

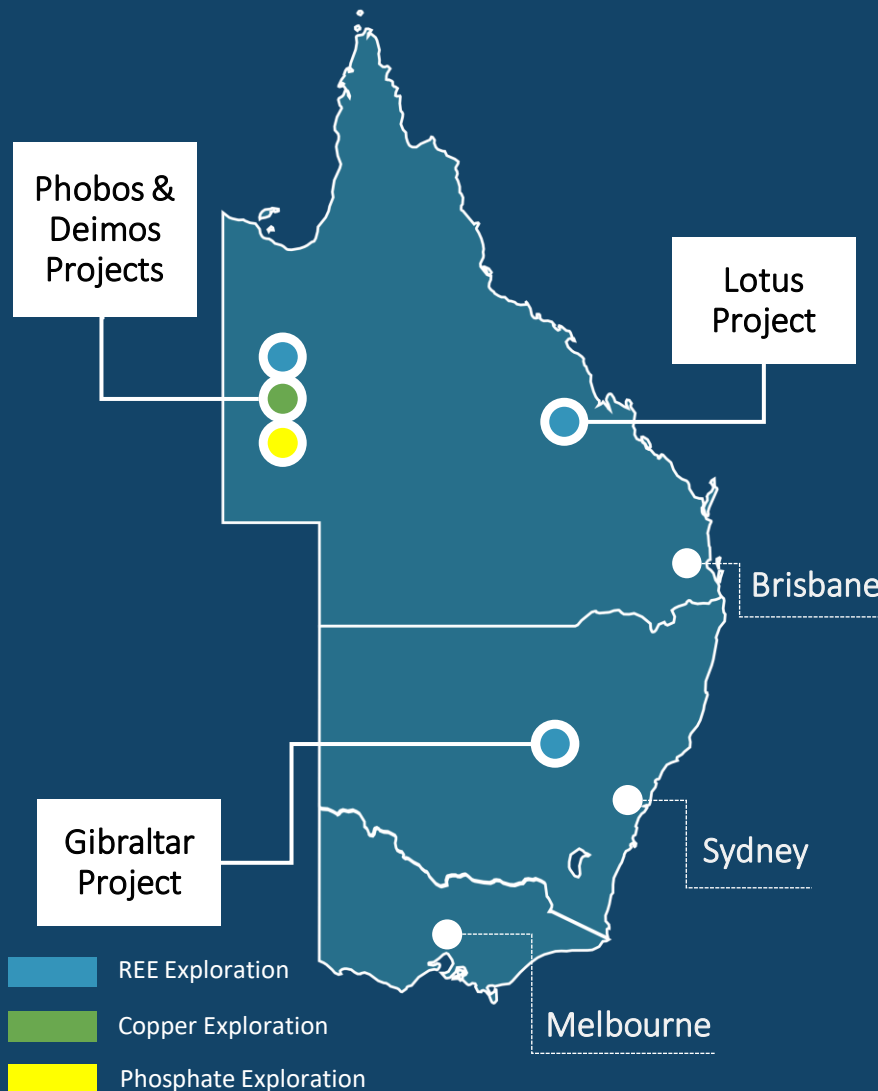


TREO RESOURCES



A Critical Minerals focused Company

COMPANY OVERVIEW



Phobos & Deimos Projects – REE, Copper and Phosphate

- Two distinct trends identified within the Beetle Creek formation for shallow Phosphate and REE mineralisation
- 2 producing phosphate mines less than 15km away all within the same formation
- Widespread REE potential in phosphorites to benefit from studies outlining near 100% recoveries, hugely outperforming typical clay-hosted REE peers
- Undrilled iron-oxide-copper-gold (IOCG) target identified by Wells Fargo
- Staged development potential focusing initially on low-capex phosphate & REE mining
- Preparations underway for drilling in 2024

Lotus Project - REE

- Within a circular magnetic low anomaly identified by existing surveys – a similar target to Lynas’ Mt Weld
- Cerium and zirconium anomaly at surface immediately within the circular magnetic target
- Targeting a large carbonatite target underneath shallow cover
- Preparations underway for drilling in 2024

Gibraltar Project - REE

- Hosted within the potential northern extension of ASM’s 75Mt Dubbo Project and Railway discovery
- Radiometric and trachyte anomalies identified for follow up. These anomalies are uniform to those on ASM’s tenure
- Supportive landholders

KEY MANAGEMENT

Patrick Say

Director/50% Shareholder

B.Sc. (Hons), MAusIMM

- 20+ year history in the minerals sector
- Led the geological team which delineated the Hillside Cu-Au deposit in South Australia
- Helped to evaluate and acquire the Hog Ranch Gold Project in Nevada, USA for Rex Minerals (ASX:RXM)

David Palumbo

Director/50% Shareholder

BCom, CA, GAICD

- Chartered accountant with 15+ years experience across company secretarial & corporate advisory roles
- Currently serves on the Board of Krakatoa Resources (ASX:KTA), Albion Resources Limited (ASX:ALB) and Rubix Resources Limited (ASX:RB6)



PHOBOS & DEIMOS PROJECTS - OVERVIEW

Project Location

130km South of Mt Isa in QLD
Access via the Boulia Mt Isa Hwy

Ground Position

1193km² of tenure in QLD's phosphate rich Georgina Basin

Exploration Target

The phosphate and REE rich Beetle Creek Formation, and a strong IOCG target at Phobos identified in the magnetics

