

19 June 2023

Comet Rare Earth Drilling Successfully Completed

Highlights

- **Aircore (AC) drilling program successfully completed at the Comet Rare Earth (REE) Project in South Australia.**
- **The program comprised of 62 AC holes totalling ~2,900m, targeting extensions to the Artemis REE Prospect and other high priority targets.**
- **Drill samples have been lodged with Bureau Veritas Laboratories, with assay results due in approximately 6-8 weeks.**
- **A second follow-up phase of drilling is planned once assay results have been received and evaluated.**

Petratherm Limited (ASX: PTR) (**PTR** or the **Company**) is pleased to announce aircore drilling operations have been successfully completed at the Artemis REE Prospect and at other high priority targets within the 1,915 km² Comet Rare Earth Element (REE) Project, in South Australia, 80km south of Coober Pedy. The drill programme comprised of 62 AC drill holes, totalling 2,896 metres with an average hole depth of 47 metres.

This most recent round of drilling is the Company's first drilling program on the Comet Project since the discovery of REE mineralisation at the Artemis Prospect. Following this success PTR has continued to develop and evolve its REE exploration models, and the recently completed drilling has utilised these models in a highly focussed program designed to test new greenfield targets as well as for additional mineralised zones around Artemis.

The greenfield targeting work is based on recognition that the REE mineralisation is associated with highly differentiated mafic rock intrusive complexes unique to the local region and the program tested several of these in the central part of the Project, east of current known REE Prospects (Figure 1).

Drill samples have been lodged with Bureau Veritas Laboratories, with assay results due in approximately 6-8 weeks-time. A second follow-up phase of drilling is planned once assay results have been received and evaluated.

PTR'S Chief Executive Officer, Peter Reid Commented:

"The Artemis and Meteor Prospects have excellent upside growth potential with high-grade clay hosted REE's intercepted over a large area with significant vertical thickness. The drilling program comprised of a dual strategy of testing for additional mineralised zones around the Artemis REE Prospect, while also drill testing high-priority greenfield targets to the east of the known REE mineralisation."

"This is an exciting time for the Company as we look to build on the two significant REE discoveries made at the Comet Project, I look forward to updating the market with results from this program as they become available."

