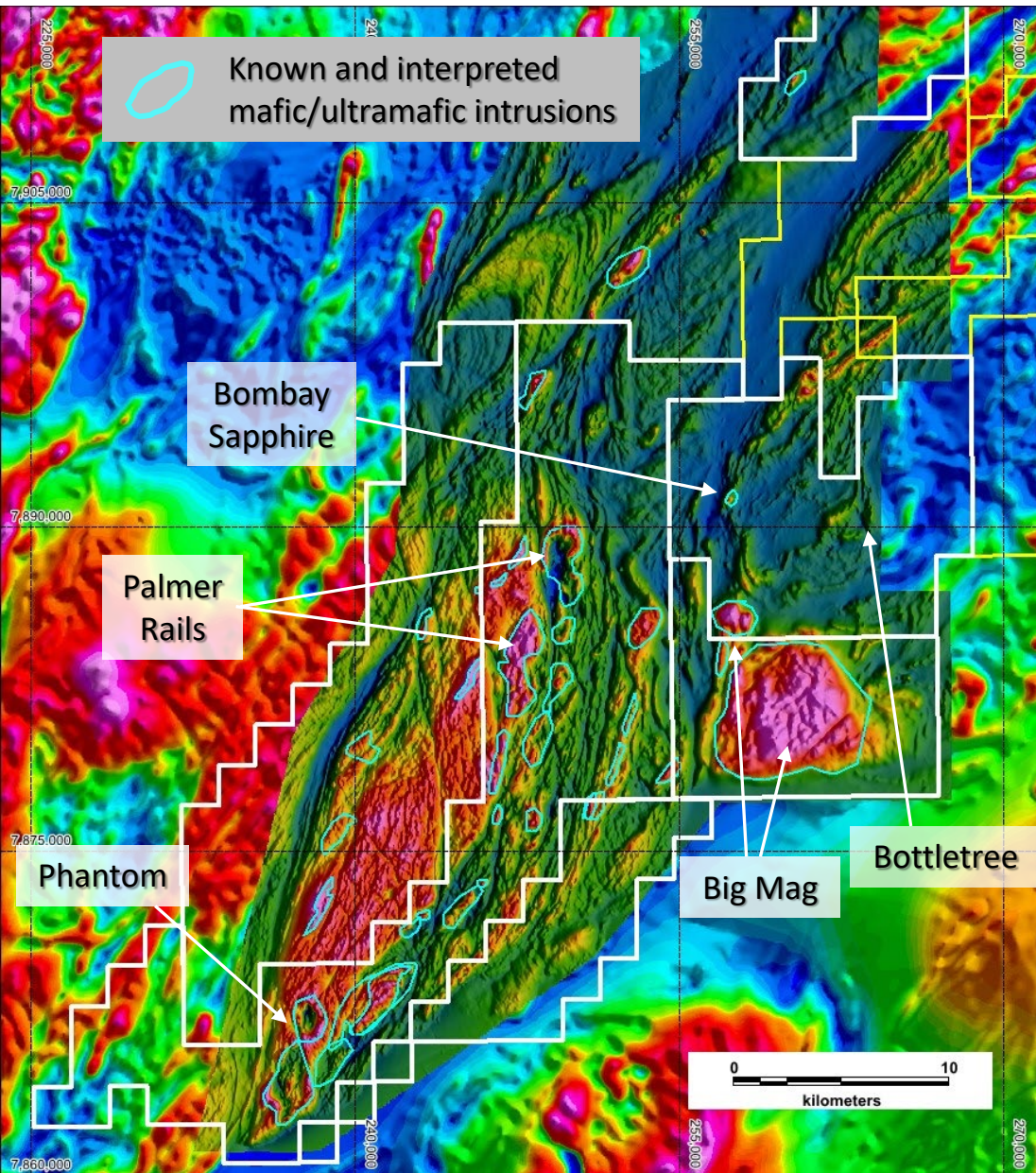
- Project tenement area: 2,058km<sup>2</sup> (including new applications) (Julimar Project area ~750km<sup>2</sup> (ASX:CHN))
- 40+ fertile troctolite intrusions – Only 1 drilled
- Troctolites, pyroxenites and gabbronorites indicative of large-scale Ni-Cu-PGE magmatic sulphide ore bodies
- Extensive airborne geophysical surveys + academic research by Anglo American (2007-2012) + very minor drilling confirmed presence of Voisey's Bay-style ore deposit systems
- Initial drill results considered by Anglo to be very significant
- Localised areas of differentiated mafic and ultramafic intrusions (Ovoids and feeder dykes) with high potential for **magmatic Ni-Cu-Co-PGE** mineralisation identified in high resolution airborne magnetics







