



TERRAIN MINERALS

Presenting a new era of Lithium, Rare Earths and Gold exploration to support new and emerging technologies

ASX:TMX | JANUARY 2023





Important information

Forward Looking Statements

This presentation has been prepared by Terrain Minerals Ltd (“Terrain”, “the Company”) as a summary of the Company, its mineral assets & its plans to explore its tenements & for general information purposes only. This presentation contains material that can be construed as forward looking statements. This presentation is not & should not be considered as an offer or invitation to subscribe for or purchase any securities in Terrain, or as an inducement to make an offer or invitation with respect to those securities. No agreement to subscribe for securities in Terrain will be entered into on the basis of this presentation.

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Compliance Statement

The Company notes that within the announcement all the information is referenced directly to the relevant original ASX market releases of that technical data.

Terrain would like to confirm to readers that it is not aware of any new information or data that materially affects the information included in the relevant market announcement and, in the case of the estimates of mineral resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

Competent Persons Statement

The information in this report that relates to Exploration Results is based on information compiled by Dr J. Richard Russell (PhD, MAusIMM), principal of R. Russell and Associates, who is a Member of the Australian Institute of Geoscientists and a consultant to Terrain Minerals Limited. Dr Russell has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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’. Dr. Russell consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Company Profile

Capital Structure

Shares on Issue: ~905 Million

Unlisted Options

(@ 0.65 - 2.14 cents): 37 Million
various expiry dates to 2026

Market Cap (Million): 5.4

Cash at Hand (Million): 1.2

Investments Listed Shares (Million): 0.1

Share Price (cents): 0.7

Major Shareholders

Top 20: 46.7%

Top 100: 75.1%

Board & Associated: 19.2%

No. of Shareholders: 1,054





TERRAIN MINERALS

Board Members

Justin Virgin Executive Director

Mr Virgin has over eleven years' experience as a ASX Director of listed exploration companies as well as sixteen years of experience in the financial services and securities industry with expertise in providing a wide range of financial services which includes capital raisings, promotion, providing general corporate advice listed small-cap companies and other investment advice involved in negotiations, mergers, acquisitions and valuations. Mr Virgin also has over ten years of onsite mining experience operating in remote and isolated sites throughout WA and NT on site. His experience covers project acquisition and sale negotiations, mine closures and rehabilitation work as well as extensive preventative maintenance planning and execution on onsite mobile fleet and of exploration program.

Johannes Lin Non-Executive Director

Mr Lin has 7 years of management experience as an entrepreneur and Principal/Managing Director of Oprian Investments Pte Ltd with interests and focus in minerals and properties/property construction of Pasir Ria Apartments in Singapore and investment team member of Monarch Parksuites Condominium in Manila Philippines. Past experience includes corporate restructuring as member of advisory team in the restructuring of Singapore listed Enzer Holdings Limited where series of debt negotiations, debt buy-out, capital raising by placements, rights issues, debt to equity conversion and eventual takeover by a marine group successfully. He holds a Bachelor of Commerce, Finance and Accounting from University of Western Australia and has been a long-term investor in Terrain Minerals Limited.

Trevor Bradley Non-Executive Director

Mr Bradley is a highly-experienced geologist with extensive expertise in the technical and operational management of resource development projects within Australia and the emerging economies of South East and Central Asia. His professional interests lie in the area of confluence of mineral exploration, mining project development, project finance, and sustainable development.



Why Terrain Minerals?

Operating within regions known to host substantial mineral deposits with access to world class mining services

Pursuing "future-facing", high demand commodities that support new technologies and advanced electronics

Rare earths mineralisation and multiple potential lithium-bearing pegmatites confirmed across the Company's project areas

Targeting a potential company-making discovery in 2023

Significant drilling campaigns targeting rare earths, lithium and gold with the associated regular news flow, commencing from 1st quarter 2023

There are 1.7 tonnes of rare earths in an average wind turbine.



Why the emphasis on "future-facing" commodities?

