



Investor Presentation

*Greenvale copper and nickel
provinces*

Peter Hwang – Managing Director
October 2022

ASX:SPQ



Cautionary statement

Information Purposes: This document is for information purposes only. The information contained in this document does not constitute an offer, invitation, solicitation or recommendation in relation to the purchase or sale of shares in Superior Resources Limited (**Superior**) in any jurisdiction. The information in this document is provided in summary form, has not been independently verified, and should not be considered to be comprehensive or complete.

Not Financial Product Advice: This document does not constitute financial product or investment advice. It has been prepared without taking into account the objectives, financial circumstances or needs of recipients and cannot be relied upon as advice to recipients. Before making an investment decision, investors or prospective investors should consider the appropriateness of the information having regard to their own objectives, financial situation and needs and seek legal and taxation advice appropriate to their jurisdiction.

Forward Looking Statements: This document may contain forward looking statements. Forward looking statements are often, but not always, identified by the use of words such as “seek”, “indicate”, “target”, “anticipate”, “forecast”, “believe”, “plan”, “estimate”, “expect” and “intend” and statements that an event or result “may”, “will”, “should”, “could” or “might” occur or be achieved and other similar expressions. Indications of, and interpretations on, future expected exploration results or technical outcomes, production, earnings, financial position and performance are also forward looking statements. The forward looking statements in this document are based on current interpretations, expectations, estimates, assumptions, forecasts and projections about Superior, Superior’s projects and assets and the industry in which it operates as well as other factors that management believes to be relevant and reasonable in the circumstances at the date that such statements are made. The forward looking statements are subject to technical, business, economic, competitive, political and social uncertainties and contingencies and may involve known and unknown risks and uncertainties. The forward looking statements may prove to be incorrect. Many known and unknown factors could cause actual events or results to differ materially from the estimated or anticipated events or results expressed or implied by any forward looking statements. All forward-looking statements made in this presentation are qualified by the foregoing cautionary statements.

Disclaimer: Superior and its related bodies corporate, any of their directors, officers, employees, agents or contractors do not make any representation or warranty (either express or implied) as to the accuracy, correctness, completeness, adequacy, reliability or likelihood of fulfilment of any forward looking statement, or any events or results expressed or implied in any forward looking statement, except to the extent required by law. Superior and its related bodies corporate and each of their respective directors, officers, employees, agents and contractors disclaims, to the maximum extent permitted by law, all liability and responsibility for any direct or indirect loss or damage which may be suffered by any person (including because of fault or negligence or otherwise) through use or reliance on anything contained in or omitted from this document. Other than as required by law and the ASX Listing Rules, Superior disclaims any duty to update forward looking statements to reflect new developments.

Exploration Results and JORC: The reporting of exploration results and mineral resource estimates in this document reflects the information that was originally reported in market announcements that have been referenced in the body of this document. Superior confirms that it is not aware of any new information or data that materially affects the information included in the relevant original market announcements. Investors and any person viewing this document should refer to the market announcements made by Superior (ASX:SPQ), which can be viewed at: <http://www.asx.com.au/asx/statistics/announcements.do>.

Corporate snapshot



Carlos Alberto Fernicola

Non-Executive Chairman

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

Carlos has 30+ years of experience in accounting, taxation, audit and the financial services industry. He is a 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

Peter has 12+ years experience as a gold, base metals and diamond geologist and 21 years experience as a lawyer at Freehills, Ashurst and Minter Ellison, specialising in mining, commercial, M&A, mining infrastructure, regulatory and native title law.



Simon James Pooley

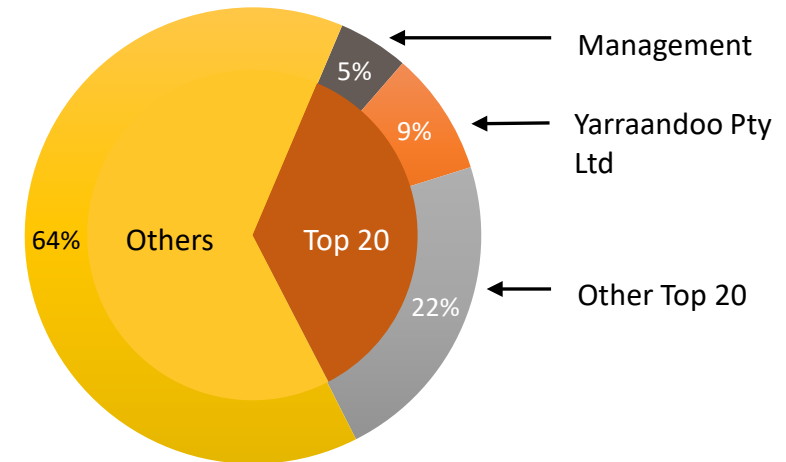
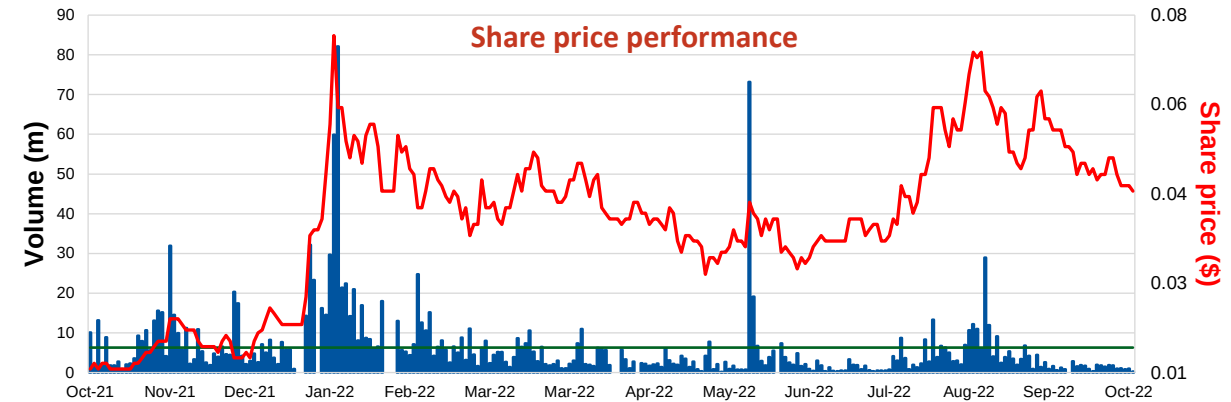
Non-Executive Director

MAusIMM, GAICD

Simon was 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.

1. As at 17 October 2022

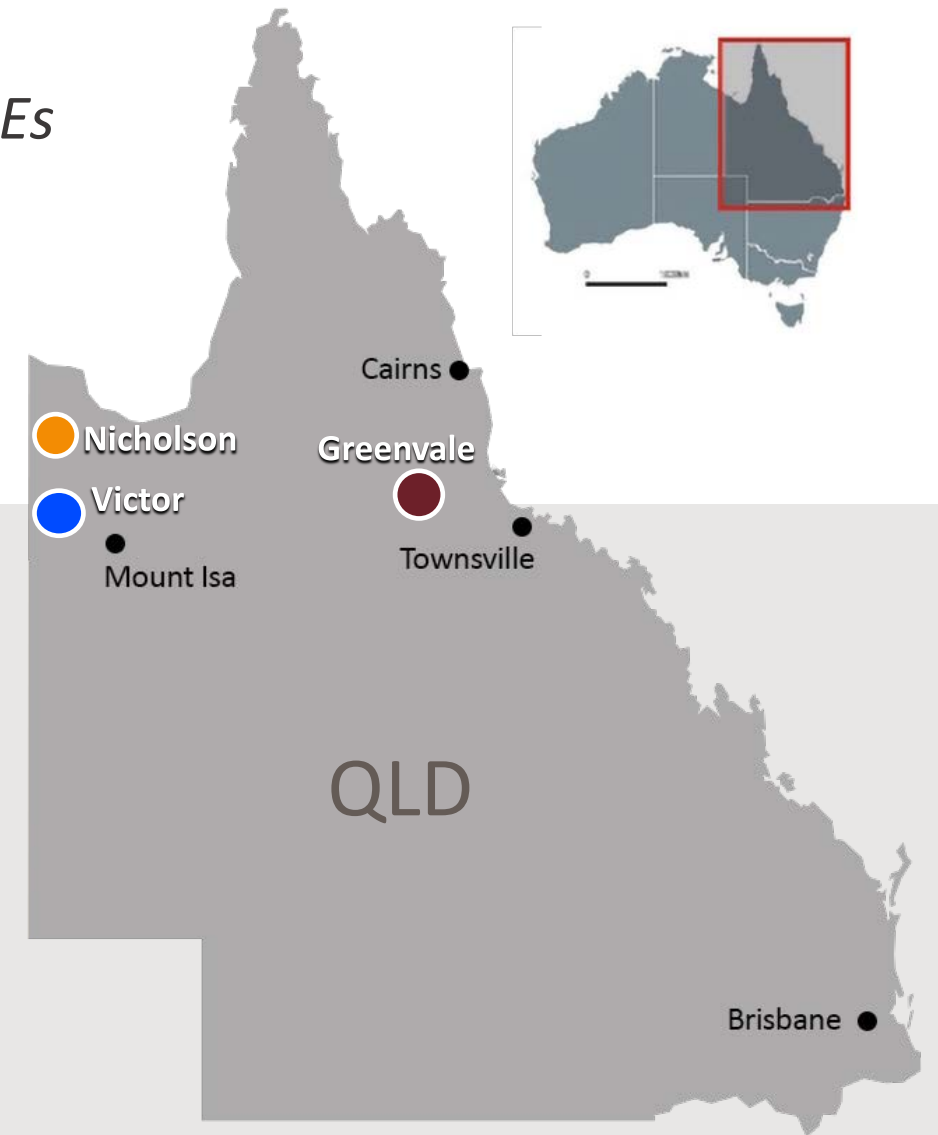
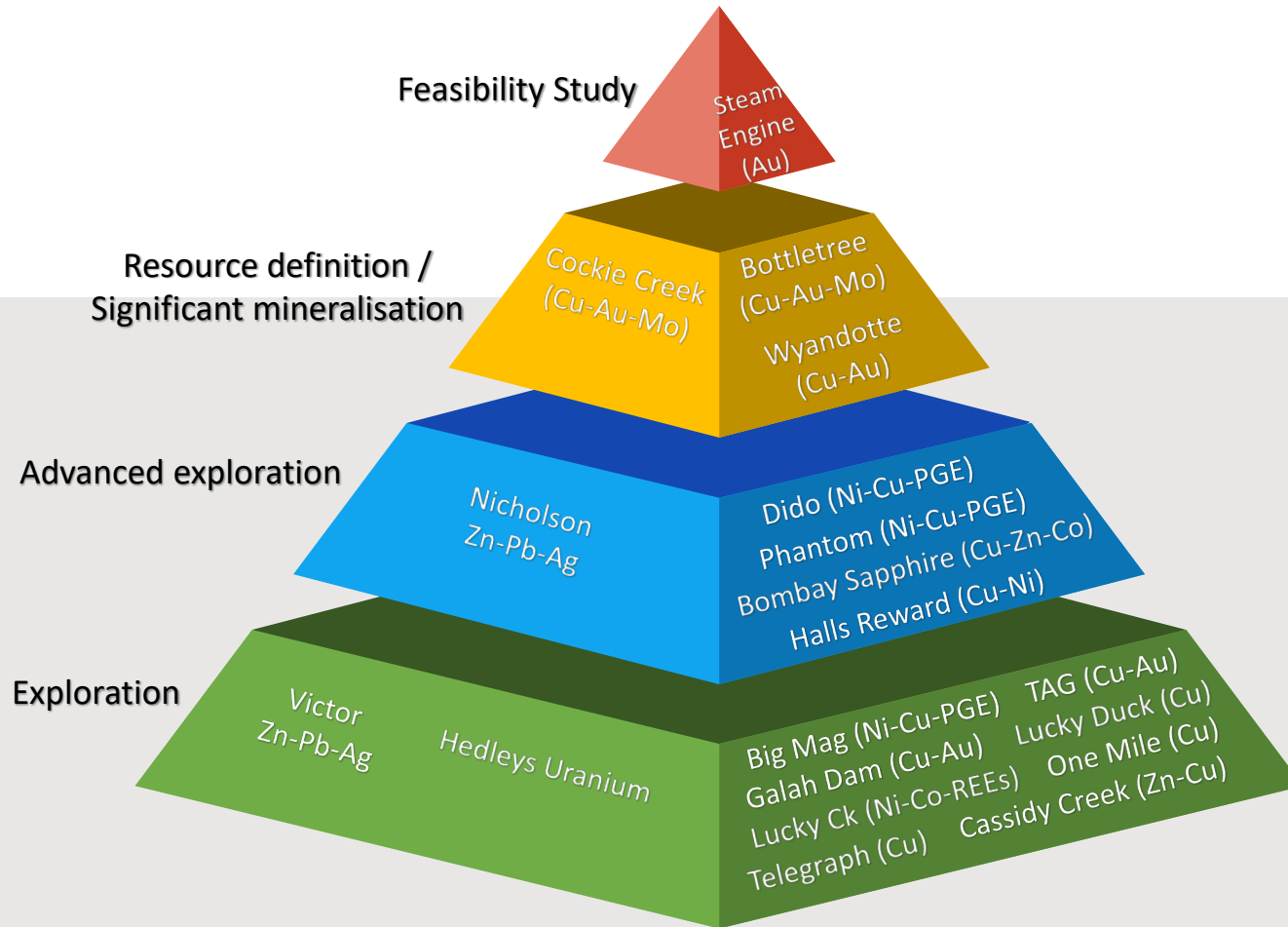
Share Price ¹ \$0.05	Issued Shares 1,701m	Market Cap \$85m
Cash \$2.3M	Debt \$nil	Top 20 Holdings 36%



Growth through discovery – multiple tier 1-potential exploration projects

Project portfolio – 100% SPQ

Leveraging the green transition – Cu, Ni, Zn, Co, U, REEs



Operational snapshot

Targeting Cu, Ni, Zn discovery and defining copper and gold resources in Queensland

Porphyry Cu-Au-Mo			Ni-Cu-PGE	Au
Bottletree	Cockie Creek	Wyandotte	Dido, Big Mag, Phantom Creek	Steam Engine
632m @ 0.21% Cu¹ incl 224m @ 0.40% Cu incl 103m @ 0.53% Cu	13Mt @ 0.42% Cu² (54,600t Cu)	Shallow Exploration Target³: 0.4Mt @ 2.2% Cu (8,800t Cu) - 1.0Mt @ 1.9% Cu (19,000t Cu)	Voisey's Bay style Ni-Cu-PGE	2.72Mt @ 2.0 g/t Au (171,000 ounces Au)⁴
Very large scale Cu system emerging: - Large drilling program underway Targeting interpreted mineralised porphyry core 1.5km x 1km Cu soil anomaly over porphyry target - Several large Cu 'leakage' mineralised zones surrounding interpreted core	Large IP chargeability anomaly beneath Cu Resource: Porphyry Cu-Au-Mo system - Upcoming maiden JORC (2012) Mineral Resource Estimate	High grade copper deposit related to interpreted Cu-Au porphyry: - Mineral Resource Estimate to be established - No exploration since 1975	Voisey's Bay style Ni-Cu-PGE: Proven Voisey's Bay-style Ni-Cu-PGE deposit systems - Fertile troctolite intrusions identified by Anglo but not followed up or inadequately followed up	Feasibility Study in progress Toll treatment discussions Scoping Study (Base Case)⁵: \$24.2M cash flow (post tax @ A\$2,200/oz; \$41M @ A\$2,500) Only 70,000oz mined \$5.1M CAPEX (pre-production and closure)

1: Refer ASX announcement, 2 June 2022

2: JORC (2004) Inferred; Refer ASX announcement, 27 March 2013

3: Refer ASX announcement, 15 June 2021

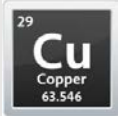
4: JORC Measured, Indicated and Inferred; Refer ASX announcement, 11 April 2022

5: Refer ASX announcement, 27 April 2021

Growth through discovery

Greenvale Project

Multiple tier-1 discovery opportunities



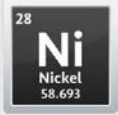
Transformational advances towards major discovery at Bottletree



Ramping Up: pipeline of significant porphyry Cu-Au systems



Large drilling program underway



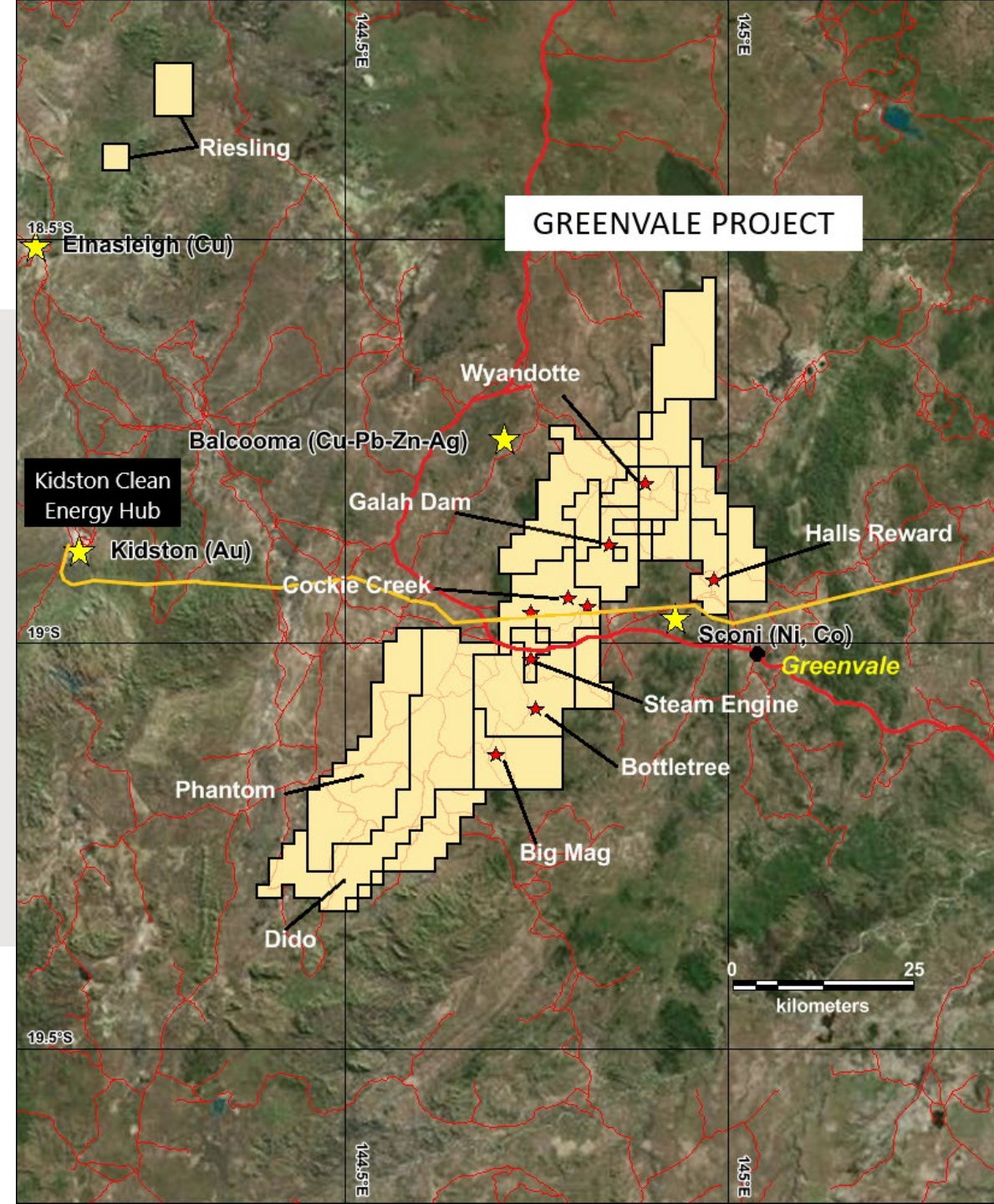
First mover advantage on new Ni-Cu-PGE Province



