

19 September 2022

CLARIFICATION – CRITICAL MINERAL PORTFOLIO POSITIONED FOR GROWTH

Petratherm Limited (“Company”) (ASX:PTR) provides a clarification to its announcement released on 13 September 2022 entitled “Company Presentation”.

The company retracts slide 4 of the original announcement. This slide contains a comparison between Petratherm and other companies that have a JORC resource but did not disclose the relevant resource categories as required by clause 26 of the JORC code. A copy of the amended presentation is following this letter.

This ASX announcement has been approved by Petratherm’s Board of Directors and authorised for release.

For further information, please contact;

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PETRATHERM LIMITED

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ASX: PTR

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ASX ANNOUNCEMENT

13/09/2022

PTR COMPANY PRESENTATION -

Critical Minerals Portfolio Positioned for Growth

Petratherm Limited (ASX: **PTR**) is pleased to provide the following Company Presentation summarising current on ground and future exploration, latest results, and target modelling. The Company is in a strong position with the discovery of major high-grade rare earth occurrences at shallow depth in the Northern Gawler Craton of South Australia and is working towards defining initial JORC Resources over the coming months. PTR has a large land position in the Northern Gawler Craton, over areas where primary rare earth mineralisation has been detected, offering great potential for new rare earth discoveries.

In addition, PTR has a strong Iron-Oxide Copper-Gold (IOCG) Project Portfolio in the heartland of the World-Class Olympic Domain of South Australia close to operating mines and recent major discoveries. Targeting work has defined several compelling IOCG targets which PTR anticipates will be drilled in the first half of the 2023 calendar period.

This ASX announcement has been approved by Petratherm's Board of Directors and authorised for release by Petratherm's Chairman Derek Carter.

For further information contact :

Peter Reid (Exploration Manager) Tel: 0435 181 705 E: preid@petratherm.com.au



CRITICAL MINERALS PORTFOLIO POSITIONED FOR GROWTH

Petratherm Company Presentation

13 September 2022



ASX: PTR

COMPLIANCE STATEMENTS

Disclaimer:

This presentation has been prepared by Petratherm Limited (Petratherm). The information contained in this presentation is a professional opinion only and is given in good faith. Certain information in this document has been derived from third parties and though Petratherm has no reason to believe that it is not accurate, reliable or complete, it may not have been independently audited or verified by Petratherm.

Any forward-looking statements included in this document involve subjective judgment and analysis and are subject to uncertainties, risks and contingencies, many of which are outside the control of, and maybe unknown to, Petratherm. In particular, they speak only as of the date of this document, they assume the success of Petratherm's strategies and they are subject to significant regulatory, business, competitive and economic uncertainties and risks. Actual future events may vary materially from the forward looking statements and the assumptions on which the forward looking statements are based. Recipients of this document ("Recipients") are cautioned not to place undue reliance on such forward-looking statements.

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JORC Information:

Further details (Including JORC 2012 Code Reporting Tables, where applicable) for the information included in this Presentation can be found in the following Petratherm Limited announcements previously lodged with the ASX:

- Petratherm Secures Land Position Over Highly Prospective Olympic Dam Style, Copper-Gold, Geophysical Anomalies – 5 December 2018
- Second Tenement Application over an Area Prospective Olympic Dam Style, Copper-Gold – 12 December 2018
- Gravity survey identifies high tenor Olympic Dam Style Targets – 12 August 2019
- Gravity Modelling Defines Olympic Dam Style Targets – 15 October 2019
- Prospective Gold Tenement Won in Competitive Bid – 18 October 2019
- Comet Project Tenement (EL 6443) Granted – 14 January 2020
- Quarterly Activities Report December 2019 – 30 January 2020
- Mabel Creek Project – Drilling Results – 12 May 2020
- Mabel Creek Project - Drilling Grant Awarded to test Olympic Dam Style Copper-Gold Targets – 25 June 2020
- New Copper and Gold Project Acquired – 3 December 2020
- Woomera IOCG Project Acquired – 16 June 2021
- Woomera IOCG Project – Regional Gravity Targeting - 1 July 2021
- Mabel Creek Project – Results of Drilling - 27 July 2021
- Comet Project – Shallow Drilling Identifies Gold Anomalies - 3 November 2021
- Petratherm Company Presentation - 1 December 2021
- Drilling uncovers major High-Value Rare Earth Discovery at Comet in the Northern Gawler Craton – 20 April 2022
- Arcoona IOCG Project Won in Competitive Bid – 14 July 2022
- Thick Intervals of Rare Earths Uncovered at Comet – 08 August 2022
- Successful Bid for Muckanippie Rare Earth Project – 19 August 2022
- High Grade Rare Earths Uncovered at Meteor – 29 August 2022

Competent Persons Statement:

The information in this report that relates to Exploration Targets and Exploration Results is based on information compiled by Mr Peter Reid, who is a Competent Person, and a Member of the Australian Institute of Geoscientists. Mr Reid is not aware of any new information or data that materially affects the historical exploration results included in this report. Mr Reid is an employee of Petratherm Ltd. Mr Reid has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activity being undertaken 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 Reid consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

CORPORATE SUMMARY

BOARD AND MANAGEMENT WITH TRACK RECORD OF EXPLORATION SUCCESS

CAPITAL STRUCTURE

(09 Sept 2022)

Shares on issue	224.8M
Options	1.35M
Share price (09/09/2022)	\$0.07
Market capitalisation (undiluted)	\$15.5M
Cash (30 June 22)	\$4.7M
Enterprise value	\$10.8M

Derek Carter

Non-Executive Chairman

Mr. Carter is a founder of the Minotaur group and a joint recipient of Explorer of the Year (AMEC) for the discovery of the Prominent Hill Copper Gold deposit. He was Chairman of Highfield Resources during the discovery and evaluation of the world-class Muga deposit and has been involved with numerous Government, Industry and ASX listed Company Boards. He is a geologist with over 45 years Corporate and field experience.

Donald Stephens

Non-Executive Director

Mr. Stephens is a Chartered Accountant and corporate advisor with over 25 years' experience in the accounting, mining and services industries, including 14 years as partner of HLB Mann Judd (SA), a firm of Chartered Accountants.

Simon O'Loughlin

Non-Executive Director

Mr. O'Loughlin is the founder of O'Loughlin's Lawyers, an Adelaide based, specialist commercial law firm. He has extensive experience in the corporate and commercial law fields while practicing in Sydney and Adelaide, and also holds accounting qualifications. Non-Executive Director of Chesser Resources.

Peter Reid

Exploration Manager

Mr. Reid is an exploration geologist with 30 years' experience. He was part of the Minotaur team which discovered the Prominent Hill copper-gold deposit and then later heavily involved in the successful IPO spin offs of ASX listed, Mithril Resources Ltd and Petrathem Ltd. He was the founding CEO of Petrathem and the recipient of the Chairman's Award for his contribution to the Australian geothermal industry.

PROJECTS OVERVIEW

A STRATEGIC PACKAGE OF REEs, COPPER & GOLD

Comet REE & Gold Project, S.A.

- Exceptional REE drill intercepts over large areas
- Drill ready advanced Gold Prospects
- Meteor REE Prospect – Oct/Nov 2022 drilling to define initial JORC Resource

Woomera IOCG Project

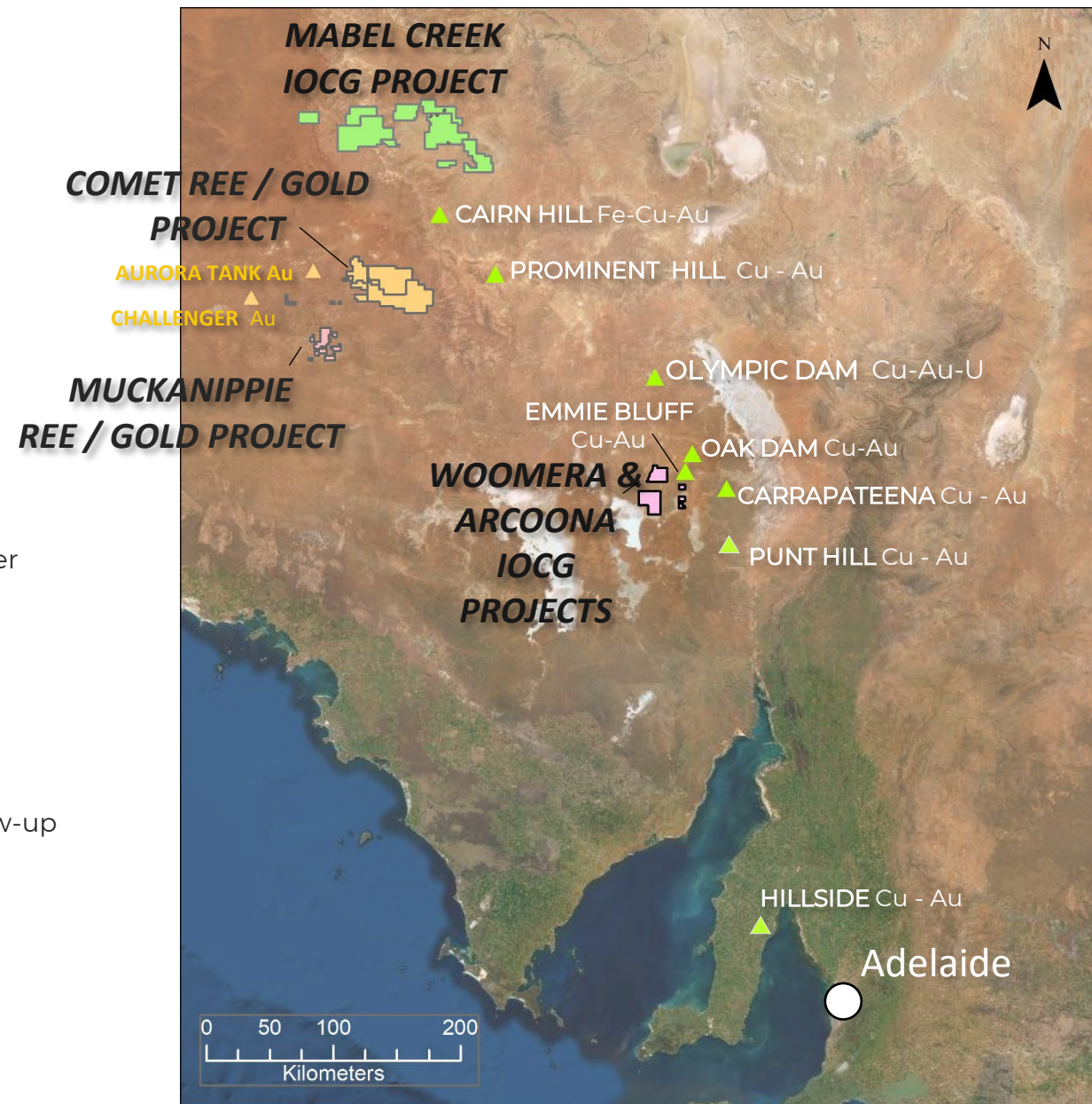
- Close to the Emmie Bluff IOCG discovery and other IOCG mineralization
- 2 Major IOCG styles of mineralization targeted + Stratabound Cu-Au-Co in cover
- High calibre drill ready gravity targets – Drilling scheduled for Early 2023

Mabel Creek IOCG Projects

- Large land holding over the northern Olympic Dam Copper-Gold Province
- Drilling to date has defined 2 IOCG Mineral Alteration Systems requiring follow-up

Muckanippie REE Project

- Major differentiated layered Intrusive Complex with abundant REE anomalism
- Project recently won through a SA Government competitive tender
- Early-Stage Project with ground works to begin early 2023