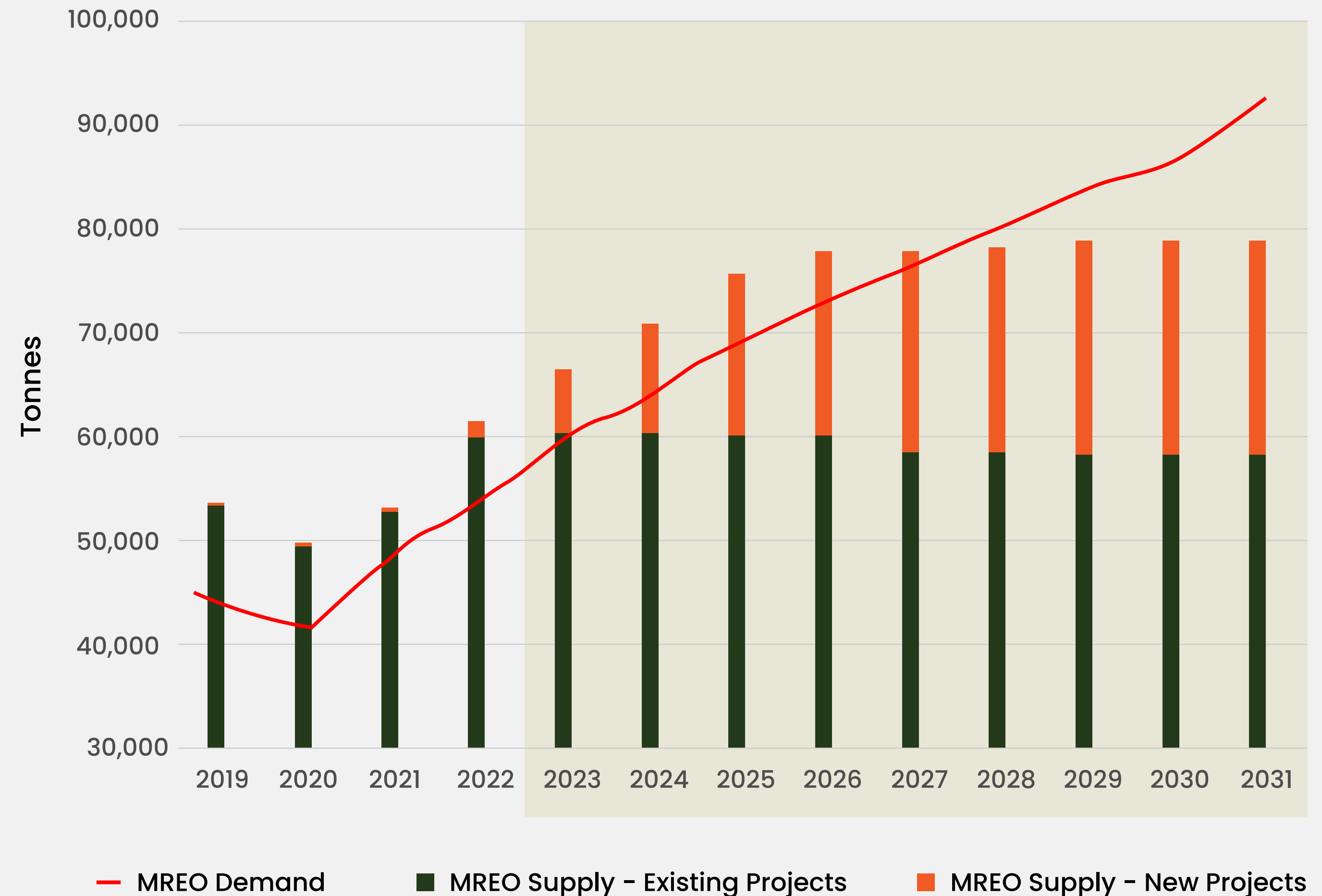
Even if ALL the planned projects come online and produce as forecast, there will likely still be supply deficits in key "future-facing" commodities such as lithium and rare earths.

That said, Terrain Minerals is aware that maximizing the speed to production is crucial to likewise maximizing shareholder return.

With strong and sustained tail winds behind the lithium and rare earths sectors, Terrain Minerals is committed to implementing a major exploration and drilling campaign across its portfolio of projects in 2023.

The ultimate objective is a company-making discovery and maiden mineral Resource within the coming 12 months.

Mixed Rare Earth Oxide (MREO) Supply vs Demand*



* 1 Argus, "Rare Earth Analytics", Report, April 2022

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Our Projects

 **Smokebush Lithium Project**
100% Terrain Minerals

 **Lort River Rare Earths Project**
100% Terrain Minerals

 **Mukinbudin Rare Earths Project**
100% Terrain Minerals

 **Smokebush Gold Project**
100% Terrain Minerals

 **Wild Viper Gold Project**
100% Terrain Minerals

 **Calytrix Gold Project**
100% Terrain Minerals





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Lithium

Approximately 8 kilograms of Lithium is needed for a single Electric Vehicle

WESTERN
AUSTRALIA

● Smokebush

OUR PROJECTS

Smokebush | Lithium Project

Located 350 kilometres north of Perth.

