

21 June 2023

Conference Presentation - PTR Positioned for Growth

Petratherm Limited (ASX: PTR) (PTR or the Company) is pleased to release the following presentation that Chief Executive Officer, Peter Reid, will be presenting at the RIU Gold Coast Investment Showcase on Wednesday 21 June 2023. PTR is a critical minerals explorer focused on the discovery of world-class copper-gold and rare earth (REE) deposits.

Exploration drilling at the Comet Project Area has delineated two major REE occurrences. The Meteor and Artemis REE prospects occur at very shallow depths, include high-grade blankets of mineralisation showing good lateral extent and ore thickness. Less than 10% of the project area has been explored for REE's and a systematic program of advancement of current prospects, testing of new areas and metallurgical recovery test work is ongoing. The latest round of exploration drilling has recently been completed with assay results due in approximately 6-8 weeks-time¹.

PTR has several exciting copper-gold targets at its Mabel Creek and Woomera Projects located within the Olympic Copper-Gold Province. Targeting work has defined several compelling Tier 1 Copper-Gold targets and PTR anticipates drill testing of targets will begin from late in 2023 calendar period^{2,3}.

This announcement has been authorised for release on the ASX by the Company's Board of Directors.

ENDS

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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 mineralisation 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.

¹ PTR ASX Release 19/06/2023 – Comet Rare Earth Drilling Successfully Completed

² PTR ASX Release 04/04/2022 – Woomera Tenement Granted – IOCG Drill Targets Defined

³ PTR ASX Release 22/05/2023 – SQUID EM Survey Generates Significant Copper-Gold Target at Mabel Creek



Positioned for Growth

Petratherm Limited (ASX: PTR)

RIU Gold Coast Investment Showcase

June 2023



Disclaimer:

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JORC Information and Compliance Note:

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:

- 1 The purpose of the figure is to illustrate the geographical proximity **only** of the Project Area to other mineral occurrences and geographical locations.
- 2 Rare Earth Drilling Commences at the Comet Project – 25 May 2023
- 3 Meteor Prospect – Exceptional REE Drill Intersections – 15 February 2023
- 4 Drilling Identifies Major New REE Prospect – 24 February 2023
- 5 Comet REE Project – Drilling Update – 18 April 2023
- 6 Woomera Tenement Granted – 04 April 2022
- 7 Woomera Gravity Survey Identifies Copper-Gold Targets – 14 June 2023
- 8 Mabel Creek Project – Drilling Results – 12 May 2020
- 9 Mabel Creek Project – Results of Drilling - 27 July 2021
- 10 Squid EM Survey – Significant Copper-Gold Target – 22 May 2023

Corporate Snapshot

Shares on Issue

224.8M

Share Price (16/06/2023)

\$0.075

Cash (31 March 2023)

\$3.2M

Options

1.925M

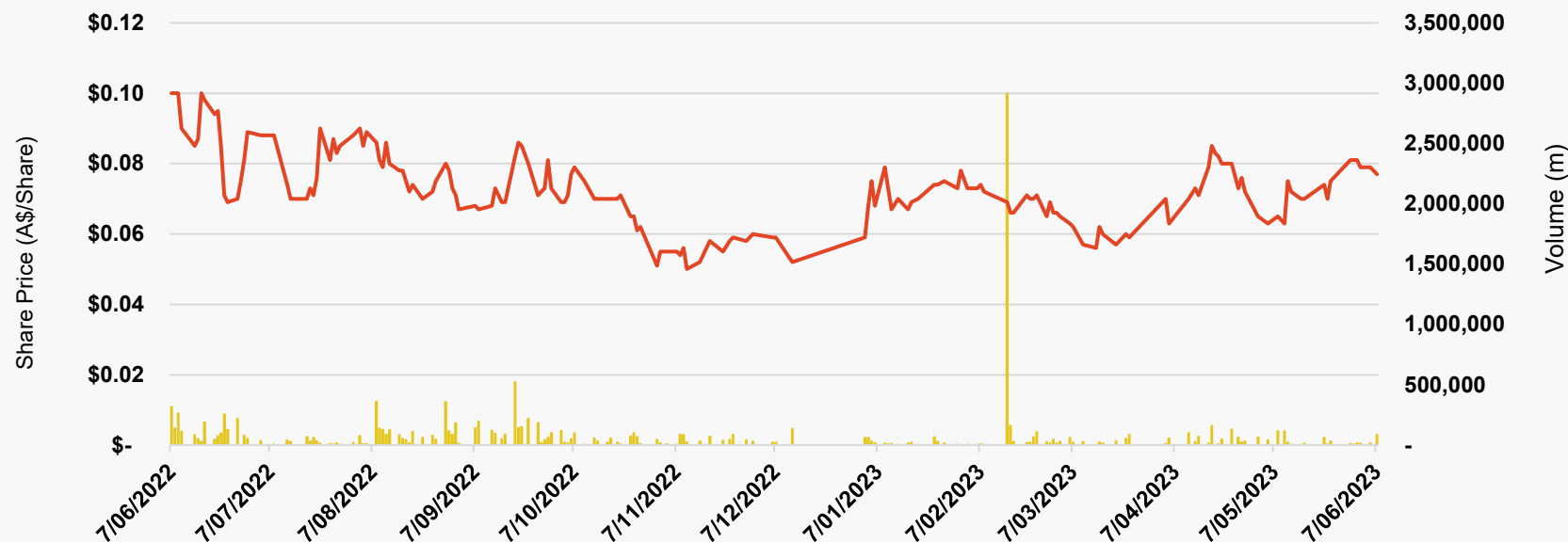
Market Capitalisation

\$17M (undiluted)

Enterprise Value

\$13.8M

PTR Share Price Chart



Corporate Snapshot

Board and Management With Track Record of Exploration Success

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 current Chairman of Hillgrove Resources. He is a geologist with over 45 years Corporate and field experience.

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. Chairman of Stellar Resources, Non-Executive Director of Chesser Resources and Orpheus Minerals.

Peter Reid

Chief Executive Officer

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 Petrathern Ltd.

He was the founding CEO of Petrathern and the recipient of the Chairman's Award for his contribution to the Australian geothermal industry.

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 Taylor

Non-Executive Director

Simon Taylor is a resources industry executive with over 25 years' experience in geology, finance and corporate management at CEO and Board levels.