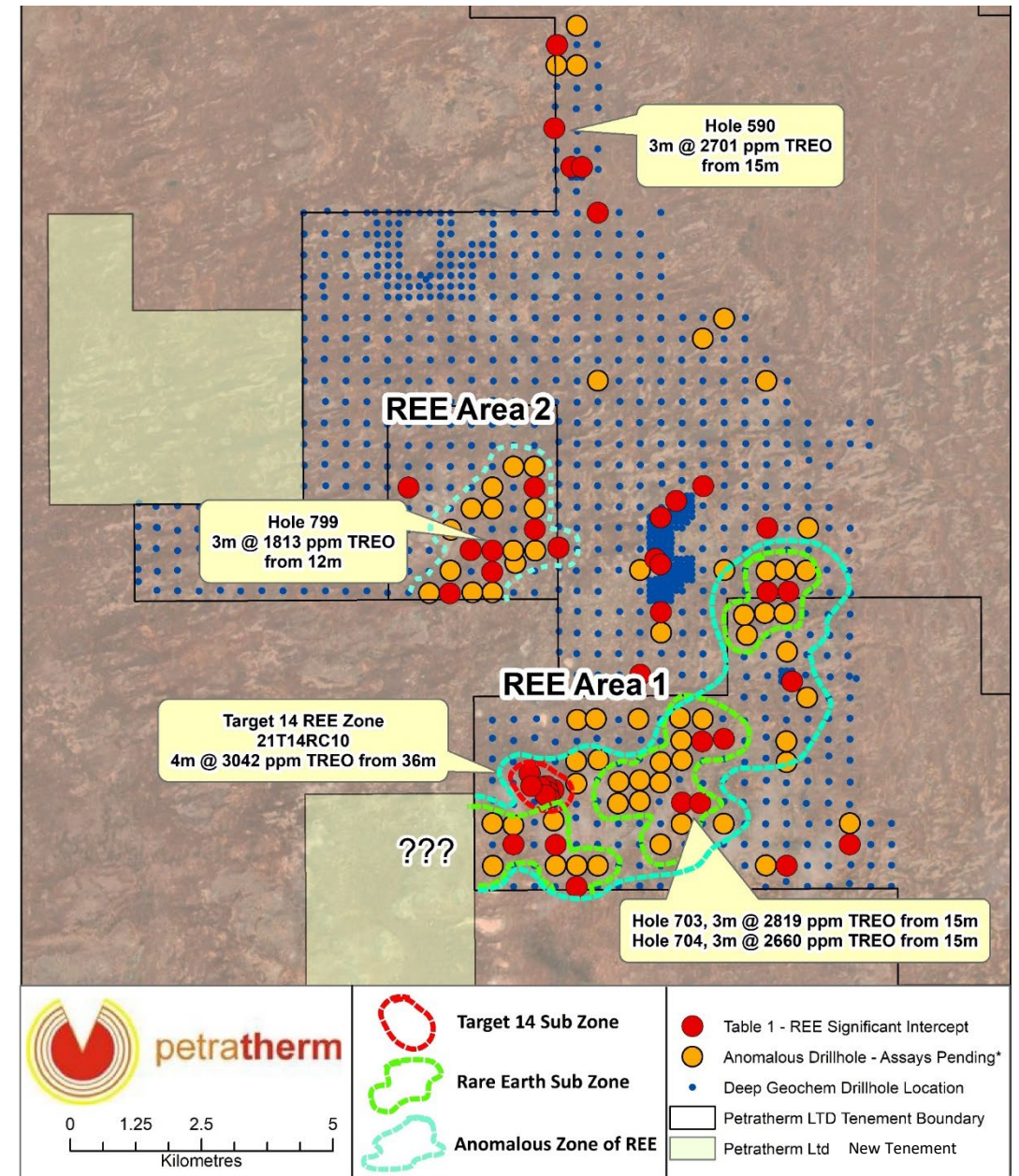


COMET REE PROJECT

APRIL 2022 - DRILLING UNCOVERS RARE EARTHS

Hole	Interval	High Value Magnet Rare Earths*
703	3m @ 2,819 ppm TREO from 15m - 18m (EOH)	743 ppm
704	3m @ 2,660 ppm TREO from 15m - 18m (EOH)	702 ppm
590	3m @ 2,701 ppm TREO from 15m - 18m (EOH)	1,016 ppm
799	3m @ 1,813 ppm TREO from 12m - 15m (EOH)	456 ppm
931	3m @ 1,705 ppm TREO from 12m - 15m (EOH)	382 ppm
T14_RC10	4m @ 3,042 ppm TREO from 36m - 40m	814 ppm

(* Magnet Rare Earths = Pr_6O_{11} , Nd_2O_3 , Tb_4O_7 & Dy_2O_3)



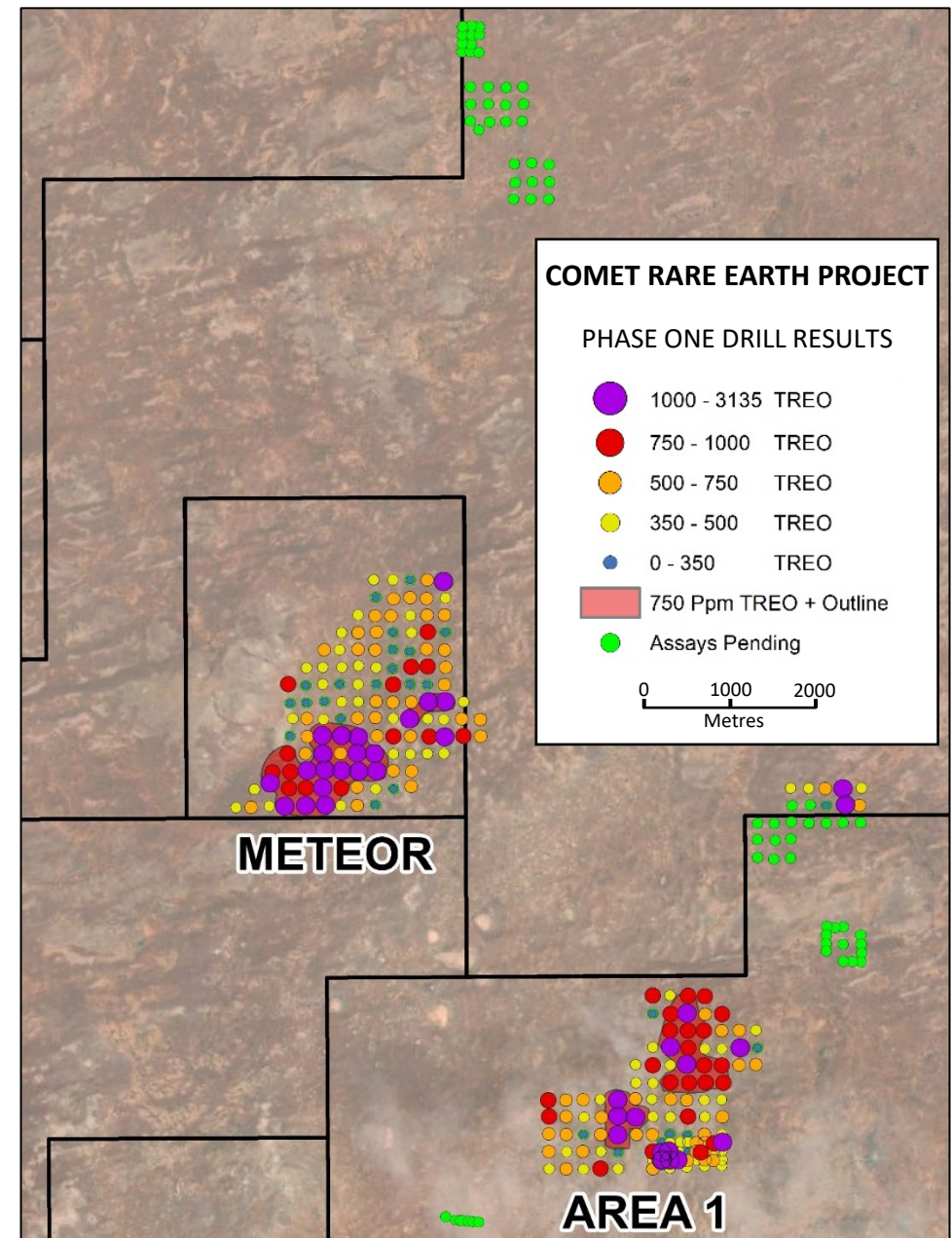
COMET REE PROJECT

June-July 2022 – FOLLOW UP AIR CORE DRILLING

- 330 drill holes completed - average hole depth of 30 metres.
- Drill spacing 200 metre by 200 metre grid
- Area 1 and Meteor Results - with further drill assays pending

DRILL RESULTS

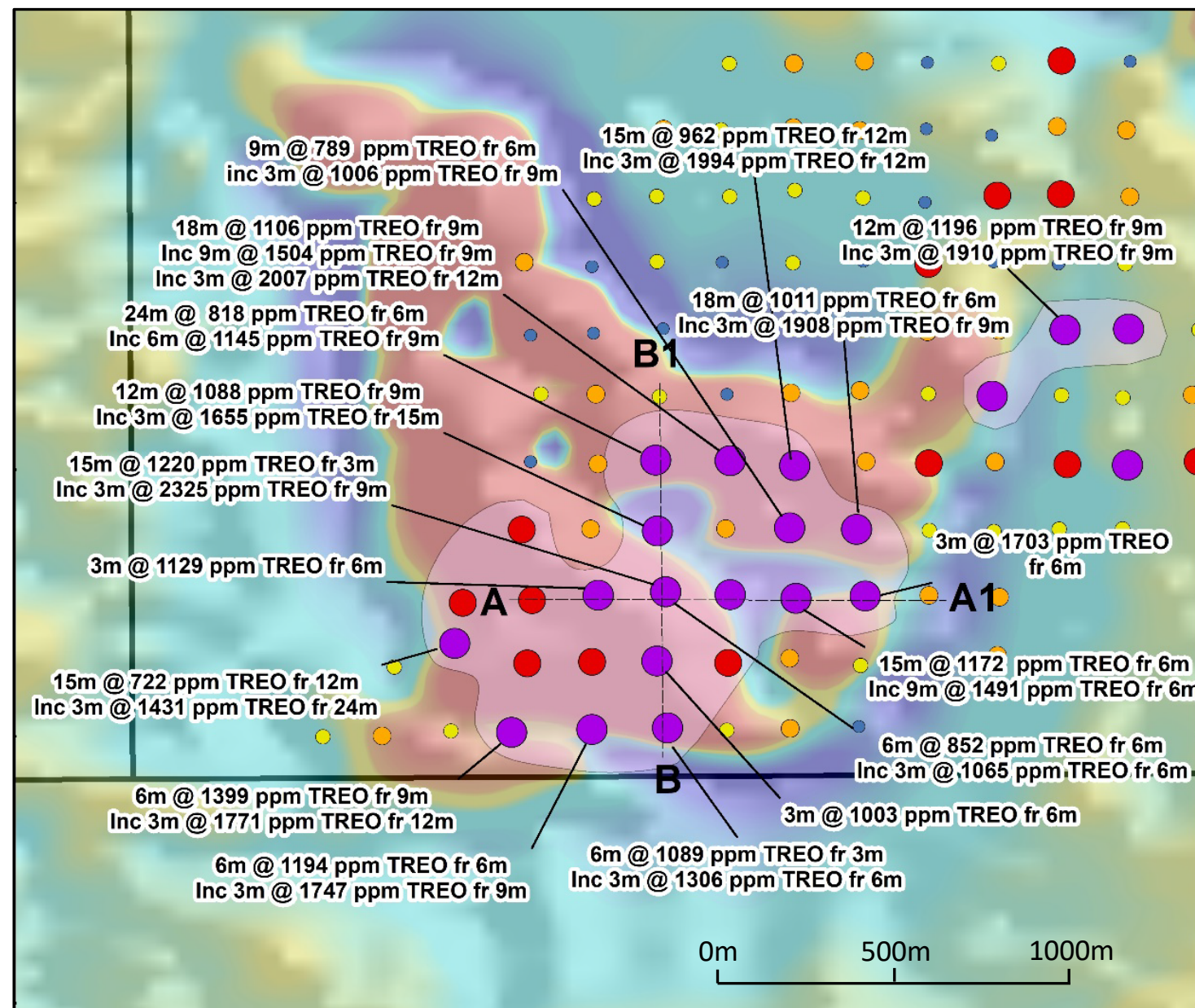
- *High-Grade REE Mineralisation encountered at METEOR and Area 1. (TREO) intervals up to 3,600 ppm*
- *Mineralisation starts at Shallow Depth - 3-12 metres*
- *Thick Intercepts from 6 metres to 27 metres*
- *High-Grade Mineralised Zones occur over Significant Areas providing good size potential*
- *High-value Scandium Oxide Credits up to 111 ppm.*