Positioned over the prospective eastern corridor of the Mt Mulgine granite intrusion and adjoining Yalgoo greenstone belt.

Outcrop mapping confirmed the presence of pegmatite units within the Smokebush "Goldilocks Zone."



- » Lithium
- » Rare Earths
- » Gold



OUR PROJECTS

Smokebush | Lithium Project

No previous lithium exploration reported across the project area.

Outcropping pegmatites recently confirmed within the Company's Smokebush Project by field mapping.

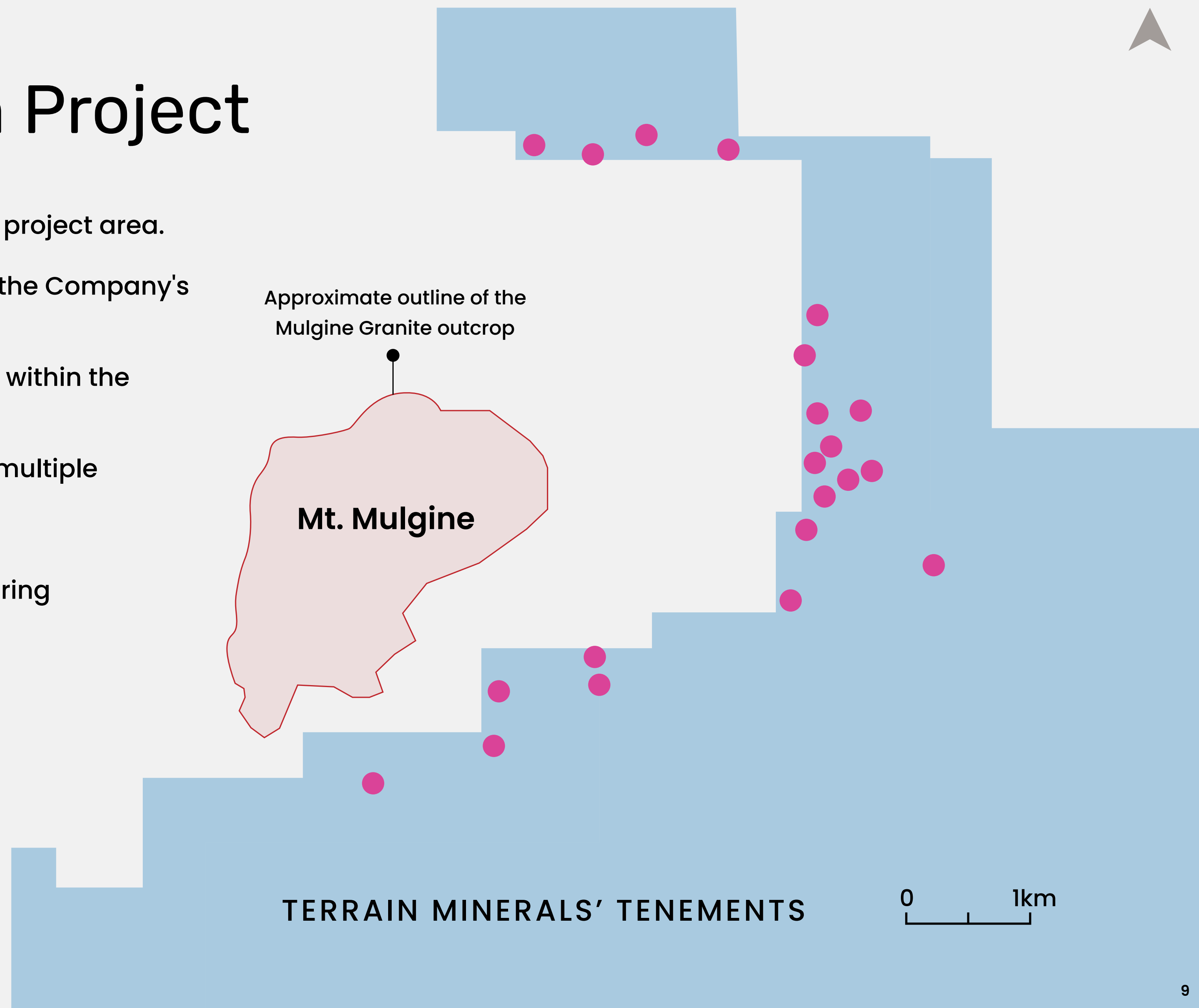
More than 15 additional potential pegmatites noted within the project area.

Follow-up mapping and geochemical sampling of multiple potential lithium-hosting units commencing.
(Assays expected in 1st quarter of 2023)

Maiden drilling program of prospective lithium-bearing pegmatites scheduled for 1st quarter of 2023.