Recent pegging spree by [Rio Tinto](#) & others to the west



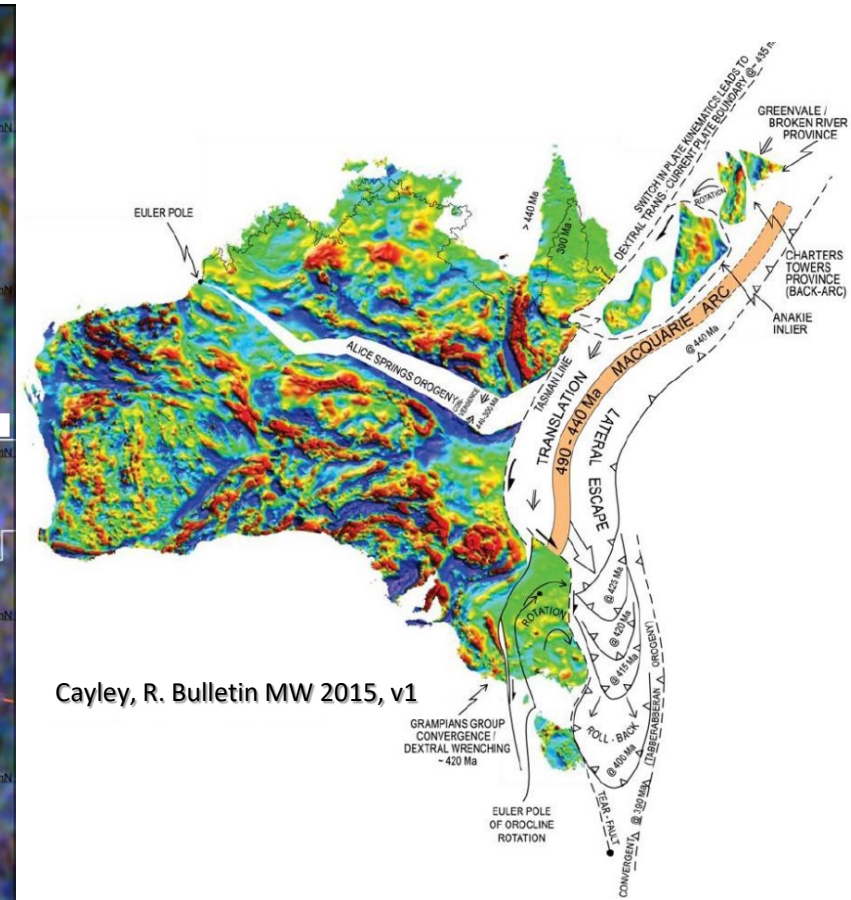
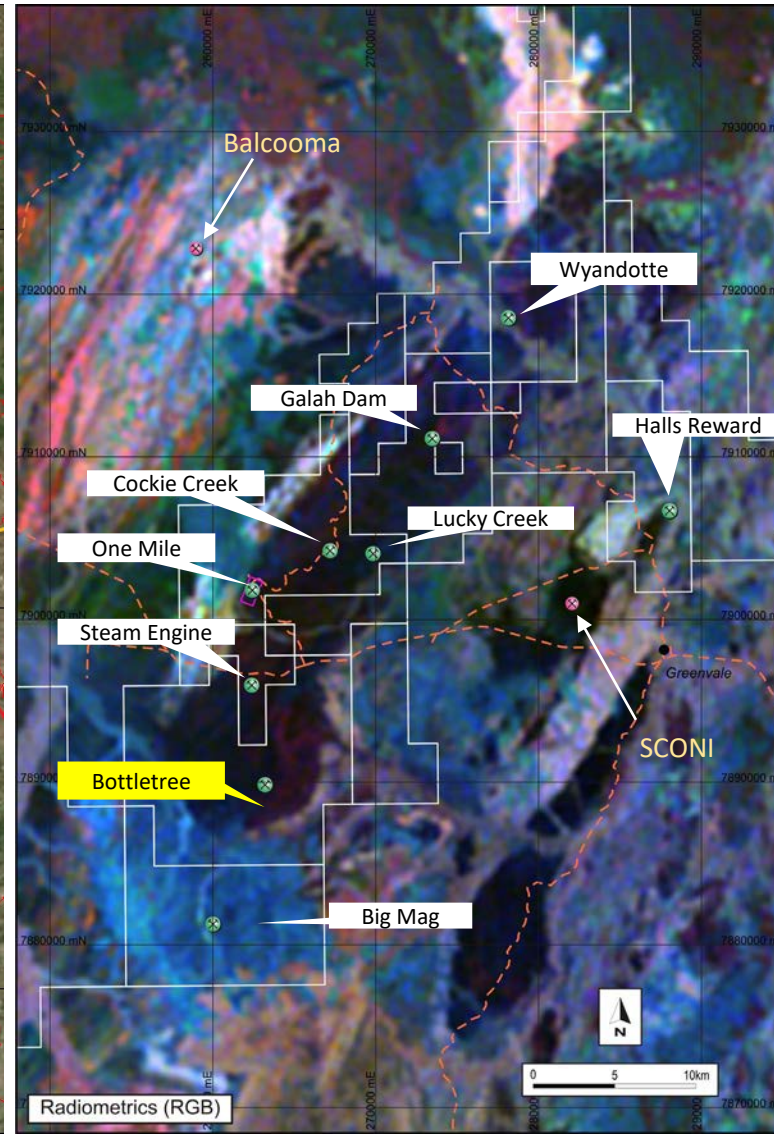
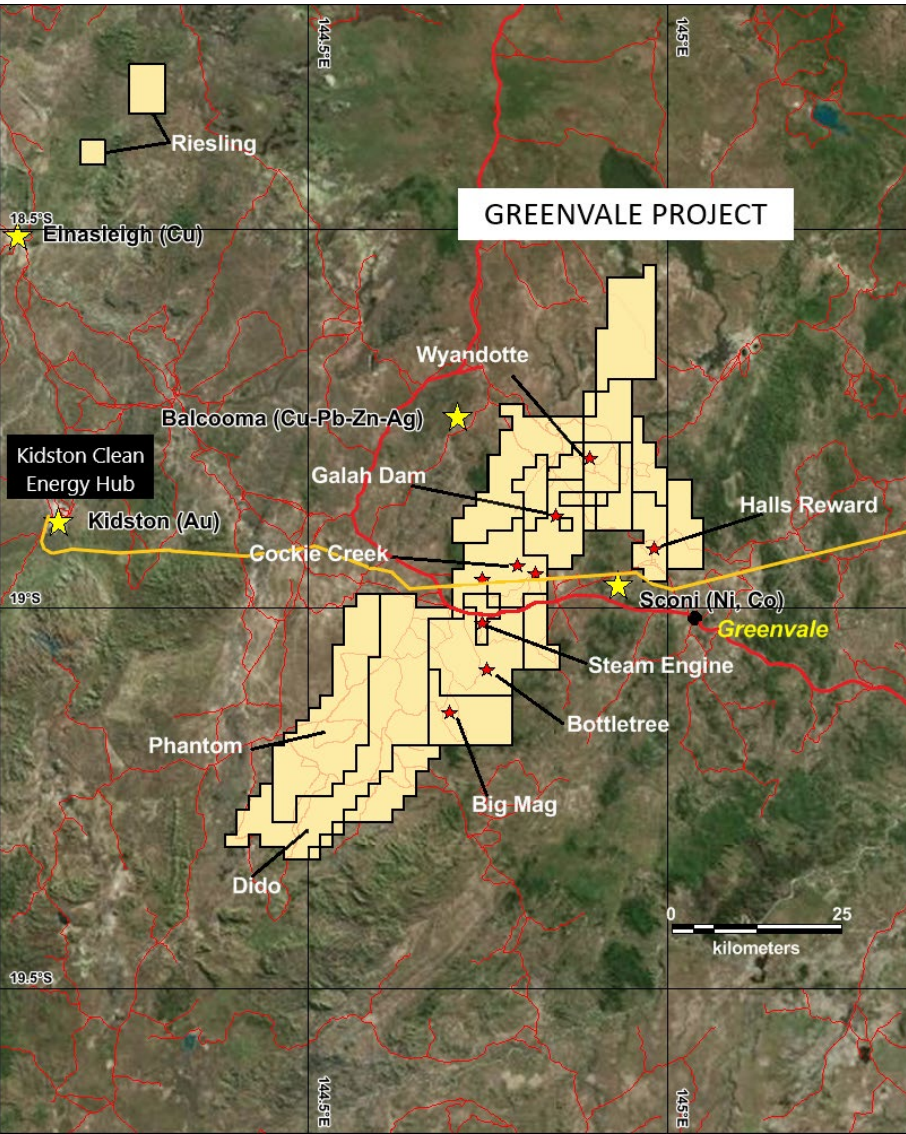
Feasibility Study: Steam Engine Gold toll treatment



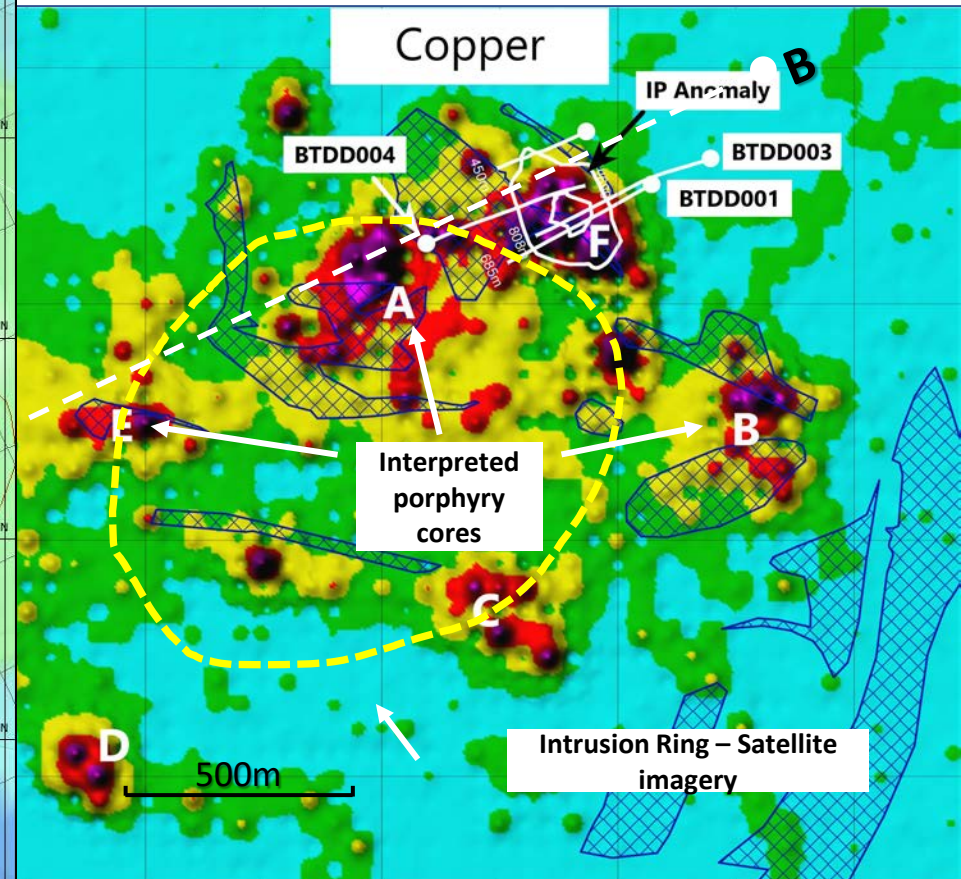
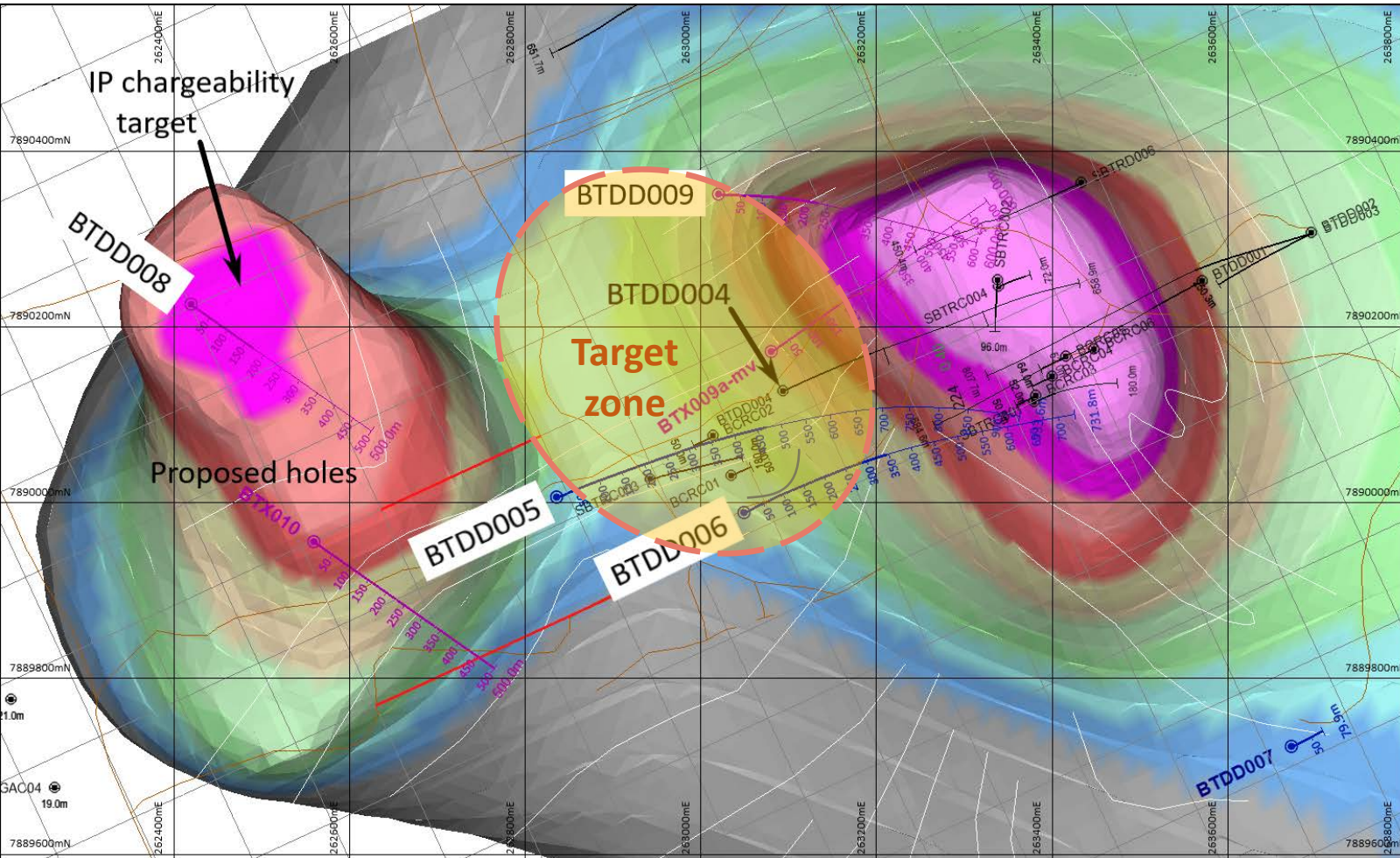
Growth through discovery