Most recently, Simon was Managing Director of Oklo Resources Limited when it was acquired by B2Gold Corp in September 2022. Currently he is a Non-Executive Director of Chesser Resources, Stellar Resources and Black Canyon Resources.

Project Overview



Strategic Package of REEs & Copper-Gold Projects in South Australia

Comet REE Project

- Exceptional REE drill intercepts over two prospects.
- Massive exploration upside – less than 10% of prospective area tested for REEs.
- AC drilling campaign completed at Artemis + New Areas – **Assays Pending.**

Muckanippie REE Project

- Major differentiated layered intrusive complex with abundant Ti-Fe-P₂O₅-V-REE anomalism.
- Early-stage project with initial ground works underway.

Woomera Copper-Gold Project

- Located in World-Class Copper-Gold Olympic Province.
- High calibre drill ready gravity targets – **Drilling scheduled for end of 2023.**

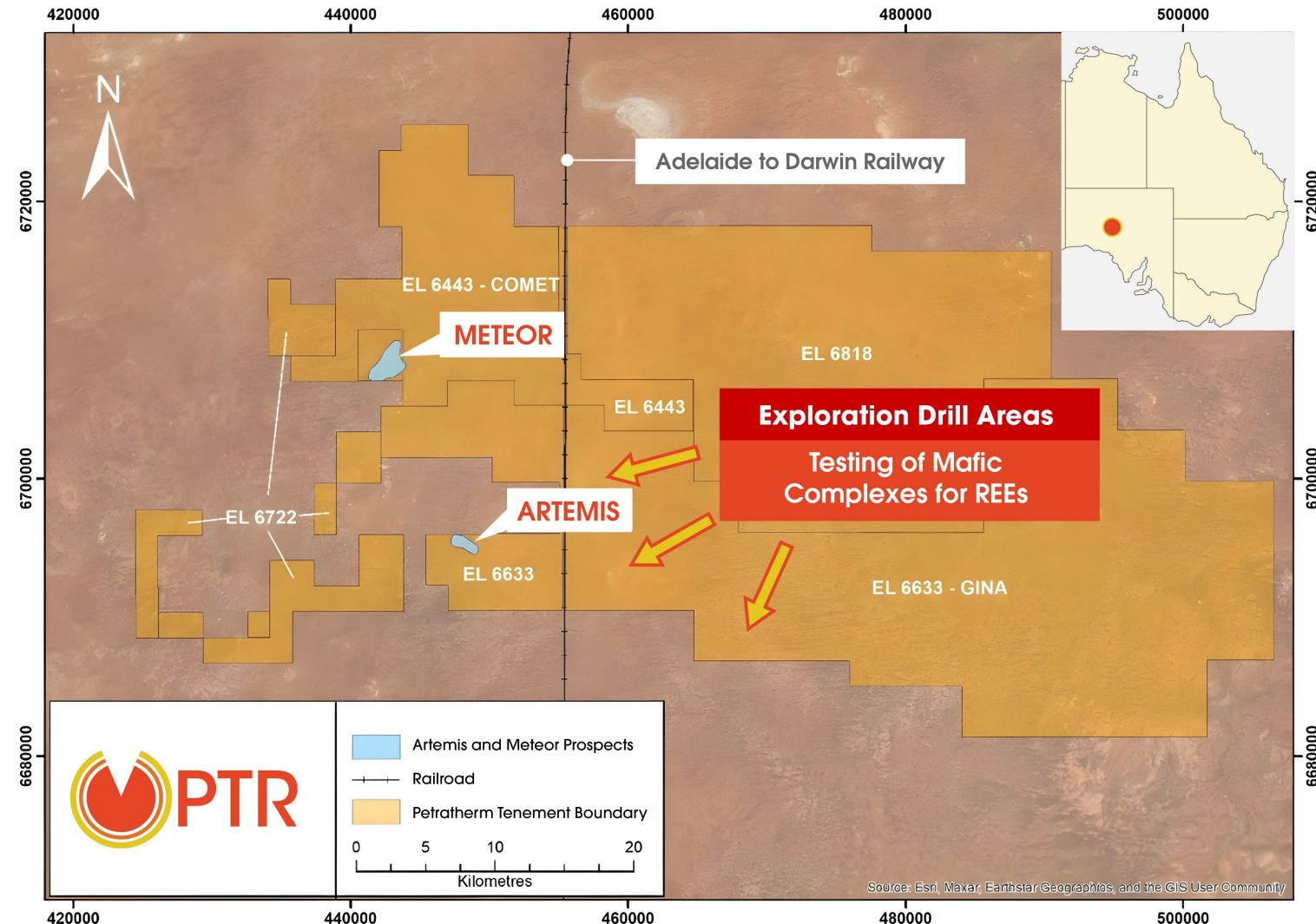
Mabel Creek Copper-Gold Project

- Large holding over the northern Olympic Copper-Gold Province.
- Drilling to date has defined two Copper-Gold Alteration Systems.
- Olympus SQUID EM/Gravity Target + Others – **Drilling scheduled Oct 2023.**



Significant Ground Position With Two REE Discoveries

- Strong ground position in the Northern Gawler Craton, totalling 1,915 km².
- Regional drilling activities to date have tested 130 km², which is <10% of the total Project Holding.
- Substantial upside potential for additional new REE discoveries in the surrounding unexplored tenure.
- ***Layered mafic intrusions under shallow cover drill tested for REEs – Results Pending!²***