KEY

● Pegmatite locations





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Rare Earths

There are 4 tonnes of rare earths in each Virginia-class submarine.

Geo-political tensions are driving the global desire to develop alternative rare earths supply chains to protect manufacturing and defence.



WESTERN AUSTRALIA

Lort River

OUR PROJECTS

Lort River | Rare Earths Project

Located 650 kilometres southwest of Perth.

Covers 320 square kilometres of prospective geology.

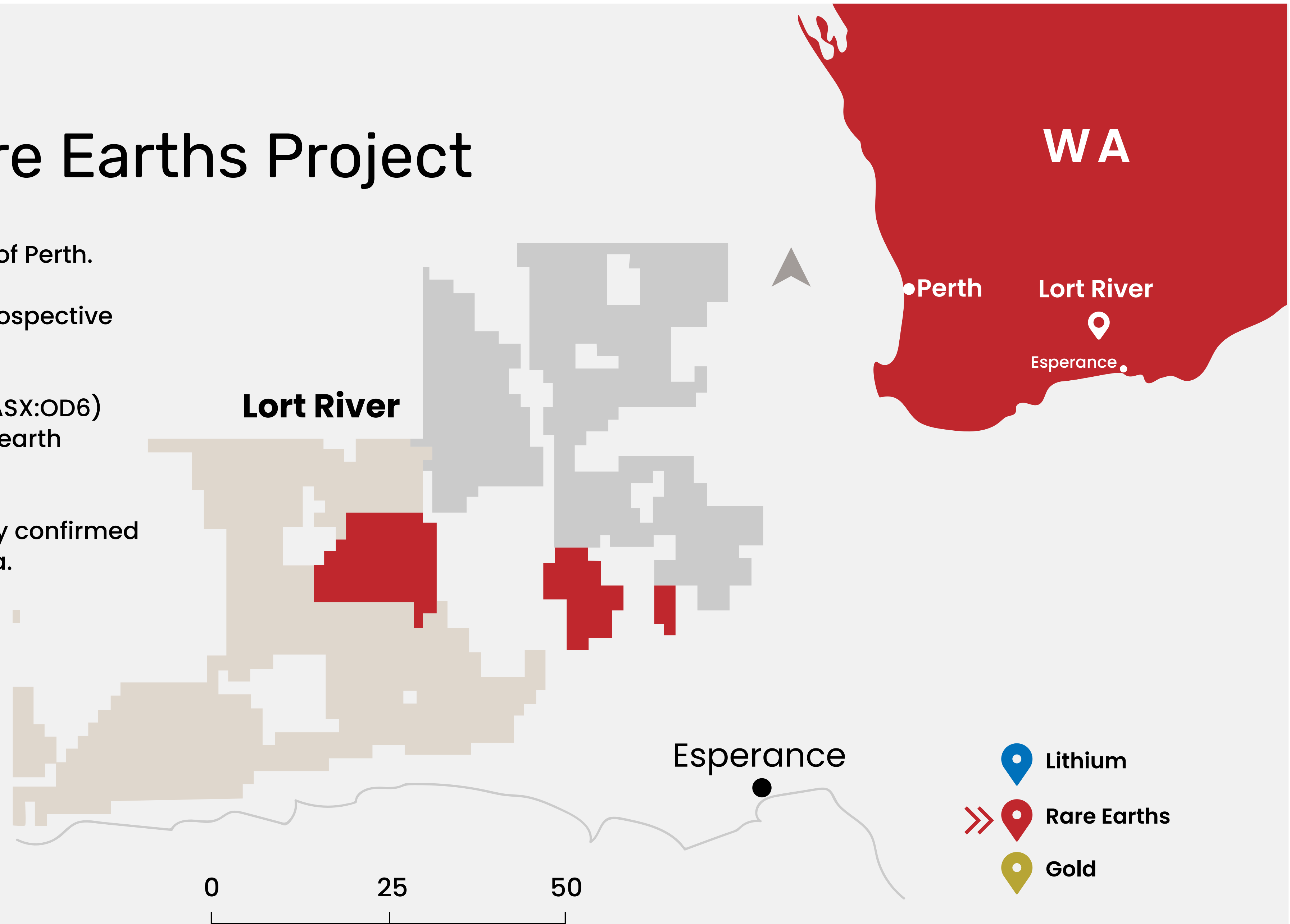
Immediately adjoins OD6 Metals (ASX:OD6) and Meeka Metals (ASX: MEK) rare earth projects.

Rare earth mineralisation is already confirmed within Terrain Mineral's project area.