Greenvale Project

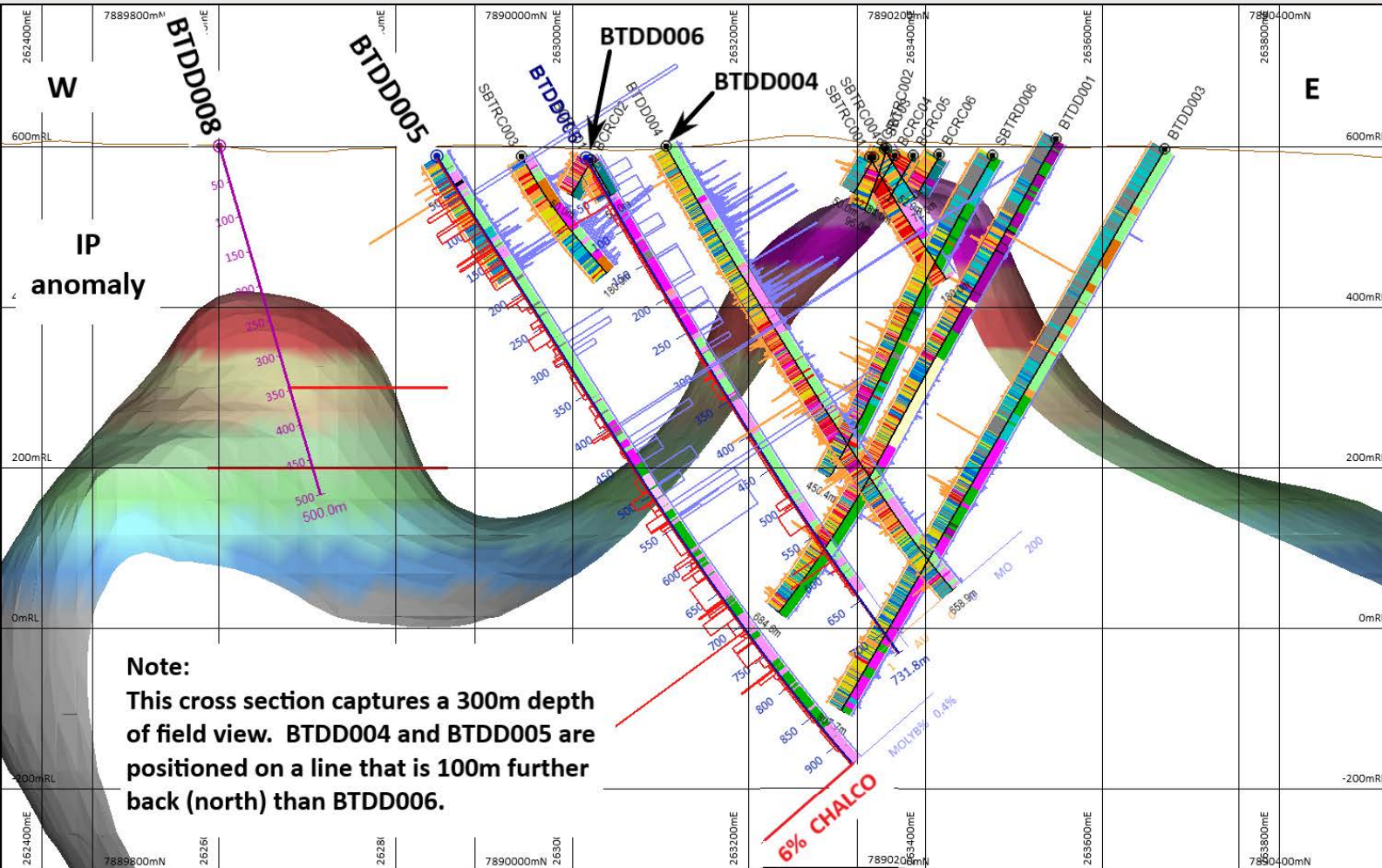
Copper Belt – Why the concentration of copper?



Bottletree – Large-scale Cu-Au interpreted porphyry system



Bottletree – Large-scale Cu-Au interpreted porphyry system



Emerging large-scale copper system

632m @ 0.21% Cu, 0.03g/t Au, 18.0ppm Mo⁶
 incl. 224m @ 0.40% Cu, 0.05g/t Au, 3.5ppm Mo
 incl. 103m @ 0.53% Cu, 0.05g/t Au, 3.3ppm Mo
 incl. 15m @ 1.19% Cu, 0.15g/t Au, 1.9ppm Mo

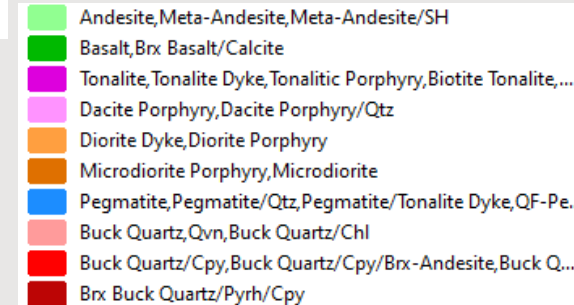
Drilling to date has intersected interpreted outer rim of porphyry system and interpreted late-stage porphyry intrusions

2022 drilling program targeting central zone of interpreted porphyry

Copper %



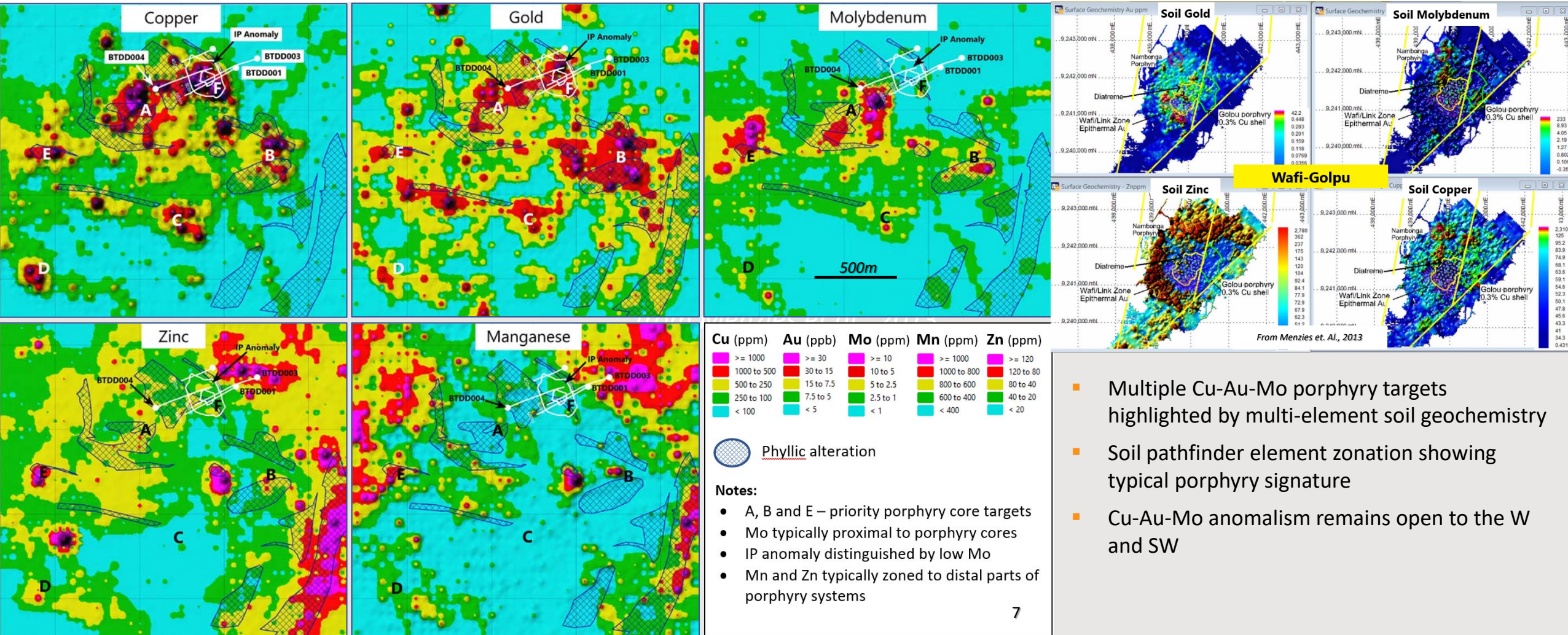
Lithology



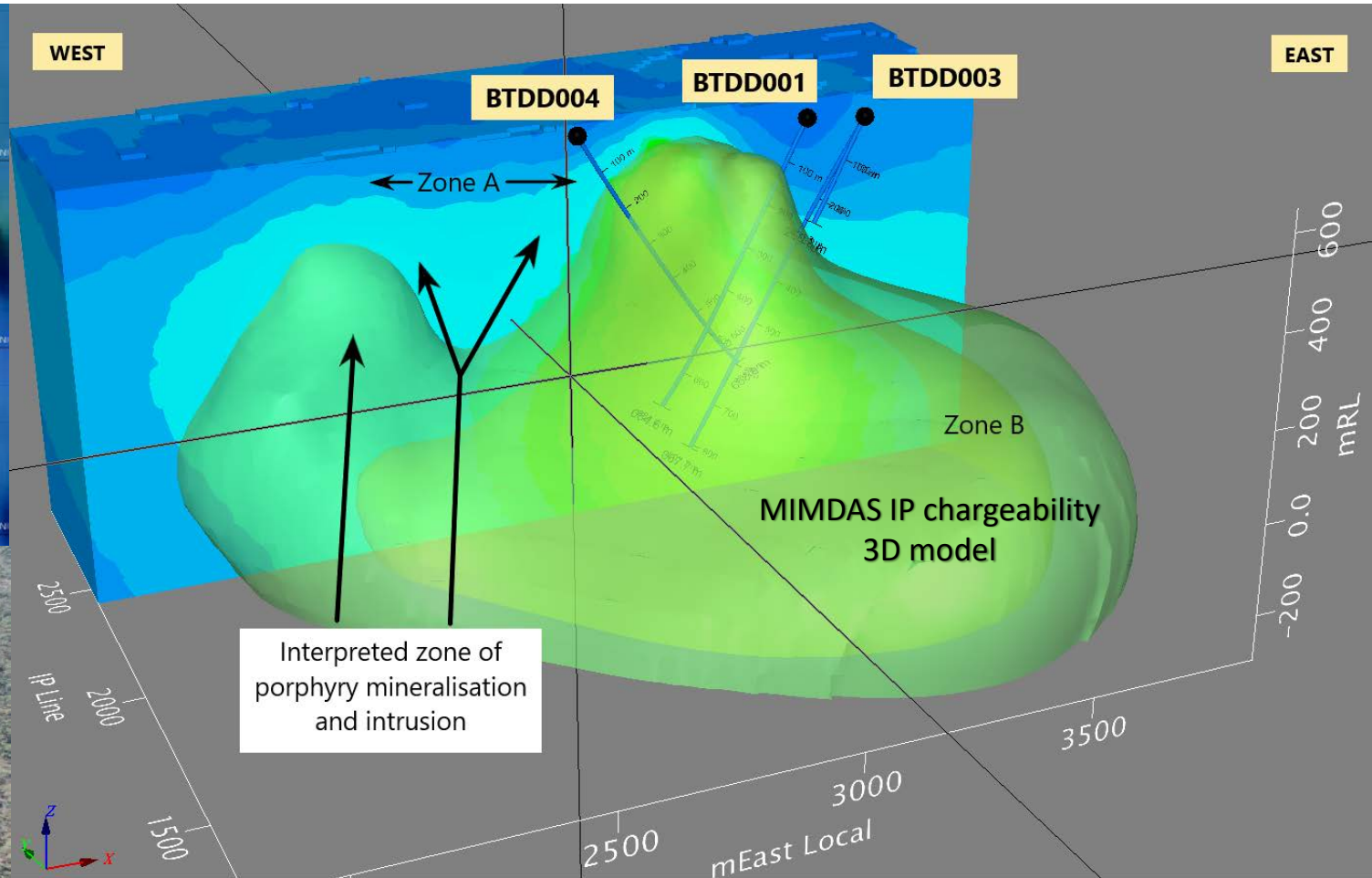
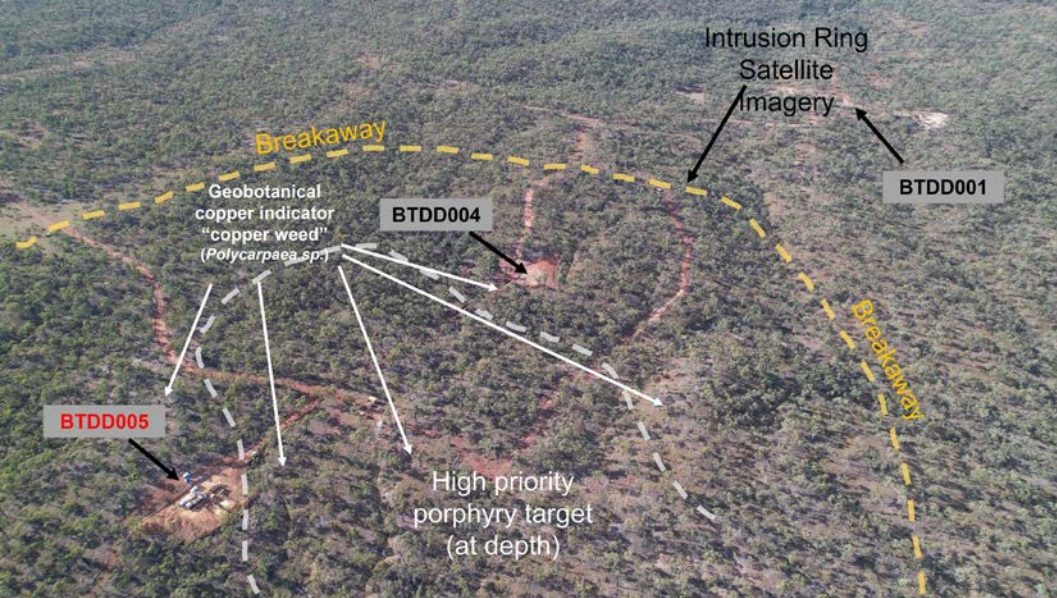
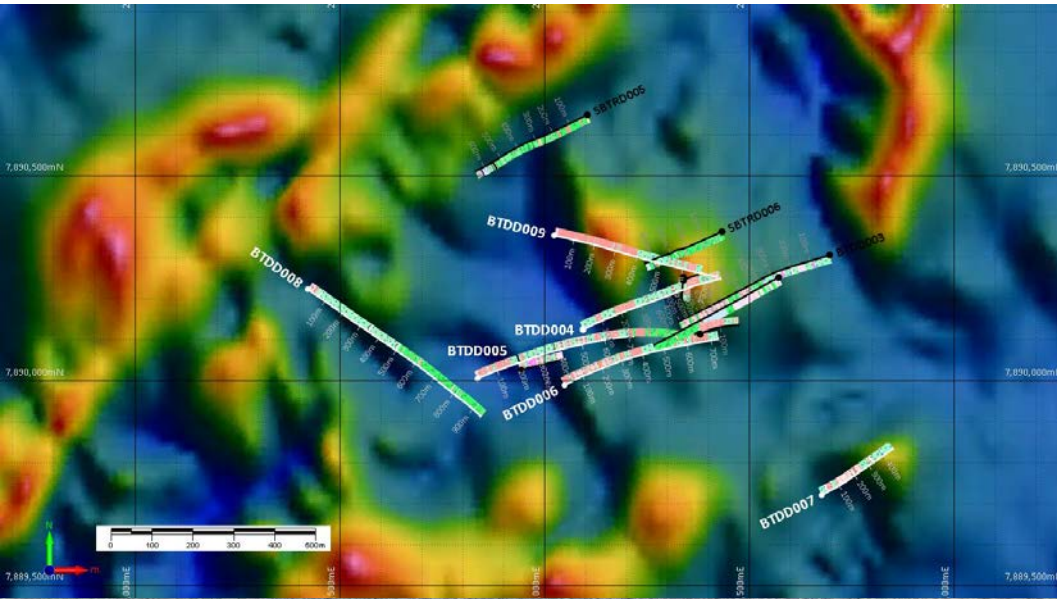
Au g/t Cu % Lithology Mo ppm