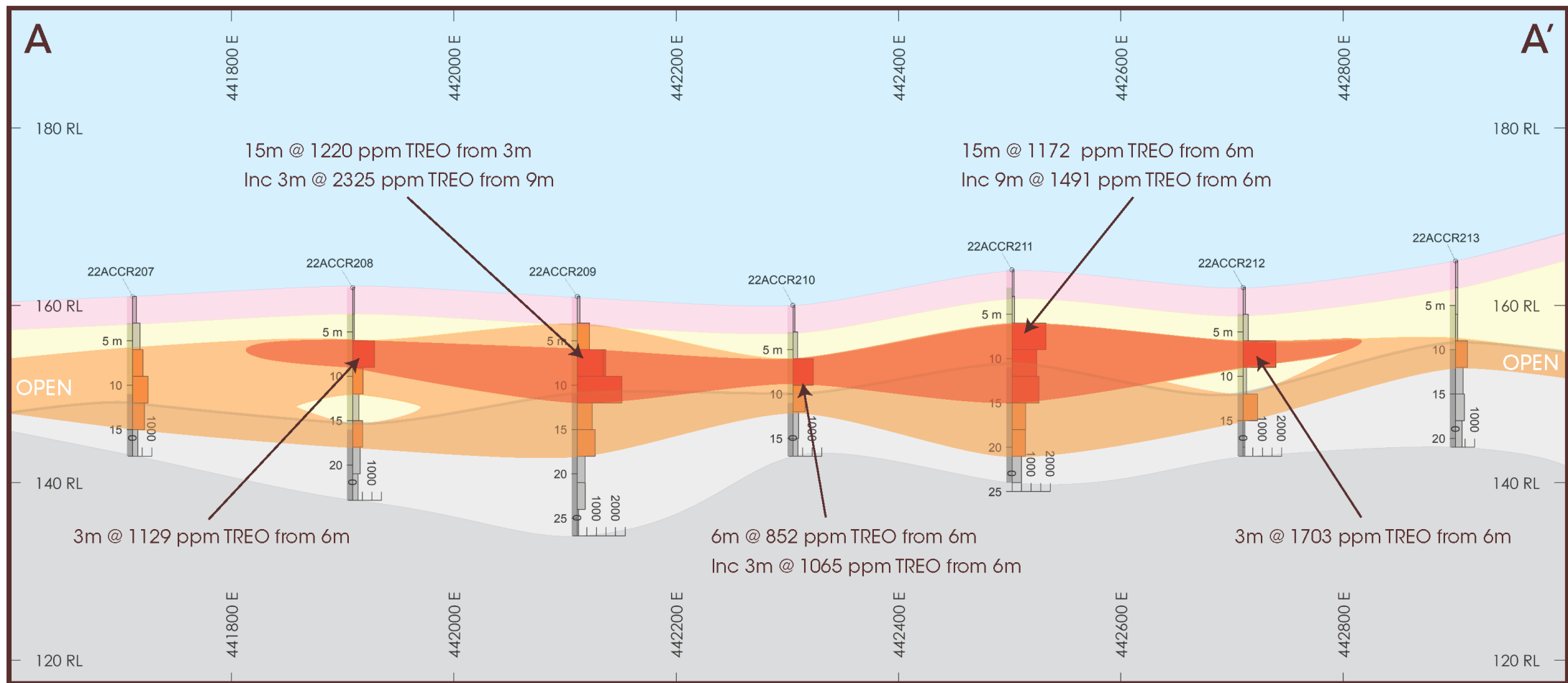


METEOR REE PROSPECT

SUMMARY OF DRILLING RESULTS

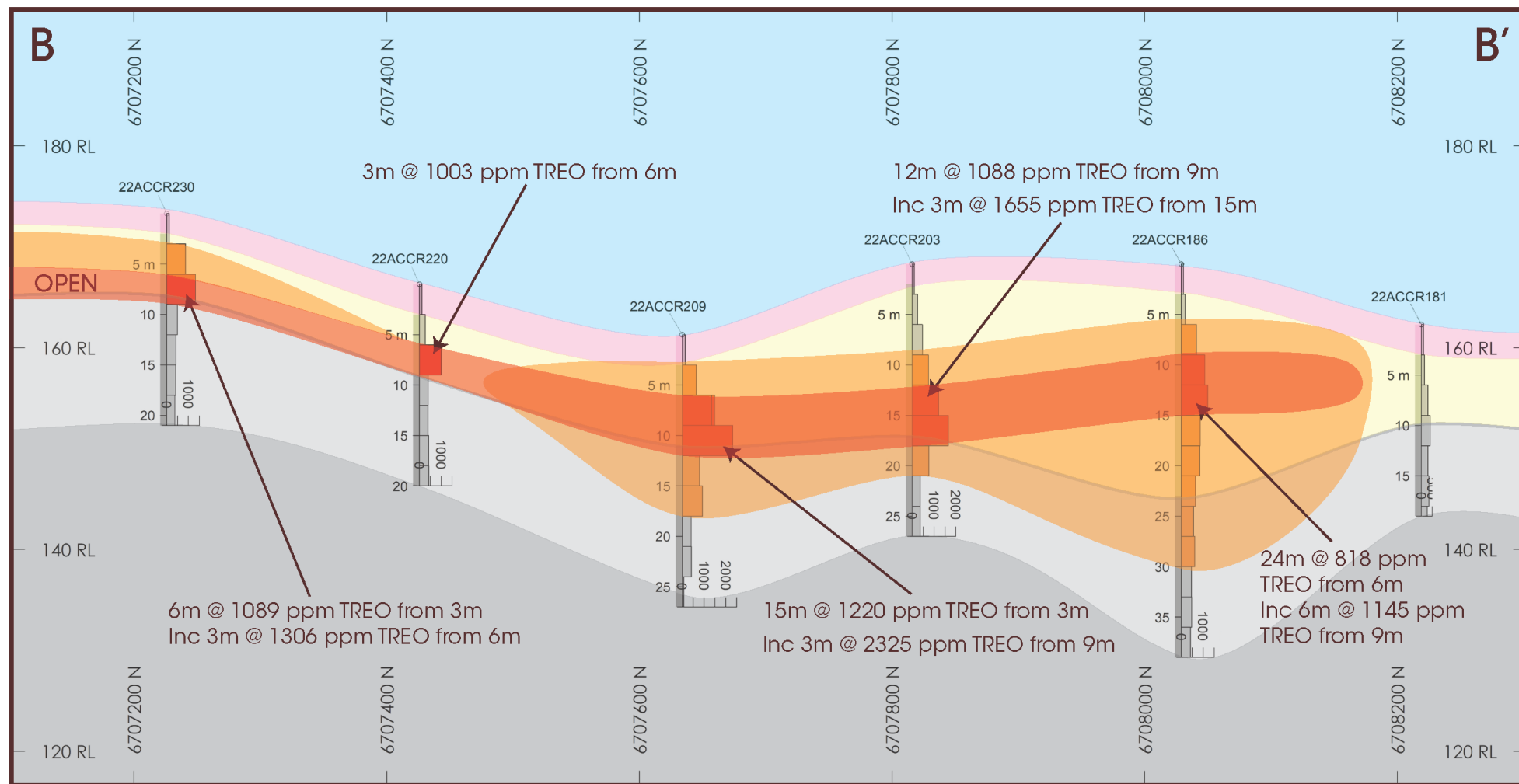
- High-Grade REE Prospect (> 1000 ppm TREO). High MREO content = 25%
- Mineralisation Starts at Shallow Depth 3-6m
- Ore thickness ranges from 3 to 24m and averages 9-12m.
- Main Prospect currently 1200m by 700m, with other satellite bodies evident and is open on west side.
- *Infill Resource Drilling From Oct/Nov 2022*





Meteor – W-E Cross Section - High Grade Mineralisation





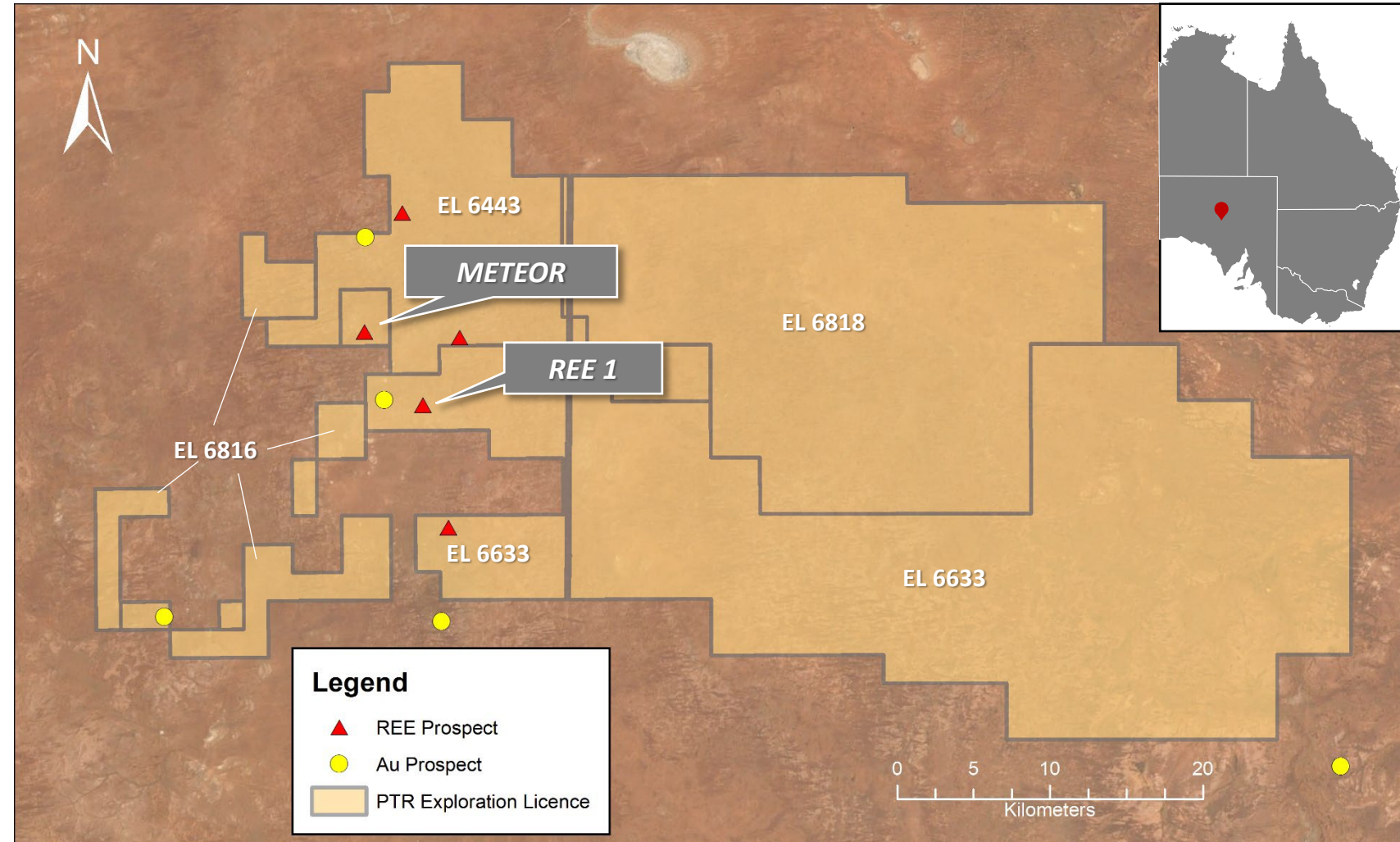
Meteor – N-S Cross Section - High Grade Mineralisation