Terrain Minerals Ltd ASX:TMX
TMX Market Cap \$5M

OD6 Ltd ASX:OD6
OD6 Market Cap \$17M

Meeka Gold Ltd ASX:MEK
MEK Market Cap \$62M



* Reference: <http://terrainminerals.com.au/upload/documents/InvestorRelations/Releases/20220505FinalLortRiverREEgranted.pdf>

OUR PROJECTS

Lort River | Rare Earths Project

Encouraging Total Rare Earth Oxide (TREO) grades returned from initial shallow auger drilling.

Heritage Agreement in place.

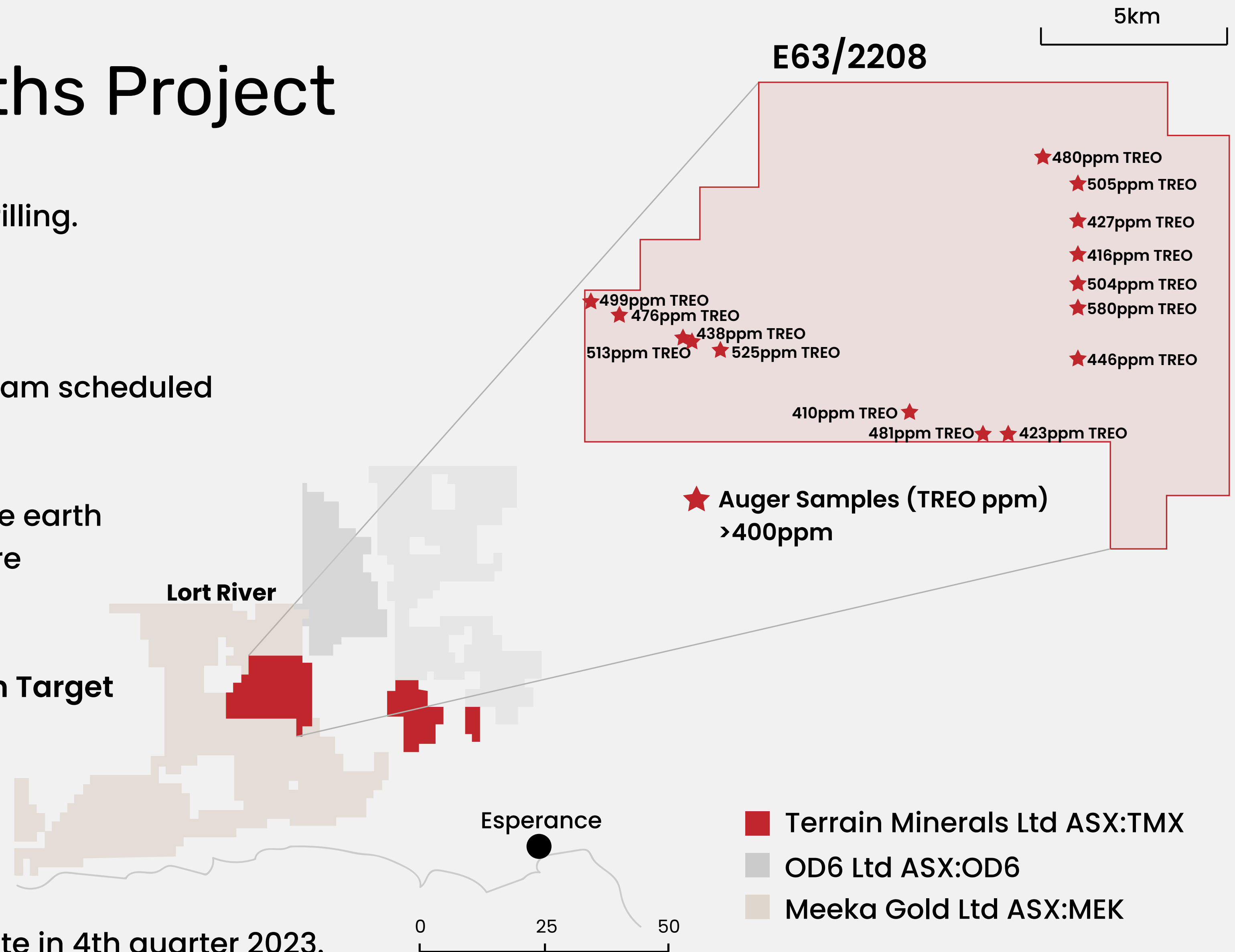
Significant 8,500 metre air core drilling program scheduled from 1st quarter 2023.

Air core drill program designed to test for rare earth mineralisation the entire 320 square kilometre Lort River project area.