Bottletree – Large-scale Cu-Au interpreted porphyry system

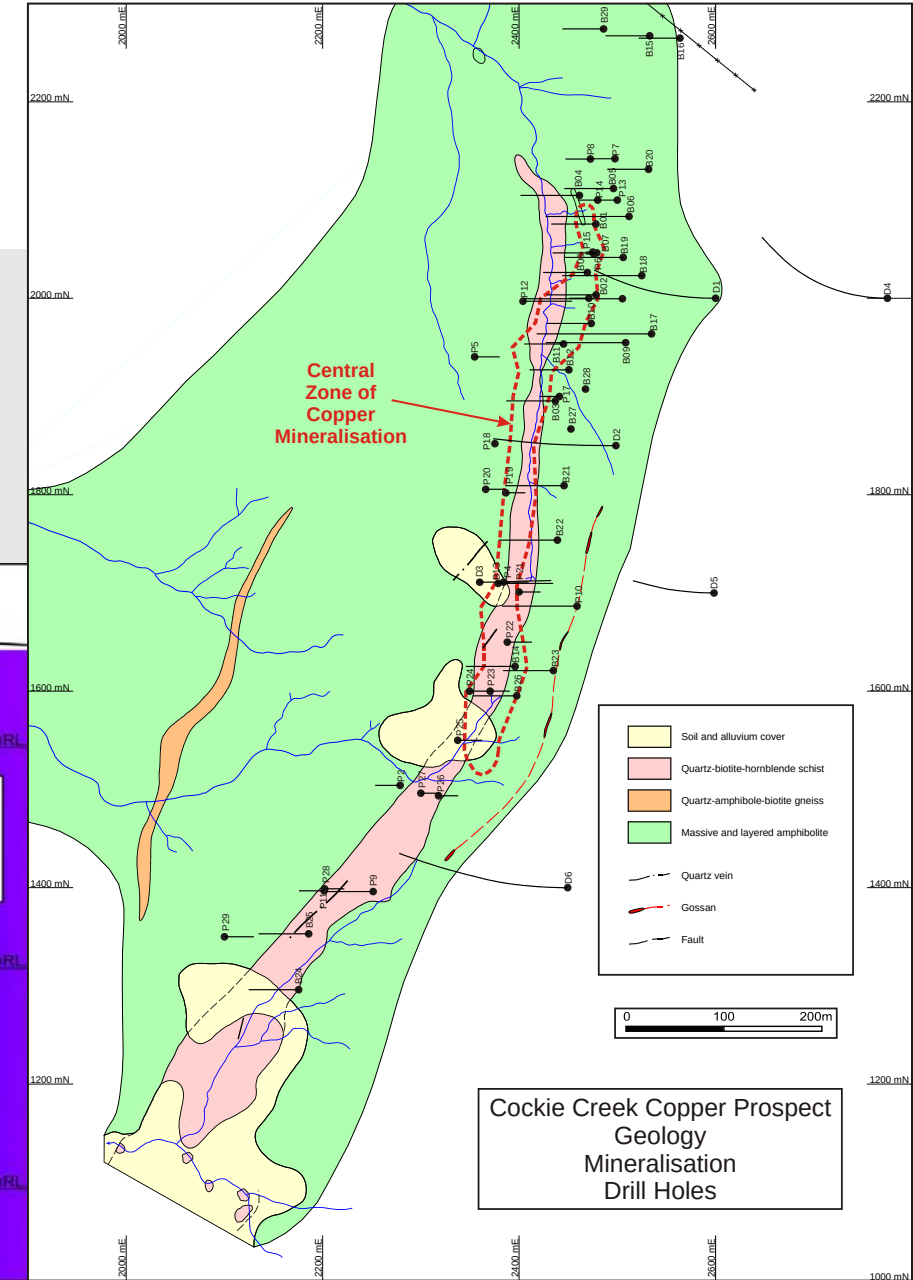
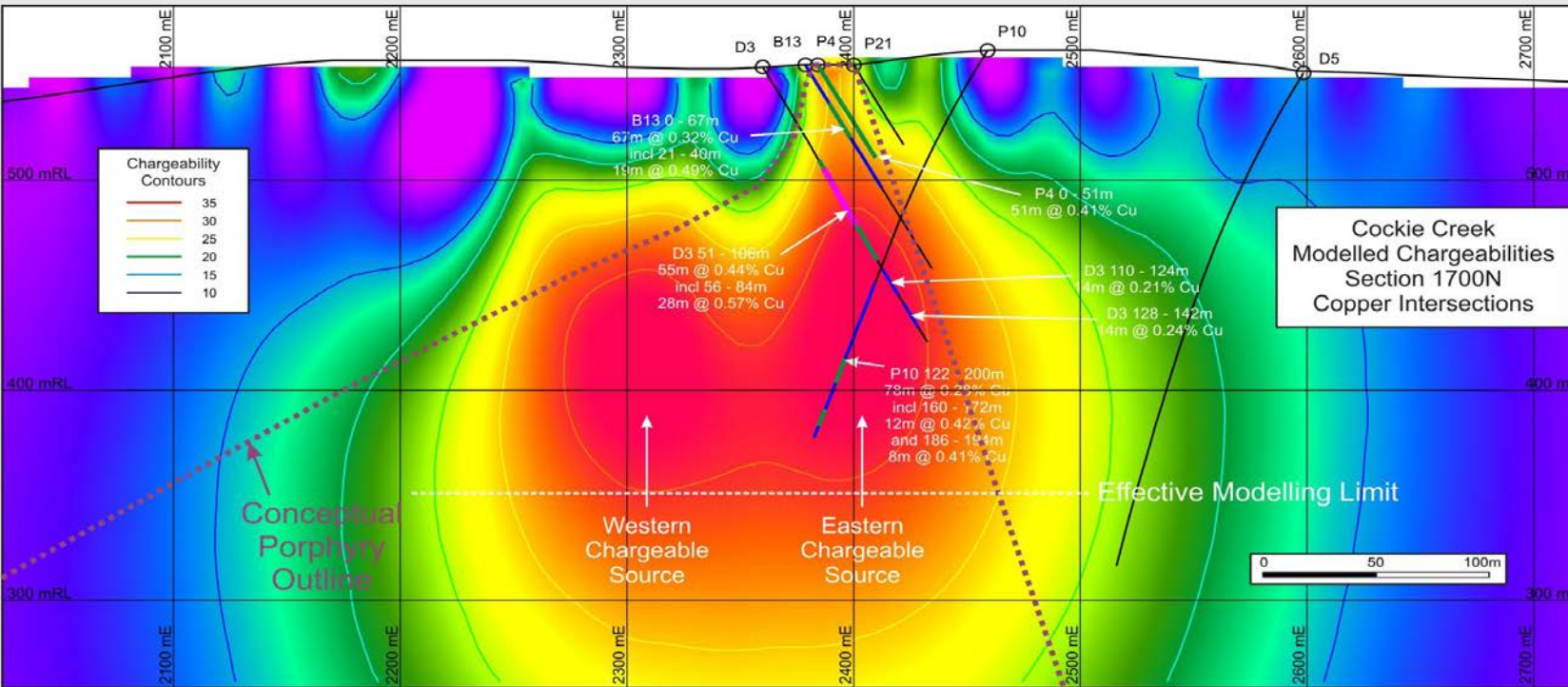


Bottletree – Large-scale Cu-Au interpreted porphyry system



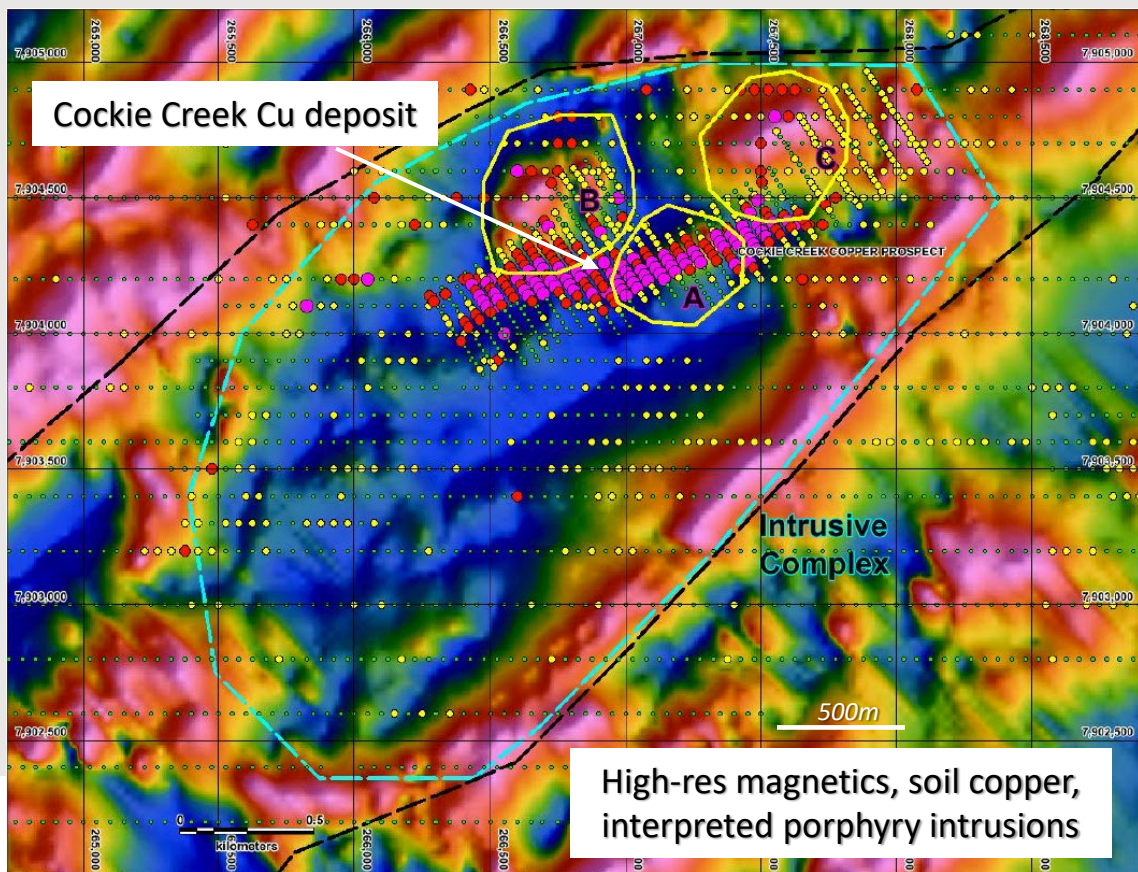
Cockie Creek – Cu-Au

- Potential for a significant porphyry Cu-Au deposit
- Current Mineral Resource estimate: **13Mt @ 0.42% Cu⁸** (JORC 2004), based on strike length of 1.2kms and down to approx. 300m depth
- Significant Au mineralisation with the copper
- Two large, intense IP chargeability targets at depth beneath the defined mineralisation



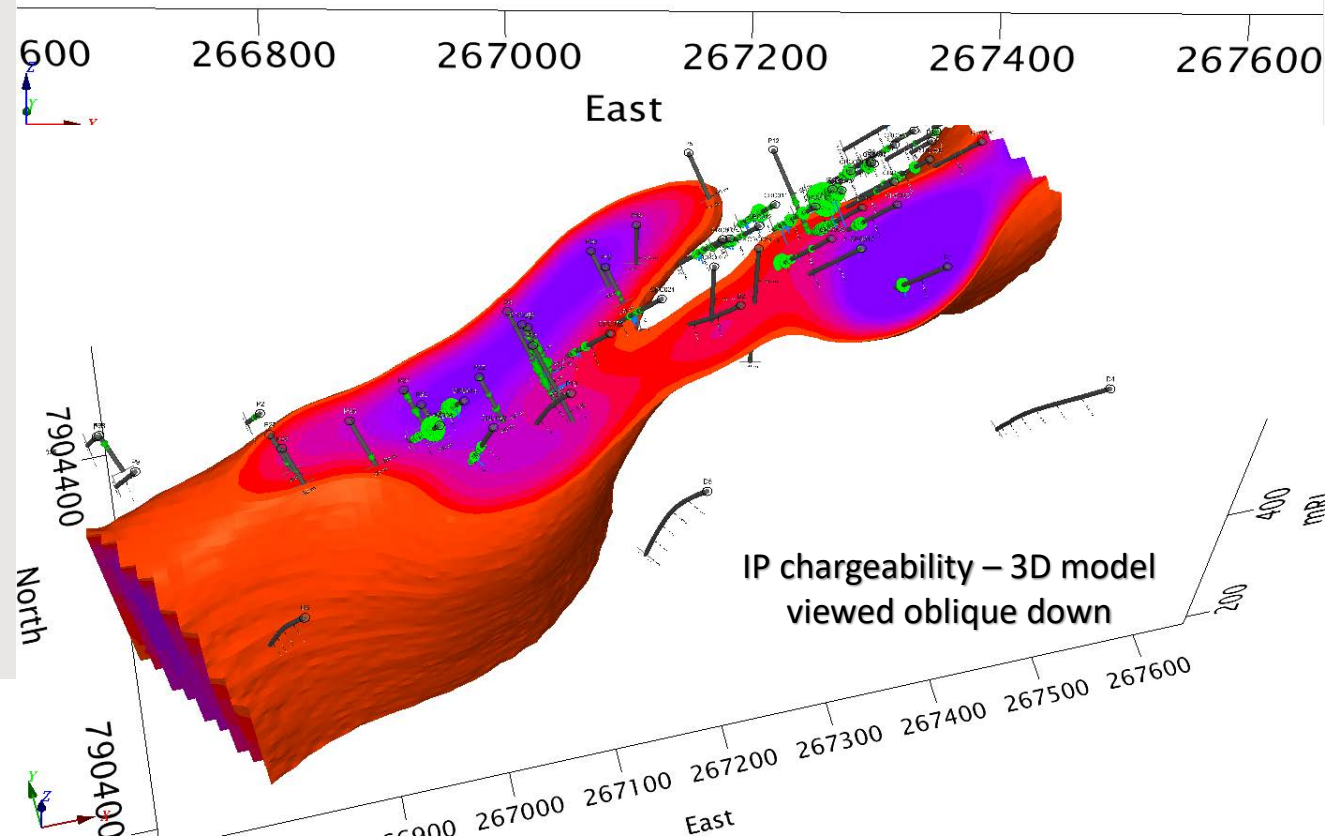
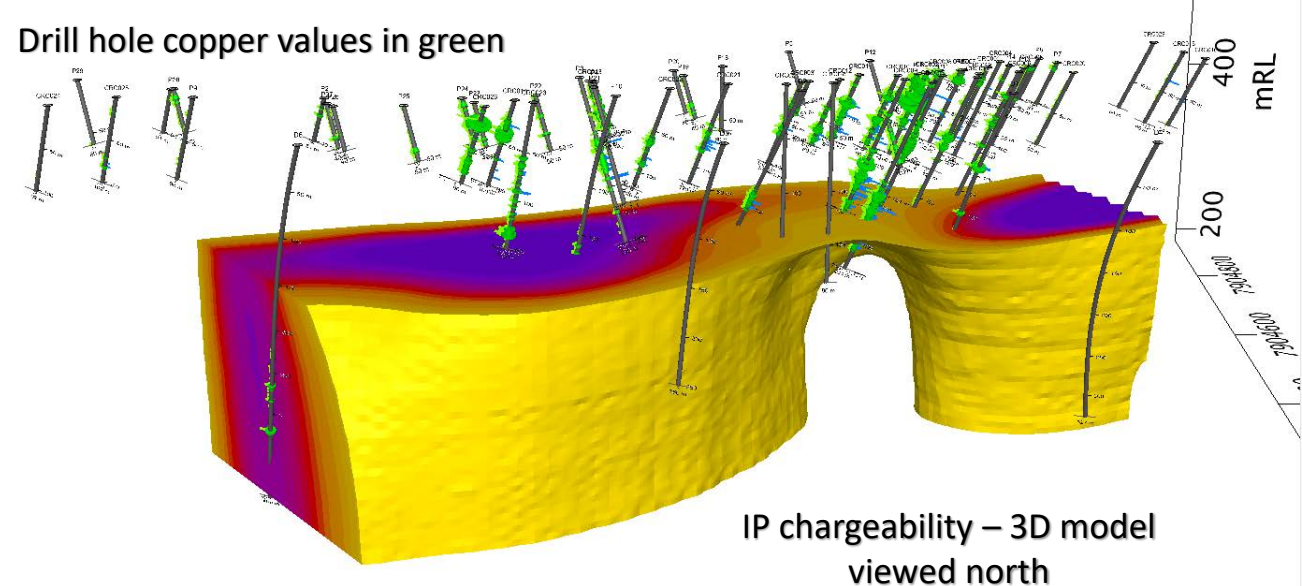
Cockie Creek – Cu-Au

- Potential for a significant porphyry Cu-Au deposit
- Current Mineral Resource estimate: **13Mt @ 0.42% Cu⁹** (JORC 2004), based on strike length of 1.2kms and down to approx. 300m depth
- Two large, intense IP chargeability targets at depth beneath the defined mineralisation