World Class Resources Next Door

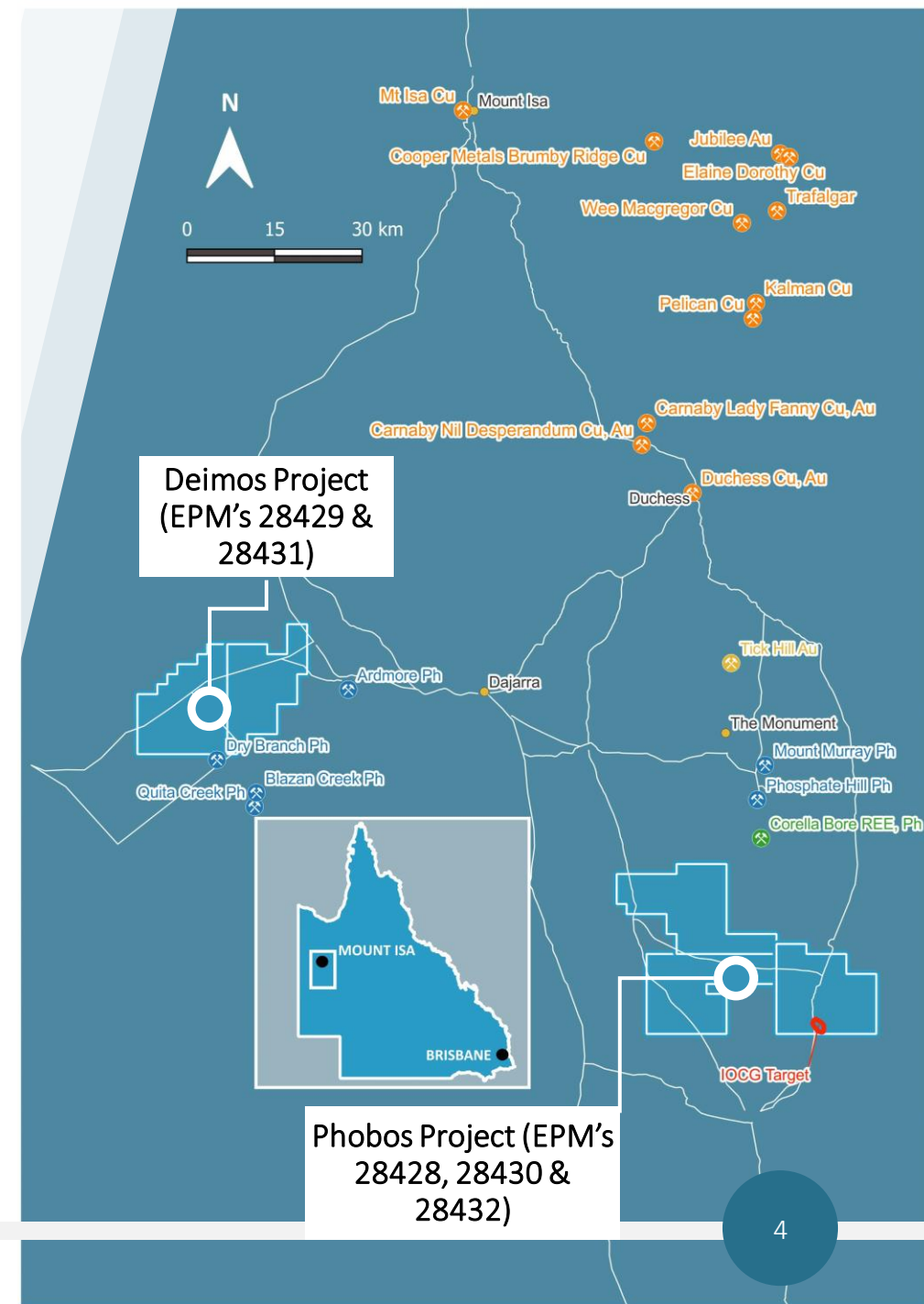
Phobos 13km South of Incitec Pivot's Phosphate Hill Project
Deimos 9km west of Centrex Metals' Ardmore Phosphate Project

5 wholly owned EPM's

Deimos Project – EPM28429 & EPM28431 are granted.
Phobos Project – EPM's expected to be granted in Q1 2024

