

12 December 2022

# Additional REE targets identified at Mt Cattlin

Large new thorium anomaly provides further support for the presence of REE-bearing intrusives, including carbonatites, within the Mt Cattlin intrusive complex

## Key Points:

- Large new thorium anomaly identified within the northern portion of the Mt Cattlin Project area, highlighting a prospective zone for supergene-enriched REE (Rare Earth Elements) at the base of the weathered zone.
- This new anomaly is partially coincident with the recently identified TREO (Total Rare Earth Oxide) soil anomalies within the central portion of the project area.
- The coincident gold, copper and REE anomalies within the Mt Cattlin Project suggest the presence of REE-bearing alkali intrusives and carbonatites within the intrusive complex.
- Diamond drilling for the gold, copper and REE mineralisation within the deeper-seated bedrock can be undertaken at the same time and utilising the same drill program.
- Potential for near-surface REE mineralisation hosted in regolith clays will be evaluated by air-core drilling.
- Re-sampling for REE potential in selected historical drill-holes that are coincident with the newly identified surface anomalies is underway.

Traka Resources Limited (ASX: **TKL**, **Traka** or **the Company**) is pleased to advise that it has identified additional significant Rare Earth Element (REE) anomalism within its 100%-owned **Mt Cattlin Gold-Copper Project** in south-west Western Australia. This work program is now being assisted by Dr. Phillip Hellman, an REE expert with international experience in this field.

A review of previously collected airborne radiometric data (1) has highlighted an area characterised by enhanced thorium values that are coincident with an area suggestive of near-surface REE depletion (Figure 1). Auger geochemical samples collected for the completed 3D Geochemical Footprint Modelling program are now being used to undertake further assessment of this potential (2).

Residual near-surface thorium anomalies are consistent with depletion of REE into the underlying weathered clay-rich zone by downward leaching. Thorium, being relatively immobile, can therefore be a key indicator of underlying supergene enriched REE mineralisation at the base of the weathered zone.

ASX: TKL ABN 63 103 323 173 Ground Floor 43 Ventnor Avenue West Perth 6005 Western Australia Tel: (+61) 8 9322 1655 Fax: (+61) 8 9322 9144 www.trakaresources.com.au traka@trakaresources.com.au



This scenario is especially applicable where the weathered regolith profile is in-situ and not covered by transported overburden. This is the case at Mt Cattlin, where the elevated thorium values occur in gently sloping land immediately west of the Ravensthorpe Fault.

This is in contrast with the previously reported TREO anomalies in the centre of the project area, which appear to be structurally controlled (3). The thorium anomaly is an additional target to the TREO targets and significantly increases the scale of REE prospectivity at Mt Cattlin (Figure 2).



Figure 1. A thorium radiometric image showing the thorium anomaly (red colours) in the north-east quadrant where the values shown are elevated (>8 derived from an algorithm relating individual REE to radiometric elements) defining the area of prospective sub-surface supergene enriched REE mineralisation.





Figure 2. TREO anomalies (red colours) shown as contours with the position of the thorium anomaly, buried mineralised intrusives and the Ravensthorpe Fault shown.

Further evaluation of the project data in addition to sampling of old drill holes for REE elements is currently underway. The locations previously observed to have fenite alteration, which is characteristic of the presence of REE-bearing carbonatite intrusives, is also being re-investigated (see images below).





Aegirine-albite sheared fenite vein

Aegirine-albite fenite, with albitised groundmass.



Aegirine-albite brecciated fenite



The new thorium anomaly area will be tested alongside the TREO anomalies, with air-core drilling to be conducted to the base of weathering. At this stage, it is not known whether the rare earths in the regolith are readily leachable or locked within resistant phases such as zircon or monazite. Future work will require desorption tests if rare earth elements are found to have accumulated within clay-rich horizons such as found elsewhere in established Ionic Adsorption Deposits (IAD).

The underlying bedrock potential for REE elements associated with alkali intrusives and carbonatites can be assessed concurrently via the re-sampling of old drill-holes and the drilling of two deep drill holes planned to test the buried intrusives. These deep holes will be the first to test the core of the multi-phase, strongly hydrothermally intrusive complex that is believed to host all mineralisation at Mt Cattlin.

# Management Comment

Traka's Managing Director, Patrick Verbeek, said:

"This is an exciting new anomaly that further supports the potential to identify significant REE mineralisation at Mt Cattlin. Thorium's unique relationship with REE – which often sees thorium anomalies as a key identifier of deeper REE mineralisation at the base of the weathered zone – make this a high priority target for follow-up drilling.

*"Importantly, we're able to test this REE potential as part of our existing copper-gold exploration program, with the planned drill holes set to test the buried intrusives as well as the potential carbonatites.* 

"We are also planning to undertake an air-core drilling program to further assess the potential for REE mineralisation at surface.

"We are delighted that these programs are being undertaken with guidance from Dr. Phillip Hellman, who is an internationally recognised REE expert with extensive international experience."

Authorised by the Board.

#### Patrick Verbeek Managing Director

- (1) Traka ASX Announcement 9 September 2020 Commencement of Geophysical Surveys
- (2) Traka ASX Announcement 16 May 2022 Vectoring to the mineralised core of the Mt Cattlin Gold-Copper Project
- (3) Traka ASX Announcement 22 November 2022 Strong Rare Earths anomalism identified at Mt Cattlin Gold-Copper Project

## COMPLIANCE STATEMENT

The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr P Verbeek who is the Managing Director of Traka Resources Limited. Mr Verbeek, who is a Competent Person and a Member of the Australasian Institute of Mining and Metallurgy, 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 Verbeek consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.