COMET REE PROJECT

SIGNIFICANT GROUND POSITION

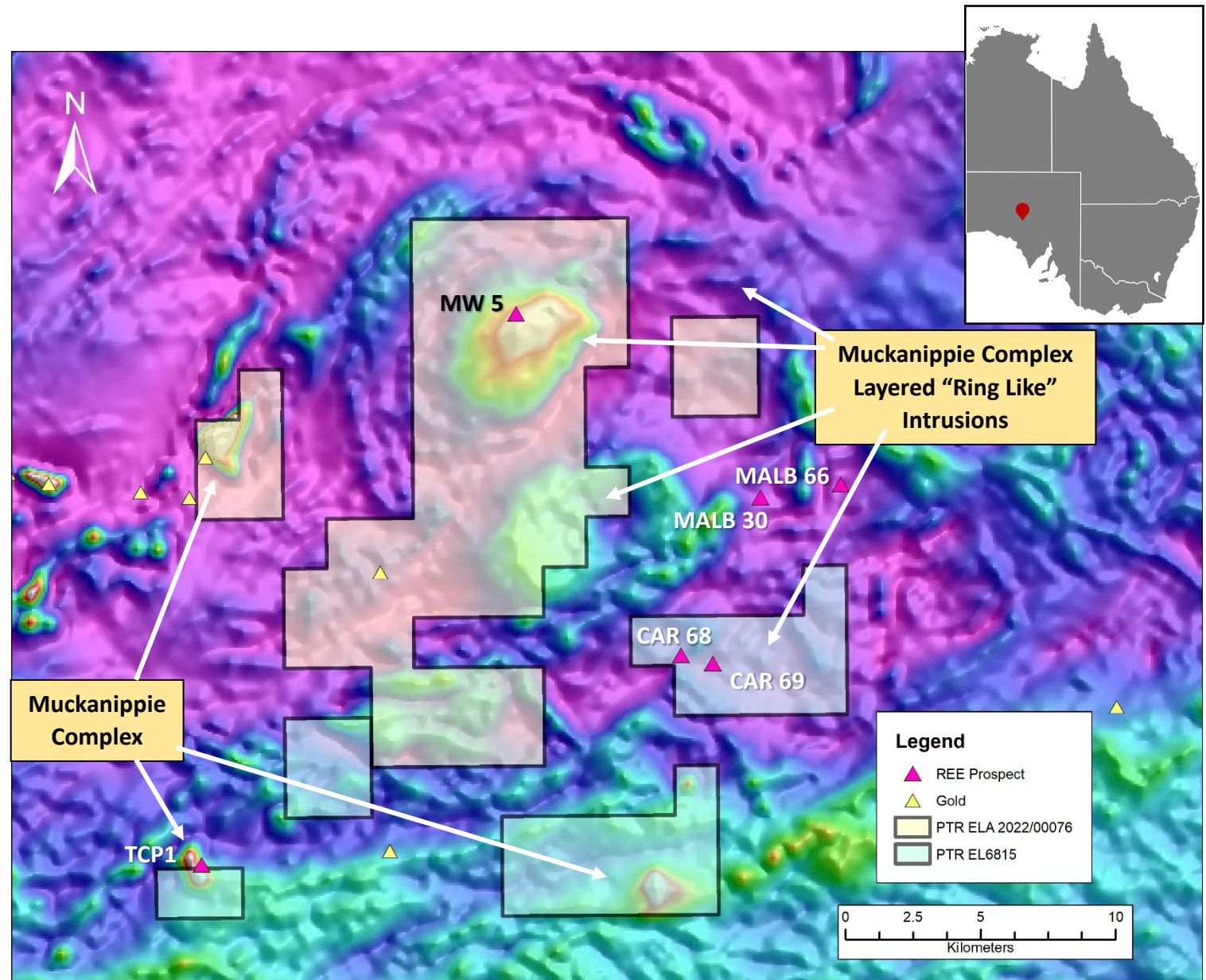
- Strong ground position in the Northern Gawler Craton, totalling 1,915 Km².
- Regional drilling activities to date have tested 130 km², which is just 7 % of the total Project Holding.
- There remains substantial upside potential for additional new REE discoveries to be made in the surrounding un-explored tenure.



MUCKANIPPIE REE PROJECT

PROSPECTIVE REE INTRUSION

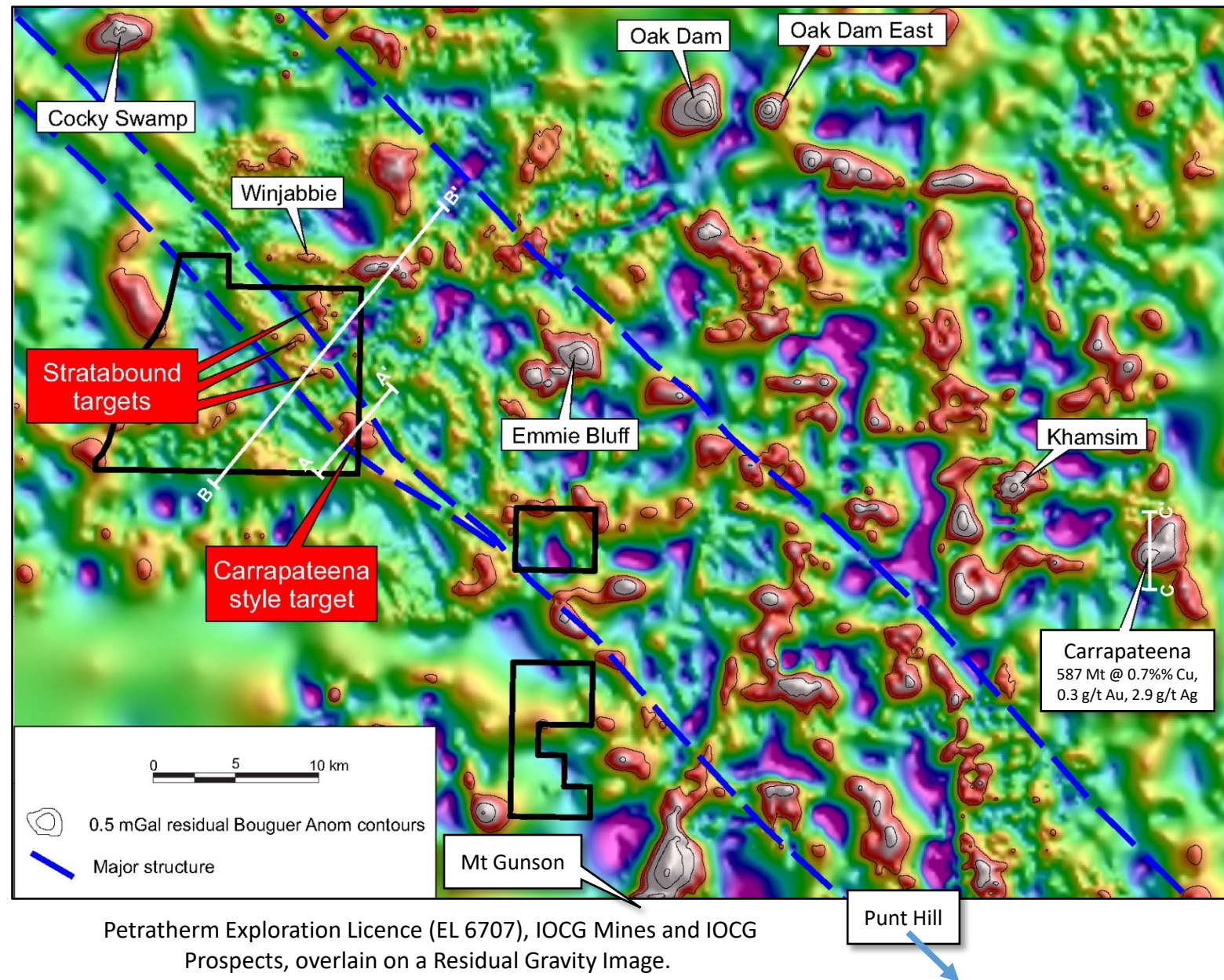
- New Project over centre of the highly prospective Muckanippie Complex - won through competitive bid
- Globally, REE accumulations are found in alkaline layered intrusions. i.e. Worlds largest REE deposit Kvanefjeld, Greenland - 1,010 Mt @ 1.1% TREO. (Total Resource, Greenland Minerals 2022)
- Historical exploration includes recordings of highly anomalous Rare Earths, Niobium, Zirconium, Titanium, Cu-Zn – *Typical of mineralised Alkaline REE Intrusions*
- i.e. Drill hole MW5 –magnetite-quartz-biotite gabbro. Bottom hole sample @ 50-53m returned Ce 1500ppm, Nb 1350 ppm, 4.25% P_2O_5