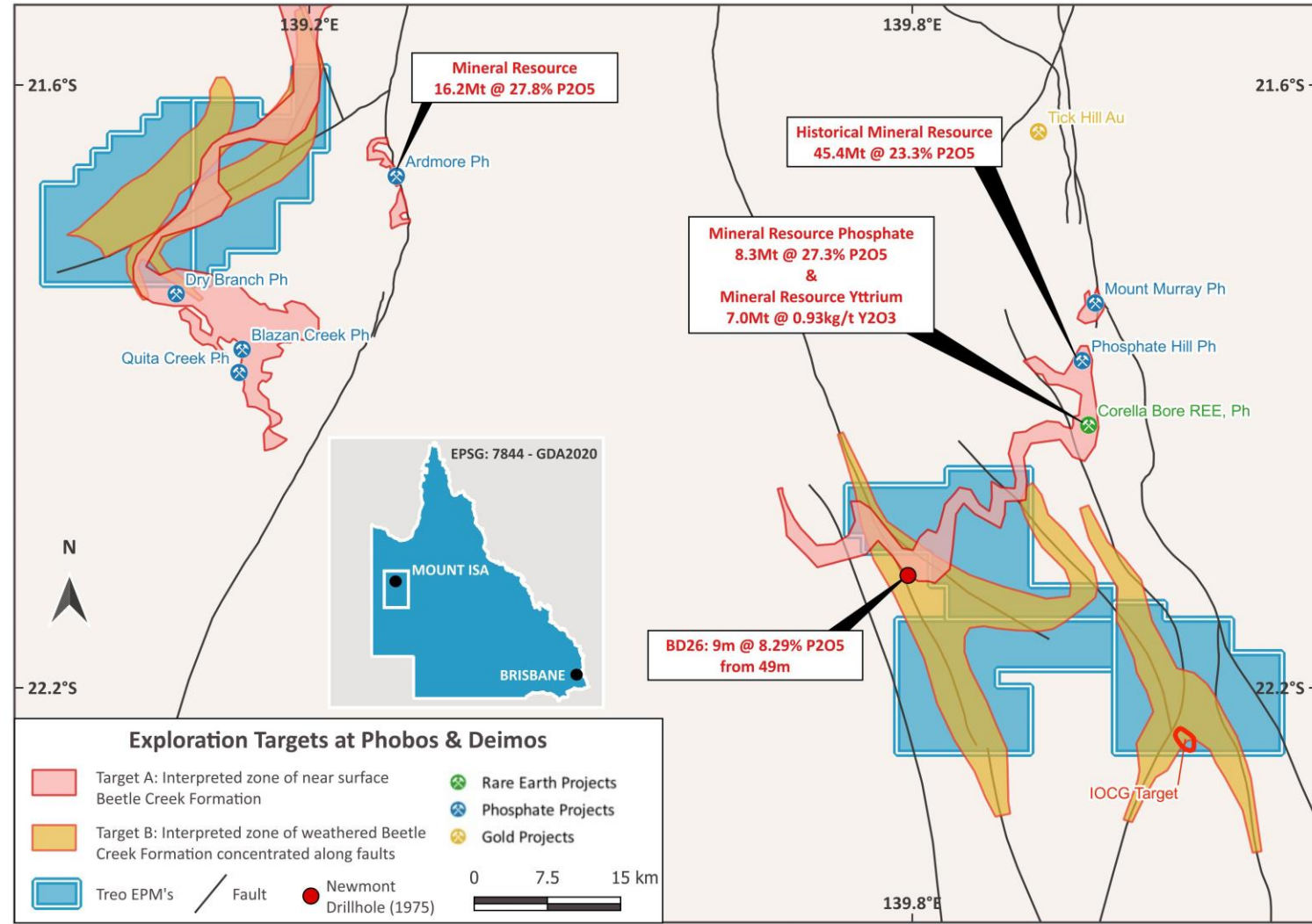
Traditional Owners

Working towards Native Title & Cultural Heritage Agreements



PHOBOS & DEIMOS – EXPLORATION FOR DSO PHOSPHATE + REEs

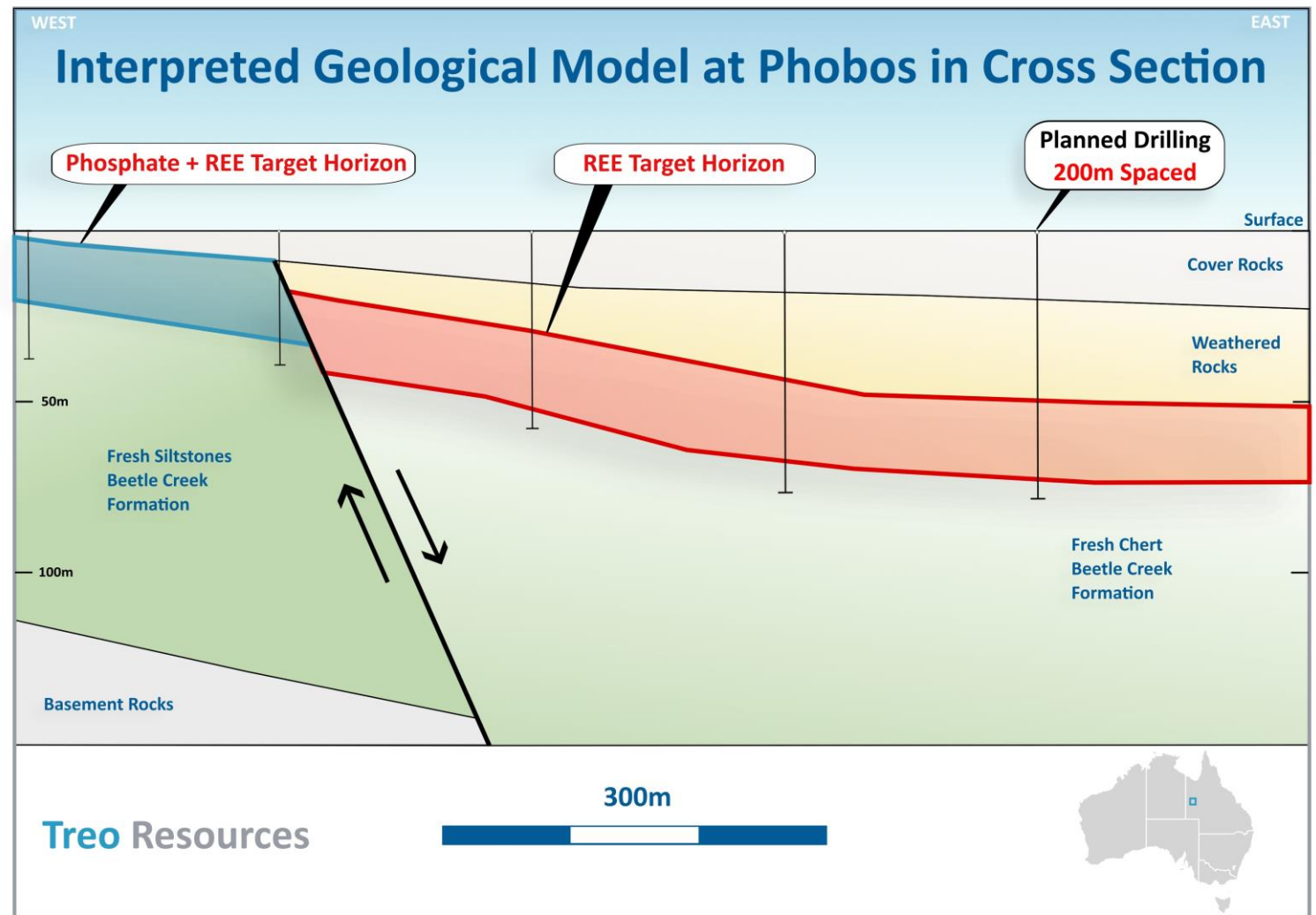
- Belt scale project targeting phosphate and REEs within or above the **Beetle Creek Formation**
- The presence of REEs in phosphorites has been documented at Corella Bore
- Extensive areas of shallow cover and limited drilling
- Modern and focused strategy to assess two target types:
 - **Target A: Phosphate** = near surface DSO phosphate within the Beetle Creek Formation
 - **Target B: REEs** = high-grade REEs along faults within the weathering profile above areas of interpreted Beetle Creek Formation
- Strong evidence of high-grade REE's:
 - Recent unpublished results from Valetich and Grigorescu¹ show strong REE concentrations of up to **2,000ppm TREEY** within the Beetle Creek Formation at both **Ardmore and Phosphate Hill**
 - **Weathering at Ardmore** produces a further upgrade, apparently through residual enrichment concentrated along faults¹, giving TREEY values in weathered phosphorite of **6,000ppm – 17,000ppm TREEY**



