13 November 2023

Drilling Underway at Olympus IOCG Target

Highlights

- Drilling of the Olympus IOCG Geophysical Target has commenced with the hole expected to take about 1 week to complete.
- **Gravity modelling of the Olympus Target defines a dense body, comparable to the densities of other IOCG bodies, starting at 270 metres depth.**

Petratherm Limited (ASX: PTR) ("**PTR"** or "**the Company"**) is pleased to announce that drilling of the Olympus Gravity/EM Target has started. Olympus occurs on PTR's 100% owned Mabel Creek Project, located along the northern reaches of the Olympic Copper-Gold Province of South Australia (Figure 1).

The initial diamond drill hole of the new campaign is aiming to test the modelled shallower southern portion of the gravity anomaly (Figure 2) and will take approximately 1 week to complete. This hole is likely to be completed to approximately 600 metres depth with the target area being intersected at approximately 400 metres down hole. Follow-up drilling will be undertaken subject to positive indications from the initial drill hole.

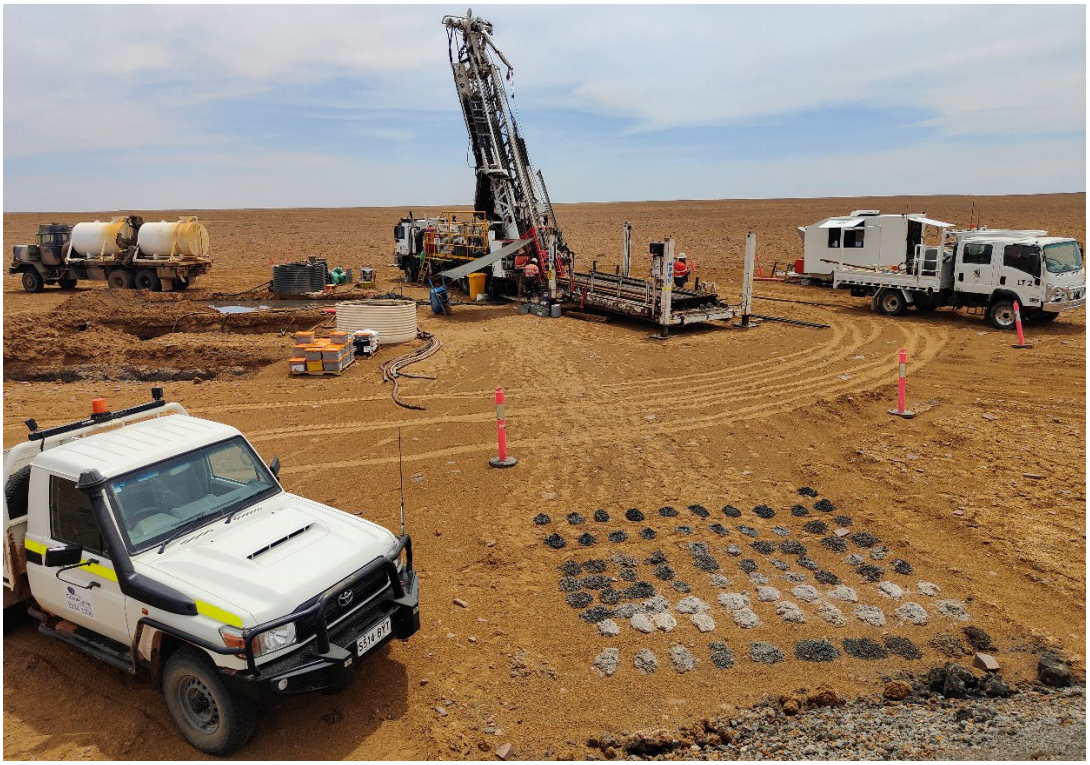

Photo 1 – Olympus Drill Site

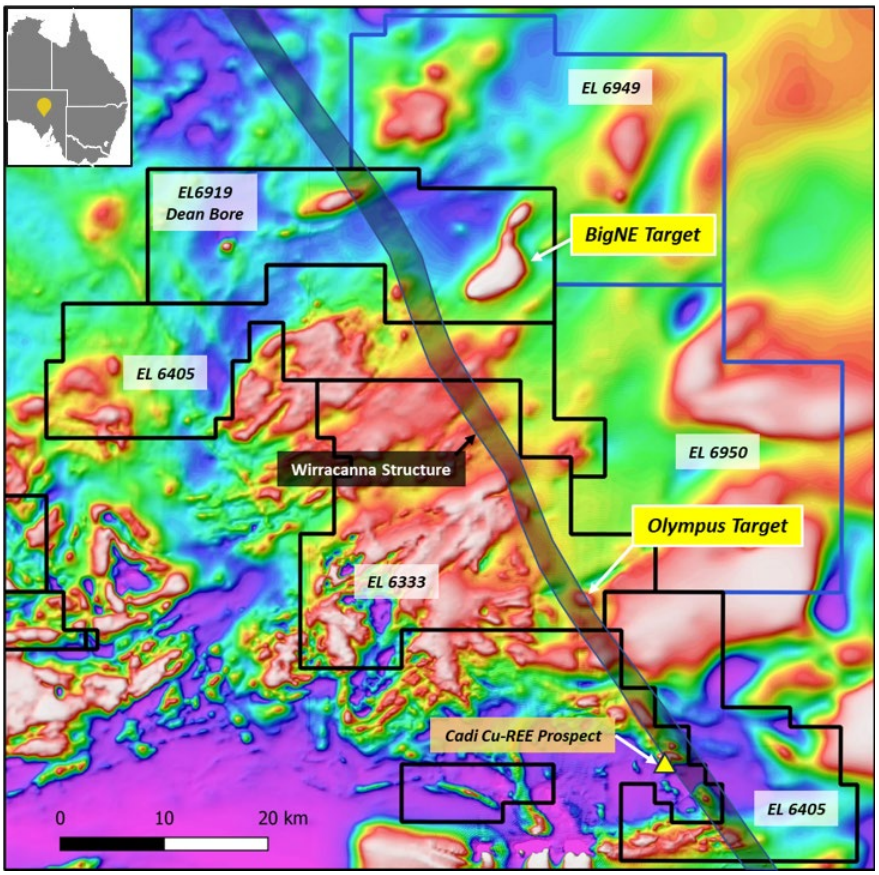

Figure 1 – Eastern Mabel Creek Project Holdings. Location of the Olympus and BigNE Targets on a magnetic image with respect to the Cadi Prospect and the Wirracanna Structure. Note newly granted EL 6949 and EL 6950 tenement areas significantly increasing PTRs land position.

Olympus Geophysical Targeting

The Olympus Target is a strong gravity and partially overlapping conductive EM geophysical anomaly of significant dimensions, located along the Wirracanna Fault Structure (Figure 1). Historical drilling at the Cadi Prospect, located to the southeast along the Wirracanna structure, intersected broad zones of highly anomalous copper and light rare earths (i.e. drillhole 99WS003 - **16m @ 0.57% Cu, 0.16% Ce+La** from 184m) highlighting the fertility of this structure for iron-oxide copper-gold (IOCG)[1].

3D inversion modelling undertaken by independent consultants, Mitre Geophysics, of the gravity data defines a sub-vertical sheet like body of high density, comparable to that produced from IOCG style mineralisation. The gravity body is approximately 1,200 metres long, by 700 metres vertical and approximately 40 metres wide. At its shallowest point, the model indicates that it comes to approximately 270 metres below the ground surface along its southern edge, which is also the interpreted top of the basement surface under the younger cover strata. The model indicates the body plunges gently to the north-northwest and appears to crosscut the older basement strata and is therefore likely a later emplacement.

The Olympus Geophysical Target has proven to be an exceptional Tier-1 geophysical anomaly, demonstrating rock densities and conductivities that may be indicative of mineralisation.