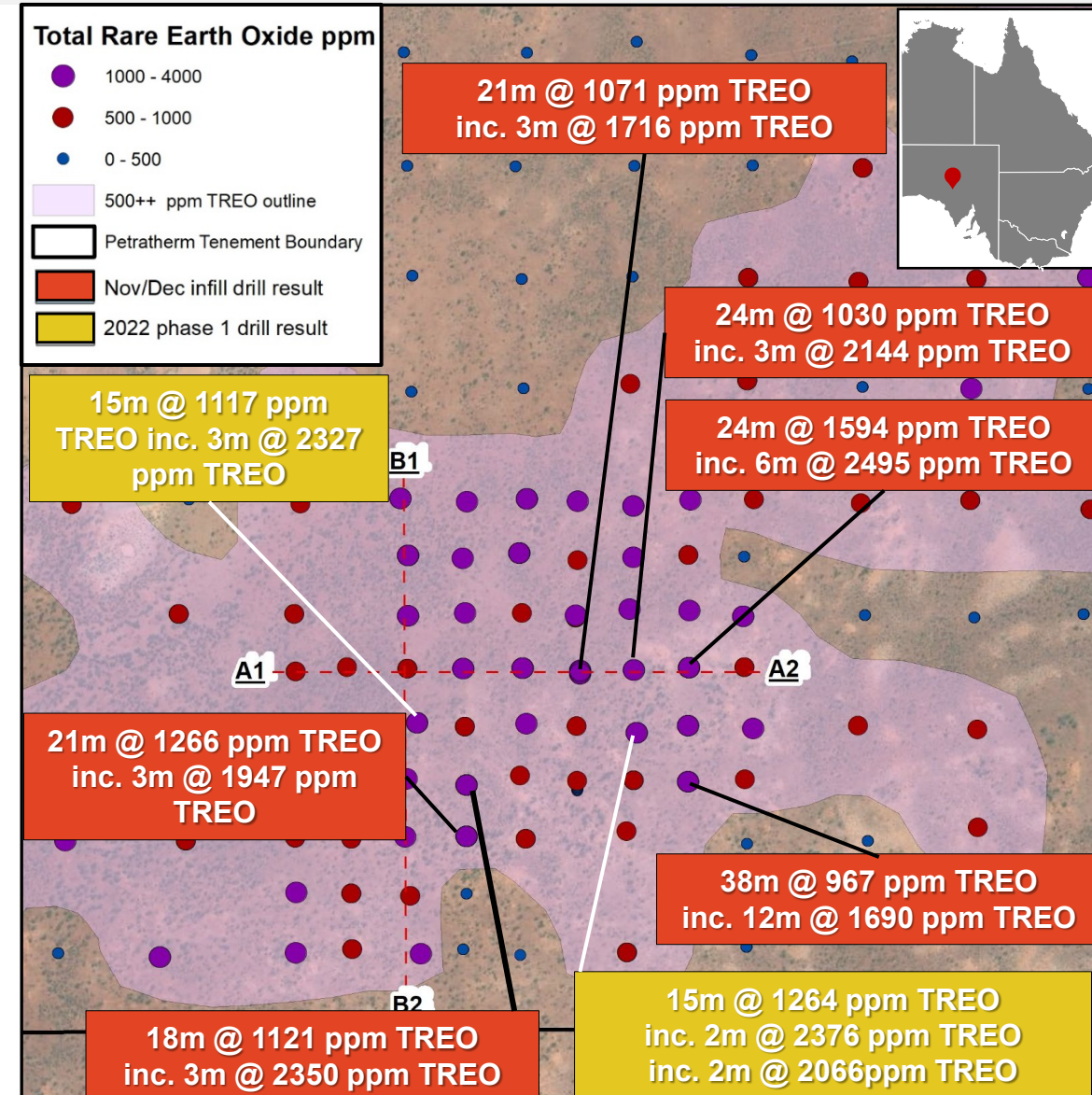


Meteor REE Prospect

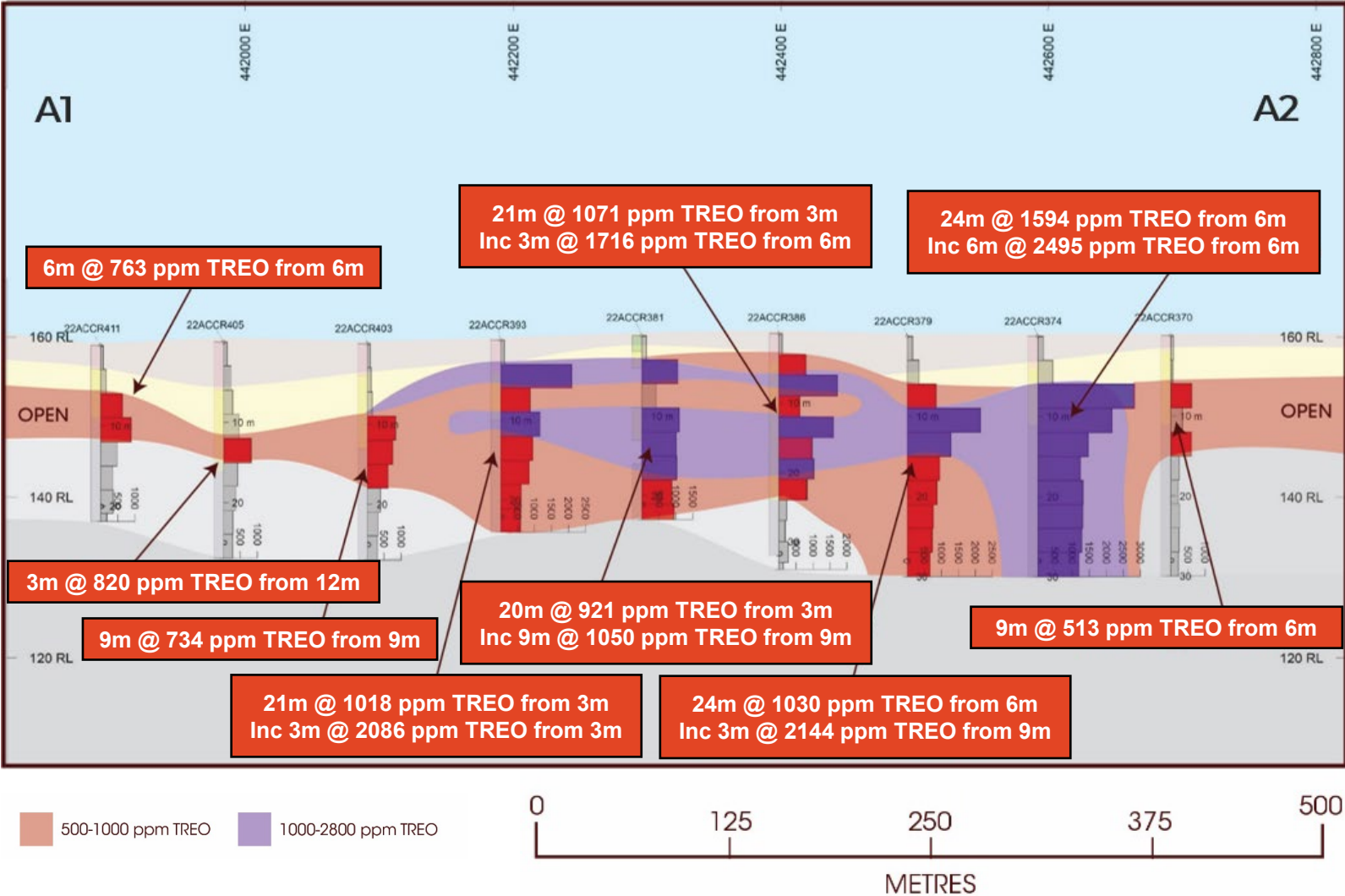


Summary of Results³

- High-Grade REE Prospect (> 1000 ppm TREO).
- High-Value MREO up to 746 ppm and average 242 ppm (26% of TREO).
- Mineralisation starts at shallow depth 3-6m.
- Mineralised intercepts up to 38m and average 11.5m.
- Main Prospect 2 km by 1 km, with other satellite bodies evident and is open in several directions.
- **REE Apatite enriched source rocks below, offer additional REE targets!**