WOOMERA IOCG PROJECT

HIGHLY PRIZED TENURE – in an area of *MAJOR IOCG MINERALISATION*

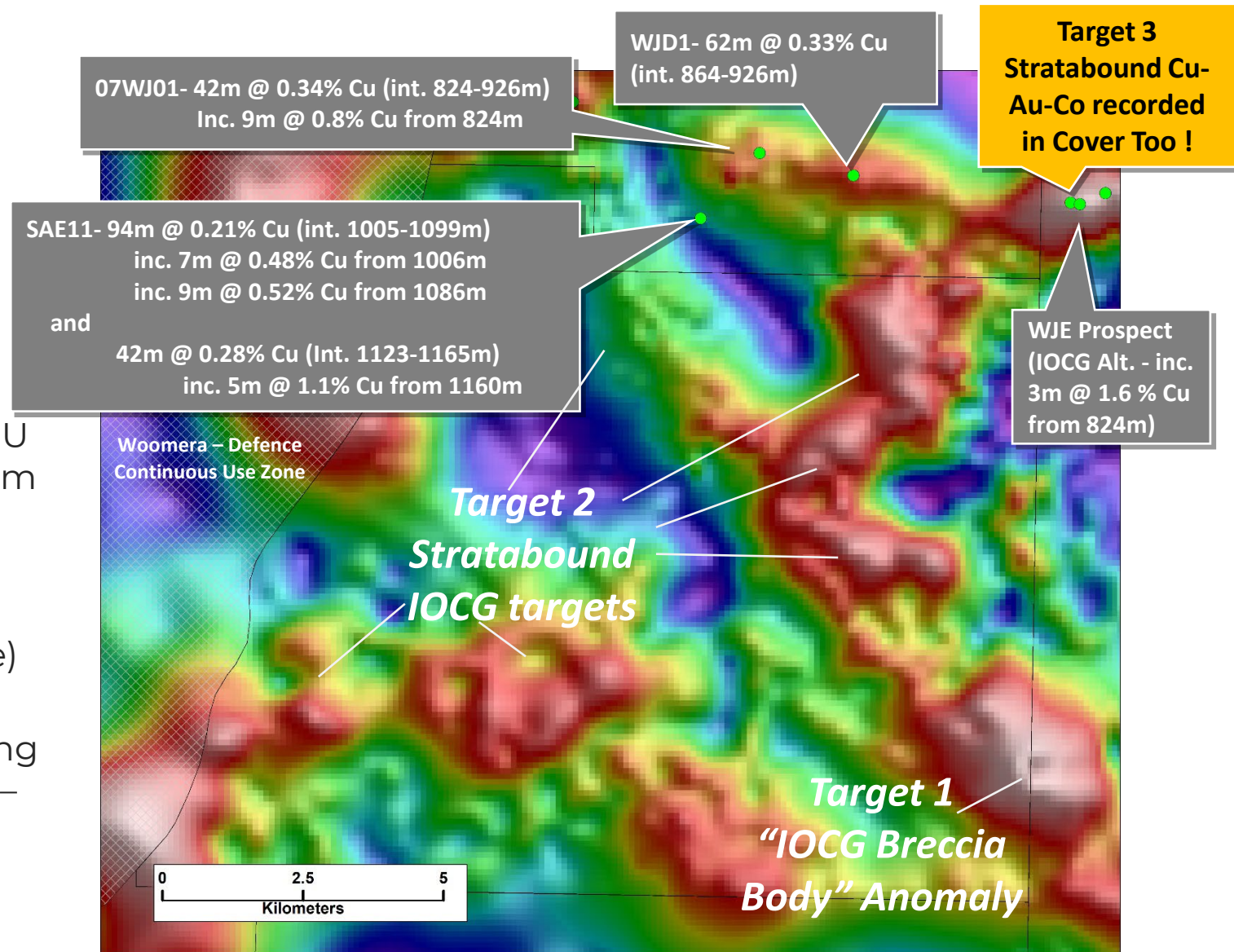
- Multiple high priority gravity targets – *3 Target Styles!*
- Tenement granted March 2022
- Native Title Mining Exploration Agreement Completed June 2022
- Schedule to start drilling of targets from Q2 2023



WOOMERA IOCG PROJECT

3 Distinct Styles of Mineralisation !

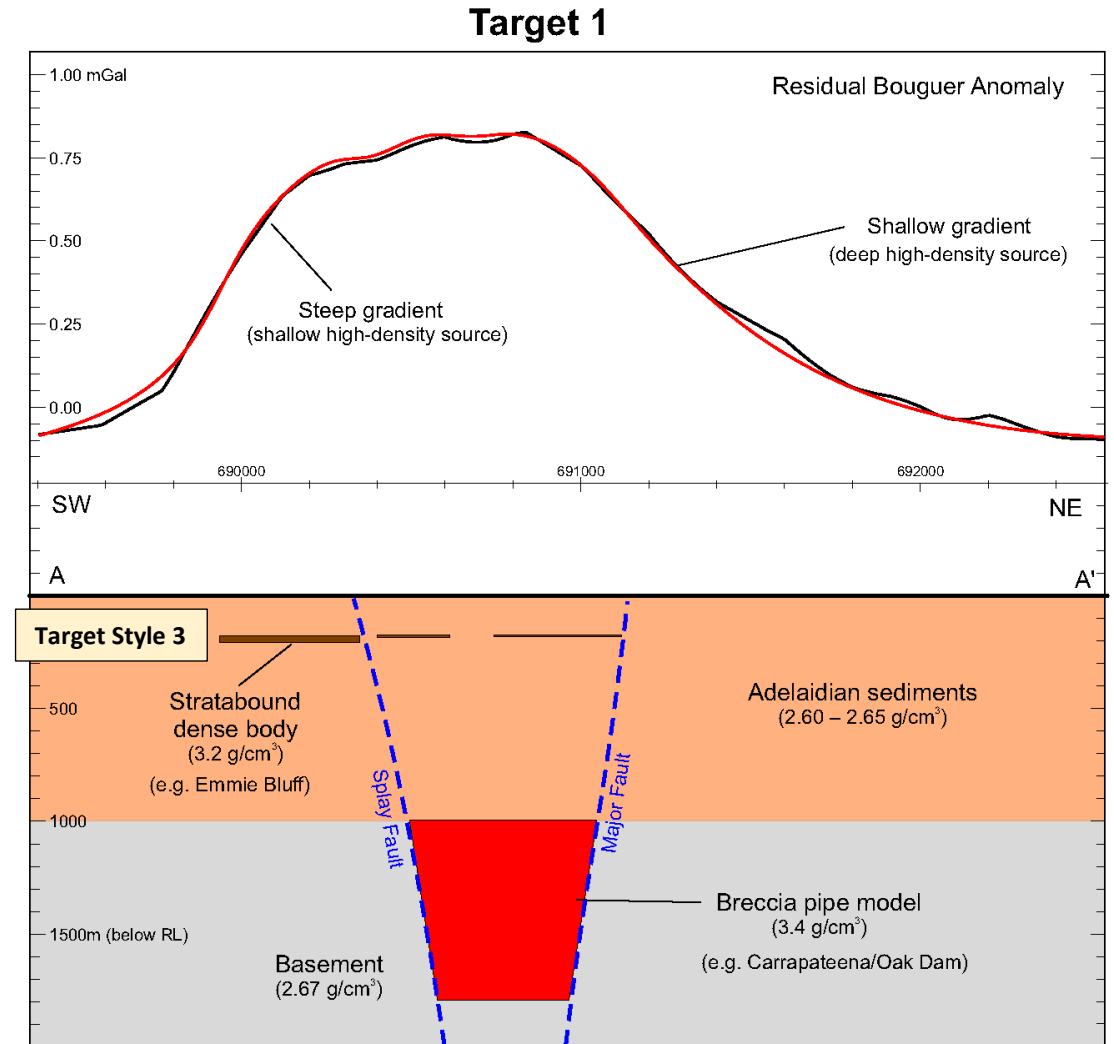
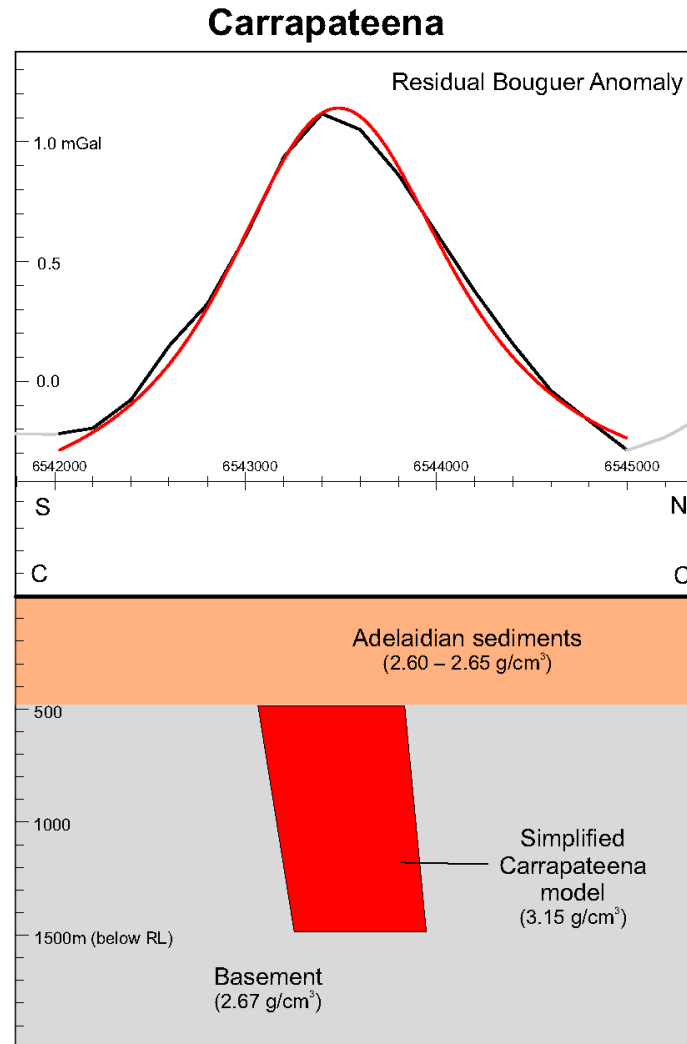
- Target 1 - IOCG Breccia Bodies – Cu-Au-Ag-U (i.e. Olympic Dam / Carrapateena / Oak Dam & Prominent Hill)
- Target 2 - Stratabound IOCG's – Cu-Au-Co (i.e. Emmie Bluff Deeps, Punt Hill & Hillside)
- Target 3 - Stratabound Cu-Au-Co in overlying cover rocks (i.e. Mt Gunson & Emmie Bluff – *interpreted to be remobilised from IOCG basement below !*)



Significant historical IOCG copper intersections adjacent to Petratherm's Woomera Exploration Licence Area overlain on a Residual Gravity Image. High gravity areas may indicate zones of stratabound and breccia mineralization

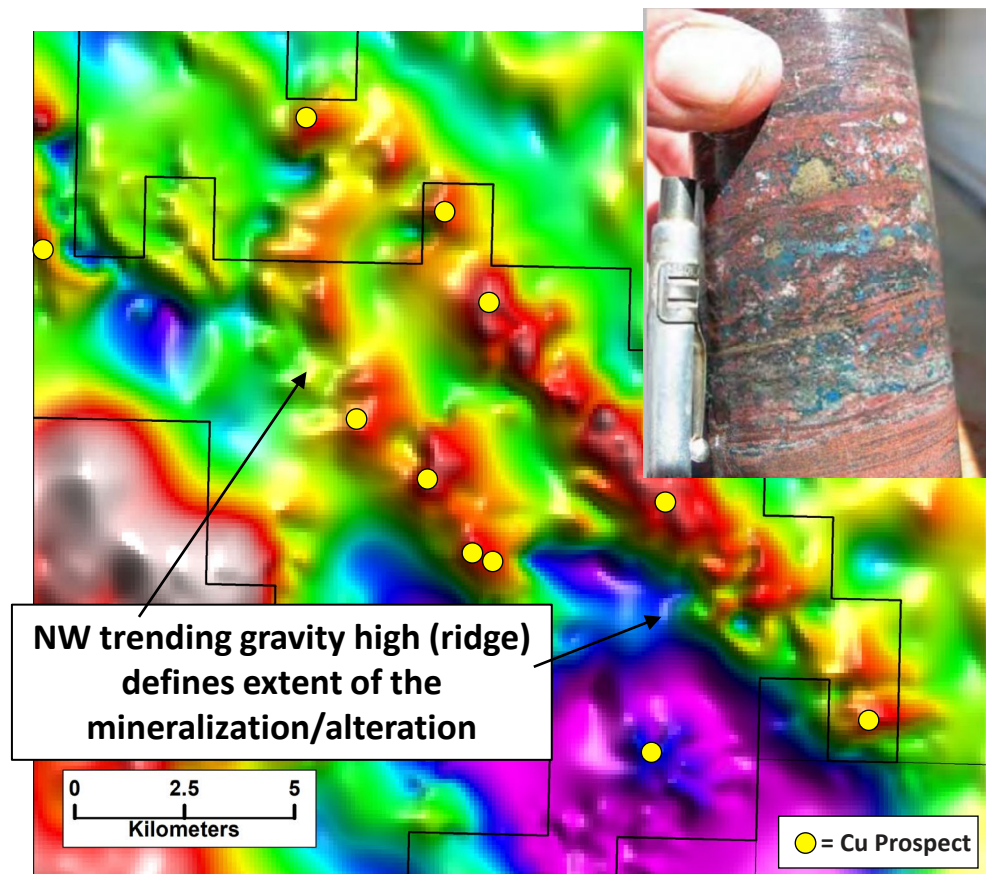
WOOMERA IOCG PROJECT – TARGET 1 COMPARISON WITH CARRAPATEENA

- Target 1 is an IOCG Breccia Body Target – *Displays a Comparable gravity response to the Carrapateena Orebody!*
- Steep gravity gradient on west side of Target 1 may indicate additional shallow Stratabound mineralisation in the overlying cover strata. (*i.e. Emmie Bluff, Mt Gunson Style Cu-Au-Co mineralisation potential also!*)



TARGET STYLE 2 : STRATABOUND IOCGs – A Potential Game Changer!