[1] Goldstream Mining, 2001, SA Govt. Record ENV09248

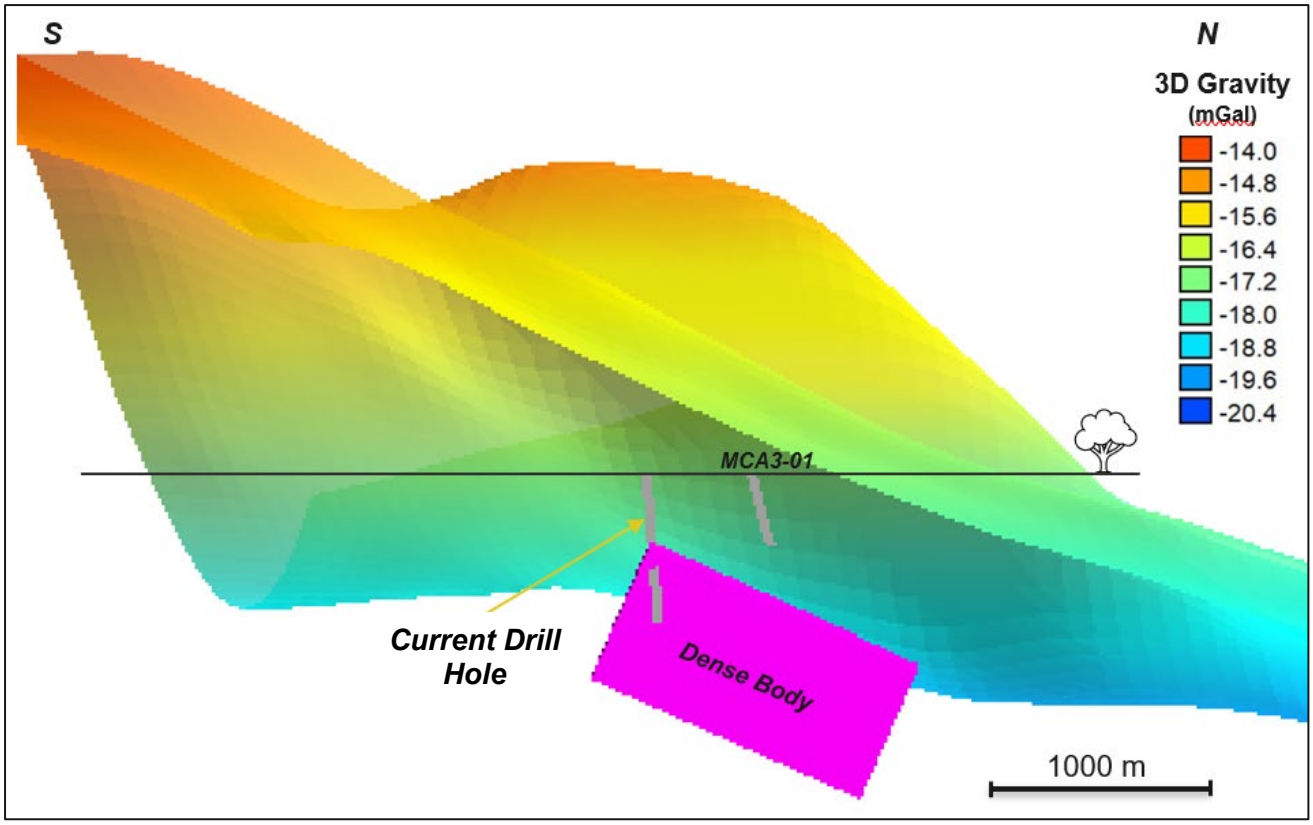

Figure 2 – 3D View looking west of the Olympus Bouguer Gravity Anomaly and dense gravity body target.

Olympus Target - Previous Work

The Company previously drilled a single hole MCA3-01 over the northern portion of the target area, intersecting 247 metres (vertical thickness) of cover and then penetrated 40 metres into weakly hematite altered granite and gneiss, intruded by mafic and felsic dykes[2]. The revised 3D inversion gravity model after inputting measured density data from MCA3-01, defines a plunging body that gets deeper to the north in the vicinity of MCA3-01, clearly showing this hole did not reach target (Figure 2).

In May 2023, PTR reported SQUID EM surveys at Olympus which identified a conductive feature over three consecutive lines spaced 400m apart along the eastern flank of the gravity anomaly (Figure 3)[3]. Modelling of the conductive response generates an approximate 2-kilometre-long conductive plate starting at approximately 600 metres below ground surface. The modelled feature dips to the southwest intersecting the gravity feature. Due to the deep nature of this conductive plate and overlying conductive cover strata, its precise orientation relative to the gravity body is open to several model interpretations. Consequently the drill targeting is based on intersecting the gravity body as its configuration is better defined.