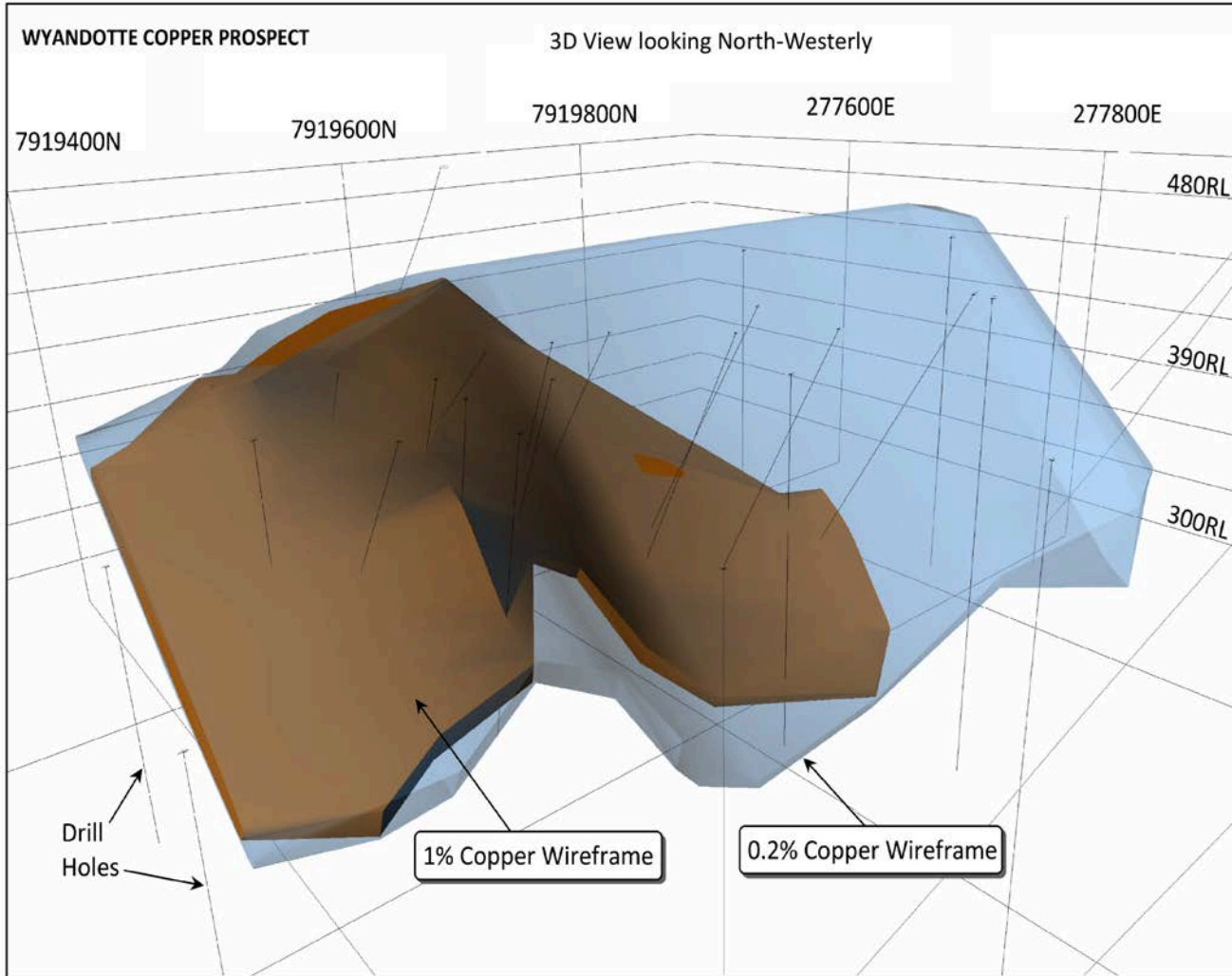


9: Refer ASX announcement dated 27 March 2013

Drill hole copper values in green



Wyandotte – High grade copper deposit

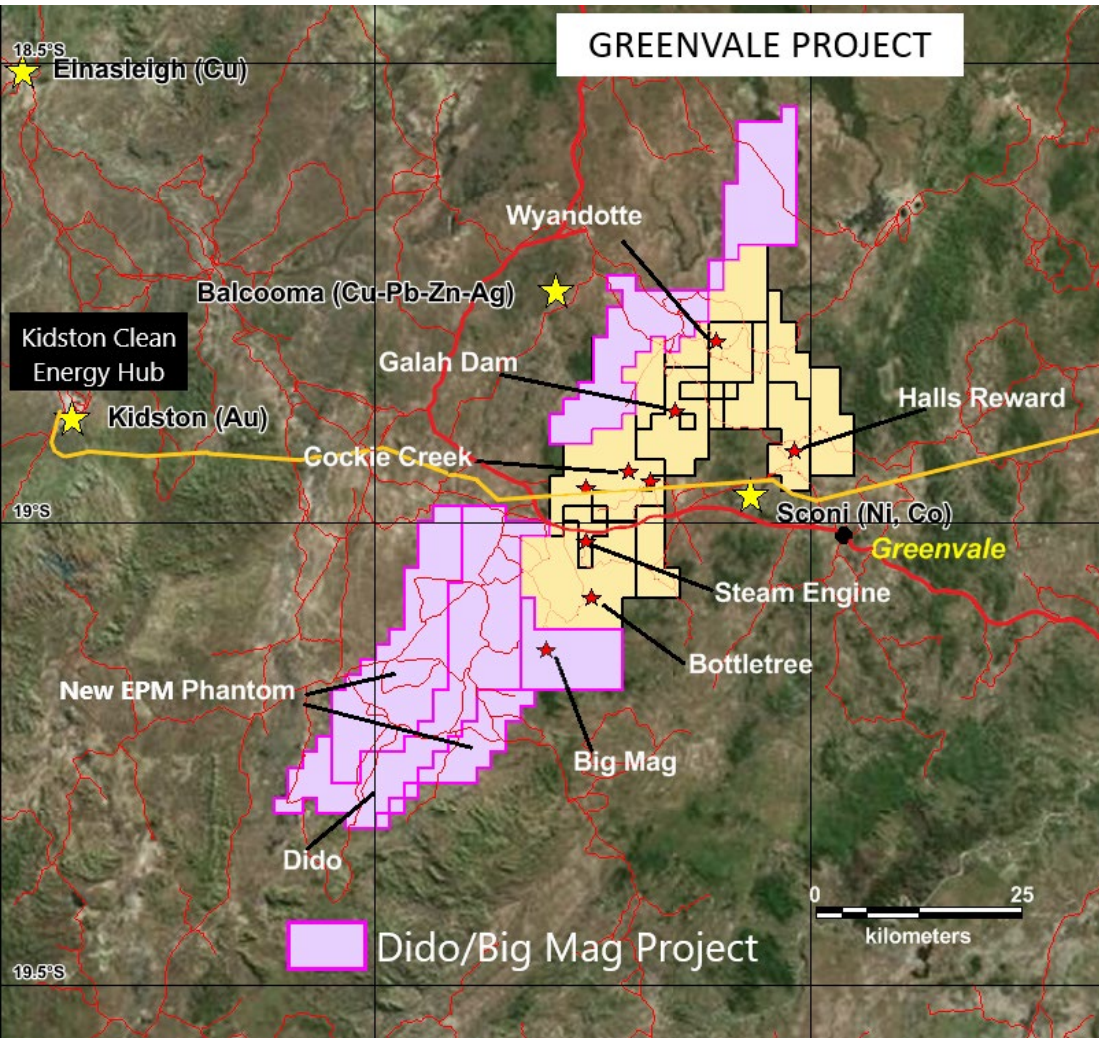


Exploration Target¹⁰

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

- Maiden Mineral Resource estimate to be established
- No exploration conducted since 1975
- Potential for down-dip extension of mineralisation
- Ground geophysical surveys to identify larger source of mineralisation

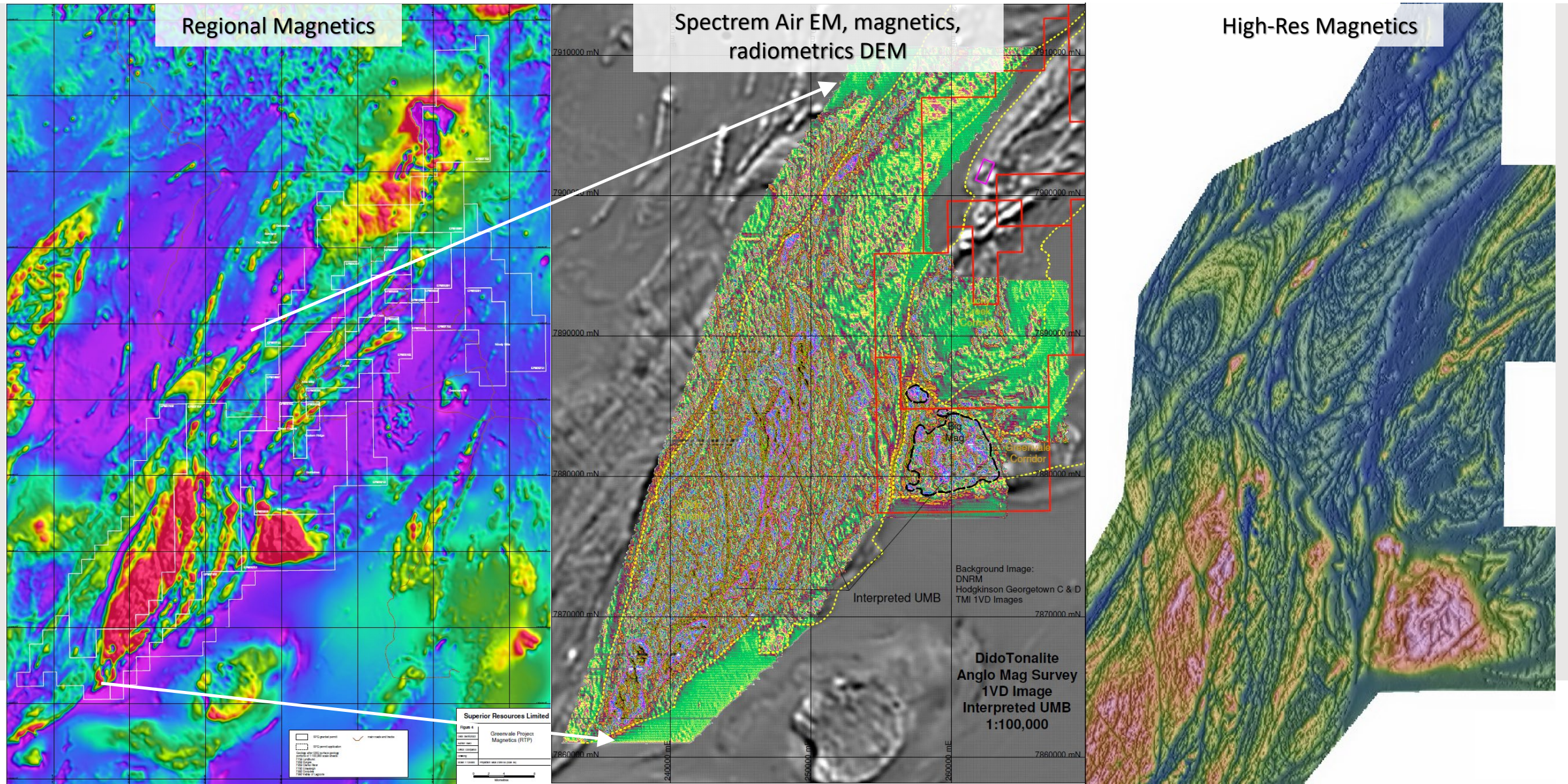
Dido, Phantom & Big Mag – Ni-Cu-Co-PGE



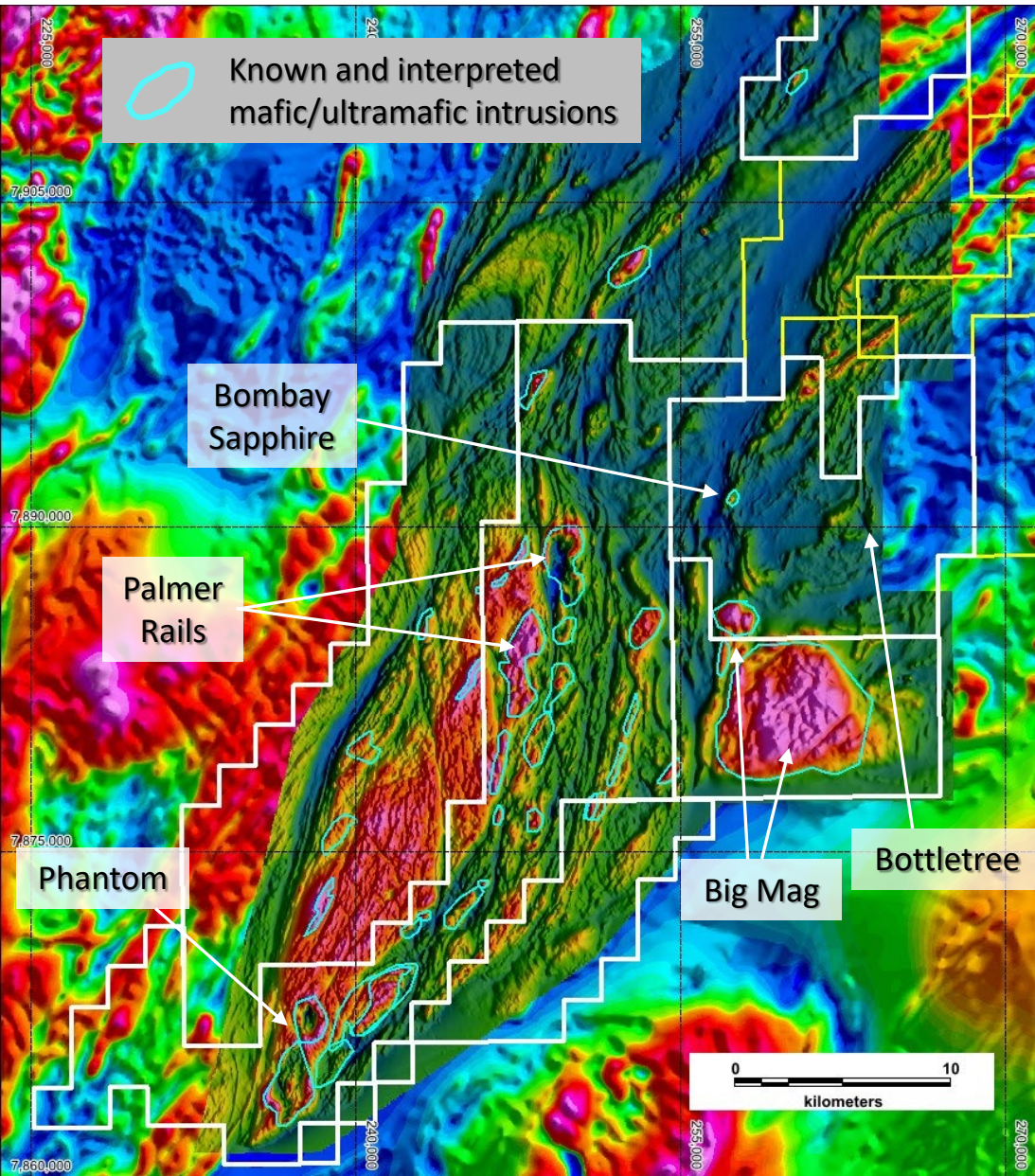
Proven Voisey's Bay style magmatic sulphide Ni-Cu-PGE deposit systems

- Previous exploration by Anglo American (2007-2012) confirmed presence of Voisey's Bay-style geological system
- Troctolites, pyroxenites and gabbro-norites indicative of large-scale Ni-Cu-PGE magmatic sulphide ore bodies
- Evidence of wall rock contamination and multiple phases of magma intrusion are key features of Ni-Cu-PGE ore systems
- Initial drill results considered by Anglo to be very significant
- Numerous fertile troctolite intrusions not followed up or inadequately followed up
- 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
- largely **unexplored**
- Rio Tinto recent pegging

Dido, Phantom & Big Mag – Ni-Cu-Co-PGE

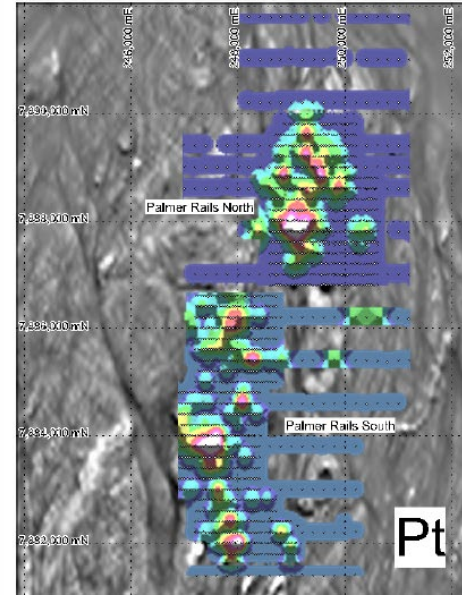
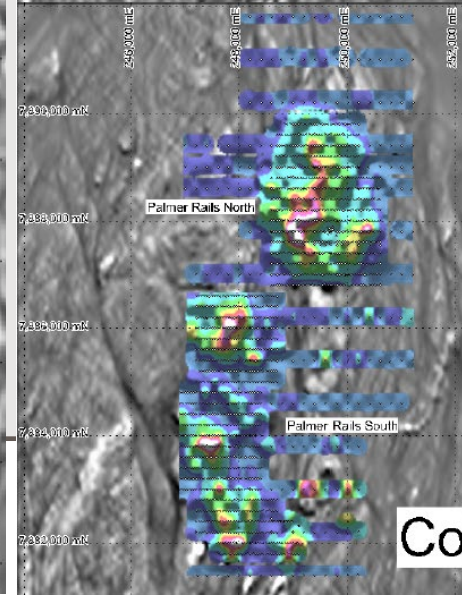
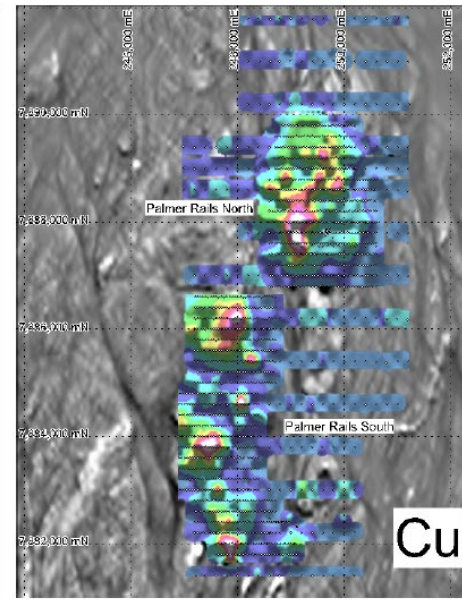
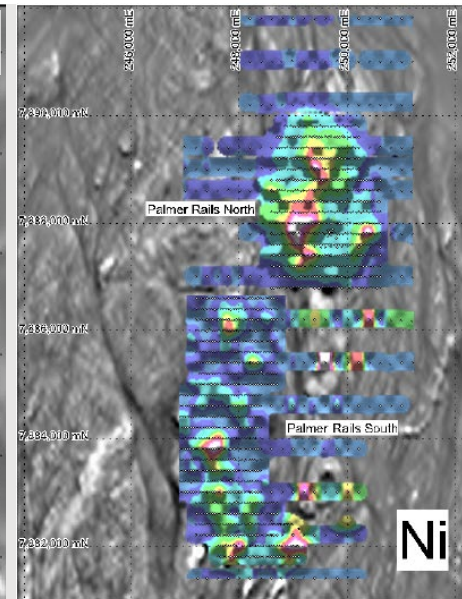
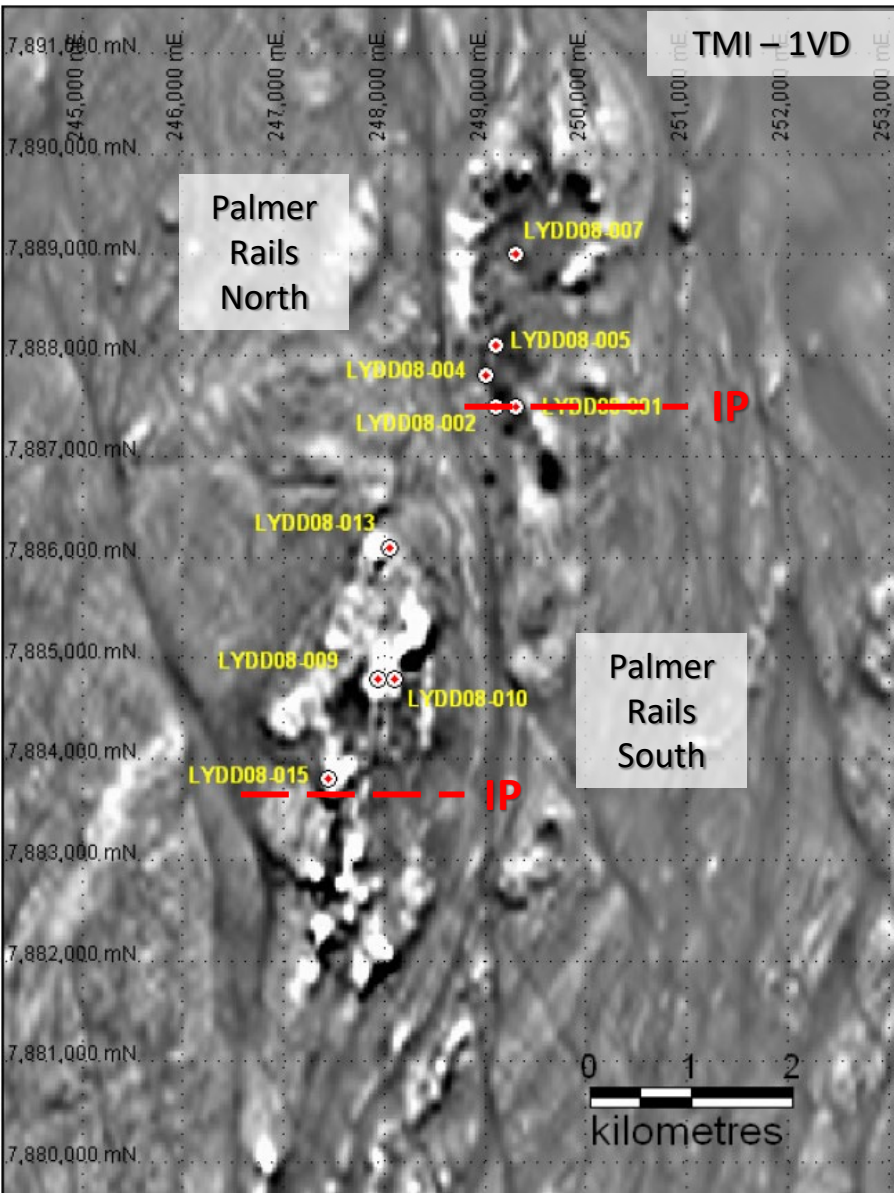