# Ni-Cu-Co-PGE magmatic sulphide project

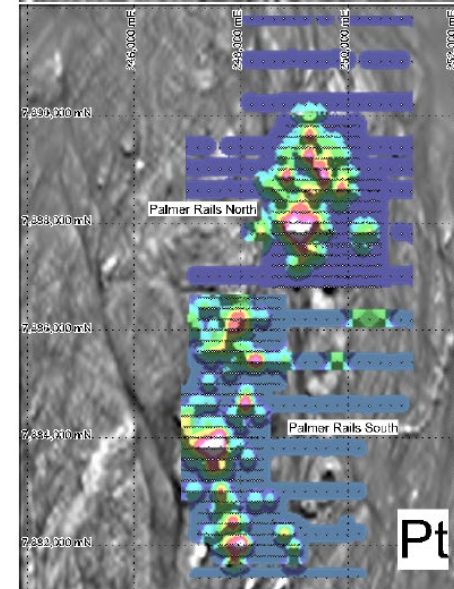
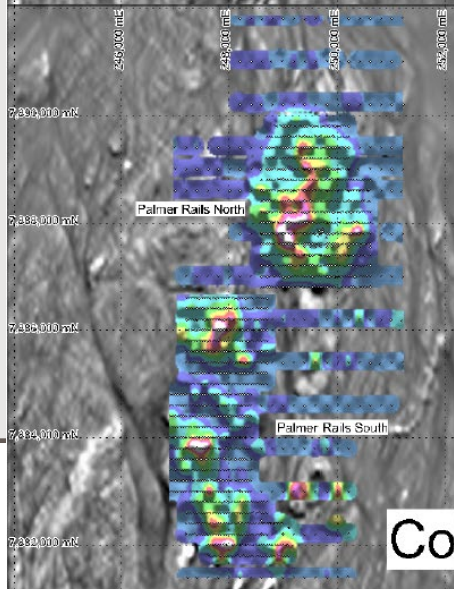
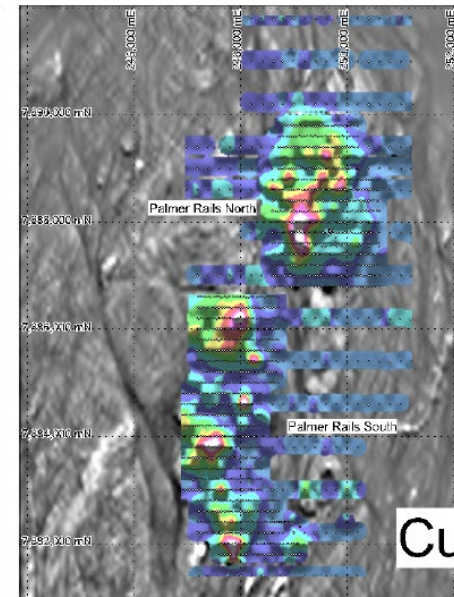
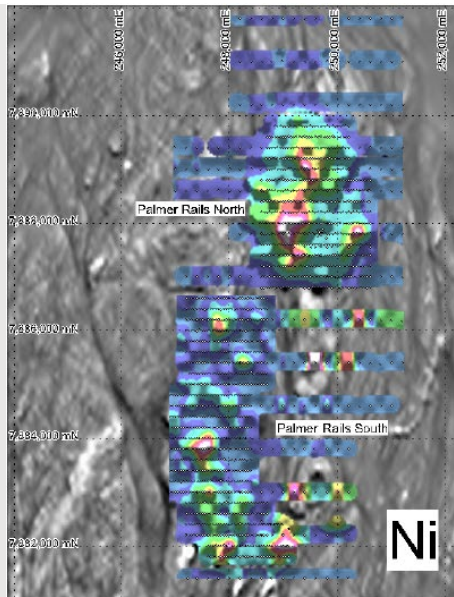
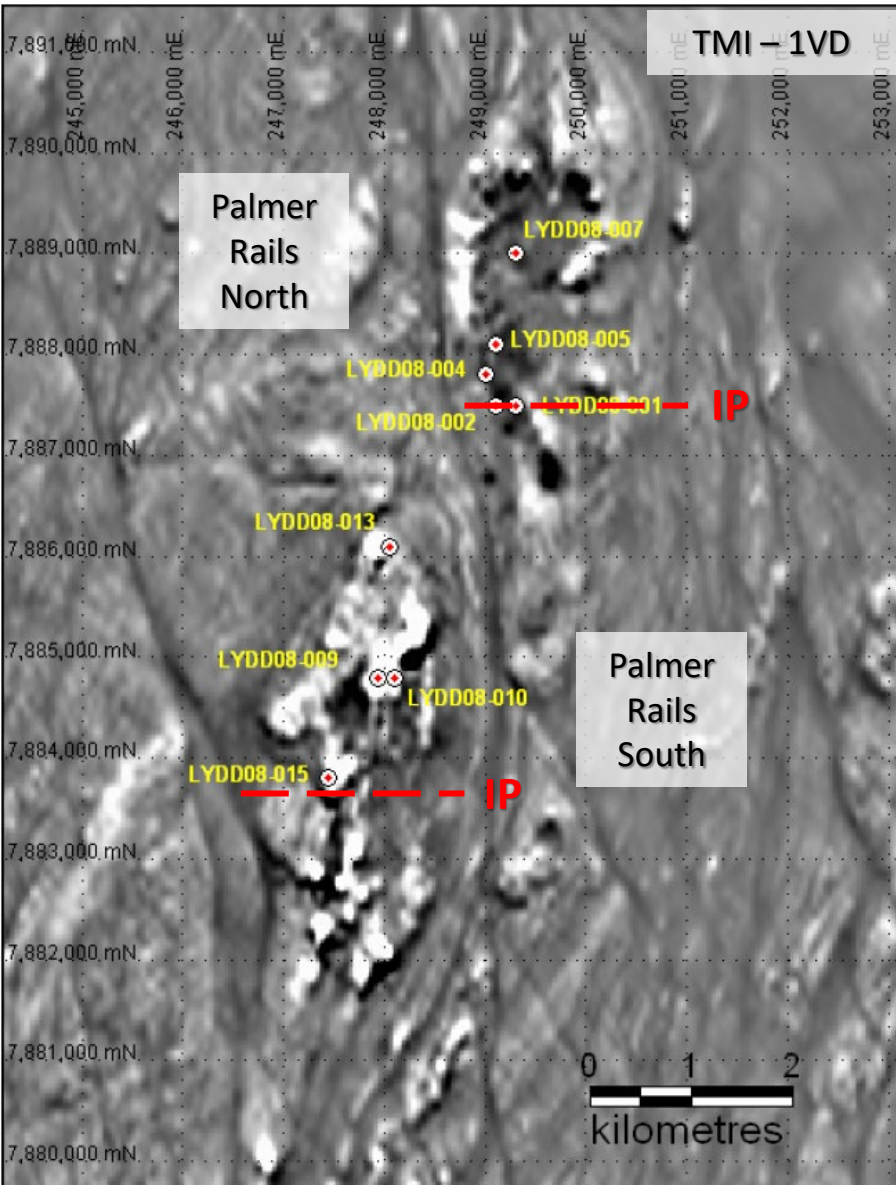


- Numerous troctolite, pyroxenite and gabbro-norite intrusions across entire project area indicative of large-scale Ni-Cu-PGE magmatic sulphide ore bodies
- Microprobe analyses of olivine from intrusions (Fo72-Fo85) consistent with Voisey's Bay – significant Ni vs MgO depletion – indicates Ni sulphide deposit likely to exist in the project area
- Hornblende geobarometry indicates intrusions were emplaced @ 5.5kbars (15-20km depth) – ideal for mineralised mafic intrusions
- Evidence of wall rock contamination and multiple phases of magma intrusion are key features of Ni-Cu-PGE ore systems
- SHRIMP and U-Pb geochronology indicate 460-470Ma age (mafic/ultramafic intrusions) and 430Ma age (Dido Tonalite)
- Initial 9-hole diamond drill program intersected multiple >15m thick disseminated Ni-Cu-PGE sulphide mineralisation (up to 0.58% Ni, 0.28% Cu) in Voisey's Bay type intrusions<sup>3</sup>
- No other follow-up – largely **unexplored**

3: Refer ASX announcement dated 16 March 2022



# Ni-Cu-Co-PGE magmatic sulphide project – Palmer Rails

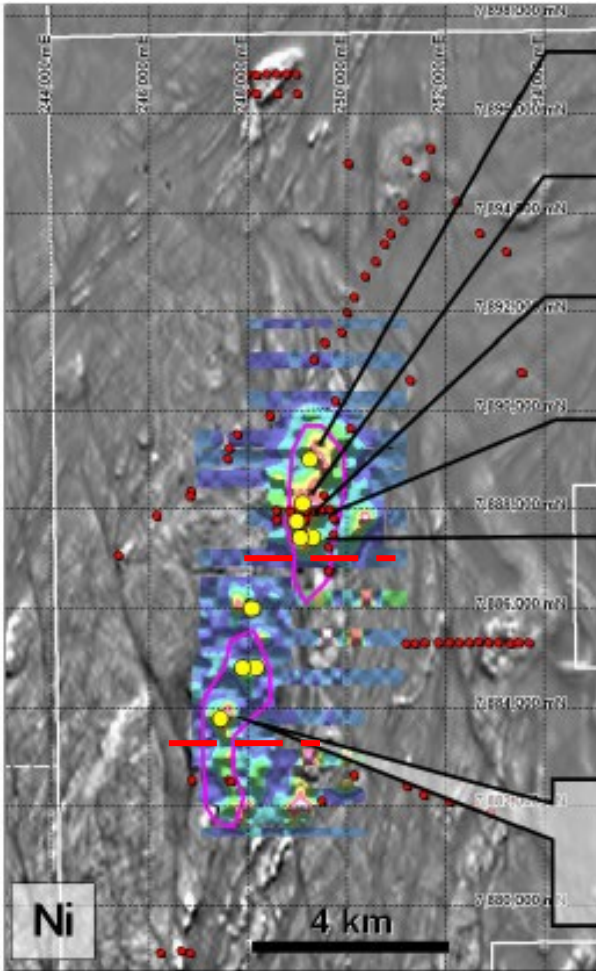


- 9 diamond drill holes (2,700m)
- Targeted IP and soil anomalies
- Intersected mafic/ultramafic intrusions incl gabbro-norite, troctolite, pyroxenite
- “Extremely encouraging”: Intrusions show substantial wall rock contamination and magma mixing
- Palmer Rails North geochemically distinct from PR South
- Magmatic sulphides present in most drill holes (both mafic and ultramafic)
- Intergrown pyrrhotite-chalcopyrite-pentlandite grains intercumulus to silicate grains
- Palmer Rails North is Ni-rich, Palmer Rails South PGE-rich