¹ Valetich, M and Grigorescu, M., 2020. REE Enrichment in Queensland phosphorite deposits., <https://www.youtube.com/watch?v=XULSvTKILT&t=362s>

PHOBOS & DEIMOS VALUE PROPOSITION – PHOSPHATE + REEs

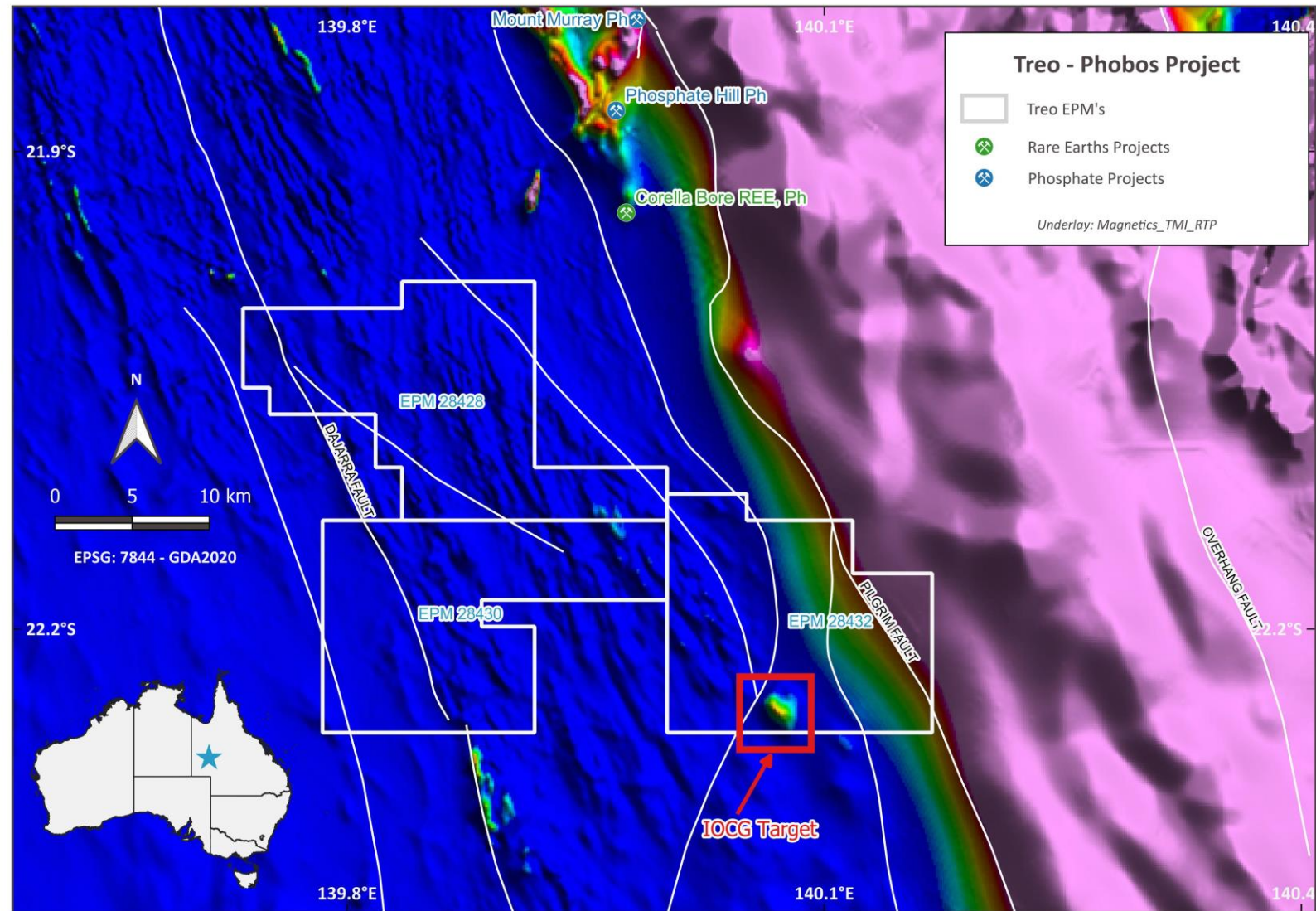
- Phosphate and REEs are interpreted to occur in both near surface Beetle Creek Formation and in weathered zones above Beetle Creek Formation
- This presents an opportunity to rapidly drill test a potential concurrent phosphate and REE bearing orebody with shallow (<75m) Aircore or RC drillholes
- We estimate both Projects could be drill tested within 2 years, with a potential DSO Phosphate + REEs Mineral Resource defined
- Once defined, because of the shallow nature of any potential orebody, the transition to developer could then be made within a relatively short timeframe
- Furthermore, recovery of REEs from phosphorites using known leaching methods in the USA has shown that nearly 100% of their total REE content can be extracted using dilute H_2SO_4 and HCl ¹
- Therefore, extraction of REEs from phosphorites at Phobos & Deimos could be dramatically cheaper than other REE orebody types