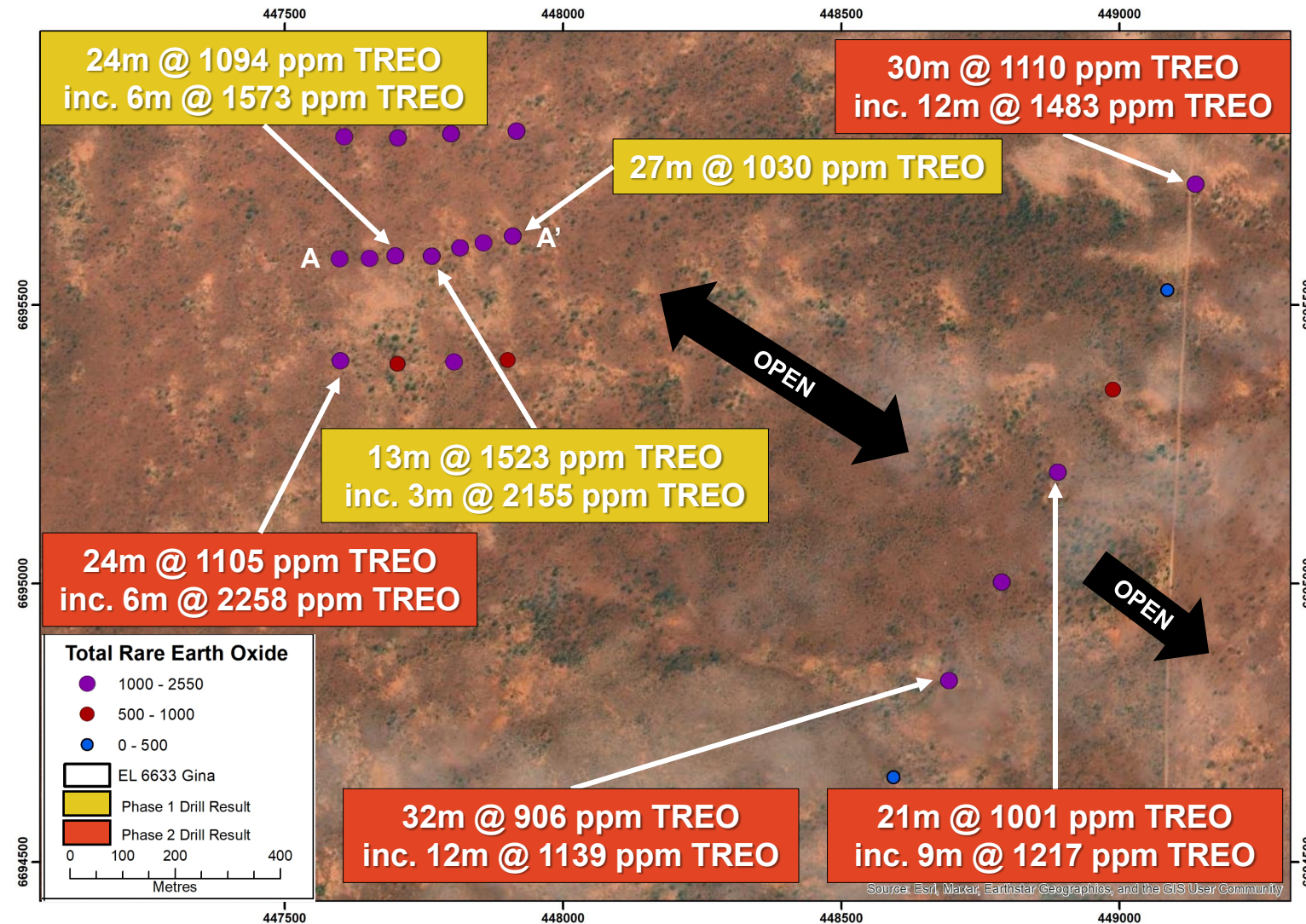


Meteor – W-E Cross Section – High Grade Mineralisation³

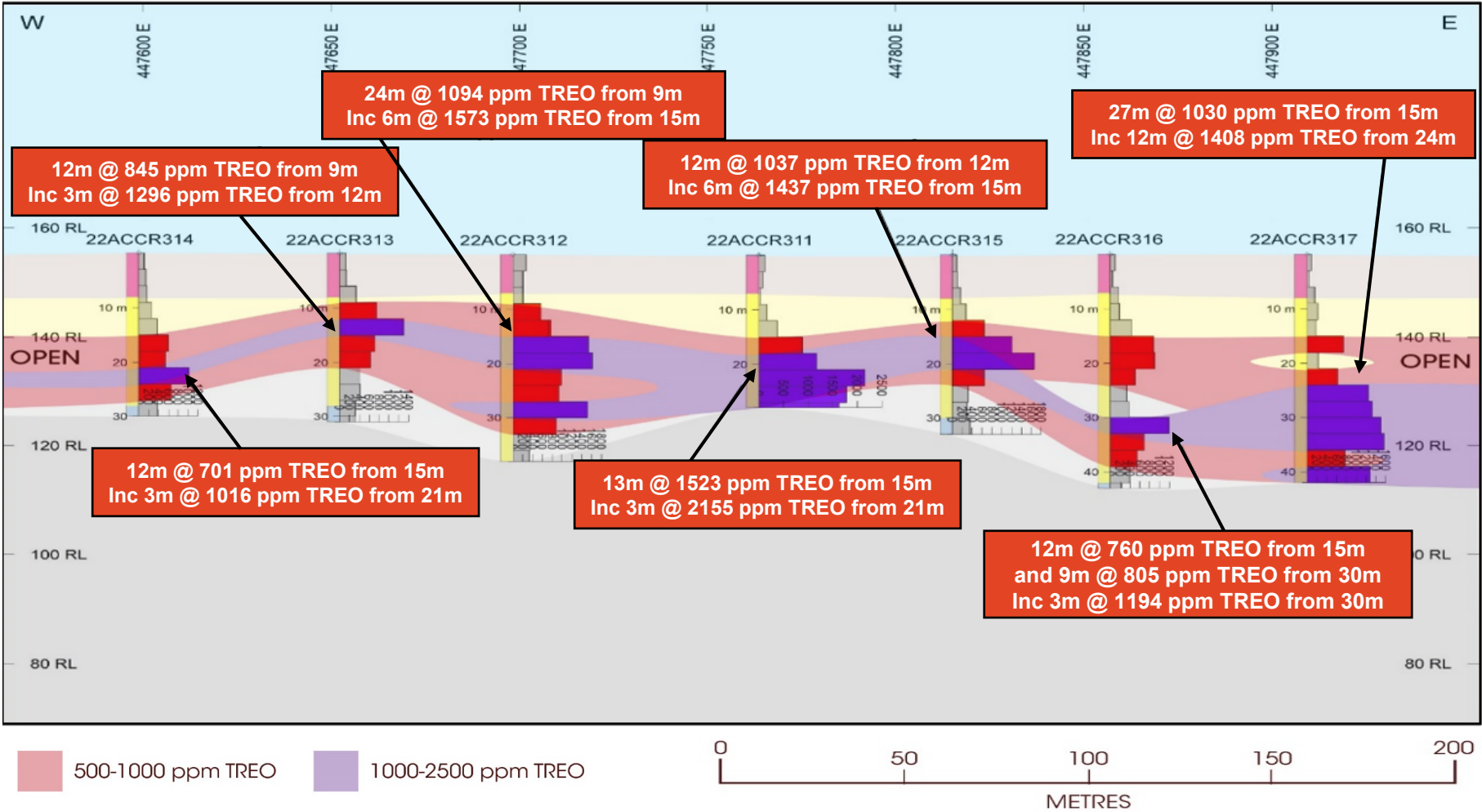


Summary of Results ⁴

- High-Grade REE blanket >1000 ppm TREO.
- Prospect currently 1.5km by 800m – open in all directions.
- High Value MREO intercepts - up to 609 ppm and average 221 ppm.
- High-Grade intercept thickness ranges from 12 to 32m.
- ***Follow-Up Drilling Completed – Assays Pending!***



Artemis Cross-Section A-A' 4



Comet REE Project Highlights⁵

Exploration Drilling Completed – Assays Pending

Thick & Shallow

Mineralisation starts from a depth of 3-6m and averages 11.5m thickness at Meteor.