Dido, Phantom & Big Mag – Ni-Cu-Co-PGE systems at Dido



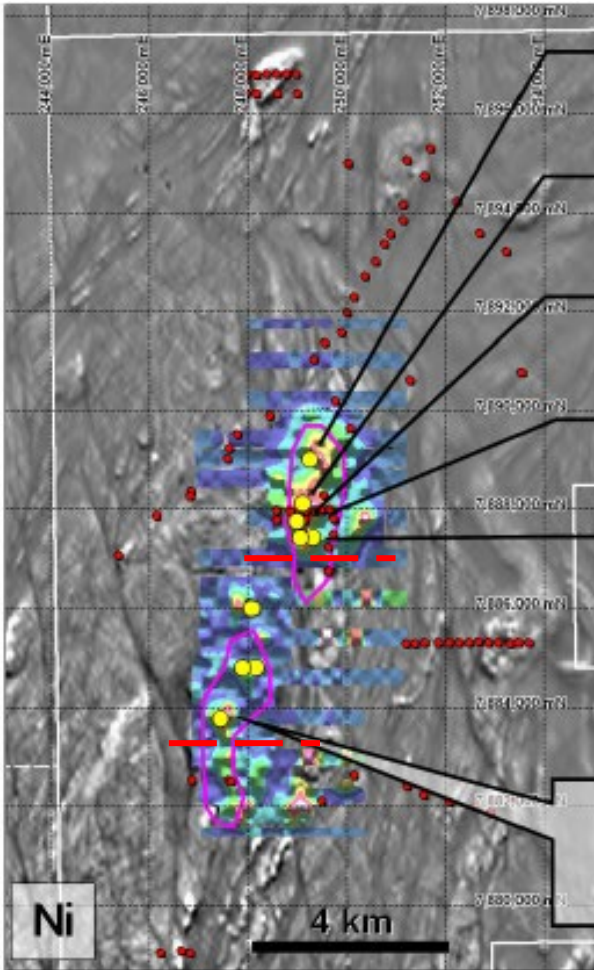
- Numerous troctolite, pyroxenite and gabbro-norite intrusions across entire project area indicative of large-scale Ni-Cu-PGE magmatic sulphide ore bodies
- Microprobe analyses of olivine from intrusions (Fo72-Fo85) consistent with Voisey's Bay – significant Ni vs MgO depletion – indicates Ni sulphide 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
- Numerous fertile troctolite intrusions not followed up or inadequately followed up
- largely **unexplored**

Dido, Phantom & Big Mag – 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

Dido, Phantom & Big Mag – Palmer Rails



LYDD08-007
133m @ 0.12% Ni

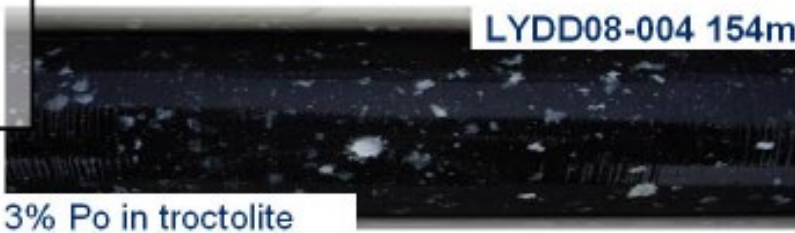
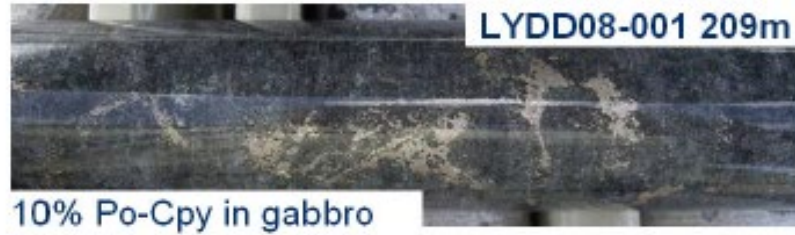
LYDD08-005
28.2m @ 0.14% Ni

LYDD08-004
105m @ 0.14% Ni

LYAC015
24m @ 0.15% Ni

LYDD08-001
74.5m @ 0.10% Ni

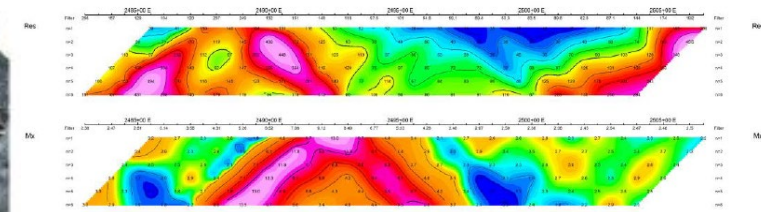
**Suite 2 Magma
Ni Depleted!**



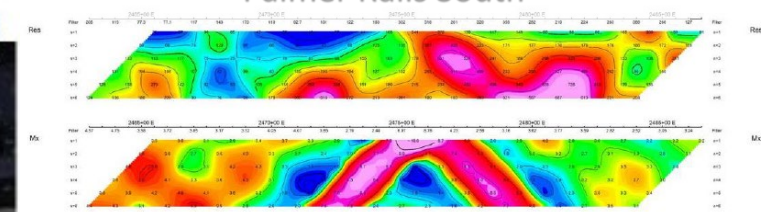
E.g., LYDD08-005:

- 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)

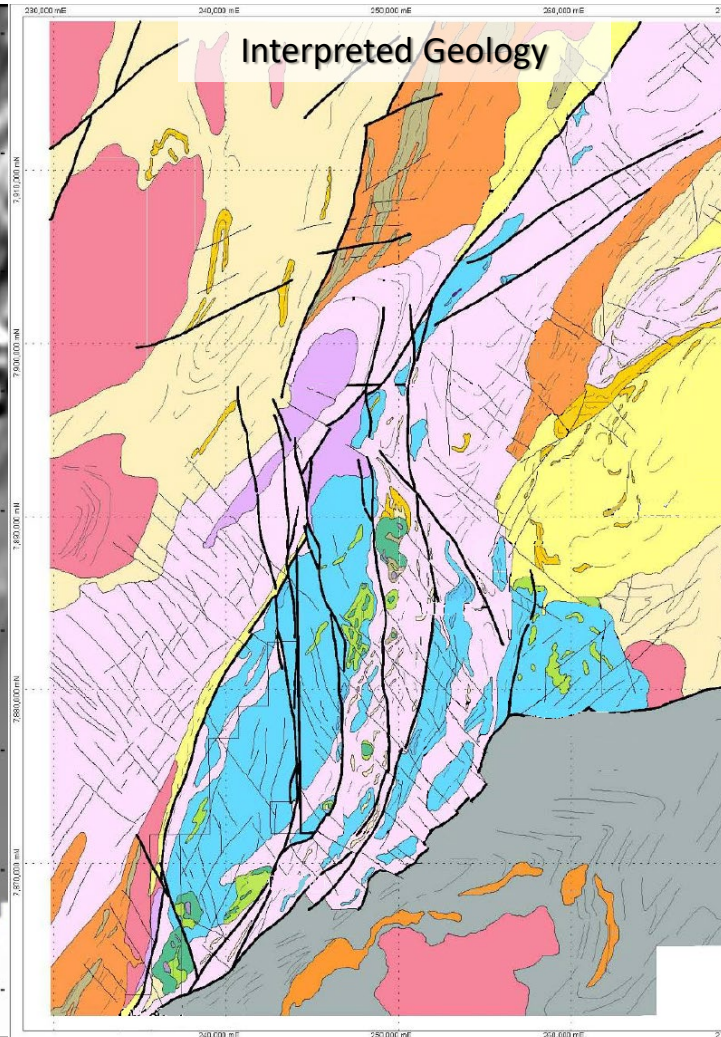
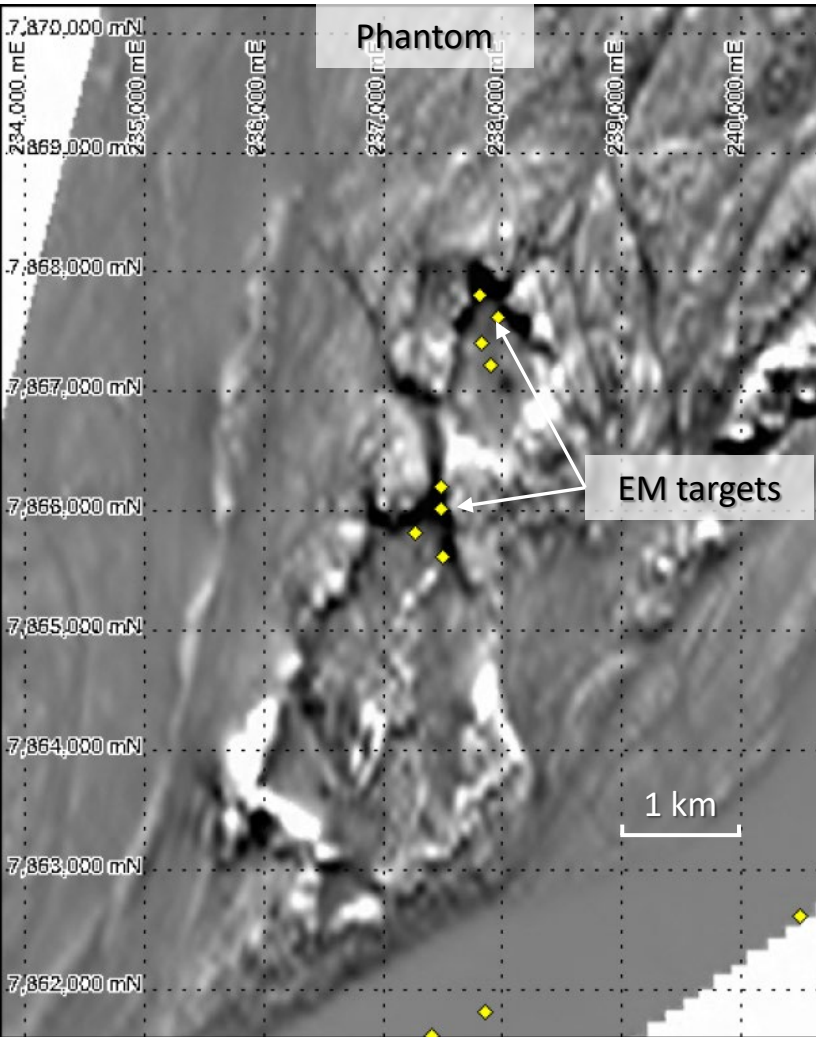
Palmer Rails North



Palmer Rails South



Dido, Phantom & Big Mag – *Phantom*

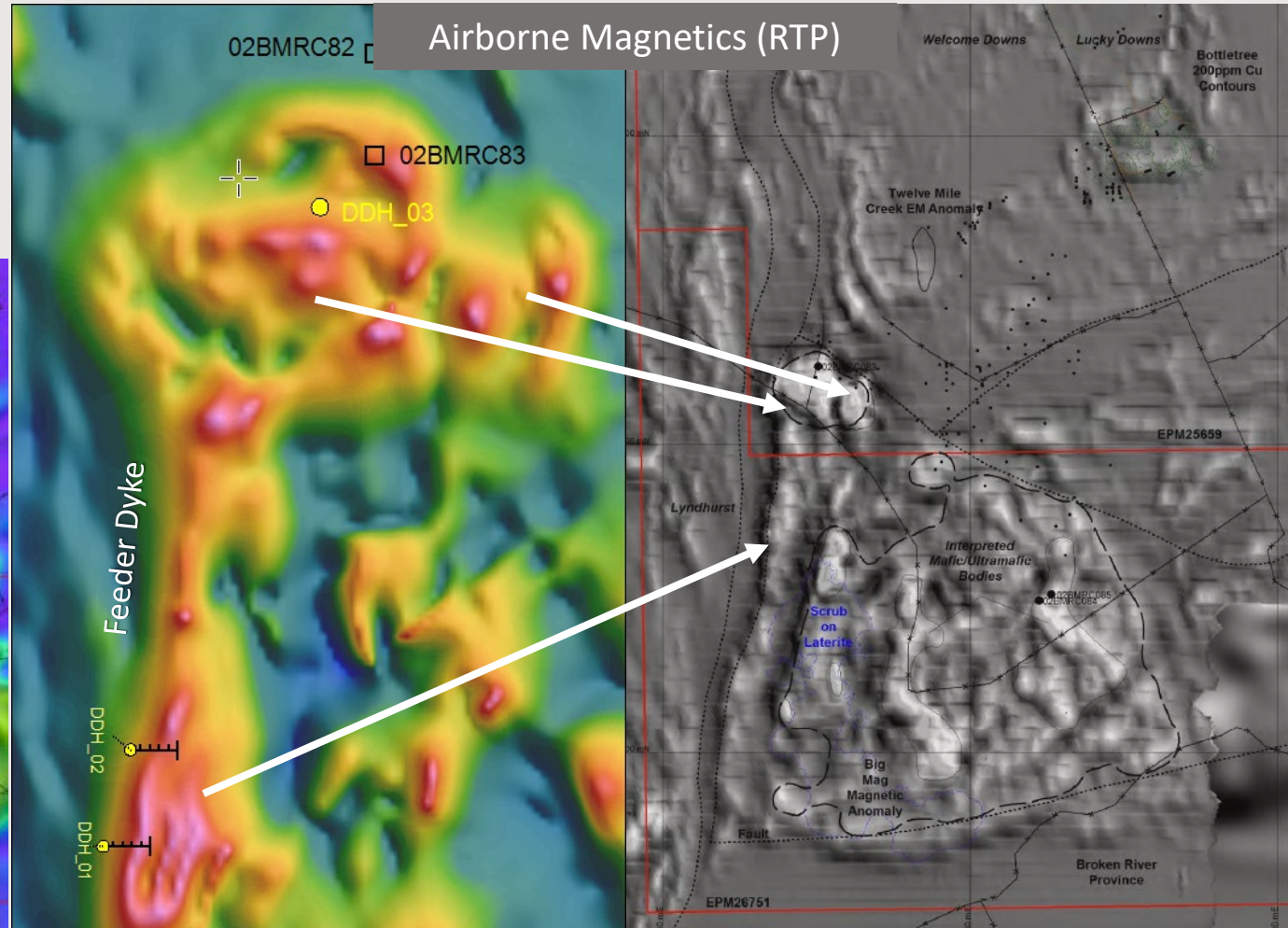
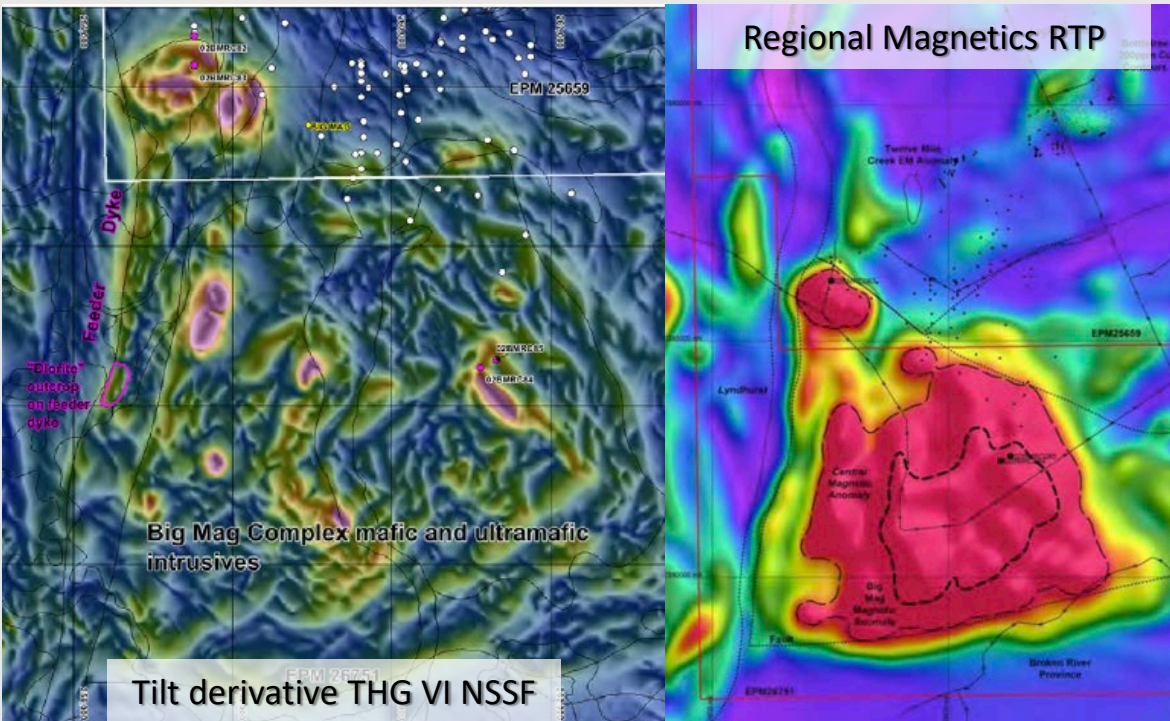


- 2 connected intrusives comprising gabbro, olivine gabbro and troctolite
- Extensive disseminated Ni-Cu sulphide mineralisation in outcrop
- Spectrem EM conductor targets drill-ready
- No exploration work conducted by Anglo