¹ <https://www.sciencedirect.com/science/article/pii/S1342937X14003128?via%3Dihub>

PHOBOS – IOCG TARGET

- IOCG target identified by Wells Fargo in 1993
- Strong magnetic anomaly along strike from Carnaby Resources – Nil Desperandum Cu discovery 110km to the north & Cooper Metals Brumby discovery
- Target sits at the southern apex of two regional large-scale faults providing pathways for hydrothermal fluid flow
- Target is undrilled
- Depth to basement estimated to be <100m
- Recent exploration in the Mt Isa-Cloncurry region shows that exploration for ‘blind’ deposits by drilling magnetic and EM anomalies along north/south trending faults is a successful and valid technique. e.g.
 - Cooper Metals (ASX:CPM) Brumby Ridge Copper Discovery
 - Carnaby Resources (ASX:CNB) Nil Desperandum Copper Discovery

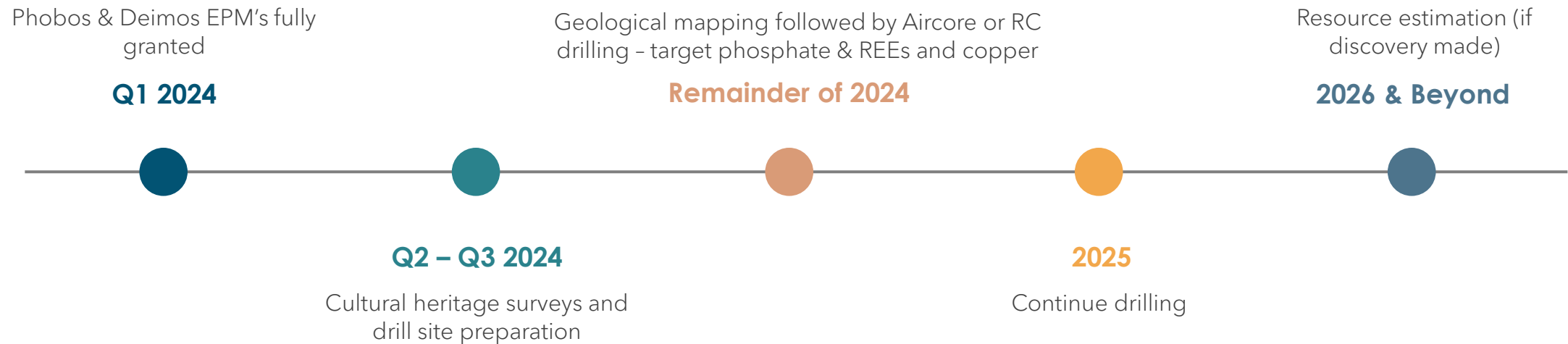


PHOBOS & DEIMOS – POTENTIAL TO RAPIDLY TRANSITION TO DEVELOPER

Phosphate and REEs are interpreted to occur in both near surface Beetle Creek Formation and in weathered zones above Beetle Creek Formation within 50m to 75m of the surface. Phobos also contains a strong magnetic “bullseye” IOCG target that is undrilled.

This presents an opportunity to rapidly test and then drill out a potential concurrent phosphate and REE bearing orebody, whilst also testing for a blind IOCG target within 100m of the surface.

