



ACN 106 806 884

ASX: PTR

www.petratherm.com.au admin@petratherm.com.au

ASX ANNOUNCEMENT 23/05/2022

Comet Rare Earth Project – Air Core Drilling Underway

Petratherm Limited (ASX: PTR) is pleased to announce drilling operations commenced on Friday 20th May to follow up rare earth (REE) intersections previously reported at Comet (EL 6443 & EL 6633) in the Northern Gawler Craton of South Australia (PTR ASX release 20/04/2022). The mineralisation is hosted in saprolite zone clays (deeply weathered basement rock which has been chemically decomposed to clay) with previous drill holes returning intercepts comparable to the REE Ion-adsorption Clay REE deposits of China which are a major world supplier. The previous results from Comet include significant concentrations of high-value magnet rare earths and these mineralised zones remain open at depth and out into surrounding areas (Refer to PTR ASX release 20/04/22 for JORC Table 1 details).

Notable drill intercepts previously reported include:

•	, , ,	High Value
Hole	Interval	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 Ea	rths = Pr_6O_{11} , Nd_2O_3 , Tb_4O_7 & Dv_2O_3)



Photo Air Core Drilling Operations Underway at Comet



Drilling Operations

The 10,000-metre air core drill program will test REE enriched areas with a 200 metre spaced grid and traverse style drilling and may include some 100-metre spaced infill. The focus for this initial work will be testing of the main REE areas currently identified (Figure 1). The prospective saprolite clay zone starts from 5 to 10 metres depth and extends to approximately 35 to 40 metres depth in most areas. It is envisaged that the drill program will take about 6 to 7 weeks to complete with drill sample batches delivered to ALS laboratories for analysis every 2 weeks.

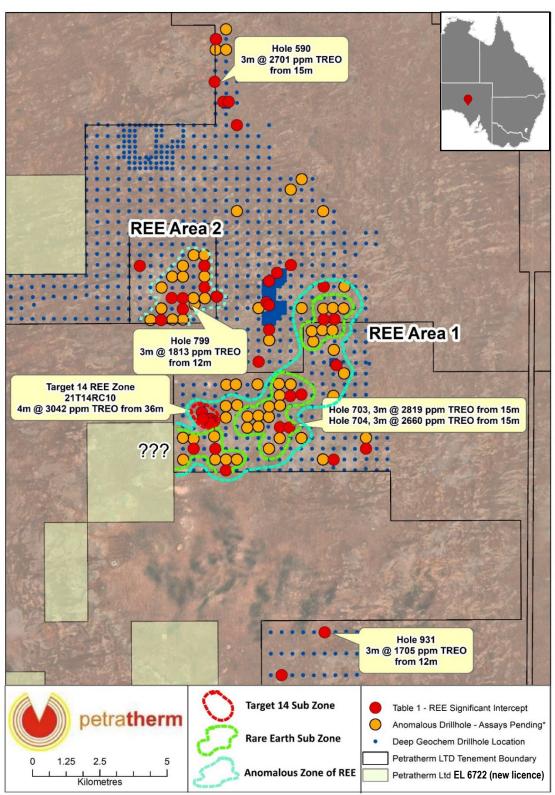


Figure 1 Comet Project REE Results Overview Map



Rare Earth Ore Minerals found in underlying Basement Rock

The Company has completed an independent petrological analysis of drill chips from the Target 14 Prospect which occurs within the REE 1 Anomaly Area (Figure 1). At Target 14, RC drilling into the crystalline basement rock below the saprolite clay interval returned highly anomalous REE's, with drill hole T14_RC10 intercepting 4m @ 3,042 ppm TREO from 36m - 40m. The study has confirmed the presence of the rare earth mineral monazite within a granitoid rock and provides evidence for the probable source of mineralisation in the clays above.

Ion-adsorption clay (IAC) REE, deposits formed by the deep weathering of igneous basement rocks, (i.e. REE enriched granitoids as seen at Target 14) are the world's primary source for heavy rare earth elements and are mostly sourced from SE China. The Northern Gawler Craton has undergone similar deep weathering processes and a well-developed highly leached clay saprolite profile occurs over the basement. The deep weathering and thin overlying transported cover sediment has historically been an impediment for explorers looking for gold and base metals in the region, however in the case of exploring for lonic Style Clay REEs, it offers potentially ideal conditions for their formation.

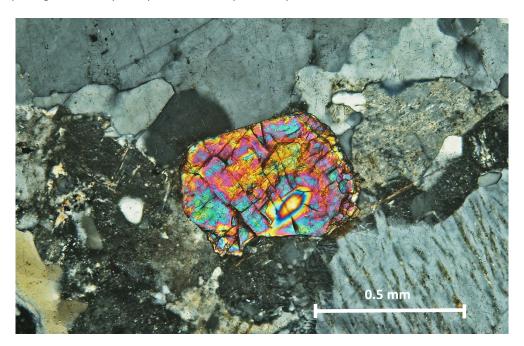


Photo Photomicrograph of the rare earth mineral, monazite (centre, bright colours) displaying its equant prismatic crystal form. Rock chip sample from drill hole 21T14RC10, 36-37m. (Transmitted light, crossed polarisers).

The Company will provide regular drilling updates and results as they come to hand. Petratherm looks forward to the next critical phase of work which is likely to determine the potential significance of the REEs encountered to date. 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 please contact:

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

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.