Punt Hill IOCG (Red Metals ASX: RDM)

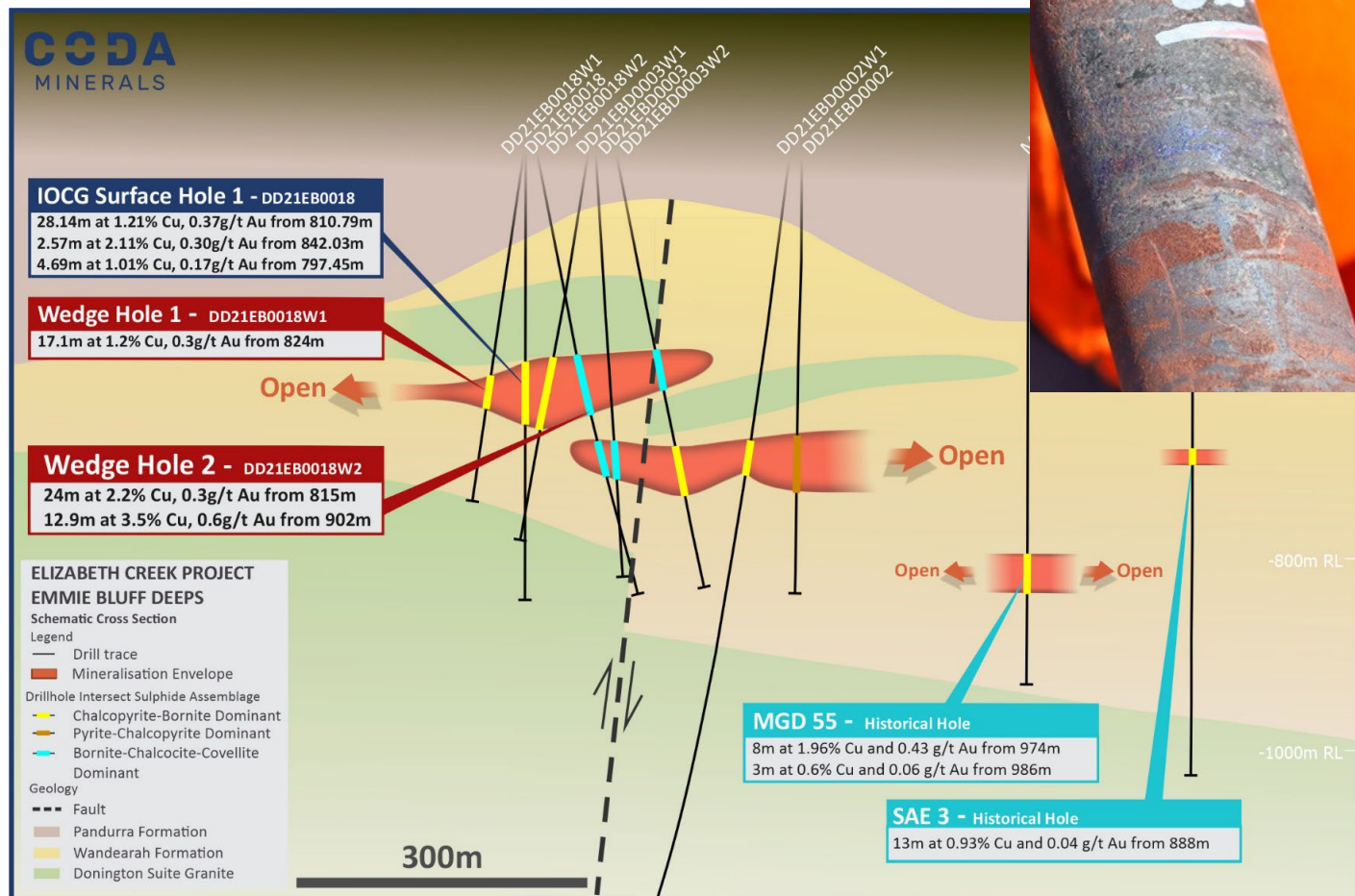


Punt Hill Residual Gravity Image (Source: SA. Govt - SARIG)

i.e. GHDD6 - 159m @ 0.47%Cu, 0.12g/t Au & 5.3g/t Ag, from 846m.

PHDD1402 - 26m @ 1.0 % Cu, 0.23 g/t Au & 8.5 g/t Ag from 969m

Emmie Bluff Deeps (Coda Minerals ASX:COD)



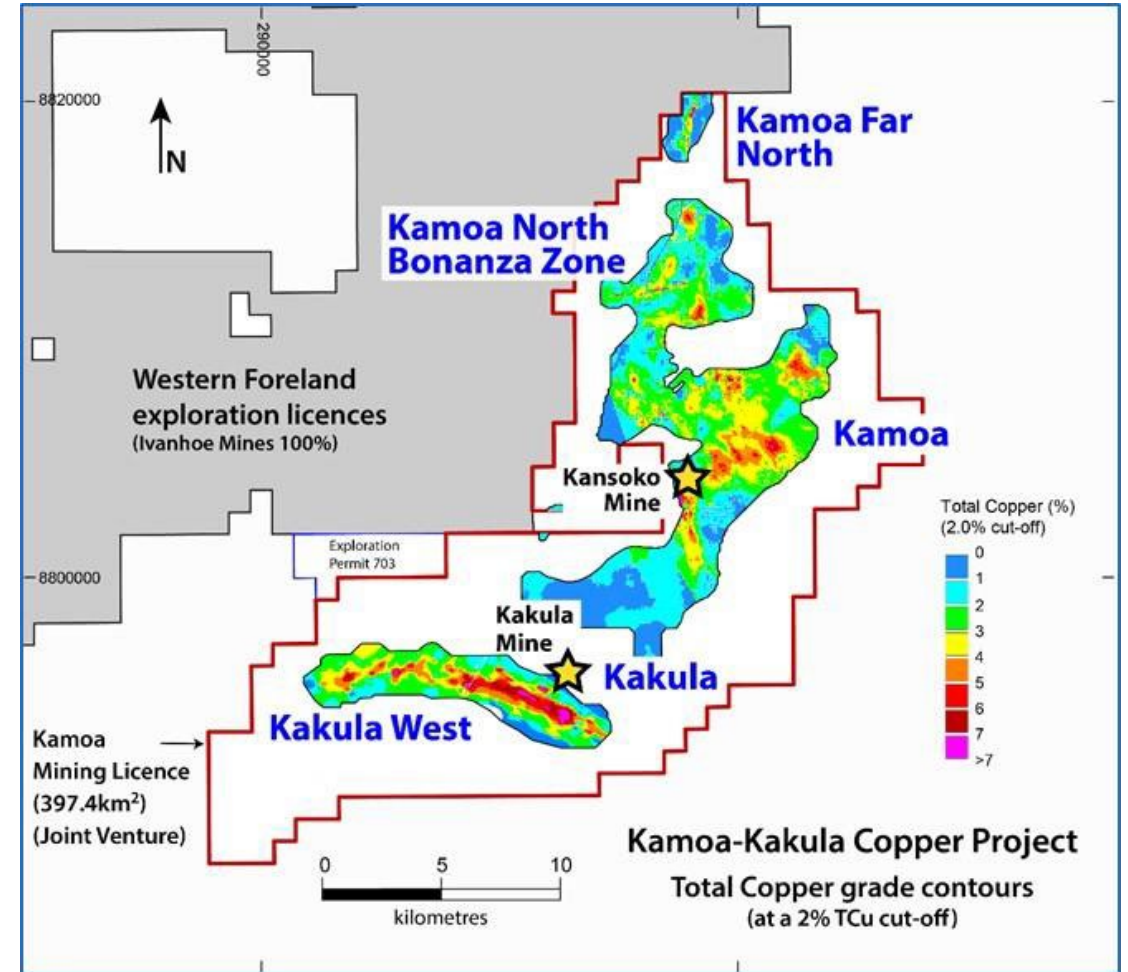
Source: Coda Minerals 06/10/2021 ASX release.

Widespread Evidence for Regional Scale "Stratabound IOCG" Copper Mineralisation across the Olympic Domain

TARGET STYLE 2 : STRATABOUND IOCGs – A Sleeping Giant !

- Fault controlled (rifting) ✓
- May be proximal to IOCG Breccia (Vent) Orebodies (i.e. Oak Dam) ✓
- Mineralisation focused on faulted basement rises/domes (i.e. upwelling fluid zones) ✓
- Mineralising fluids trapped by reductant (reactive) host rock (Walleroo Grp) ✓
- Fluid source - The world class Olympic IOCG Magmatic / Hydrothermal event ✓

Woomera Project



Stratabound Copper - i.e. Kamo-Kakula (DRC) – The Big Prize!

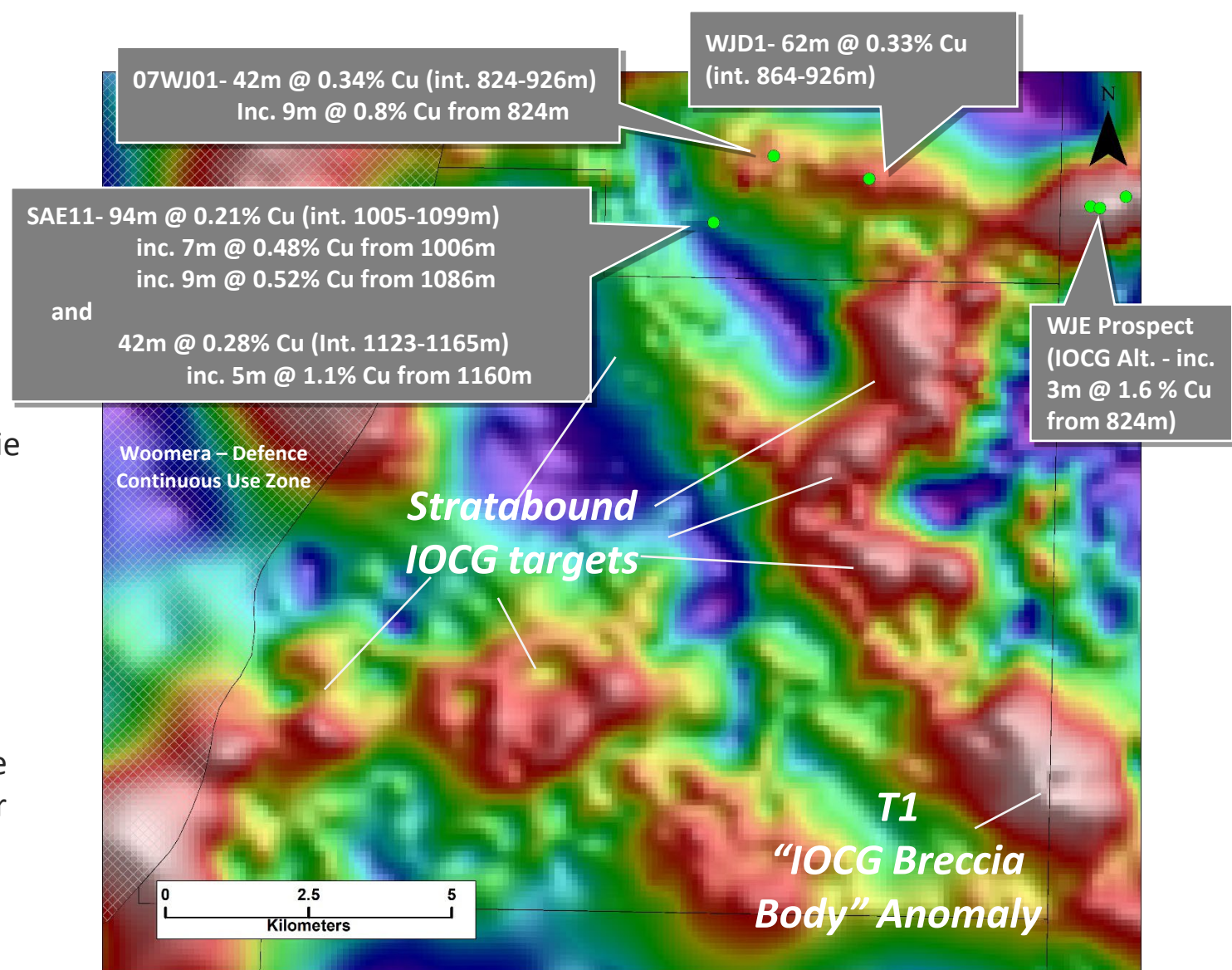
1,387 Mt @ 2.74% Cu = 38 Mt of contained copper