Possible analogy with RareX’s Cummins Range Phosphate and REE Project



LOTUS PROJECT - OVERVIEW

Project Location

40km east of Middlemount in QLD
Access via the May Downs Road from Middlemount

Ground Position

176km² of tenure

Exploration Target

REE-Niobium mineralised carbonatite

Large Circular Shaped Magnetic Anomaly

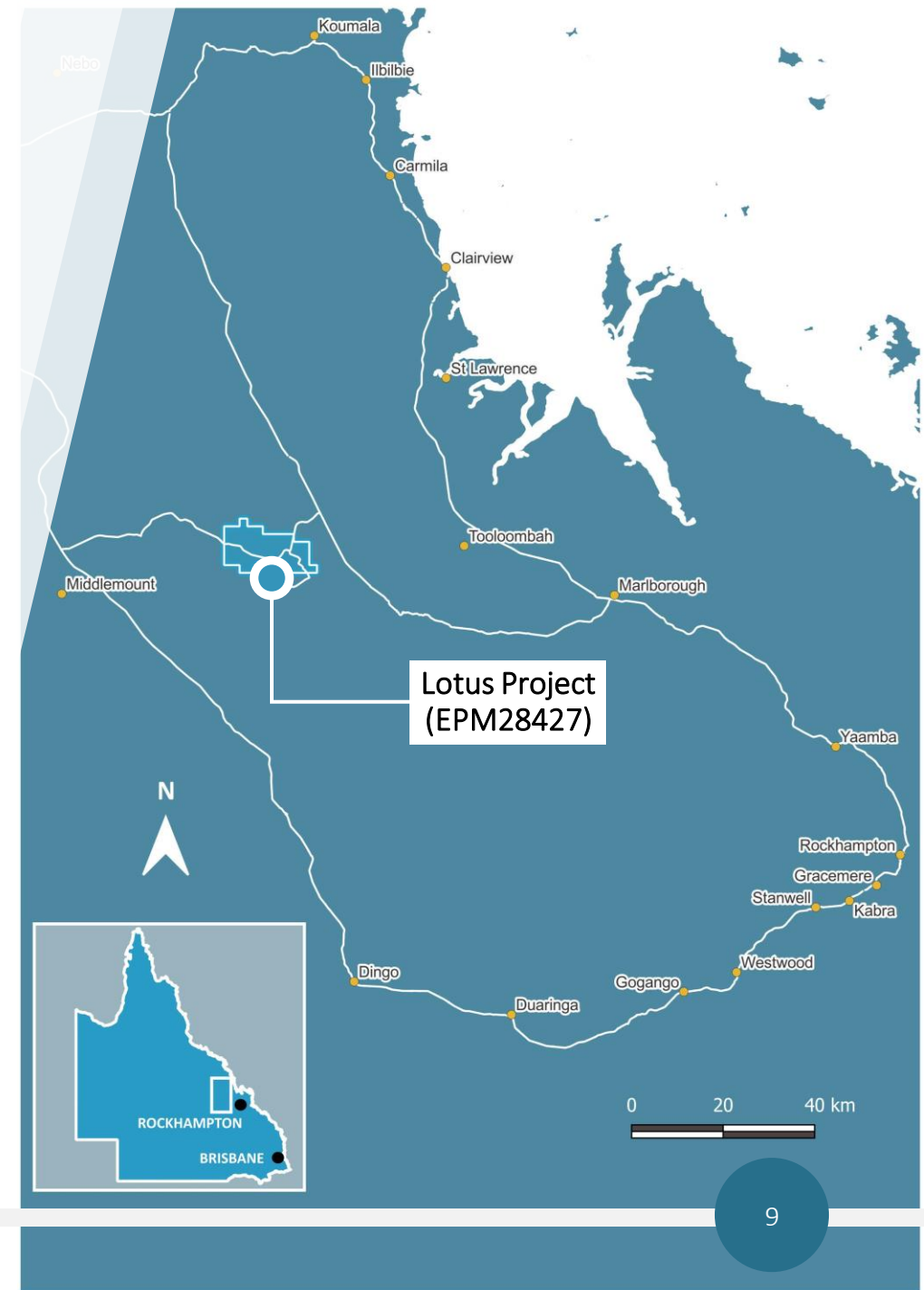
Is this a buried Niobium-REE carbonatite?

1 wholly owned EPM

EPM28427 expected to be granted in Q1 2024

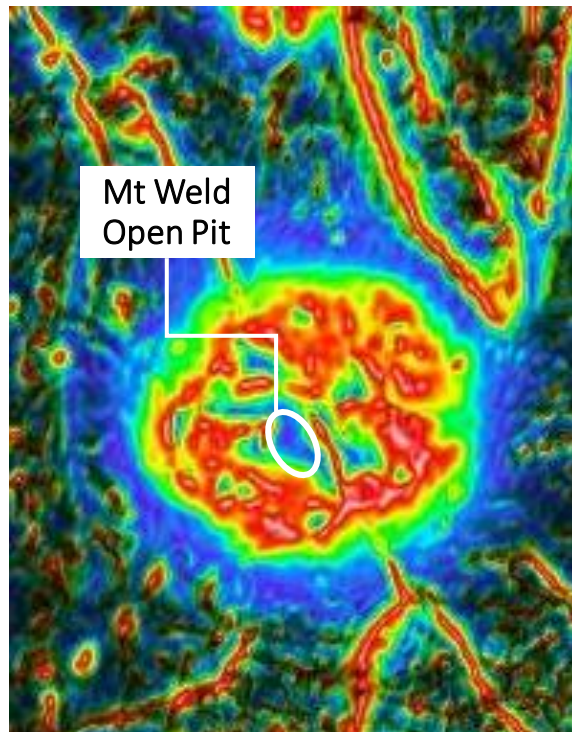
Traditional Owners

Working towards Native Title & Cultural Heritage Agreement

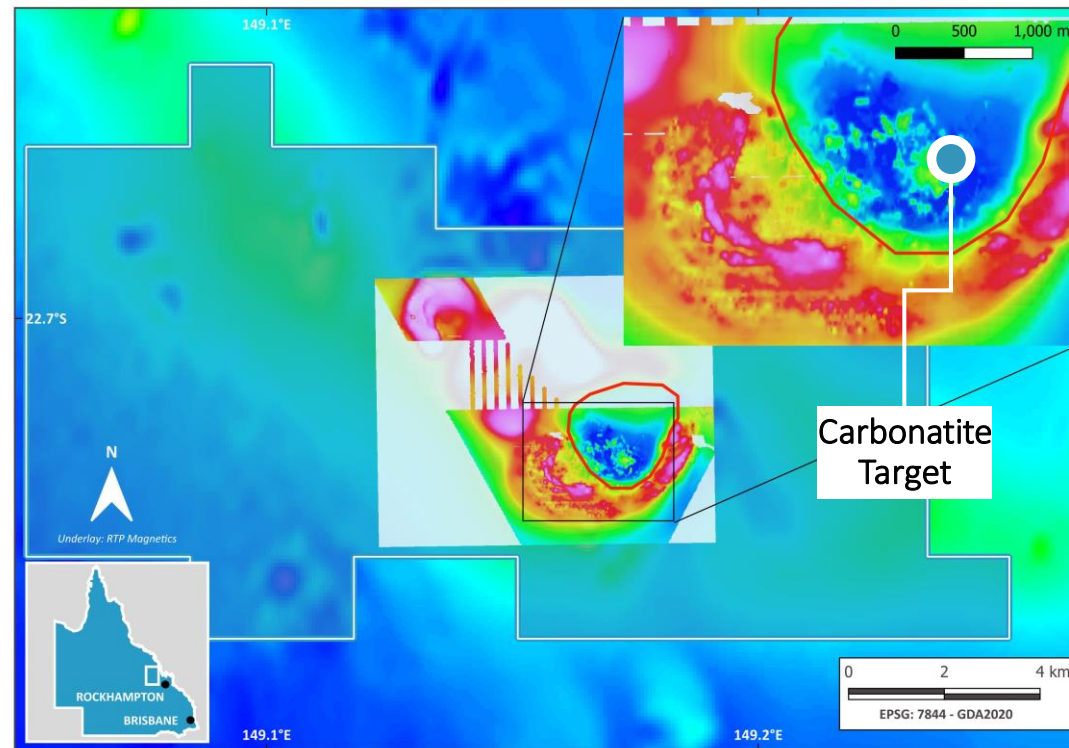


LOTUS – A MT WELD ANALOGY?