Refer ASX announcement dated 16 March 2022



# Ni-Cu-Co-PGE magmatic sulphide project – Palmer Rails



**LYDD08-007**  
133m @ 0.12% Ni

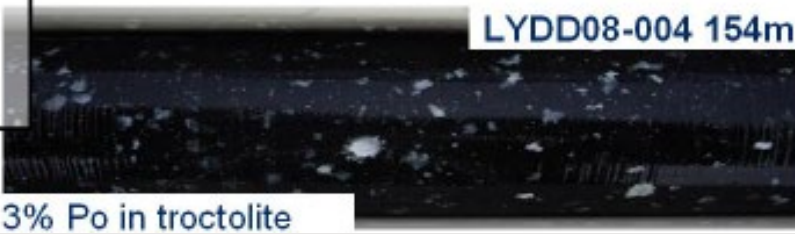
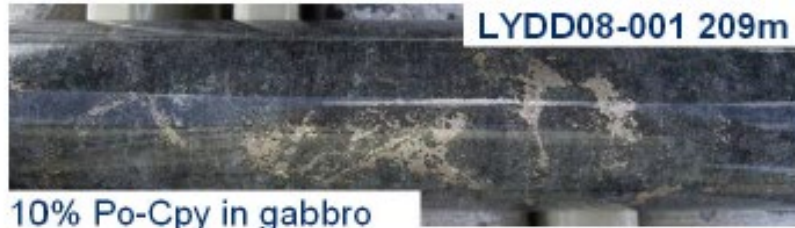
**LYDD08-005**  
28.2m @ 0.14% Ni

**LYDD08-004**  
105m @ 0.14% Ni

**LYAC015**  
24m @ 0.15% Ni

**LYDD08-001**  
74.5m @ 0.10% Ni

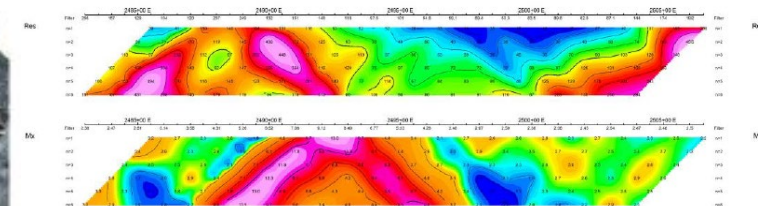
**Suite 2 Magma  
Ni Depleted!**



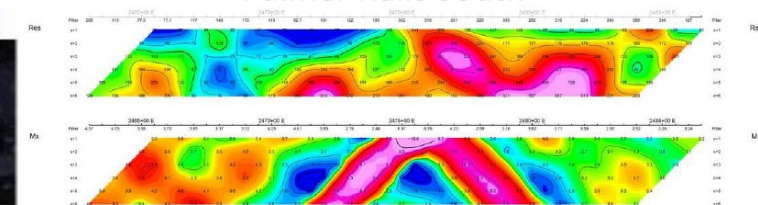
E.g., LYDD08-005:

- 0.37% Ni, 0.13% Cu, 0.01g/t Pt, 0.03g/t Pd (27-29m)
- 0.23% Ni, 0.07% Cu, 0.12g/t Pt, 0.37g/t Pd 0.3g/t Au (29-31m)
- 0.38% Ni, 0.22% Cu, 0.01g/t Pt, 0.12g/t Pd (31-33m)
- 0.15% Ni, 0.14% Cu, 0.01g/t Pt, 0.01g/t Pd (317-319m)

## Palmer Rails North

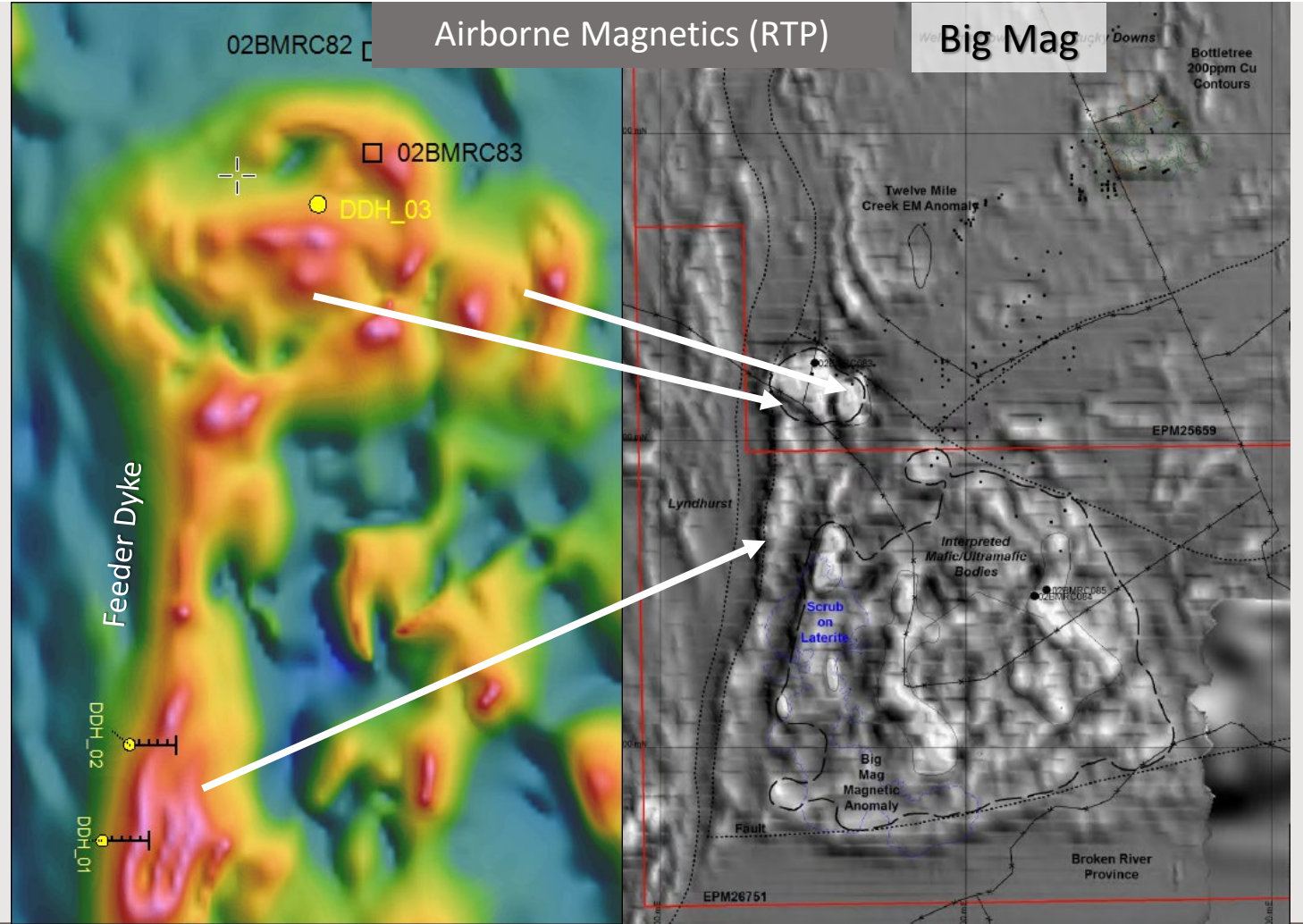
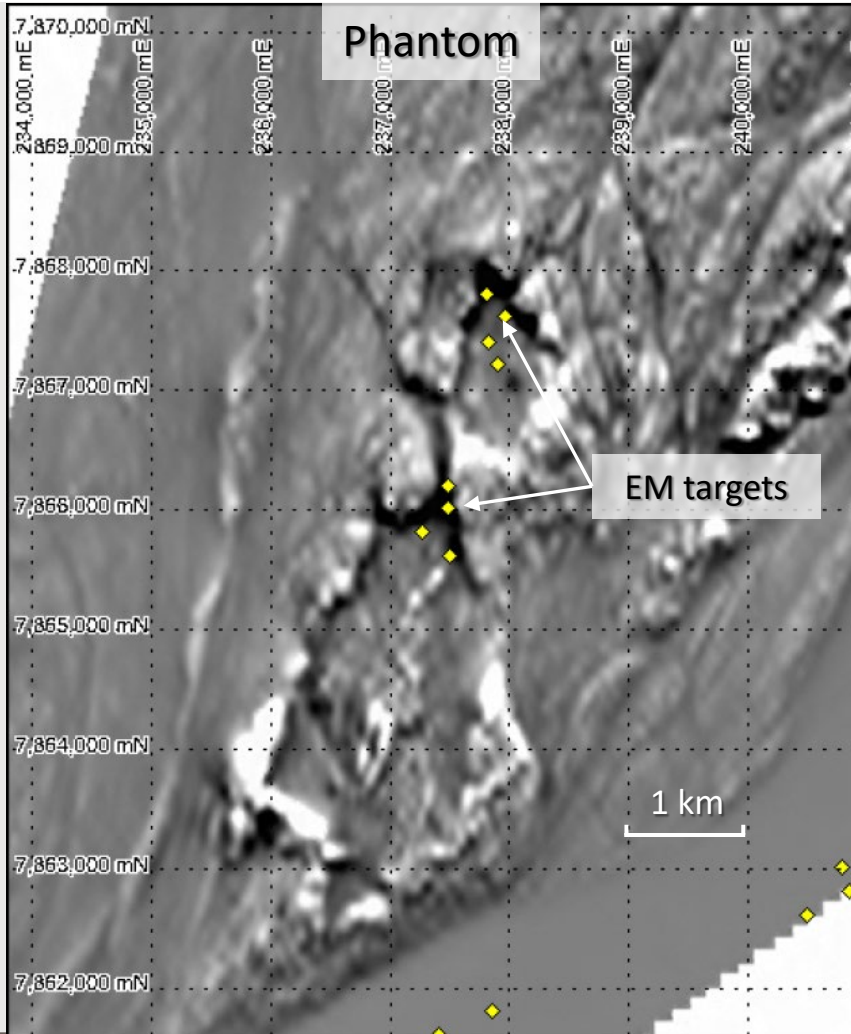