(Total Indicated Resource, Ivanhoe 2020, Figure by Ivanhoe 2020)

WOOMERA IOCG PROJECT

TARGET STYLE 2 – STRATABOUND IOCG TARGETS !

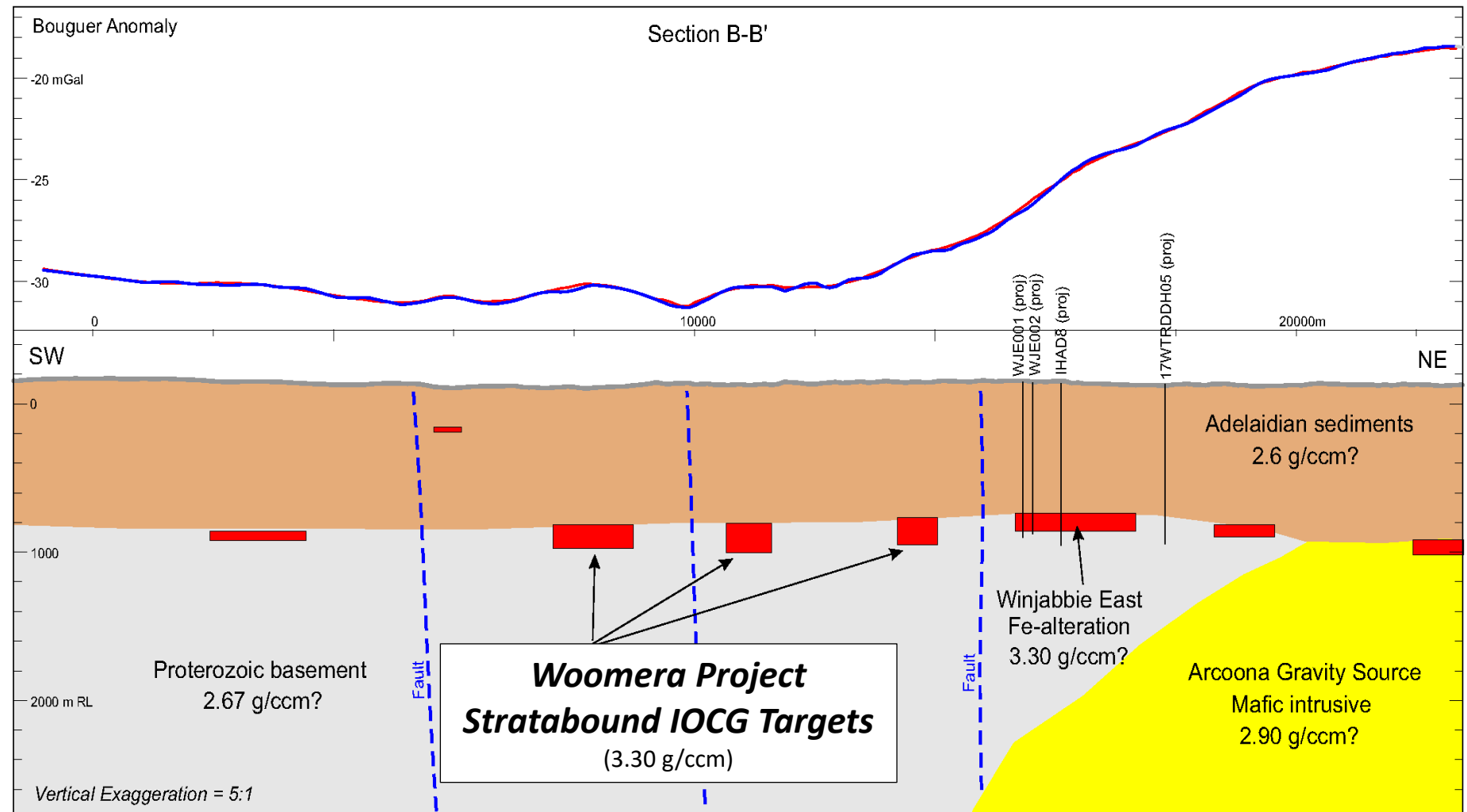
- Stratabound IOCG Copper mineralisation at Winjabbie Prospect appears to extend over several kilometres !
- Stratabound IOCG's – Are Cobalt rich too (i.e. WJD1 intercept includes 24m @ 0.1% Co from 962m)
- Woomera gravity modelling highlights several large prominent gravity ridges which are higher magnitude than the Winjabbie Gravity Anomaly and cover larger areas. *i.e. Kamoa-Kakula Style Targets !*



Significant historical IOCG copper intersections adjacent to Petrathem's Woomera Exploration Licence Area overlain on a Residual Gravity Image. High gravity areas may indicate zones of stratabound or breccia style mineralization

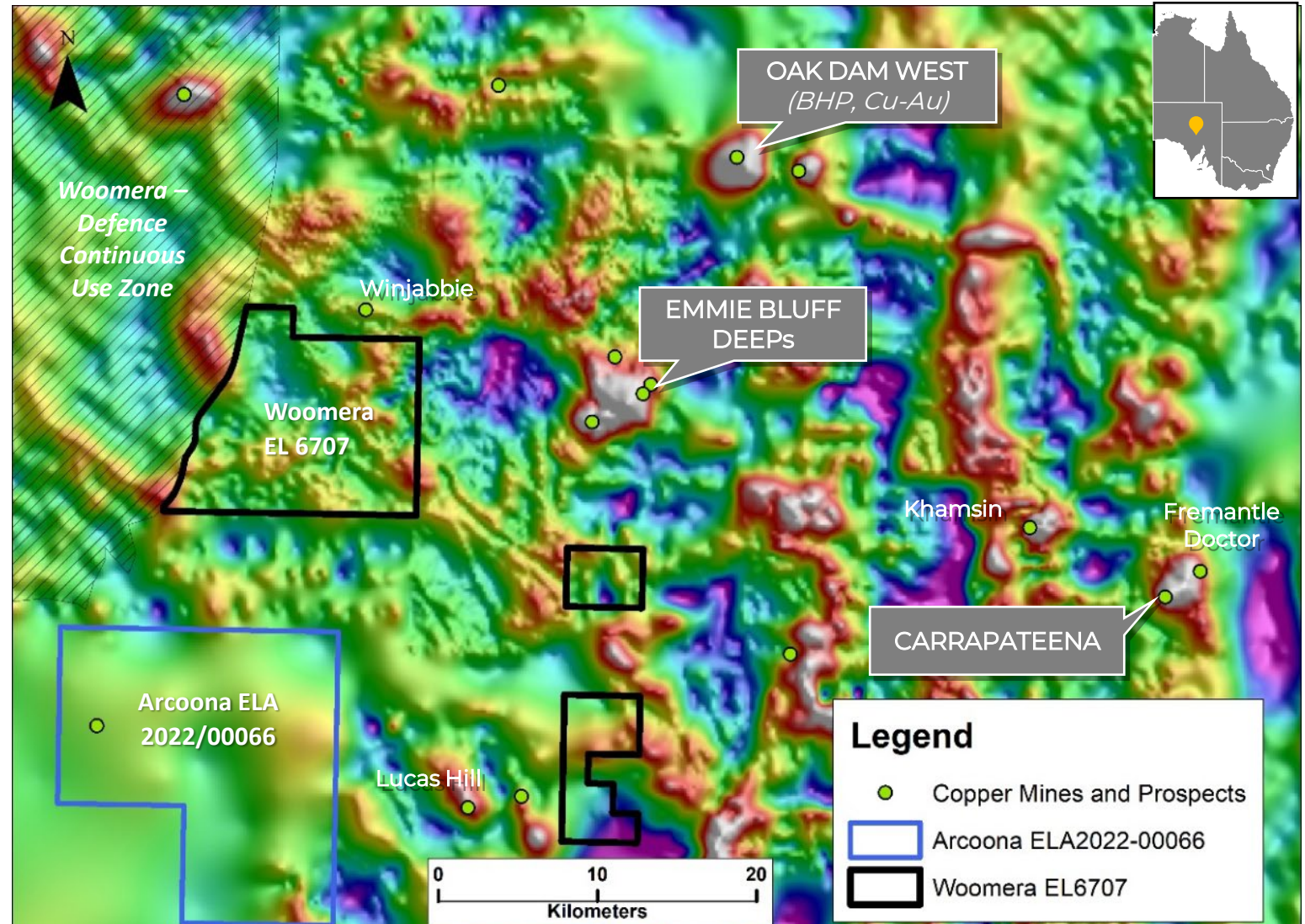
TARGET STYLE 2: STRATABOUND IOCGs – WOOMERA PROJECT TARGETS

Gravity Profile
Modelling highlights
several **Stratabound IOCG Targets** on the
Woomera Project Area
displaying higher
magnitudes than the
Winjabbie Anomaly