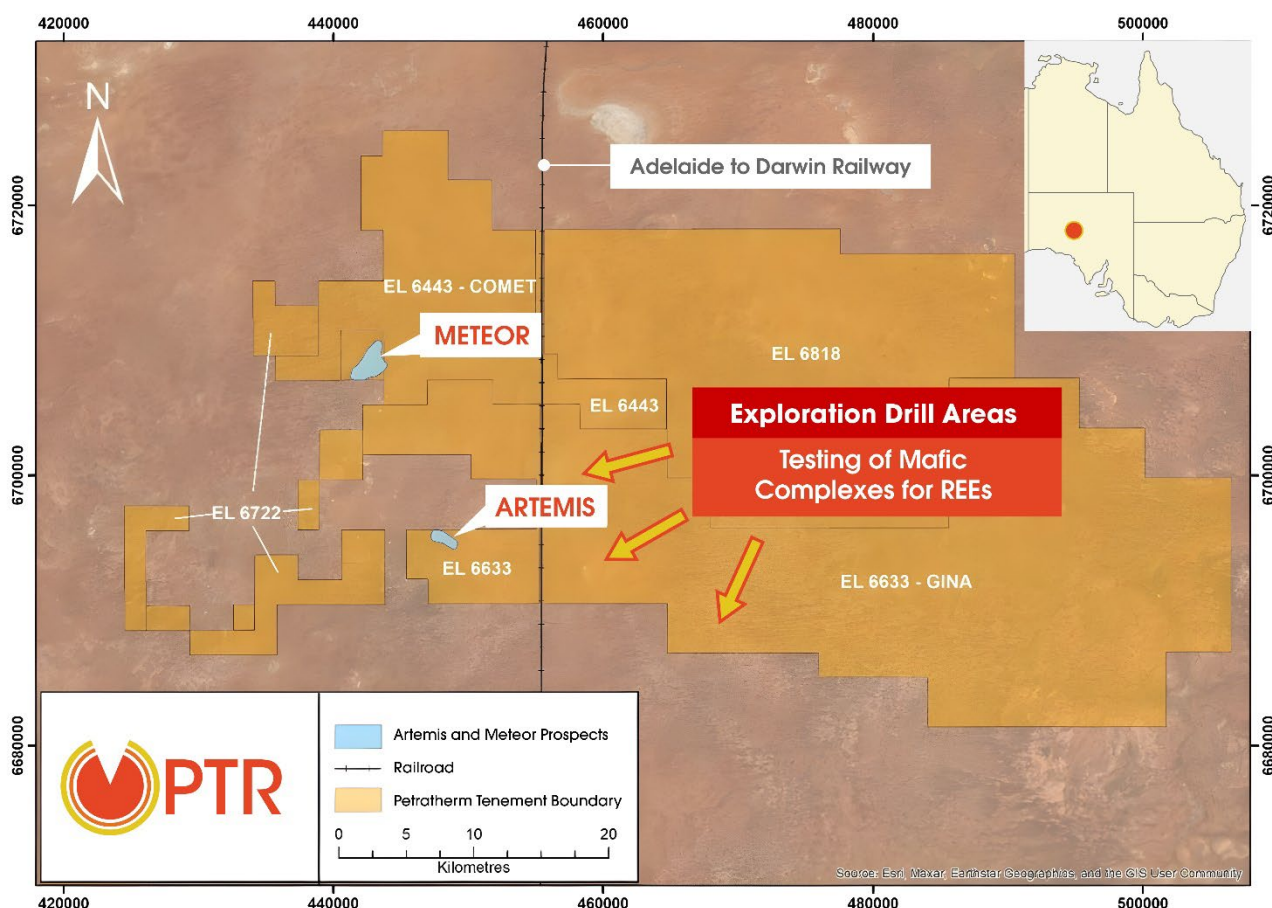


Figure 1 – Comet Project Area showing Artemis and Meteor Rare Earth Prospects. Expansion drilling at Artemis and testing of several layered mafic intrusions has been completed in current round of drilling.

Artemis REE Prospect

REE mineralisation typically starts from a depth of 9 to 15 metres and the average intercept thickness is 17 metres across the prospect. The average TREO intercept grade is 973 ppm, which includes 222 ppm Magnet Rare Earth Oxide (MREO) (23% of TREO).

The prospect area is approximately 1.5 kilometres by 800 metres and is open laterally in all directions.¹

Meteor REE Prospect

REE mineralisation starts from a depth of 3 to 6 metres and the average intercept thickness² is 11.5 metres across the prospect. The average TREO intercept grade is 936 ppm, which includes 242 ppm MREO (26% of TREO).

The prospect area is approximately 2 kilometres by 1 kilometre and remains open in several directions. Due to the shallow nature of mineralisation, there is potential for low-cost favourable free dig mining methods. PTR has begun beneficiation trials to increase head grade with leach optimisation work to follow.³

¹ PTR ASX Release 24/02/2023 - Drilling Identifies Major New Rare Earth Prospect

² Intercept grade and thickness's based on > 500 ppm TREO cut-off over the prospect area

³ PTR ASX Release 15/02/2023 - Meteor Prospect - Exceptional Rare Earth Drill Intersections



Sunrise Drilling Operations at Artemis – June 2023

ENDS

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

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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.

About Petratherm Limited

Petratherm Limited (ASX: PTR) is a critical minerals explorer focused on the discovery of world-class copper-gold and rare earth deposits. The Company has several advanced drill ready projects in the Olympic Copper-Gold Domain of South Australia. PTR recently announced the discovery of significant concentrations of rare earths hosted in clays in the Northern Gawler Craton of South Australia which are now undergoing intensive drill testing.

Exploration drilling at the Comet Project Area has delineated two major REE occurrences. The Meteor and Artemis REE prospects both 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.

PTR has several exciting copper-gold targets at its Mabel Creek and Woomera Projects located within the Olympic Copper-Gold Trend. 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.



PTR's Project Locations in South Australia