Drilling to support reporting of an Exploration Target early 2nd quarter 2023.

Infill drilling and metallurgical test work scheduled from 2nd quarter 2023.

Targeting a Maiden Mineral Resource estimate in 4th quarter 2023.



* Reference: <http://terrainminerals.com.au/upload/documents/InvestorRelations/Releases/20220505FinalLortRiverREEgranted.pdf>



Hard rock vs clay Rare Earths comparison

Advantages of Clay Deposits	Clay Rare Earths	Hard Rock Rare Earths
Project location Geographic distribution of resources and production	Project location Dominated by Asia, specifically China and Myanmar	Project location Mainly China, also projects in Australia and the United States of America
Element composition Rare earth element assemblage and concentration	Element composition Both light (Nd and Pr) and heavy (Tb and Dy) rare earth elements typically exist	Element composition Predominately light rare earth elements (Nd, Pr)
Extraction intensity Relative operating costs	Extraction intensity Low	Extraction intensity High
Exploration dynamics Cost and time	Exploration dynamics Inexpensive aircore drilling into soft sedimentary material for swift exploration	Exploration dynamics Costly, hard rock diamond drilling required for slower, expensive exploration
Mine development Capital expense	Mine development Low Shallow deposits, progressive mining and rehabilitation	Mine development High Large open pit with large operating fleet and costly closure
Processing Style and environmental impact	Processing Simple, proven, low acid metallurgy with inert tailings and solvent recycling	Processing Complex metallurgy, high temperatures and pressures, strong acids and often radioactive tailings

* Source: OD6 Metals Ltd <https://www.od6metals.com.au/rare-earths/#clayvshard>



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Gold



OUR PROJECTS

Smokebush | Gold Project

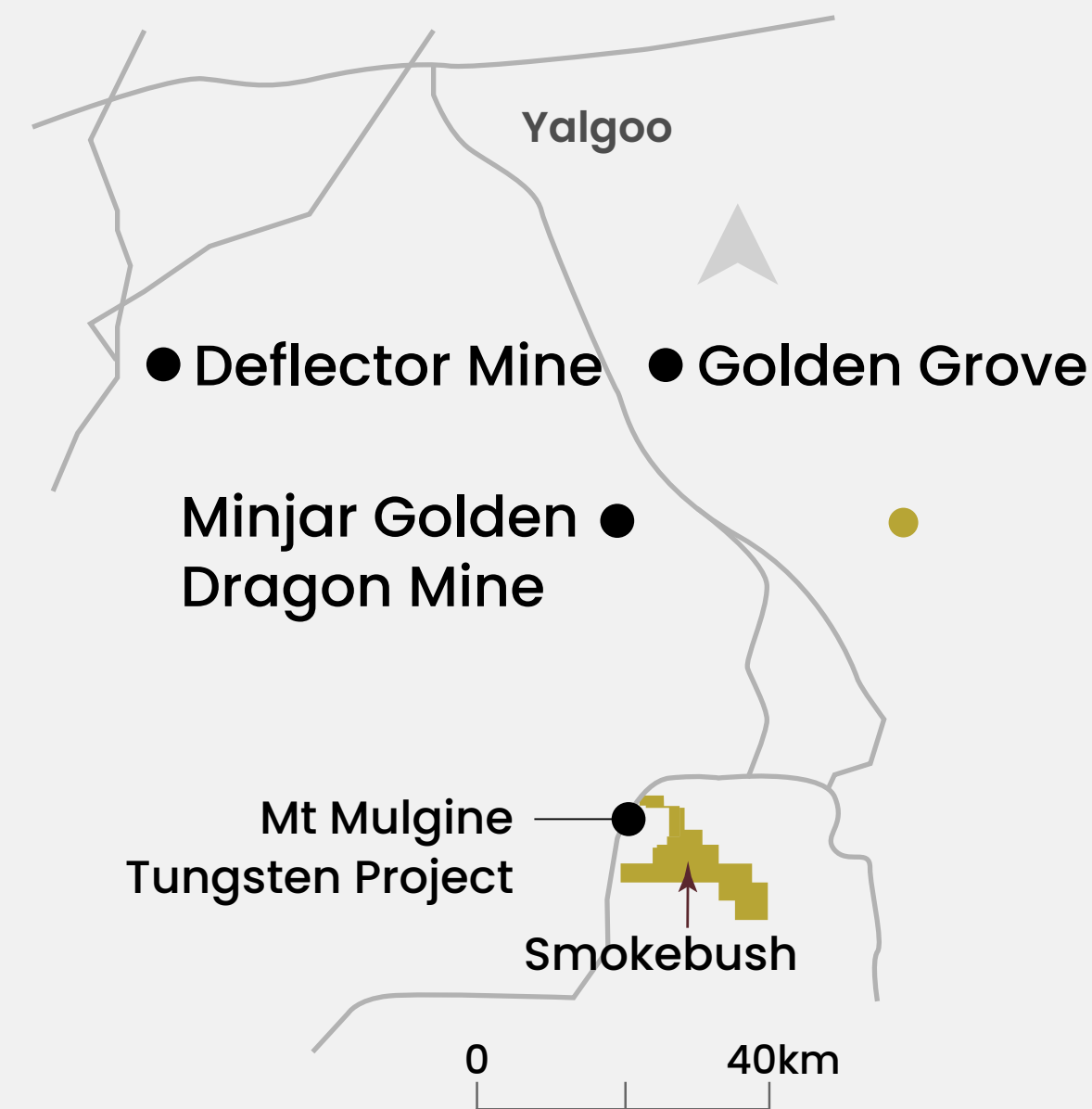
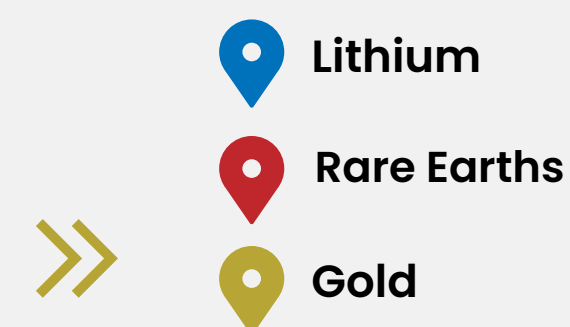
Historic exploration focused on areas of outcrop or minimal cover.