## Palmer Rails South





# Ni-Cu-Co-PGE magmatic sulphide project

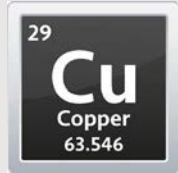
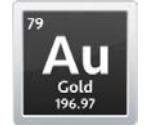
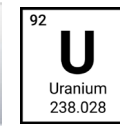
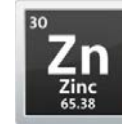
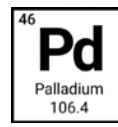
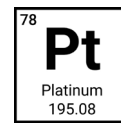
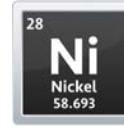
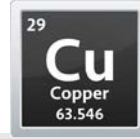




Growth through discovery – multiple tier 1-potential exploration projects

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Leveraging the green transition



**Undisputed most critical element for Zero-Carbon Target**

(\* Wood Mackenzie, Oct 2022)

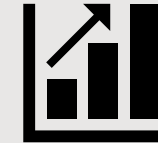


**Perfect timing**

Transformational advances towards major discoveries



**Newly recognised Cu-Au porphyry and Ni-Cu-PGE sulphide provinces**



**Ramping up Cu, Ni-PGE drilling in addition to Bottletree**



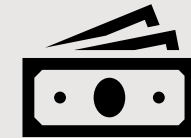
**Future-facing focus on Cu, Ni**

We can trust the world's population to progress a green transition. Copper, above all other future-facing elements, is the most fundamental. SPQ is Copper (Nickel, PGE, Zinc).

This is a period of global change and opportunity and SPQ is moving forward on multiple fronts.

We're driven to expedite SPQ's projects.