- Many carbonatite bodies occur in association with cylindrical, intrusive bodies & high amplitude gravity with a reduced magnetic response
- Mt Weld, one of the worlds highest grade carbonatite deposits, sits beneath 20-50m of sediments within the reduced magnetic response of a high amplitude gravity anomaly
- Lotus is also located within a reduced magnetic response and the anomaly lies beneath sedimentary cover



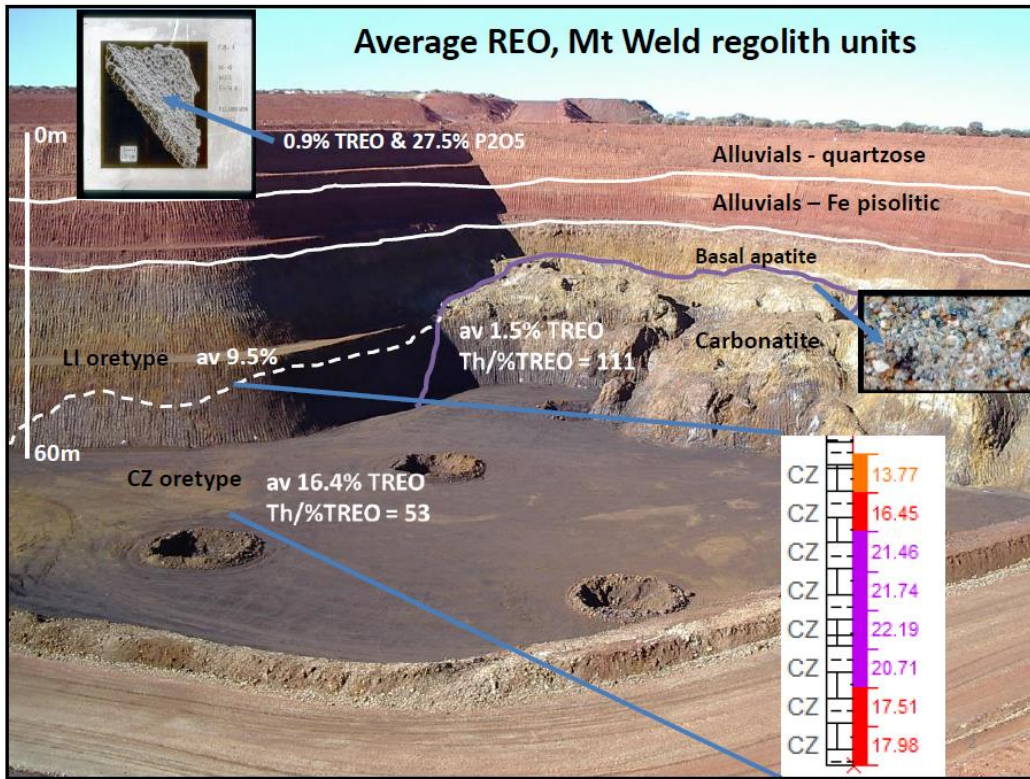
Mt Weld RTP Magnetic Response
Circular magnetic anomaly is 3.6km in diameter



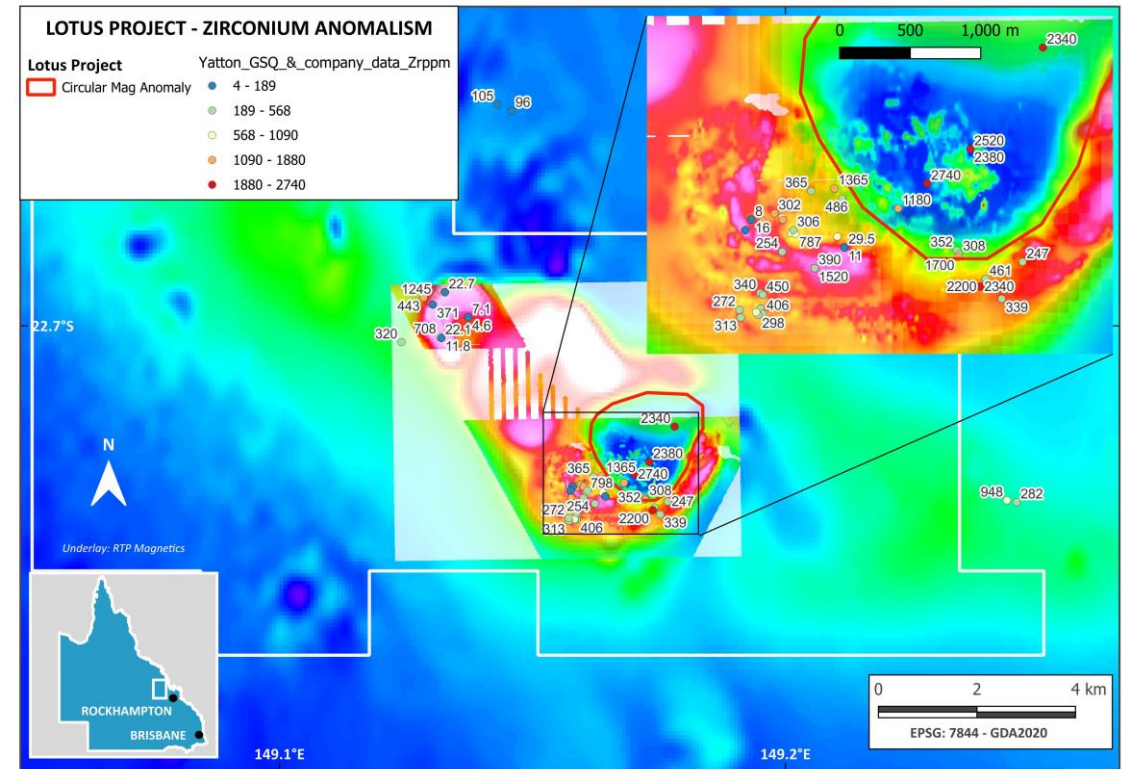
Lotus Detailed RTP Magnetics over Regional Magnetics
Lotus circular magnetic low approx. 2.1km in diameter

LOTUS – REE & ZIRCONIUM ANOMALISM AT SURFACE

- All the currently known economic REE resources at the Mount Weld deposit are hosted within lateritic regolith above the carbonatite
- The Mt Weld mineralisation consists of high-grade REE's and concentrations of zirconium, niobium and other critical minerals
- **At Lotus, we have a cerium and zirconium anomaly at surface immediately within the circular magnetic target indicating the potential for a weathered carbonatite at depth**



Mt Weld Regolith and TREO Content
Image from Hellman, April 2023

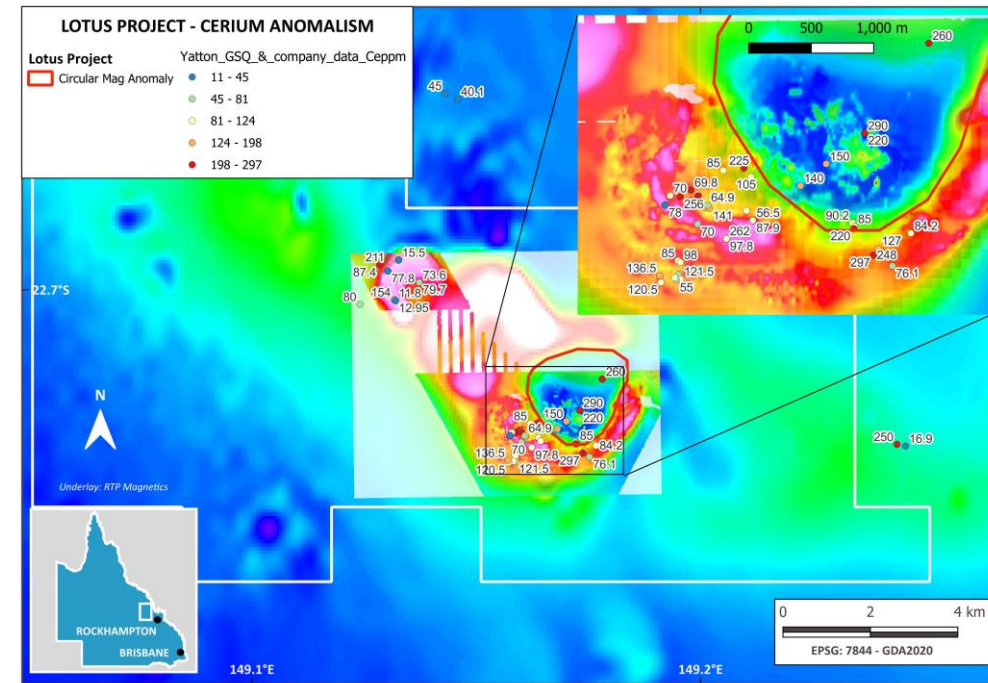


Lotus Detailed RTP Magnetics and Zirconium Anomalism
Zirconium up to 2740ppm within the circular magnetic low

LOTUS – NEXT STEPS

The Lotus EPM is expected to be granted in Q1 2024.