Significant potential for bedrock-hosted gold mineralisation beneath barren transported cover.

Priority targets include;

- 1. Wildflower** - previous drilling returned an encouraging 15 metres @ 1.4 g/t gold from 10 metres.
- 2. Paradise City** - Previous drilling returned 3 metres @ 2.17 g/t gold from 10 metres.
- 3. Larin's Lane** - Magnetic "high" feature located within an interpreted structural corridor.

Induced polarisation (IP) survey, aimed at defining zones of higher-grade gold mineralisation, scheduled for 2nd quarter 2023.



Smokebush Gold Project

- Wildflower Gold Prospect
- Paradise City Gold Prospect
- Hurley Gold Prospect



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Project Pipeline

Hurley prospect – Smokebush Gold Project

- Previous drilling returned :
 - 10 metres @ 1.4g/t gold from 15 metres (MM084) and
 - 2 metres @ 2.5g/t gold from 51 metres (MMRC074)
- Potential for gold mineralisation at depth and along strike of known mineralisation

Wilson's Arc – Wild Viper Gold Project

- Rock chip sampling returned positive results including 13.6 g/t gold and 7.7 g/t gold
- Project surrounds Red 5 (ASX: RED) Great Western gold mine
- Drill testing of interpreted extension of Great Western mineralisation in 2nd quarter 2023

Calcaing prospect – Mukinbudin Rare Earths Project

- Targeting pegmatite-hosted Dysprosium, Neodymium, Terbium and Praseodymium
- Ultra high resolution airborne and radiometric survey to define pegmatites and define primary controls on mineralisation, anticipated to commence immediately tenement granted



Planned Work Program* | 2023

Lithium Work Program

Reconnaissance drilling - (Smokebush Project)

Resource-focused drilling - (Smokebush Project)

Metallurgical test work - (Smokebush Project)

Rare Earths Work Program

Air core drilling - (Lort River Project)

Resource-focused infill drilling - (Lort River Project)

Metallurgical test work - (Lort River Project)