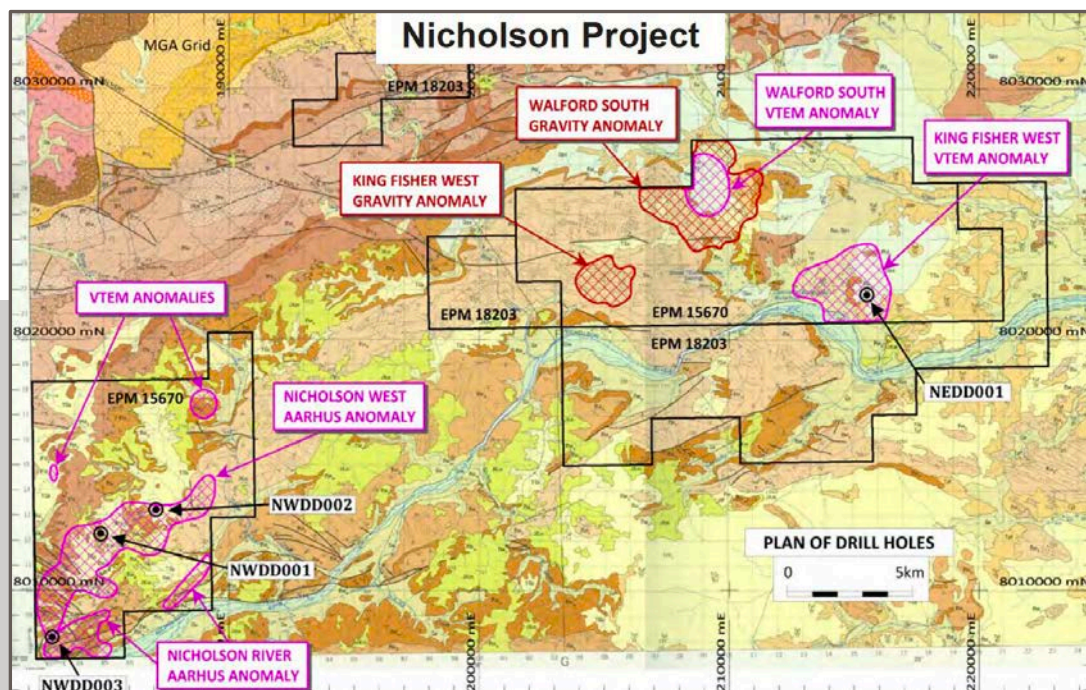
Dido, Phantom & Big Mag – *Big Mag*

- A series of mafic and differentiated ultramafic intrusions
- Drill-ready potential Ovoids and Feeder Dykes
- Intense magnetic anomaly targets at depth
- Differentiated / layered intrusion appears within potential Feeder Dyke



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

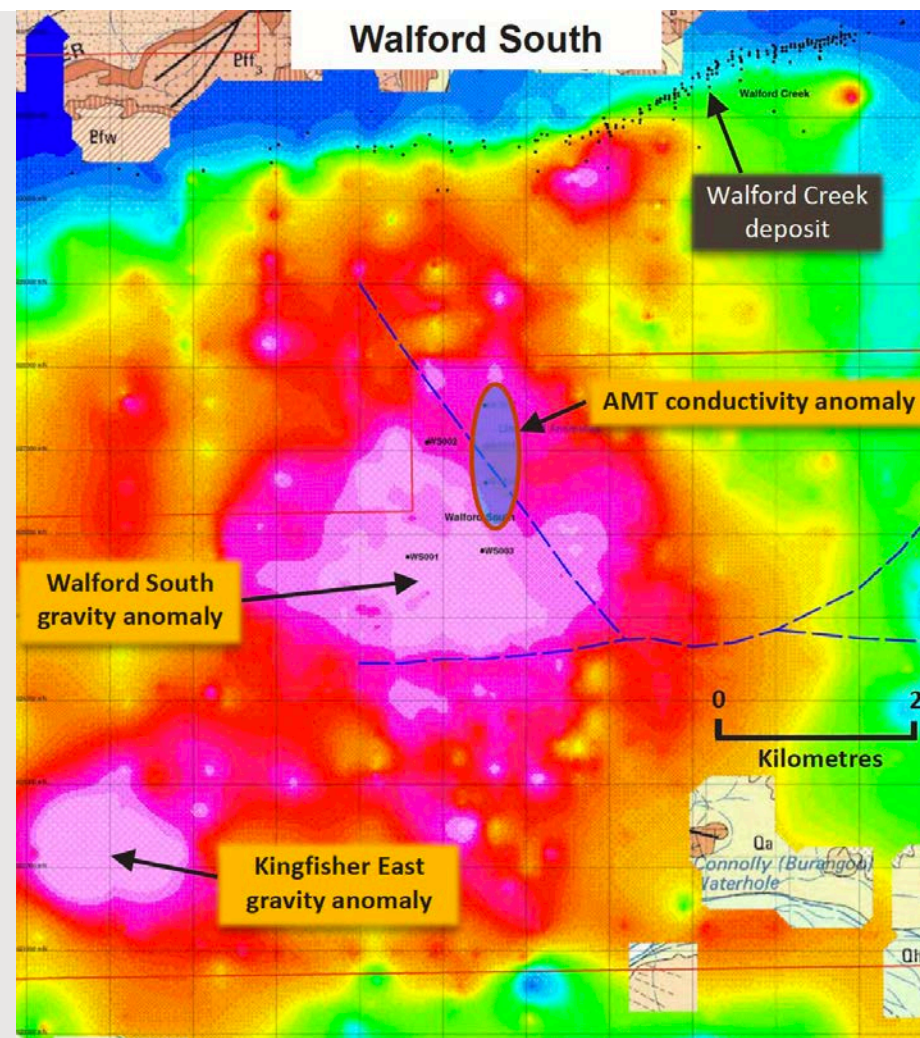
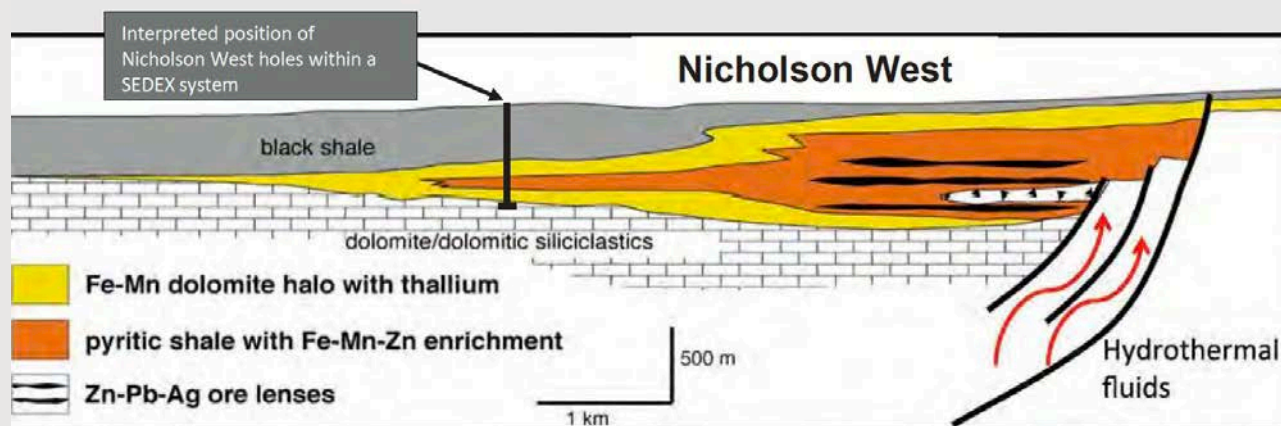


Nicholson West and Walford South targets

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

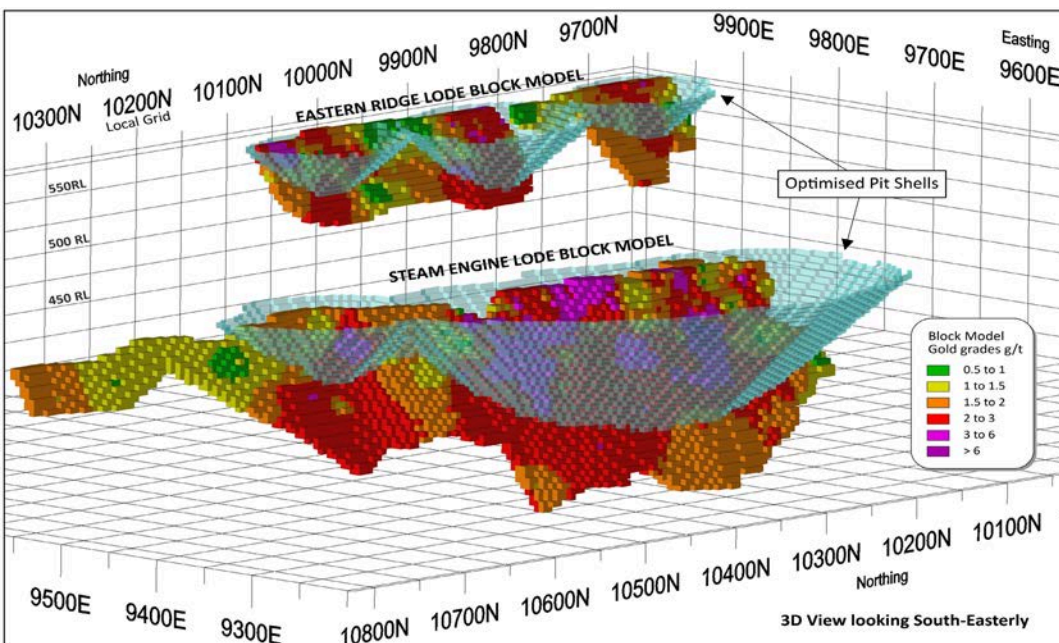


(Refer ASX announcement dated 6 March 2020)

Appendices



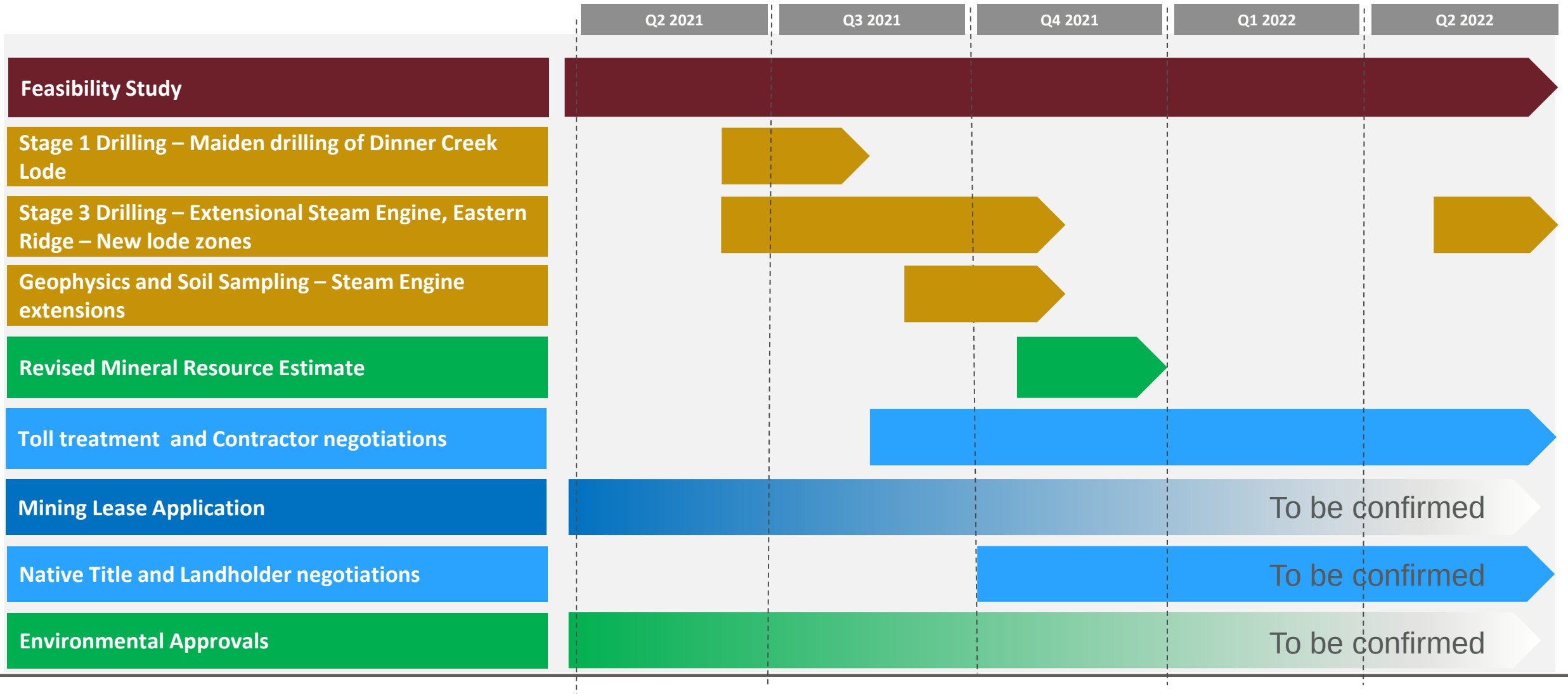
Steam Engine – Highly positive Scoping Study



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

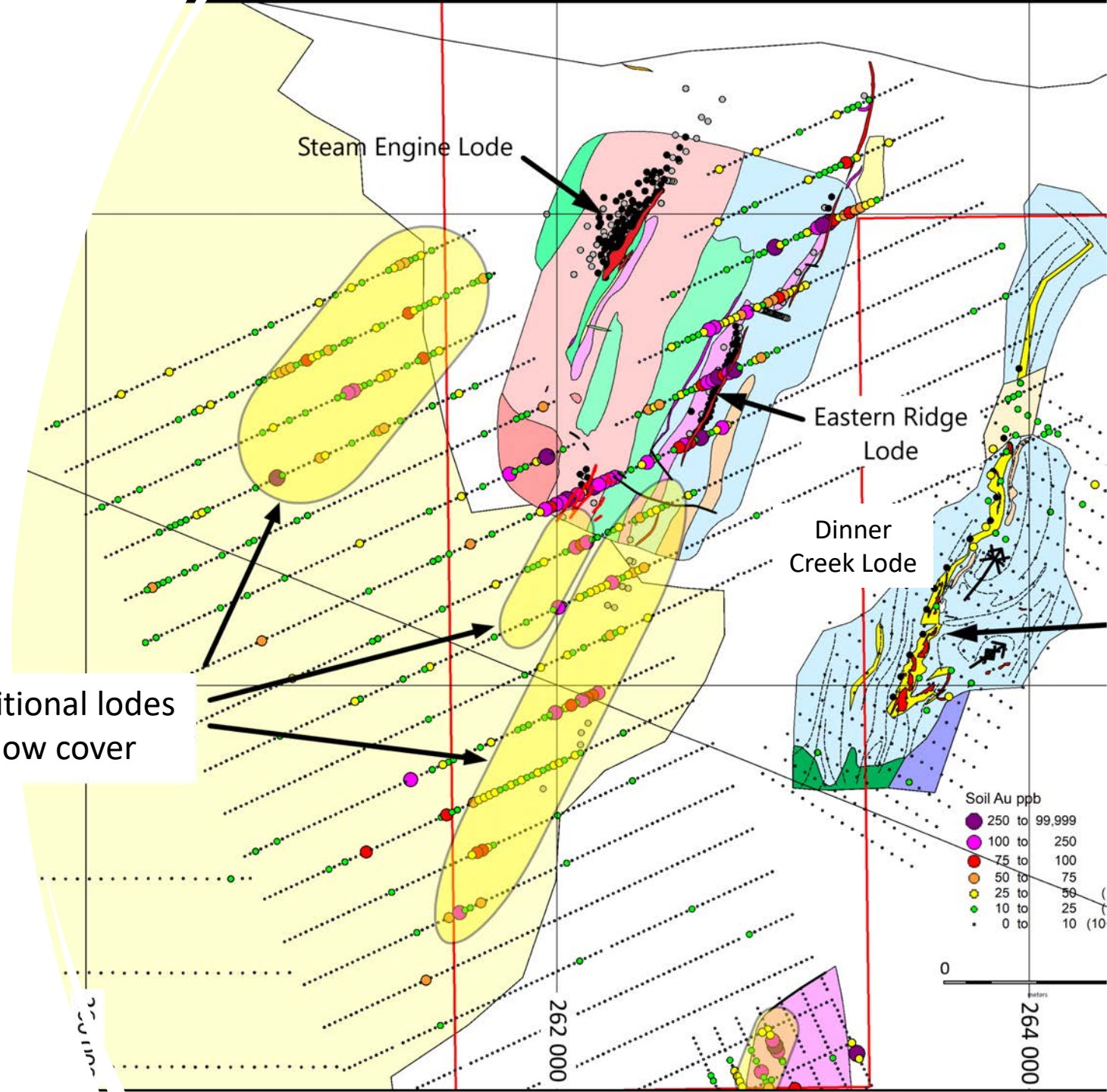
Parameter	Base Case @ A\$2,200 /oz	Upside Case @ A\$2,500 /oz
Financial Summary		
Overall Cash Flow (post-tax)	A\$24.2M	A\$41.0M
NPV _{7%} (post-tax)	A\$21.2M	A\$35.9M
Internal Rate of Return (IRR) (post-tax)	242%	410%
All-in Sustaining Costs (AISC) ¹²	A\$1,673 /oz	A\$1,725 /oz
Payback Period	11 months	9 months
Funding		
CAPEX (Pre-Production and Closure)	A\$5.1M	A\$5.1M
Funding Required ¹³	A\$10.0M	A\$9.0M
Return on Capital (post-tax)	475%	806%
Physical Outputs		
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