We have commenced discussions with the Native Title Holder and will have a finalised Native Title and Cultural Heritage Agreement in Q1 2024.



Lotus Detailed RTP Magnetics and Cerium Anomalism
Cerium up to 290ppm within the circular magnetic low

Lotus EPM granted & Cultural Heritage Agreement Signed

Q1 2024

Ground gravity

Q3 2024

Systematic RC Drill testing of key targets

2025

Q2-Q3 2024

Cultural heritage surveys

Q3 – Q4 2024

Soil/rock chip geochemistry

GIBRALTAR PROJECT - OVERVIEW

Project Location

5km south of Dubbo in NSW

Access via paved Obley Road from Dubbo

Ground Position

171km² of tenure

Proximal to World Class Critical Minerals Project

Gibraltar lies immediately north and south of ASM's Dubbo Project

Exploration Target

Alkaline igneous rocks rich in REEs & critical minerals

Multiple Outcropping Targets

Several outcropping alkaline igneous targets at surface

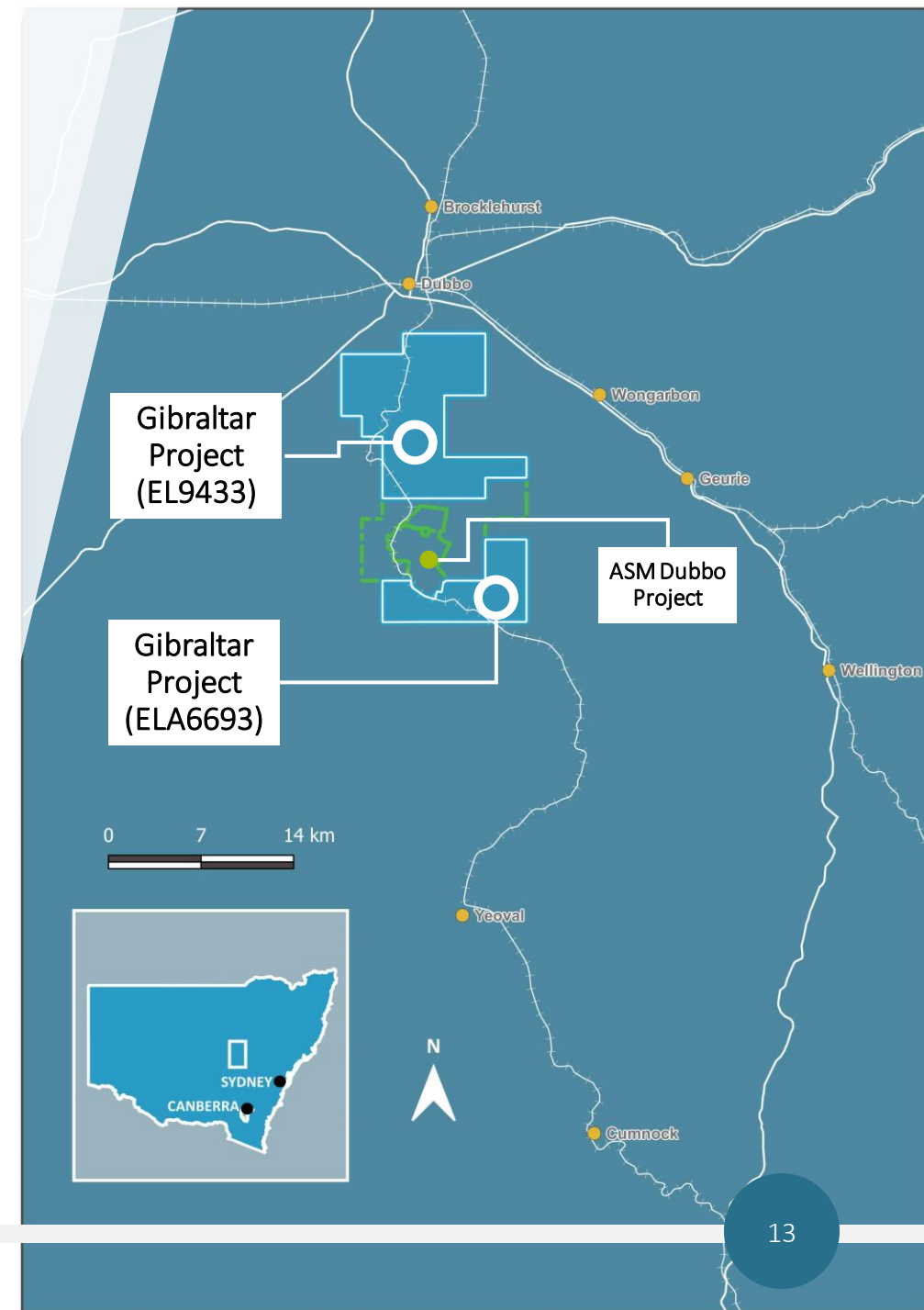
2 wholly owned EL's

EL9433 granted in June 2022

ELA6693 under application – expected grant in Q1-Q2 2024

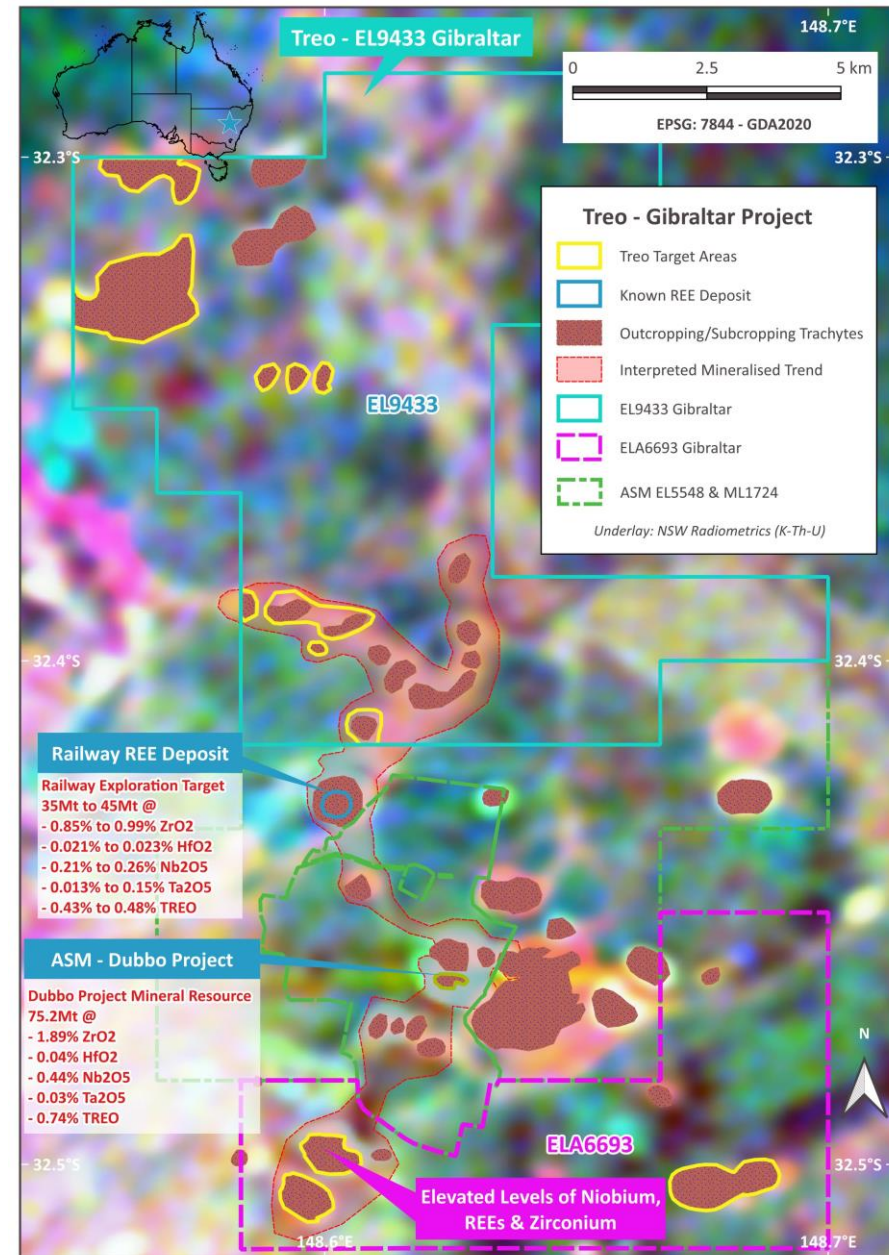
Land Access

Many landowners have been approached with all verbally approving land access to explore



GIBRALTAR PROJECT – SEARCHING FOR THE NEXT CRITICAL MINERALS OREBODY

- EL9433 has little historical exploration for REE & Critical Minerals
- Past exploration by ASM (and parent Alkane) has focused on development of the Dubbo Project (named the Toongi orebody)
- Limited regional exploration – **only 9 drillholes at the Railway Deposit**
- Results highlight the prospectivity of the region:
 - **RWRC002: 65m @ 0.99% ZrO₂, 0.26% NbO₂, & 0.46% TREO from 3m**
- The mineralised trend is interpreted to continue north into EL9433 and south in ELA6693.
- **Rock chip sampling over a trachyte in ELA6693 shows elevated concentrations of niobium, REEs and Zirconium**
- Targets = alkaline igneous rocks (Trachytes) outcropping at surface or intruding older Napperby Formation cover sediments
- **Trachytes in our tenure are the same trachytes as the Dubbo and Railway REE orebodies**
- We have also identified a number of alkaline targets underneath shallow alluvial cover



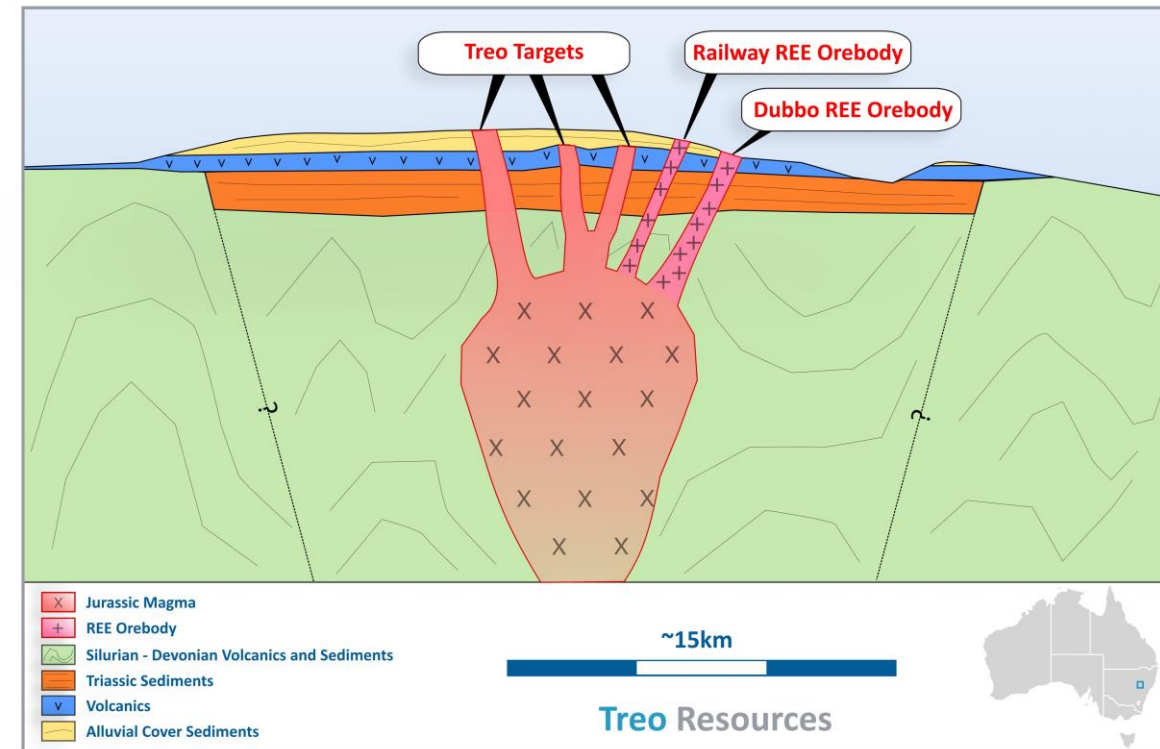
GIBRALTAR – NEXT STEPS

The key landholders at Gibraltar have already been contacted. Most have provided verbal approval to access their land, with a few remaining landholders yet to be reached

The key field component prior to drilling at Gibraltar will be systematic rock chip sampling of outcrop and pattern soil sampling to check for sedimentary hosted “enriched” REEs

No need for any further geophysics

Geological Model



Draft and sign land access agreements

Q1 2024

Soil geochemistry

Q2 2024

Interpreted Geological Model at Gibraltar

We’re targeting alkaline igneous rocks (trachytes) outcropping at surface or intruding older cover sediments

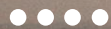
Shallow RC drilling (100m) testing key targets identified from geochemistry

Q3 2024 & Beyond

Q2 2024

Rock chip geochemistry

THANK YOU



Patrick Say



+61 438 337 864



patricksay01@gmail.com



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