Discover, Explore, Transact, De-merge



**Early revenue potential**  
Feasibility study progressing at Steam Engine

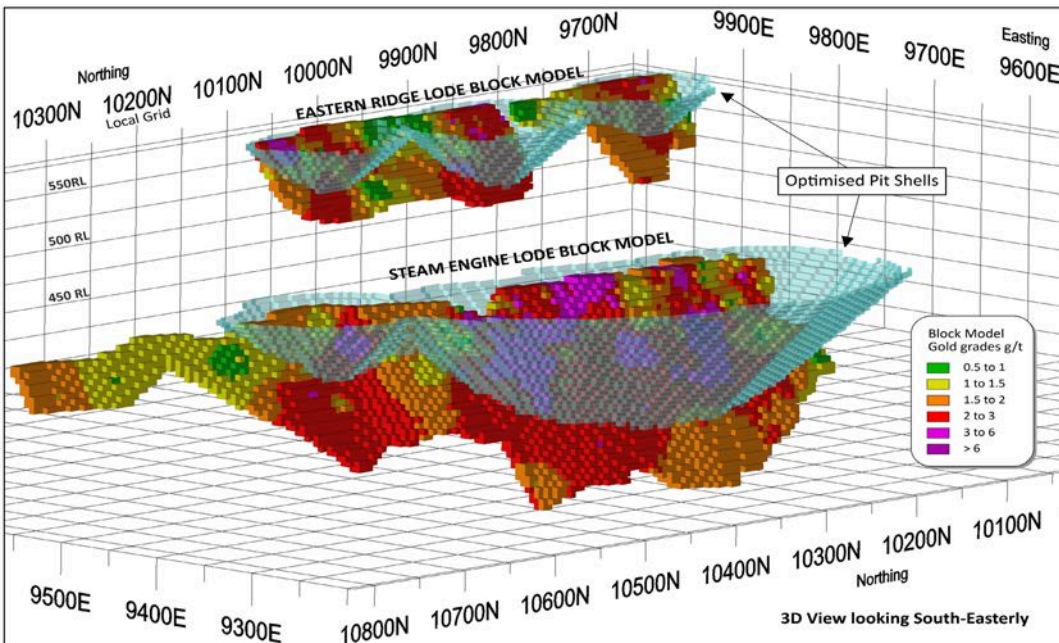


# Appendices





# Steam Engine – Highly positive Scoping Study

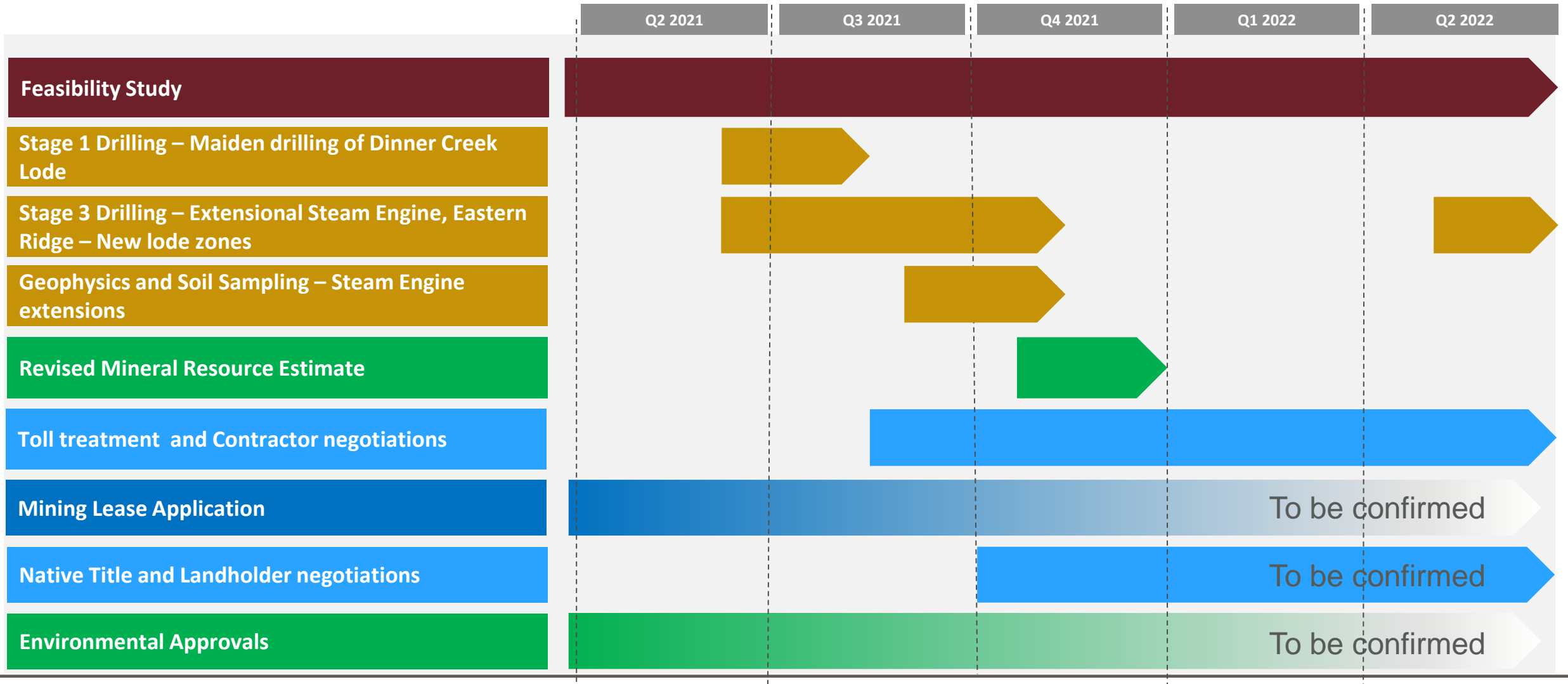


Parameter	Breakeven Value
Gold Price	A\$1,709 (US\$1,299 @ 0.76 AUD/USD)
Gold Grade	1.79 g/t
Gold Recovery	60%
Steam Engine Lode Ore	

Parameter	Base Case @ A\$2,200 /oz	Upside Case @ A\$2,500 /oz
<b>Financial Summary</b>		
Overall Cash Flow (post-tax)	A\$24.2M	A\$41.0M
NPV <sub>7%</sub> (post-tax)	A\$21.2M	A\$35.9M
Internal Rate of Return (IRR) (post-tax)	242%	410%
All-in Sustaining Costs (AISC) <sup>4</sup>	A\$1,673 /oz	A\$1,725 /oz
Payback Period	11 months	9 months
<b>Funding</b>		
CAPEX (Pre-Production and Closure)	A\$5.1M	A\$5.1M
Funding Required <sup>5</sup>	A\$10.0M	A\$9.0M
Return on Capital (post-tax)	475%	806%
<b>Physical Outputs</b>		
Life of Mine (LOM) (Construction to Closure)	~2.5 years	~2.9 years
Total Ore	1.131 Mt	1.305 Mt
Ore Grade	2.31 g/t	2.24 g/t
Overall Gold Recovery	84%	84%
Gold Produced and Sold	70,000 oz	79,000 oz



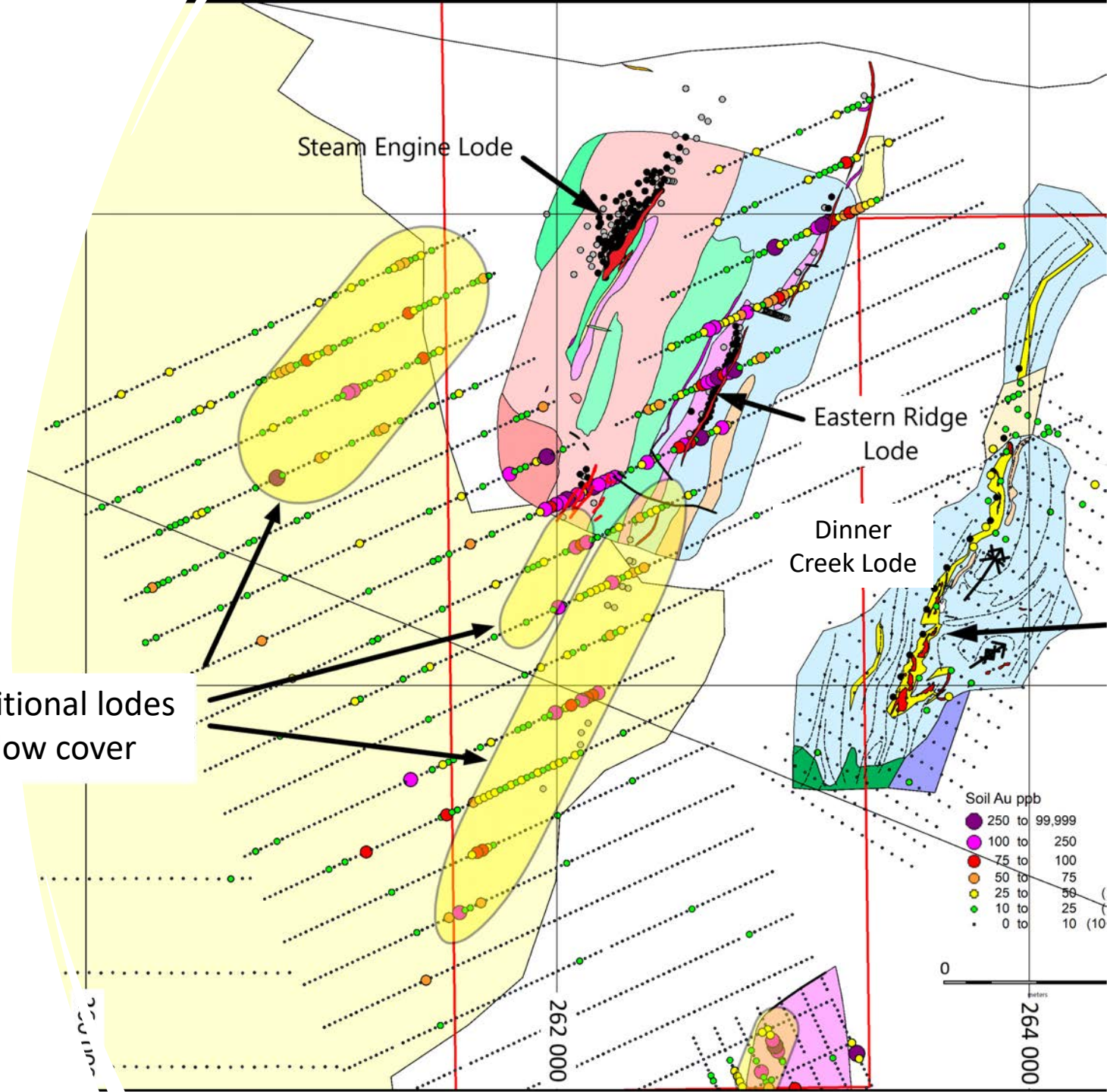
# Steam Engine – Current program timeline