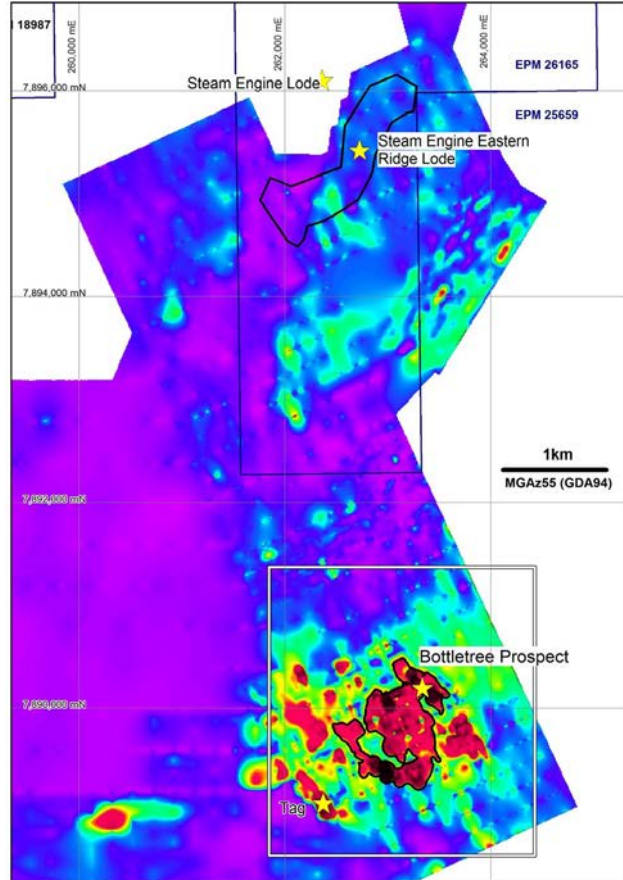
Steam Engine Project – Potential new lodes

Potential additional lodes under shallow cover

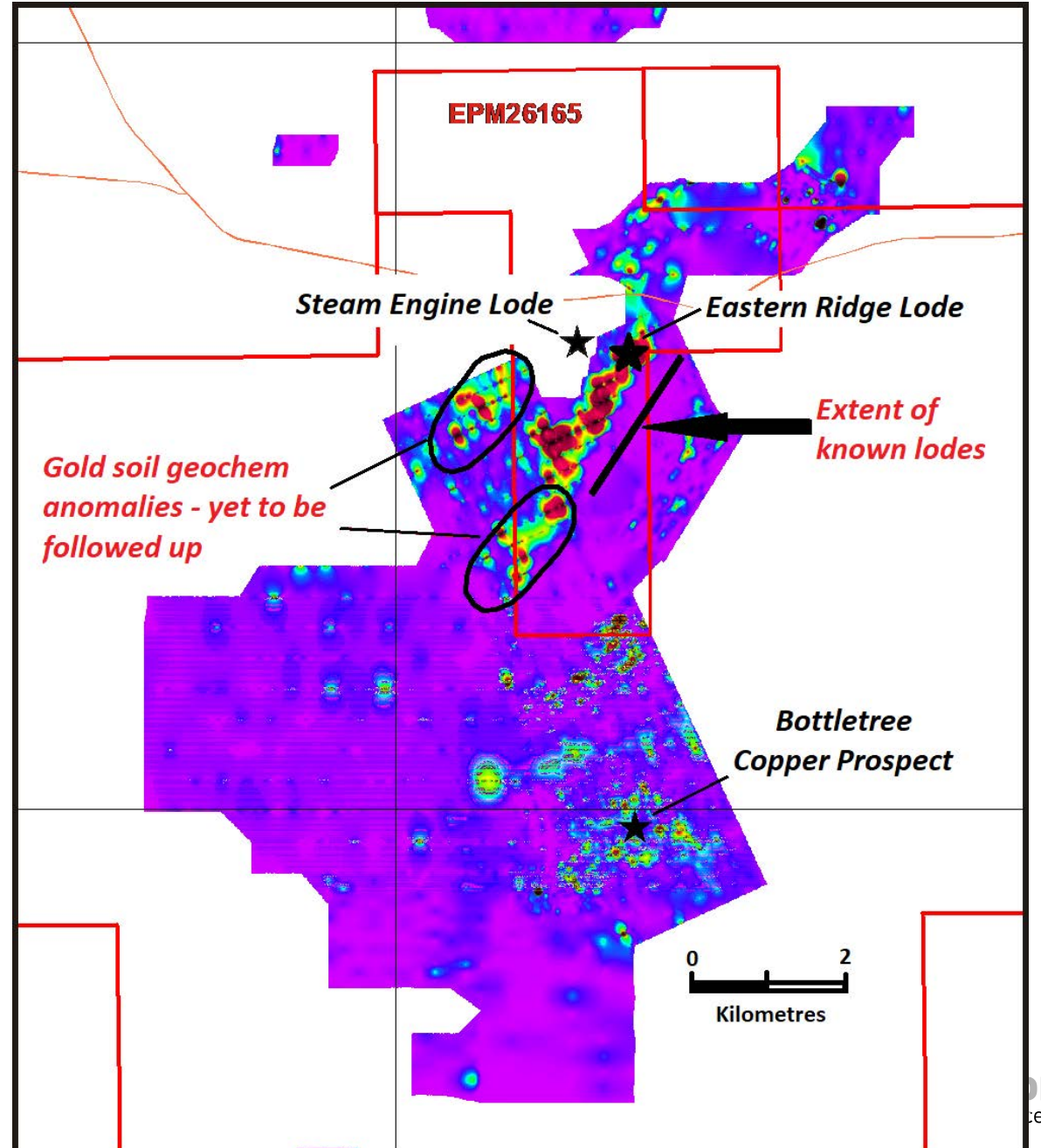


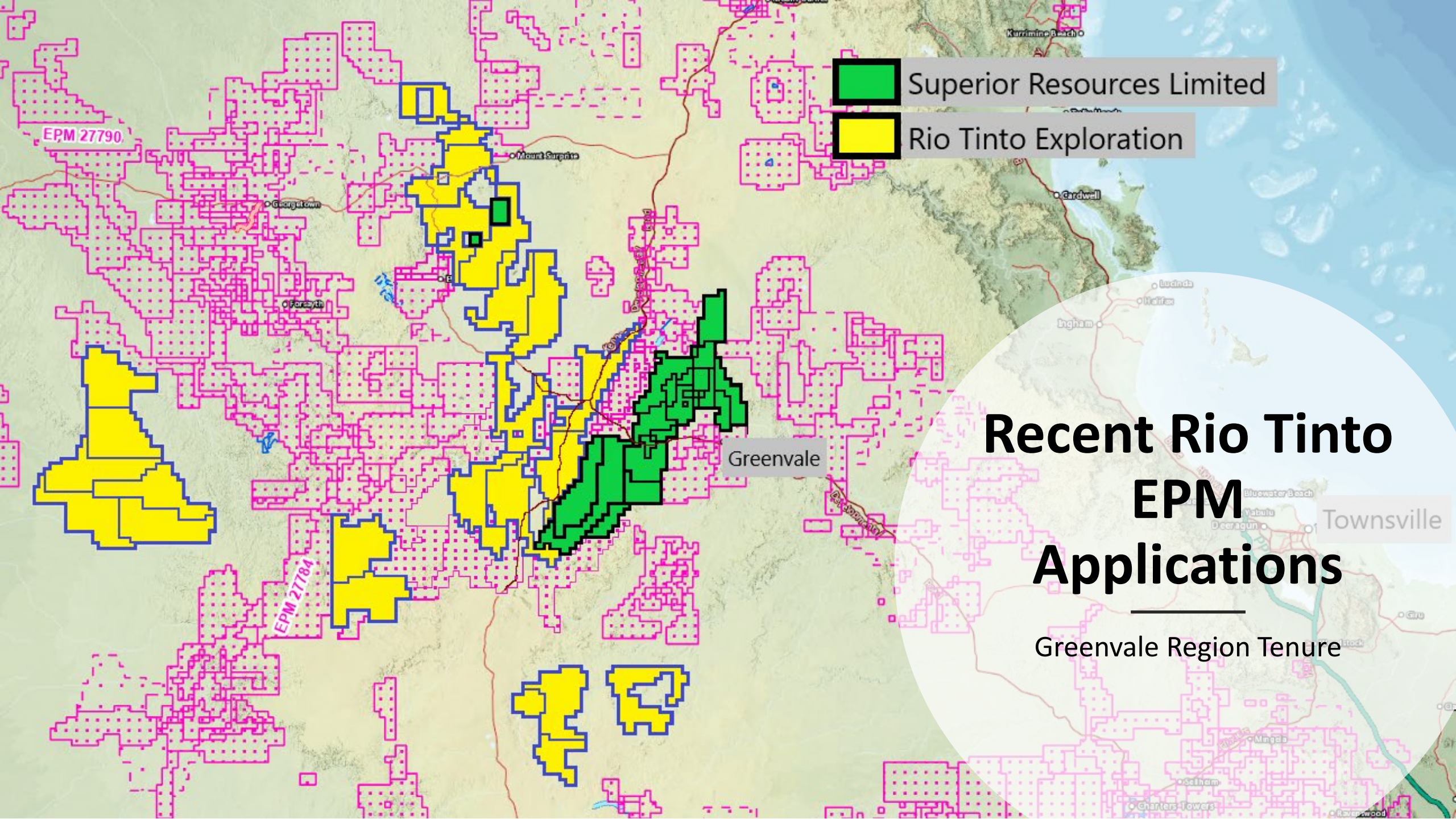
Steam Engine Project – Potential new lodes

Soil geochemistry (Copper)



Soil geochemistry (Gold)





-  Superior Resources Limited
-  Rio Tinto Exploration

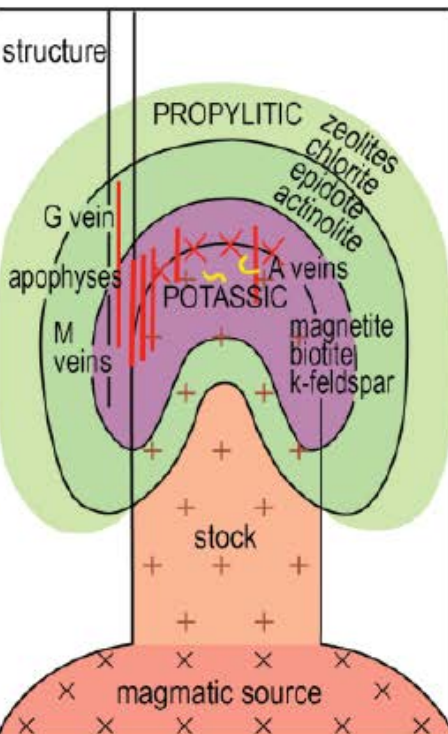
Recent Rio Tinto EPM Applications

Greenvale Region Tenure

STAGED PORPHYRY Cu-Au EVOLUTION

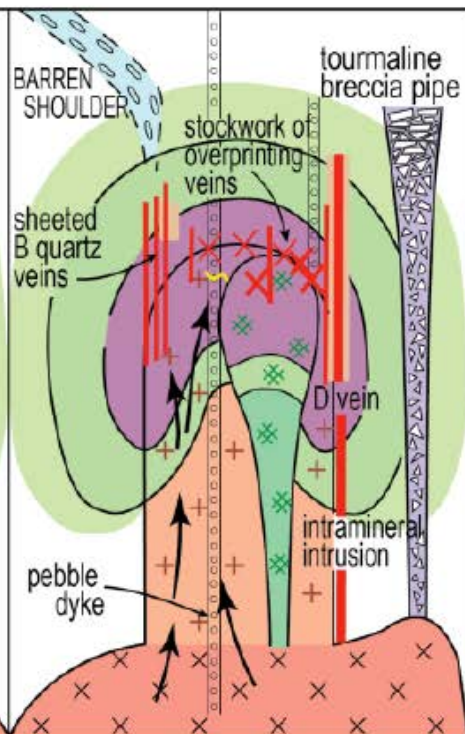
EARLY

EMPLACEMENT, PROGRADE
ALTERATION
& EARLY MINERALISATION



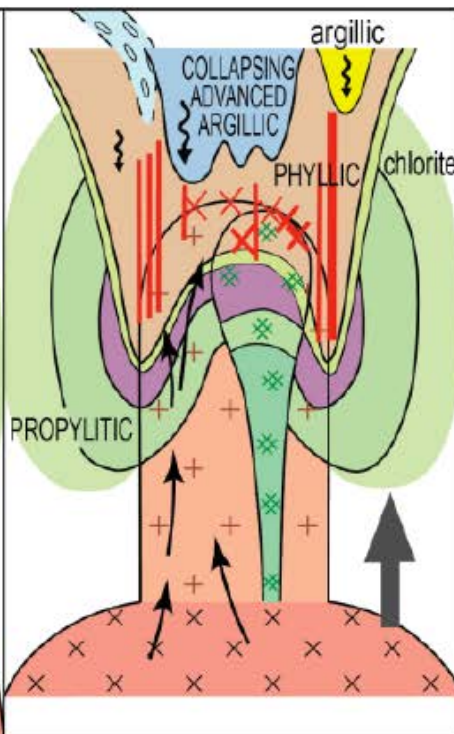
Zoned potassic to inner & outer propylitic alteration by heat transfer.
Initiation of prograde A, M & G veins.
Early mineralisation.

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.

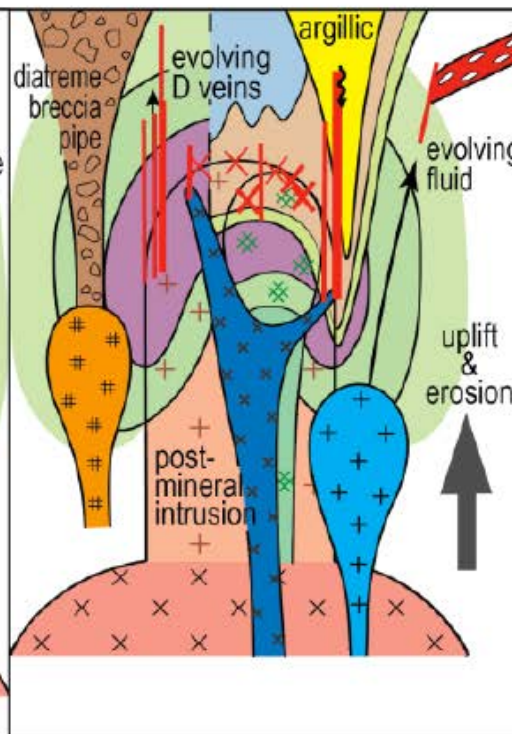
DRAW DOWN,
RETROGRADE ALTERATION
& LATE MINERALISATION



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

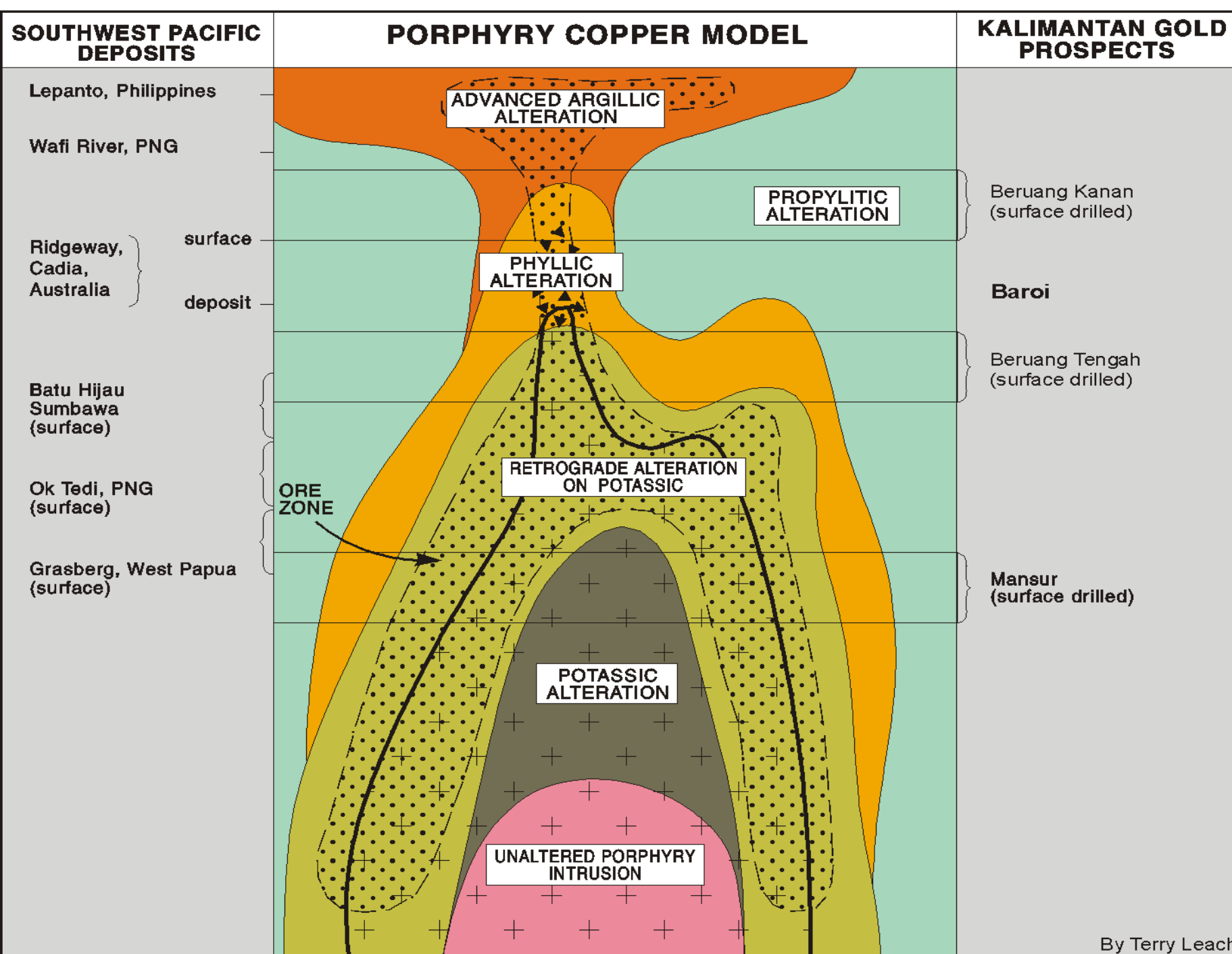
SHUT DOWN &
POST-MINERAL



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. 1984c

Porphyry
Cu-Au system



Porphyry Cu-Au system



Contact Us

Email:

manager@superiorresources.com.au

Phone:

+61 7 3847 2887

Website:

www.superiorresources.com.au