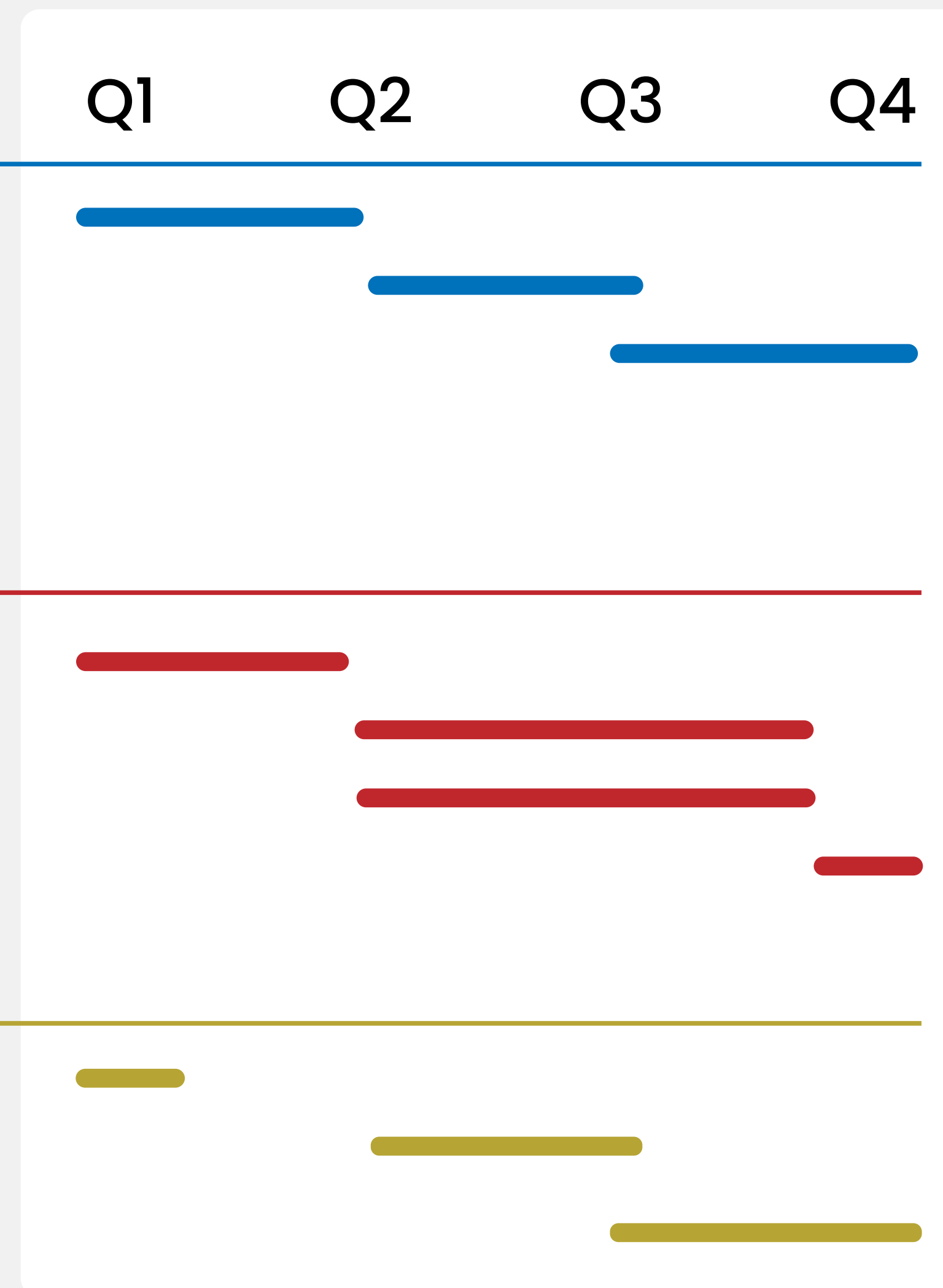
Maiden JORC Resource - (Lort River Project)**

Gold Work Program

Induced Polarisation (IP) Survey - (Smokebush Project)

Reverse circulation drilling - (Wild Viper Project)

Drill Campaign - (Smokebush Project)



* Subject to change; dependent on (amongst other things) the result returned from the Company's exploration activities each quarter and Company's ability to raise additional capital when required

** Subject to change; dependent on (amongst other things) drill results and metallurgical test work

A new era of **Terrain Minerals** is here. Are you with us?

8,500+ metres of drilling targeting rare earths and lithium commencing early 2023

Targeting potential company-making discovery in 2023

Utilising proven exploration approach and industry-standard tools in world leading mining jurisdiction

Focused on "future-facing" commodities including lithium and rare earths

Operating in regions known to host significant mines

Favourable geology including pegmatites and clay-hosted rare earth mineralisation already confirmed across project areas

Motivated and focussed team driving regular news flow anticipated throughout 2023



Want to know more? Contact Terrain Minerals

Principal Registered Office

Suite 2, 28 Outram Street

West Perth WA 6005

PO Box 79, West Perth WA 6872

Telephone: +61 8 9381 5558

terrain@terrainminerals.com.au

Share Register

Computershare Investor Services Pty Ltd

Level 2, Reserve Bank Building

45 St George's Terrace

Perth WA 6000

Telephone: +61 8 9323 2000

terrainminerals.com.au



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