# Steam Engine Project – Potential new lodes

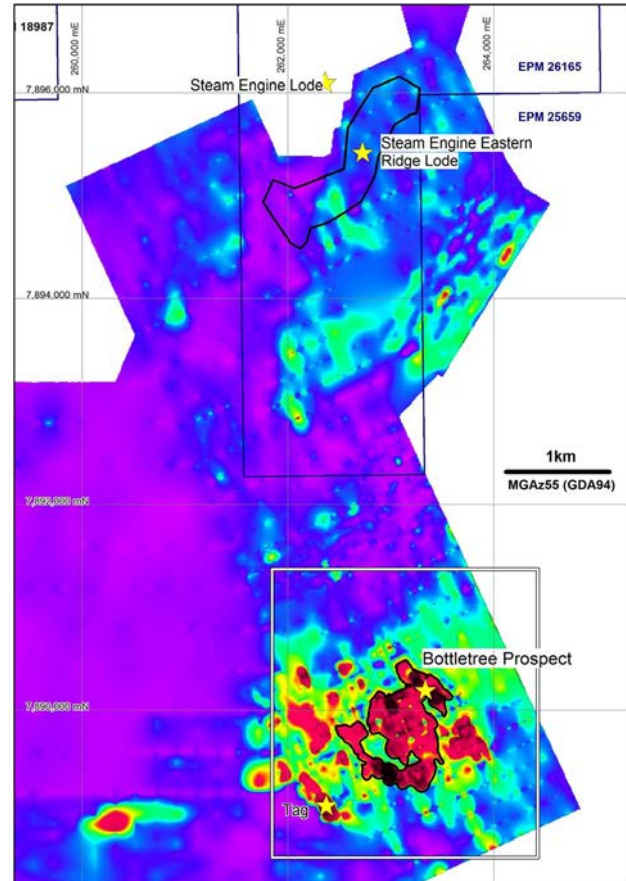
Potential additional lodes under shallow cover



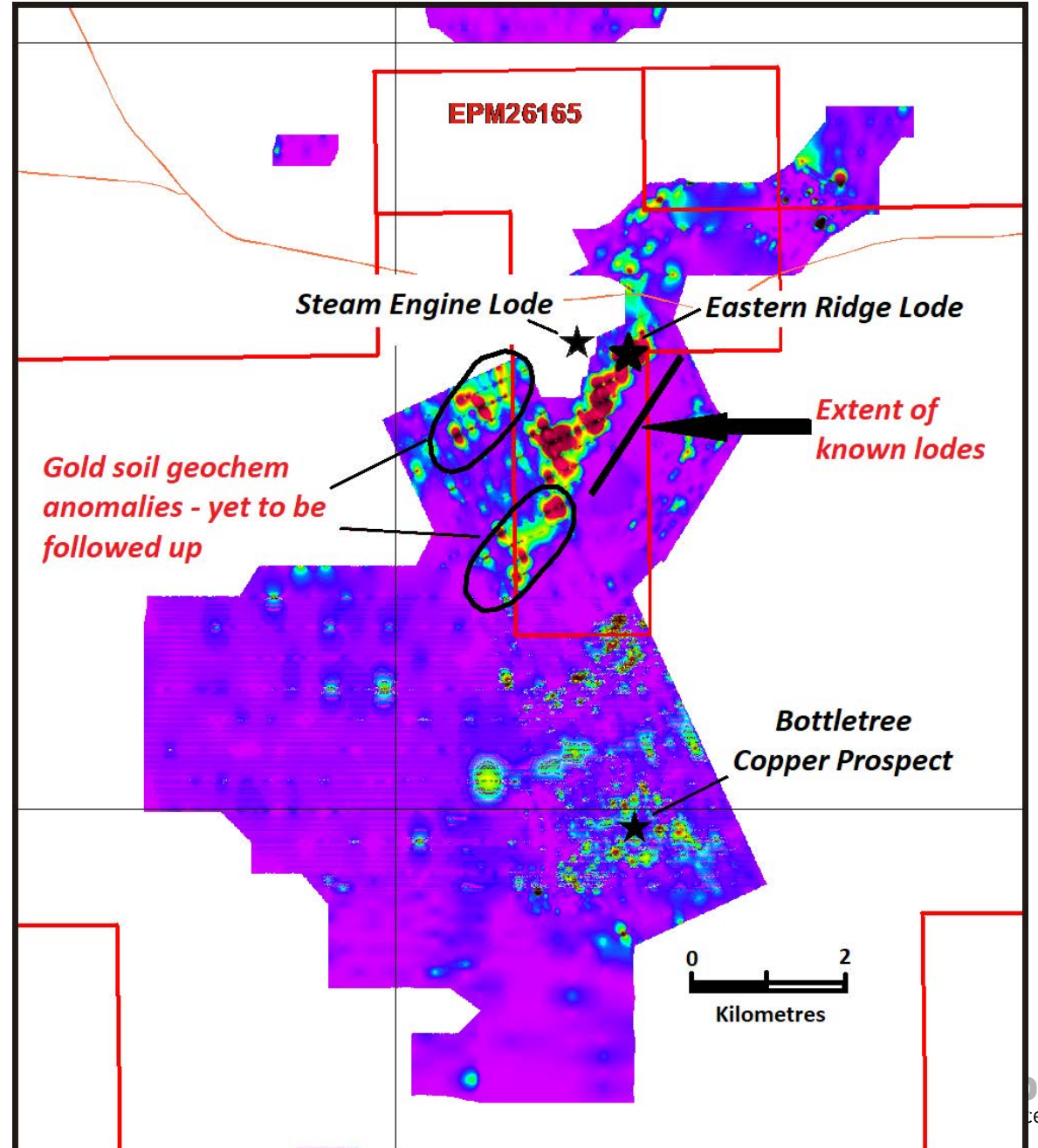


# Steam Engine Project – Potential new lodes

Soil geochemistry (Copper)



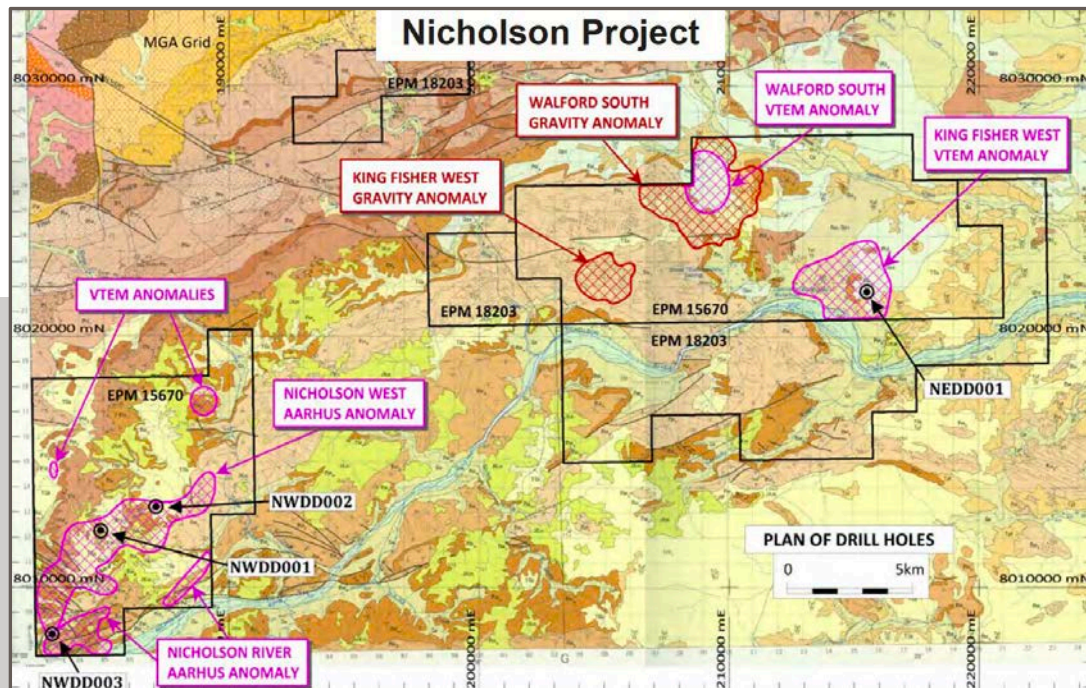
Soil geochemistry (Gold)





