ASX Announcement

ASX:PTR



19 March 2025

Phase 2 Drill Program Commenced at Muckanippie

Highlights

- Phase 2 drill program comprising 6,000m of Air Core (AC) drilling has commenced at the Rosewood Titanium Discovery and other Titanium Prospects within the Muckanippie Project, SA.
- Drilling at the Rosewood Prospect will test extensions of the HM mineralisation beyond the currently defined outline.
- The drill program will include limited infill drilling at Rosewood to better characterise grade and thickness of mineralisation as well as undertake collection of bulk samples for metallurgical test work.

Petratherm Limited (ASX: PTR) ("**PTR**" or "the Company") is pleased to announce the Phase 2 drill program has commenced at the Rosewood Titanium Discovery within the Muckanippie Project in the northern Gawler Craton of South Australia (Figure 1). The 6,000m air core drill program heralds the start of a series of drill campaigns to be undertaken over the coming months to define extent of the Rosewood mineralisation as well as assess other highly promising Titanium Prospect Areas.

Petratherm Chief Executive Officer, Peter Reid, commented:

"The successful phase 1 drilling last year and associated follow up work has seen the titanium-rich HMS mineralisation at the Muckanippie Project quickly progress. Following the strong support received for our recent \$8.1m placement, PTR is well positioned to ramp up activities and unlock the full potential of the project. We look forward to building on our earlier success with the Phase 2 drill program, which is aimed at extending known mineralisation plus providing bulk samples for further metallurgical test work."



Photo 1: March 2025 Drilling Operations at Rosewood Prospect





Previously, at Rosewood the Company reported highly encouraging heavy mineral (HM) drill intercepts over a continuous 15km² area which remains open in multiple directions^{1,2}. Initial mineralogy results from the east Rosewood area have additionally indicated HM sands with >95% Valuable Heavy Mineral content, composed primarily of high value titanium minerals – rutile product (high-titanium leucoxene and rutile) and pseudorutile³. Most recently, results from sizing analysis indicate the HM is coarse grained and highly amenable to produce excellent mineral recoveries using conventional gravity spiral processing techniques⁴.

This current round of drilling at Rosewood is aimed at extending mineralisation principally to the north where it remains open (Figure 2), as well as including some limited infill drilling of the East Rosewood area to better define grade and thickness of the mineralisation and to collect representative bulk samples (>500 kg) for metallurgical testing.

Previous exploration in greenfield areas, away from the Rosewood Heavy Mineral Sands Discovery identified a new style of high-grade Titanium Rich HM mineralisation hosted in Saprolite Clay, at the Duke, Nardoo and Claypan Prospects (Figure 1). Follow up exploration drilling will also be undertaken at each of these sites to test extensions of mineralisation which remain open along trend⁵.

The air core drilling program will comprise of wide spaced (400m to 1km) drill traverses with holes at approximately 200 to 400 metres along lines and include some closer infill drilling in zones of interest. The previously reported shallow HM mineralisation starts from near surface to approximately 30m depth, and maximum hole depths are expected to range between 30 to 40m. The Company looks forward to providing updates as they come to hand.

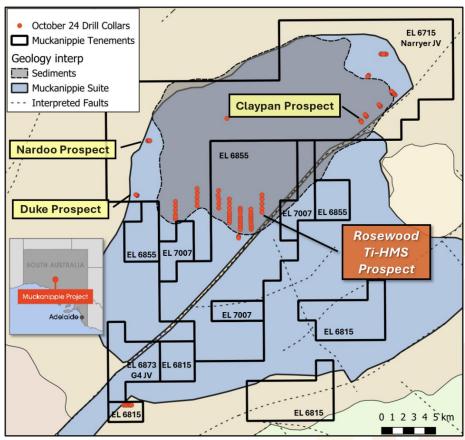
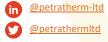


Figure 1: Interpreted Geological Map of Muckanippie Project Area, Tenements, Prospects and 2024 drill collars². Surrounding Muckanippie Suite is a local source of HM into the younger sedimentary sequence.

⁵ PTR ASX release 19 February 2025 – New Style of Titanium Mineralisation at Muckanippie



¹ PTR ASX release 04 December 2024 – Drill Results Confirm Major HMS Discovery at Rosewood

² PTR ASX release 6 February 2025 – Drilling Confirms Potential for World-Class Titanium Project

³ PTR ASX release 20 January 2025 – Pure High-Value Titanium Mineral Assemblage at Rosewood

⁴ PTR ASX release 5 March 2025 – Positive Rosewood Heavy Mineral Size Analysis



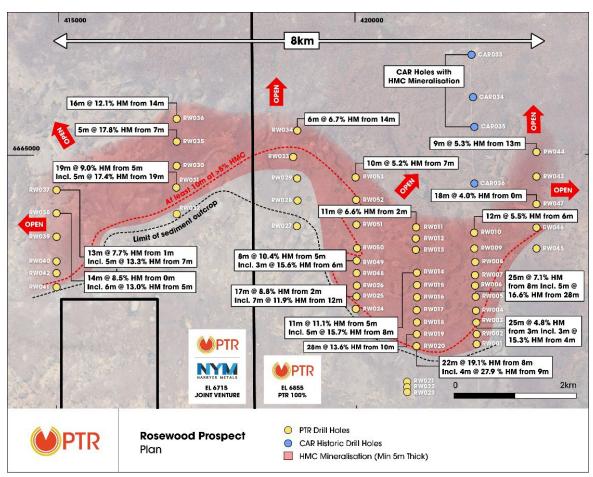


Figure 2: Rosewood Prospect plan map showing extent of mineralisation and exploration areas to the north which will be tested.

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 Limited. 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 copper and critical minerals explorer focused on the discovery of world-class deposits in both frontier and mature mineral provinces. The Company has a major project holding in the northern Gawler Craton of South Australia. Recent exploration has uncovered significant concentrations of titanium rich heavy mineral sands (HMS) over large areas at its Muckanippie Project Area. The Project contains 100% owned Petratherm tenure and the JV tenements, EL 6715 (Narryer Metals Limited, ASX:NYM)⁶ and EL6873 (G4 Metals)⁷. The mineral sands are associated with the weathering of a major intrusive complex, the Muckanippie Suite, which has been found to be highly prospective for critical minerals including Platinum Group Elements, Vanadium, and Titanium. This is an early-stage Greenfields project with exceptional upside potential.

The Company has two major exploration projects in the world-class Olympic Copper-Gold Province of South Australia. Work in the region has uncovered Iron-Oxide Copper-Gold style alteration/mineralisation at both its Mabel Creek and Woomera Project Areas. Geophysical targeting work has defined several compelling Tier-1 Copper-Gold targets which the Company is aiming to drill test during the 2025 calendar period.



PTR's Project Locations in South Australia

 $^{^{7}}$ PTR ASX release 29 Feb 2024 – Farm-In Agreement Executed – Muckanippie Project Expansion



⁶ PTR ASX release 18 April 2024 – Farm-in Agreement Expands Muckanippie Project