ARCOONA IOCG PROJECT

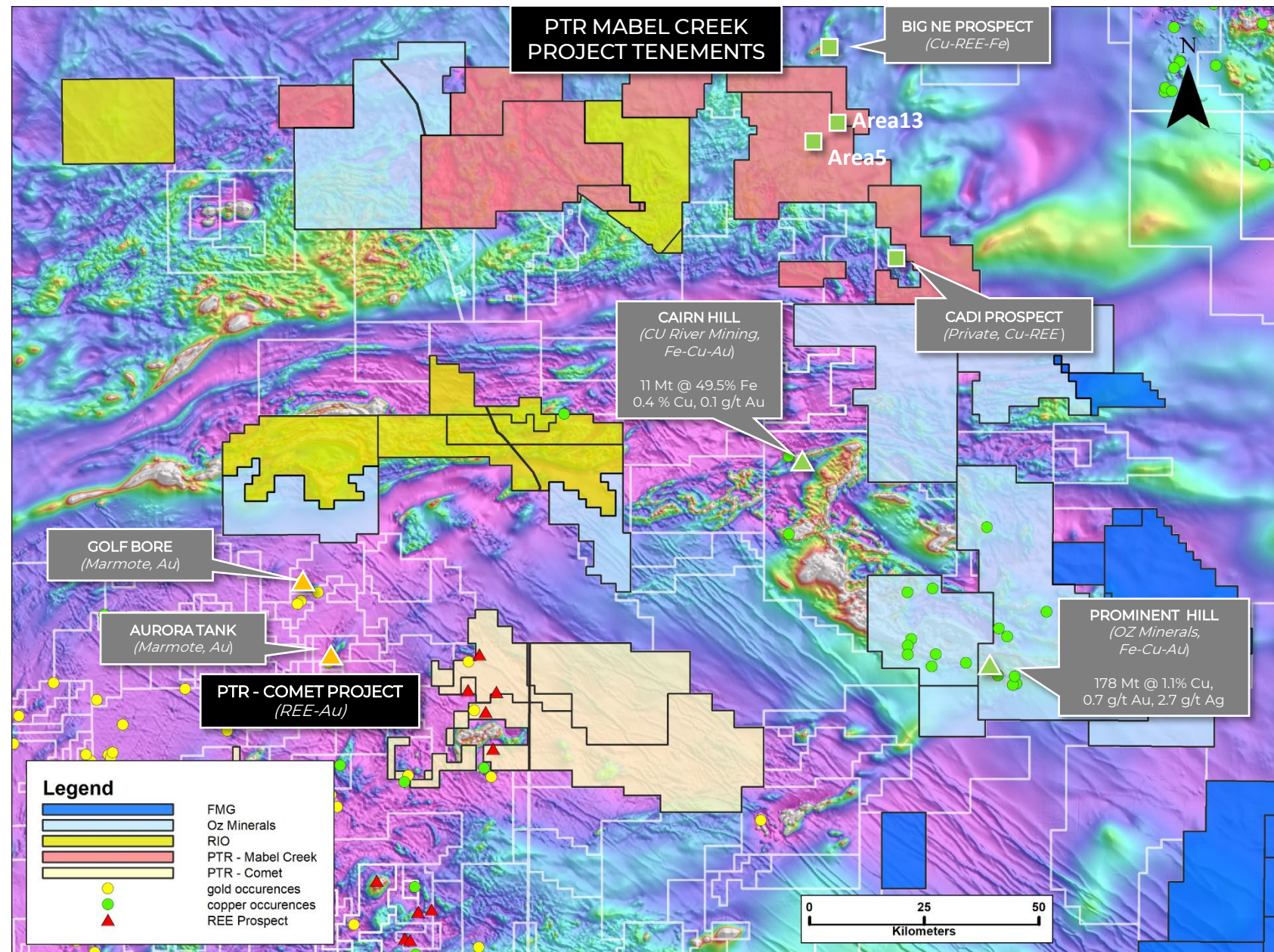
- Arcoona Project (ELA 2022/00066), located within the world class copper-gold “Olympic Province” of South Australia
- Project secured through a South Australian Government competitive bid process.
- Tenement is close to major copper-gold mines/occurrences and is prospective for Olympic Dam style Copper-Gold and Strata-bound Copper-Gold mineralisation.
- ***One of the last areas in the region where no detailed gravity surveying has been undertaken to explore for Iron Oxide Copper Gold***



Residual Gravity Image over the Olympic Province, PTR's ELA 2022/00066 and EL 6707, IOCG Mines / Prospects.

SOUTH AUSTRALIA'S World-Class Olympic Dam Copper-Gold Province

- Mabel Creek - Large holding (2,852 km²), fertile for Iron Oxide-Copper-Gold (IOCG) mineralisation
- Surrounded by Major World Copper Players – RIO, Oz Minerals & FMG
- 2020-2021 drilling has intersected IOCG alteration at 2 Prospect sites – Area 5 & 13
- Numerous untested drill ready targets



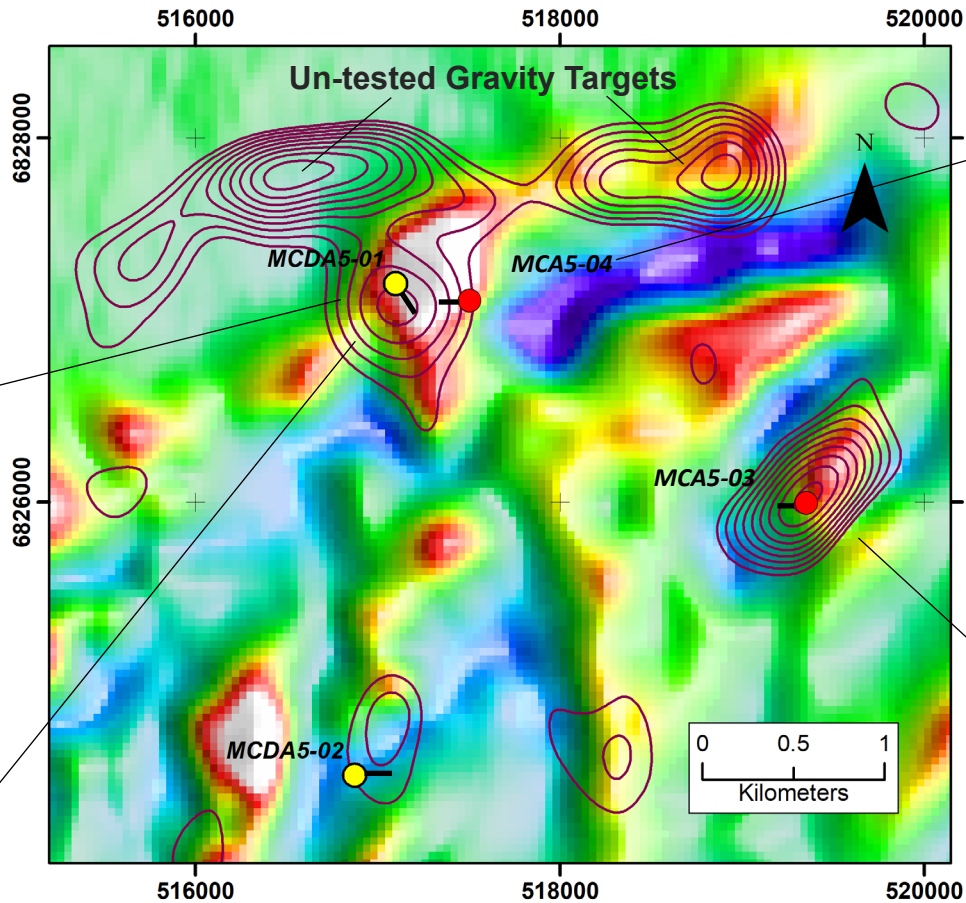
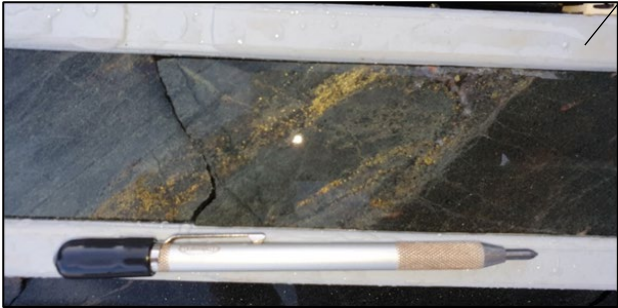
MABEL CREEK IOCG PROJECT

AREA 5: DRILLING – Un-tested residual gravity targets

MCA5-01 – Breccia with hematite + high rare-earths



MCA5-01 – chalcopryite (cu) mineralisation



- hydrothermal alteration overprints all rocks at varied levels of intensity and is comparable to Iron Oxide Copper-Gold (IOCG)-type sodic-calcic alteration.



MCA5-04 – Red Rock Altered high rare Earth granite



MCA5-03 – chlorite-hematite-epidote alteration

PETRATHERM: FORWARD PROGRAM

REE RESOURCE DEFINITION / DRILL EXPLORATION + COPPER AND GOLD TARGETS TO BE DRILLED

	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23
COMET REE's - Exploration	Batch 3 Drill Results		Greenfield and REE Prospect Drilling				Greenfield REE Drilling			
METEOR REEs - Resource Development		Meteor Resource Drilling Metallurgical Recovery Test Work				JORC Inferred / Indicated Resource		Pre-feasibility Study		
MUCKANNIPPIE REE's - Exploration		Historic Drilling REE Results	Field - Rock Chip REE Sampling				Heritage Surveying		Greenfield REE Drilling	
WOOMERA & ARCOONA IOCGs - Target Drilling		Woomera Gravity Survey		Woomera Final Target Selection		Heritage Surveying	Arcoona Gravity Survey	Drilling - Breccia IOCG Target	Drilling - Stratabound IOCG Target	Drilling - Stratabound IOCG Target
MABEL CREEK IOCG's - Exploration		SQUID EM Survey						SQUID EM Target Test Drilling		



ASX: PTR

IONIC ADSORPTION CLAY-HOSTED REE vs. HARD ROCK-HOSTED REE

Mining and Processing Stages	Ionic Adsorption Clay-Hosted REE	Hard Rock-Hosted REE
Mineralisation	Soft material - Elevated HREO/CREO product content	Hard rock - product content varies i.e. Bastnaesite and Monazite (LREO dominant), Xenotime (HREO dominant)
Mining	Bulk surface mining (0-30 metres), low operating costs – no blasting required, high productivity, minimal stripping of waste material	Selective mining, high operating costs - blasting required, lower productivity, could produce high ratio of waste material
Processing Mining Site	Simple process plant with no crushing or milling. Simple process plant with low reagent consumption for production.	Required intensive crushing and milling . Benification often requires expensive (flotation) reagents to produce mineral concentrate.
Mine Product	Mixed high-grade rare earths precipitate , either oxide or carbonate, (+90% TREO) for feedstock directly into rare earth separation plant, low Ce-La content	Mixed REE mineral concentrate, (typically 20 – 40% TREO grade), high Ce-La content. Requires substantial processing to produce feedstock .
Processing – Environmental	Non-radioactive tailings/waste, option to back fill shallow open cut and return to natural pre-mine state .	Tailings often radioactive (complex and costly disposal), legacy tailings management.
Processing – Refinery	Simple acid solubilization followed by conventional REE separation. Complex recycling of reagents and water. Lower Capex (\$100-200Mill)	High temperature mineral "cracking" using strong reagents to solubilise the REE minerals. Complex capital-intensive plant (\$500Mill-\$1Bill). Radionuclide issues follow REE mineral concentrates

Source: Clay vs Hardrock n.d., Ionic Rare Earths, viewed 17 June 2022, <<https://ionicre.com.au/clay-vs-hardrock/>>.

Rare Earths are Critical for the Electric Revolution

Rare Earth Oxide Prices	US\$/Kg
Terbium	\$1,838
Lutetium	\$803
Dysprosium	\$313
Holmium	\$80
Praseodymium	\$91
Neodymium	\$91
Gadolinium	\$39
Erbium	\$38
Europium	\$28
Ytterbium	\$13
Yttrium	\$9
Samarium	\$2
Cerium	\$1
Lanthanum	\$1
Thulium	\$0

Scandium Oxide Price	\$911
Copper Price	\$9

Source: Shanghai Metal Market (09 Sept. 2022)

Magnet Rare Earths



Adamas Intelligence (April 2022) - Rare Earth Magnet Market Outlook to 2035

Nd/Pr Supply Shortfall

Global consumption of NdFeB magnets jumped 18.1% in 2021. From 2022 through 2035 Adamas forecast global demand for NdFeB magnets will increase at a Compound Annual Growth Rate (CAGR) of 8.6%, bolstered by double-digit growth from electric vehicle and wind power sectors, translating to comparable demand growth for the rare earths elements (i.e., neodymium, praseodymium, dysprosium and terbium) these magnets contain.

Over the same period, Adamas forecast that global production of neodymium, praseodymium, dysprosium and terbium will collectively increase at a slower CAGR of just 5.4% as the supply side of the market increasingly struggles to keep up with rapidly growing demand.