# Mt Isa-style Zn-Pb-Ag-Cu targets

- Located within Carpentaria Zinc Province, which contains 20% of the world's zinc inventory
- Underexplored – the most likely area to make the next Mount Isa discovery



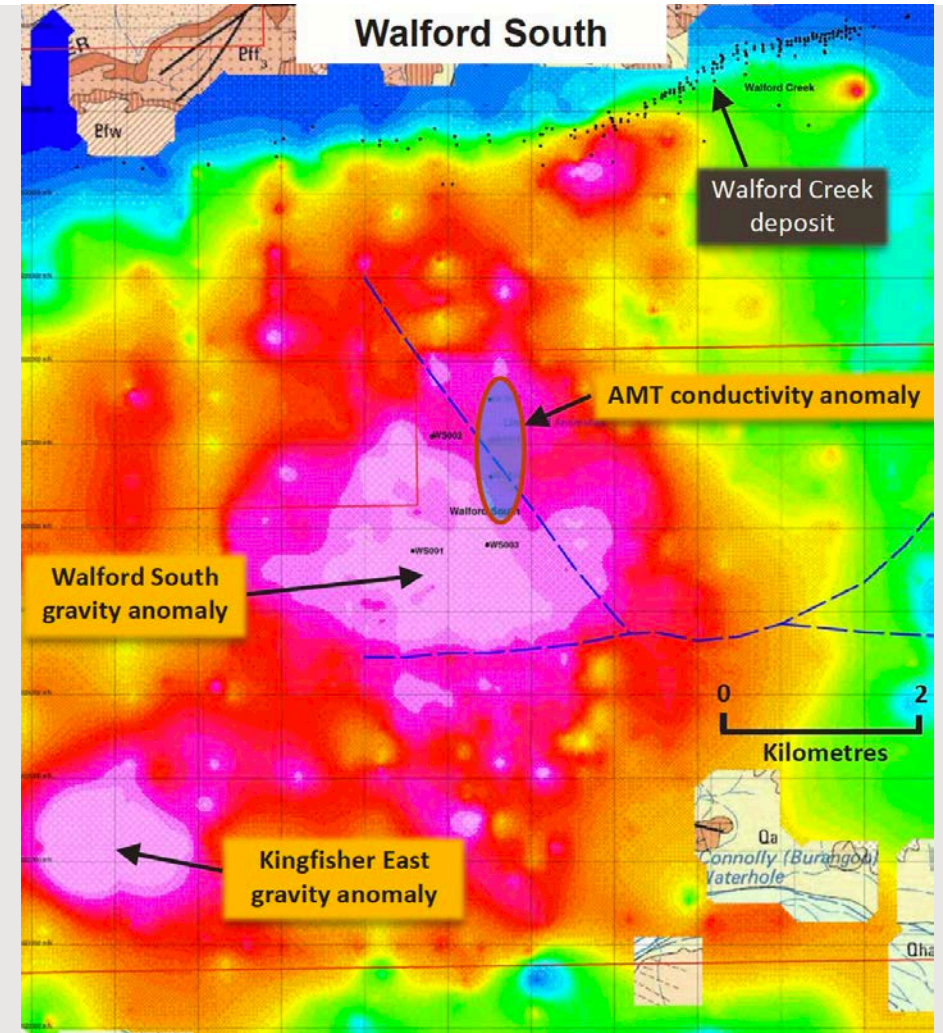
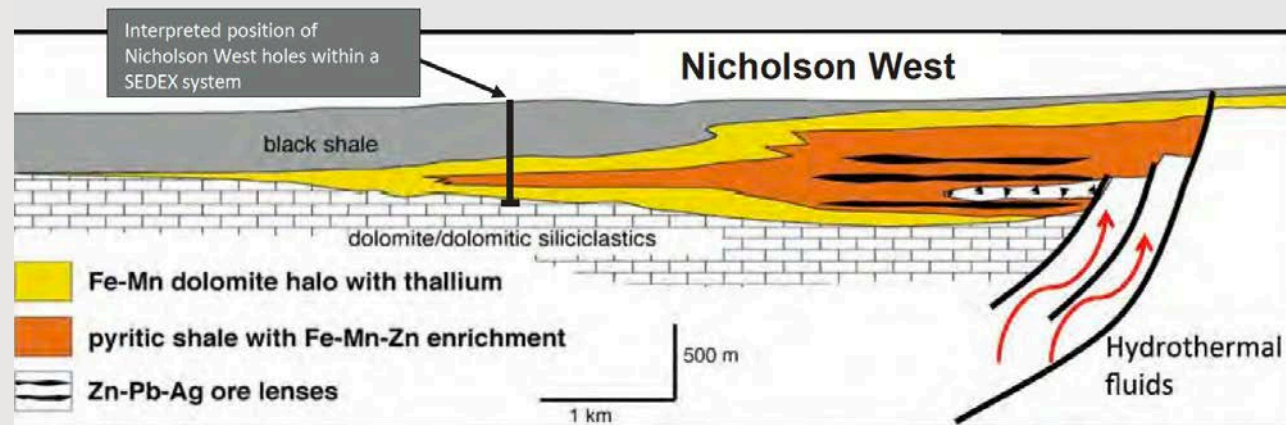


# Nicholson West and Walford South targets

## Walford South: Tier 1-potential VTEM, gravity and AMT target

- Coincident VTEM, gravity and associated AMT anomalies
- Anomalies adjacent to at least two major fault structures
- Previous SPQ drilling (3 holes) intersected “classic” well-developed stratiform pyritic shale, typical of McArthur River style mineralisation

## Nicholson West: 2019 drilling confirmed presence of SEDEX mineralisation systems (McArthur River and Mt Isa) developed within thick (up to 340 m) Mount Les Siltstone