Mineralisation starts from a depth of 9-15m and averages 17m thickness at Artemis.

Favourable Location

Strong ground position in the Northern Gawler Craton, totalling 1,915 Km².

Pastoral Lease – *Only 1 Land holder!*

Adelaide to Darwin Railway line runs through the middle of the Project area.

High-Grade MREO

Average Intercept TREO = 936 ppm. Average Intercept MREO = 242 ppm (26%) of TREO at Meteor.

Average Intercept TREO = 973 ppm. Average Intercept MREO = 222 ppm (23%) of TREO at Artemis.

Exploration Upside

Meteor prospect approx. 2km by 1km open in all directions.

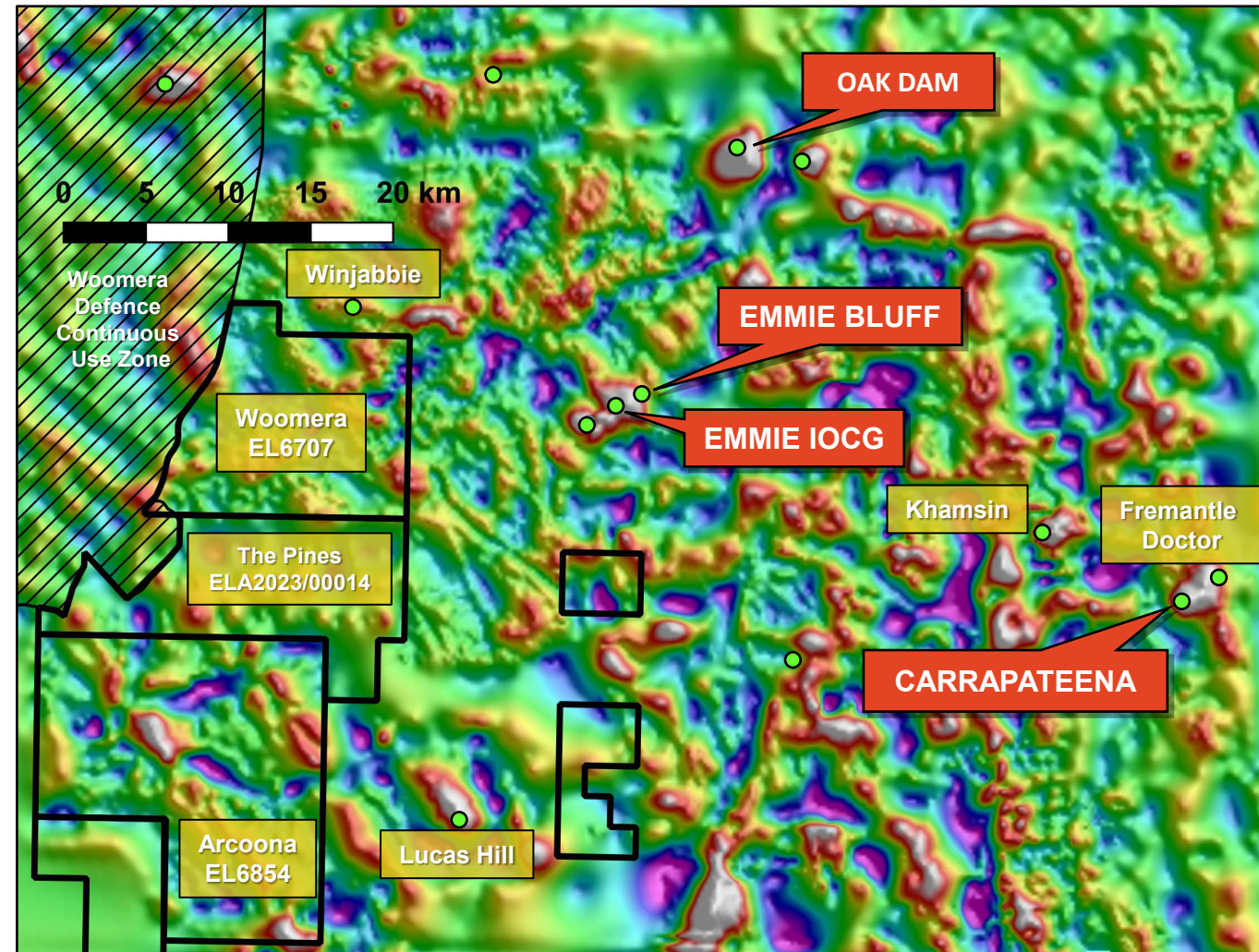
Artemis Prospect approx. 1.5km by 800m open in all directions.