[2] PTR Announcement -12 May 2020 - Mabel Creek Drilling Results
[3] PTR Announcement – 22 May 2023 – SQUID EM Survey – Significant Copper-Gold Target

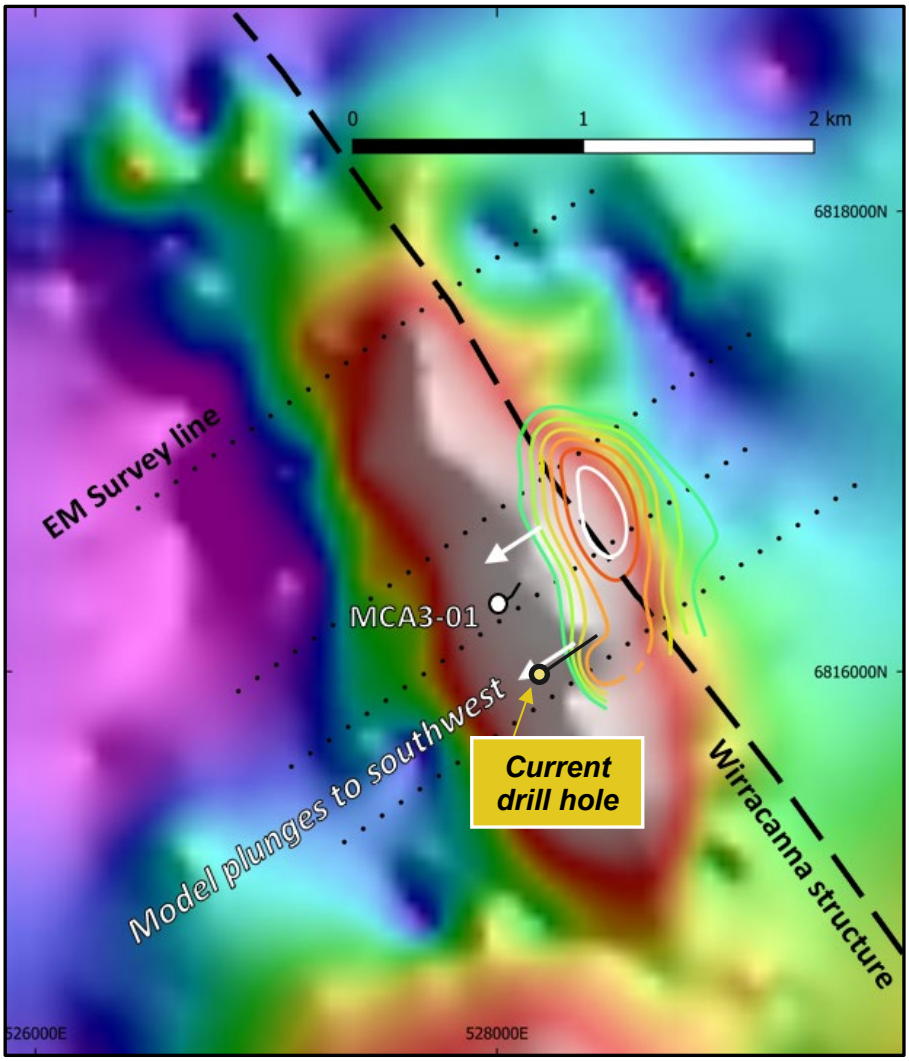

Figure 3 – Olympus geophysical response. Coloured image is gravity data (1VD Bouguer) overlain by late time EM contours (X channel 32) showing the conductive plate on the eastern flank of the gravity body, which plunges back to the southwest at depth.

Additional Tenements Granted

PTR was recently granted Dean Bore (EL 6919), which adds an additional 470km^2 of land tenure at Mabel Creek and has just received additional grant of two large exploration licence areas (EL 6949 & EL 6950) covering a further 1,263km^2 over an identified prospective Iron-Oxide Copper-Gold (IOCG) fertile zone along the eastern side of the tenement holdings (Figure 1). PTR intends to undertake gravity surveying over these new areas to explore for additional high calibre IOCG style geophysical targets for drill testing.

ENDS

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

For further information:

Peter Reid
Chief Executive Officer
preid@petratherm.com.au
0435 181 705

Media and Broker Contact

Zander Beacham
White Noise Communications
zander@whitenoisecomms.com
0433 515 723

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 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 undergoing further 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 Tend. 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