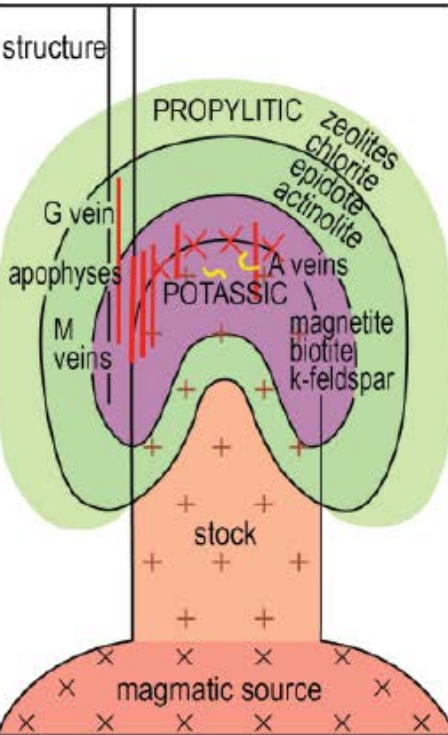




# STAGED PORPHYRY Cu-Au EVOLUTION

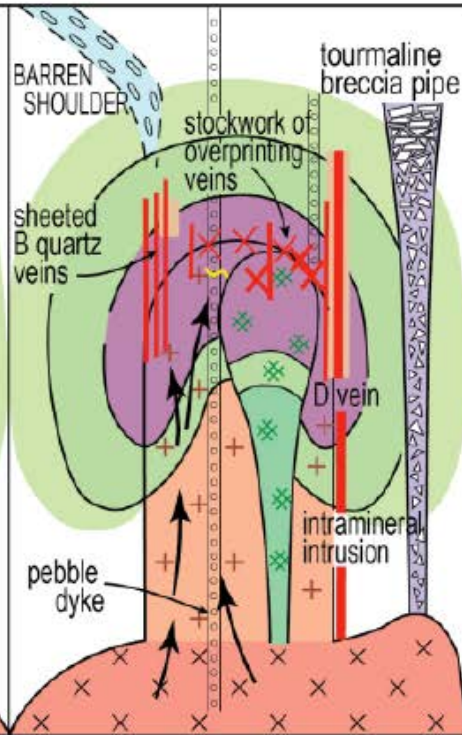
EARLY

EMPLACEMENT, PROGRADE ALTERATION & EARLY MINERALISATION



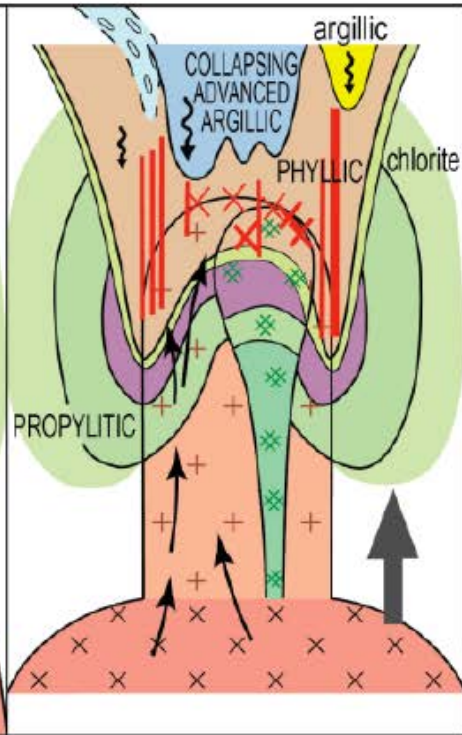
Zoned potassic to inner & outer propylitic alteration by heat transfer. Initiation of prograde A, M & G veins. Early mineralisation.

PROGRESSIVE COOLING & CONTINUED MINERALISATION



Exsolution of volatiles to form barren shoulders. Tourmaline breccia pipes. Metals from the magma source as B C & D veins. Pebble dykes. Initiation of phyllic alteration.

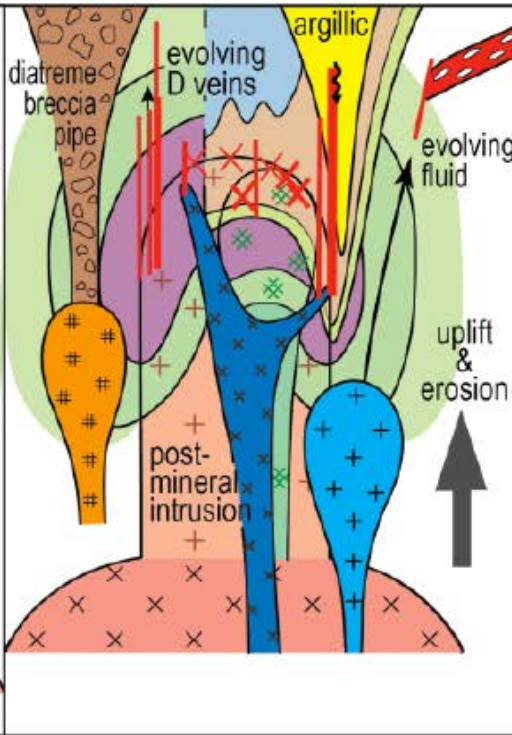
DRAW DOWN, RETROGRADE ALTERATION & LATE MINERALISATION



Draw down of low pH waters onto cooling apophysis & phyllic-argillic alteration. Degassing of magma source at depth & late mineralisation. Collapsing advanced argillic contributes to lithocaps.

LATE

SHUT DOWN & POST-MINERAL

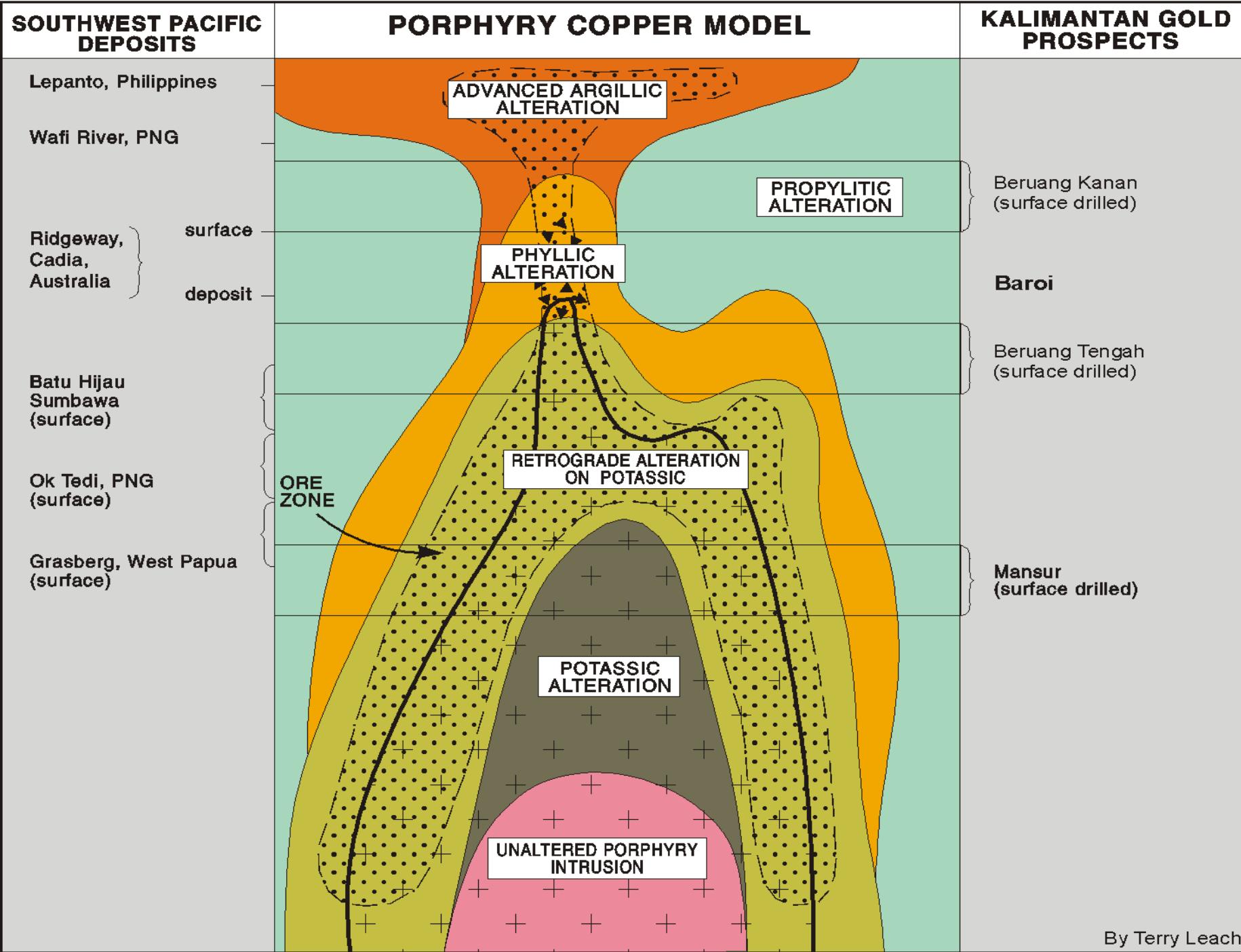


Uplift & erosion. Continued collapse of low pH and meteoric waters. Evolution of alteration & mineralisation. Post-mineral intrusions & breccias stope out ore. Epithermal overprint.

CORBETT et al. 854c

## Porphyry Cu-Au system





# Porphyry Cu-Au system

By Terry Leach





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