Less than 10% of prospective area explored.



Highly Prized Tenure – In Area of Major IOCG Mineralisation^{6,7}

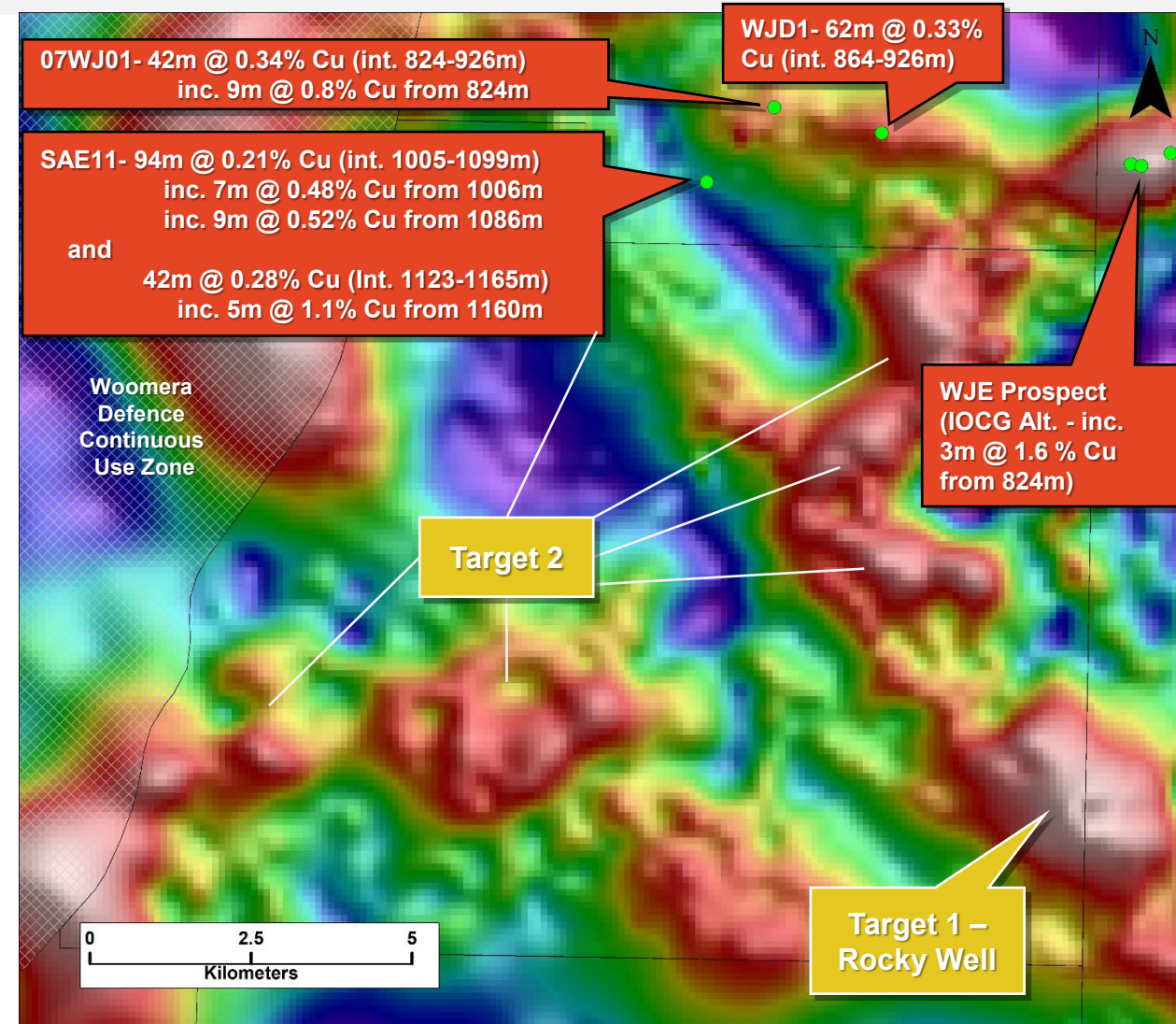
- Multiple high priority gravity targets – **3 Target Styles – IOCG, Stratabound IOCG and Sedimentary Copper.**
- Native Title Mining Exploration Agreement Completed June 2022.
- **June 2023 - Arcoona Gravity Survey identifies Copper-Gold Targets.**
- Drilling of targets scheduled from Q3/Q4 2023.



PTR Exploration Licences, IOCG Mines/Prospects, overlain on a Residual Gravity Image¹

Three Distinct Styles of Mineralisation⁶

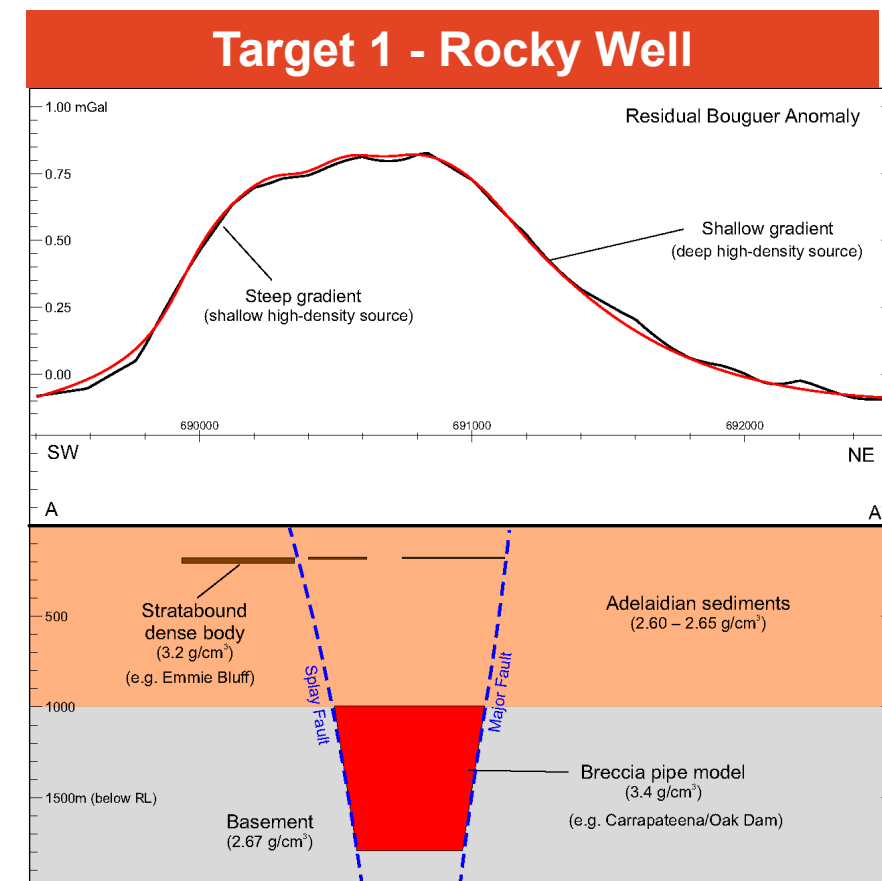
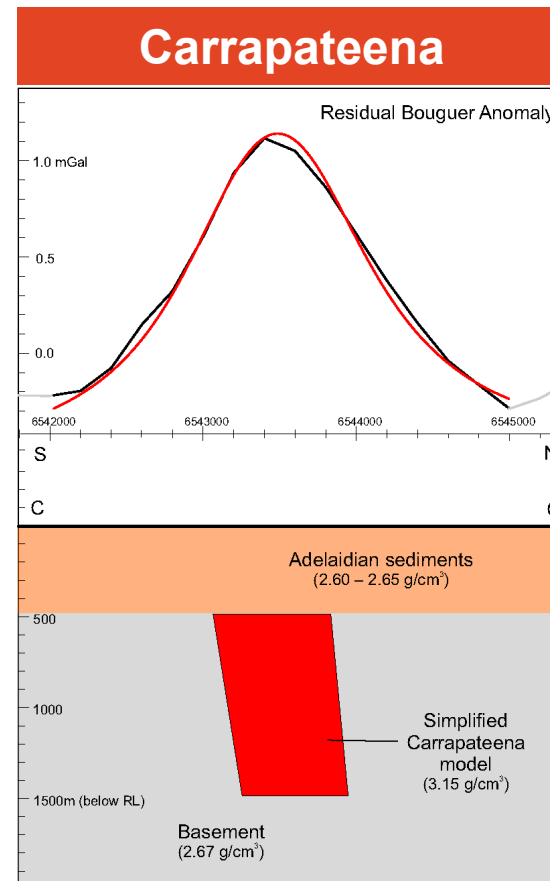
- **Target 1 - IOCG Breccia Bodies** – Cu-Au-Ag-U (i.e. Olympic Dam/Carrapateena/Oak Dam & Prominent Hill).
- **Target 2 - Stratabound IOCG's** – Cu-Au-Co (i.e. Emmie IOCG, Punt Hill & Hillside).
- **Target 3 - Sedimentary Copper** – Cu-Ag-Co in overlying cover rocks (i.e. Mt Gunson & Emmie Bluff – *potentially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



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 mineralisation

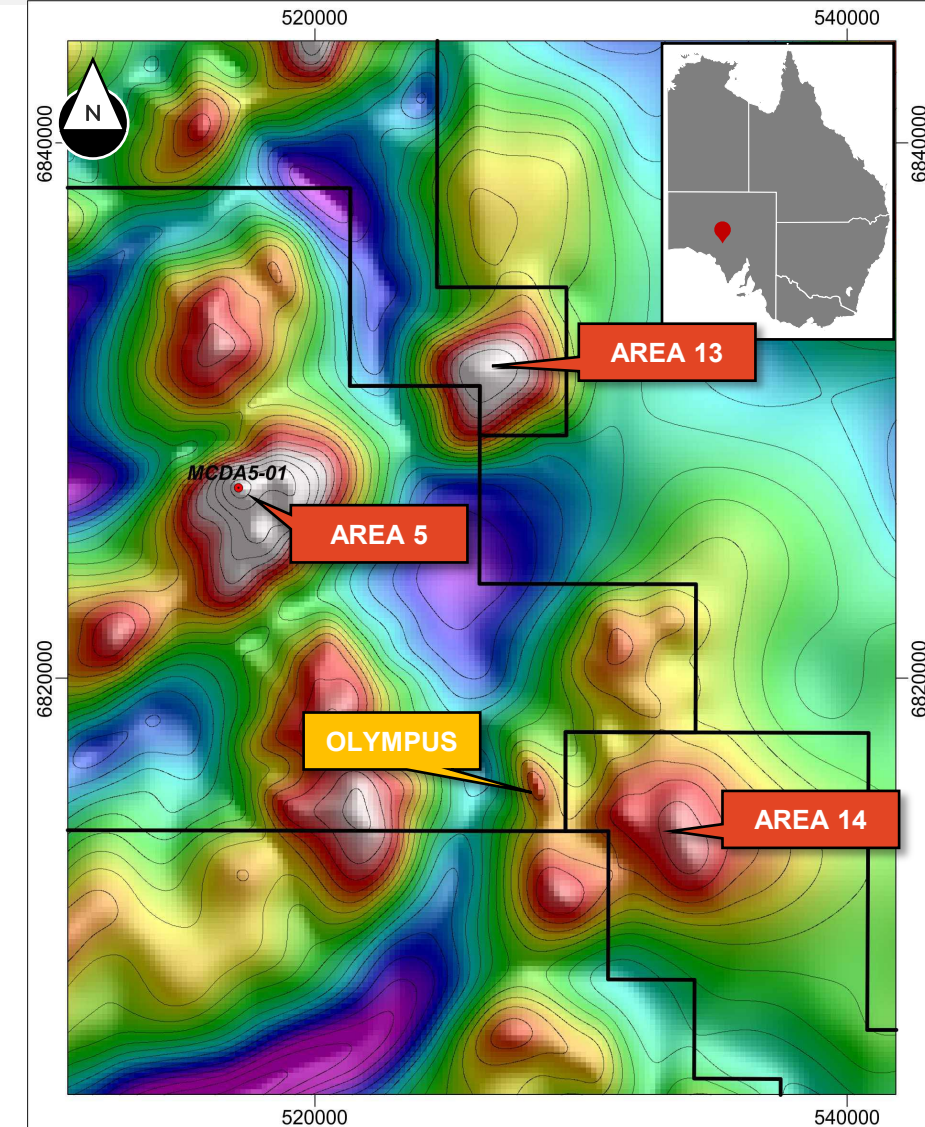
Rocky Well Gravity Anomaly Comparison with Carrapateena Gravity Anomaly⁶

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



World-Class Olympic Copper Gold Province

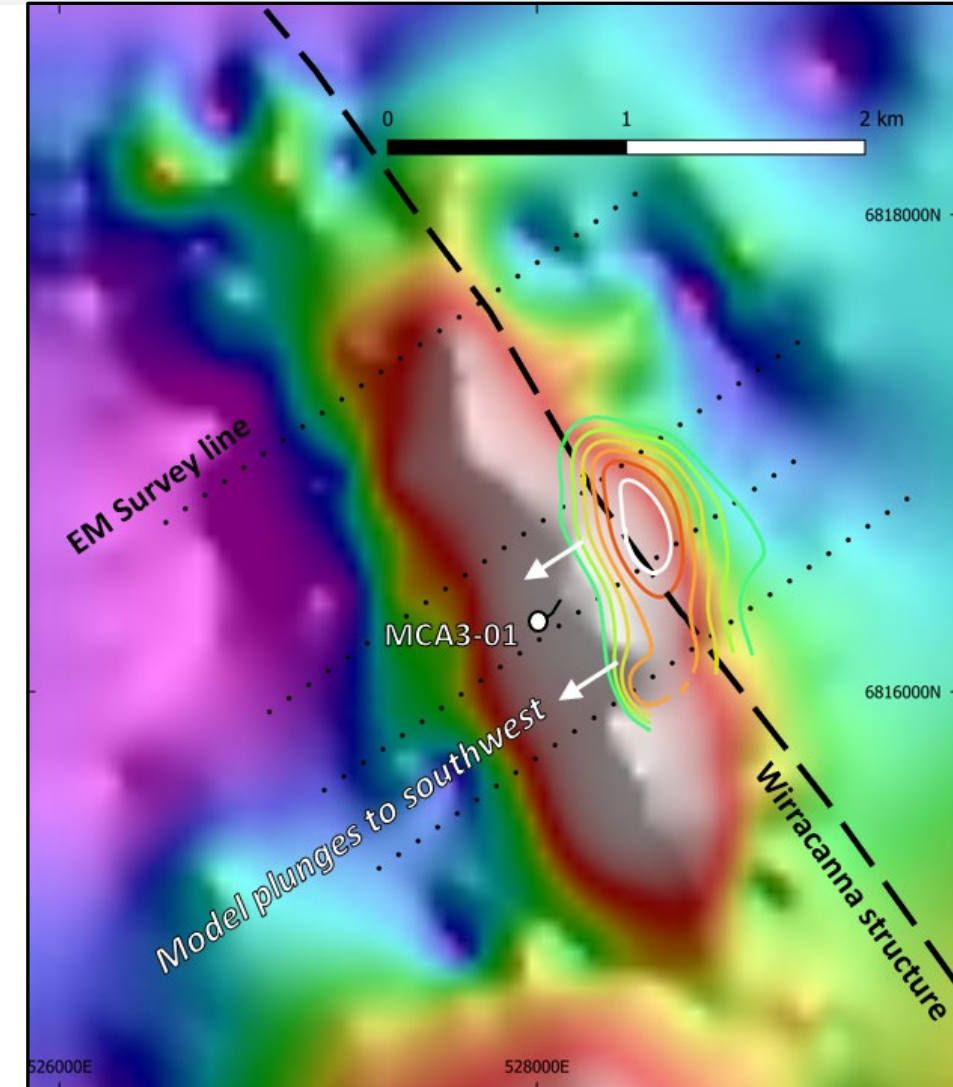
- Mabel Creek Copper Gold Project – Large land holding(2,852 km²).
- Cu-Au prospects highlight fertility for Iron Oxide-Copper-Gold (IOCG) mineralisation.
- Major copper players – RIO, BHP & FMG in surrounding Areas.
- 2020-2021 drilling intersected IOCG alteration at 2 Prospect sites – Area 5 & 13. ^{8,9}
- Numerous drill ready targets.
- ***High Powered SQUID EM Survey (April 23) – identified Tier-1 Cu-Au Target (Olympus)***¹⁰



Residual Gravity Image – Eastern Mabel Creek





Olympus IOCG Target¹⁰

- **A World-Class Sized Geophysical Target in the Olympic Cu-Au Trend.**
- 3 Milligal Gravity Target comparable to the Prominent Hill Cu-Au Mine geophysical response.
- High Powered SQUID EM – identified conductive plate of significant dimensions on eastern flank of the gravity target.
- Conductor starts at 600m depth, is approximately 2km long and extends down at least 2km.
- ***Drilling of target scheduled from Q3/Q4 2023.***

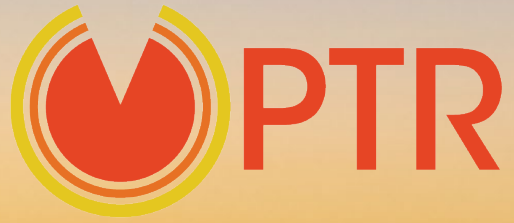


Olympus Geophysical Response - 1VD Bouguer Gravity Image overlain by late time EM contours showing the position of the top of the conductive plate on the eastern flank of the gravity body which plunges steeply back to the southwest.

Active Ground Campaign for 2023

Exploration Activity	June	July	August	September	October	November	December
Comet Project							
REE Drilling Programs							
Assay Results							
Metallurgical Studies							
Woomera Project							
Gravity Survey Results							
Drilling Programs							
Mabel Creek							
EM/Gravity Targets Defined							
Drilling Programs							





Why Invest in PTR?



**Thick, Shallow
& High-grade REE**



**Favourable
Location**



**Exploration
Upside**



**World Class
Cu-Au Targets**



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