

# American Rare Earths

(ASX: ARR; OTC: ARRNF; FSE: 1BH)

March 2023  
Quarterly Activities

# Disclaimers and Forward Looking Statements

## Disclaimers

This presentation contains forward-looking statements that involve subjective judgement and analysis and accordingly, are subject to significant uncertainties and risks, many of which are outside the control of, and are unknown to, American Rare Earths (“ARR”). In such circumstances, the forward-looking statements can be identified by the use of forward looking words such as “may”, “will”, “expect”, “intend”, “seek”, “estimate”, “believe”, “continue” or other similar words.

No representation, warranty or assurance is given or made in relation to any forward-looking statement by ARR or it’s representatives, In addition, no representation, warranty or assurance is given in relation to any underlying assumption or that any forward-looking statements will be achieved. Actual future events may vary materially from the forward looking statements and the assumptions on which the forward-looking statements are based. Accordingly, presentation readers are cautioned not to place undue reliance on such forward looking statements as a result of the uncertainties.

ARR wishes to caution readers that these forward-looking statements are based on economic predictions and assumptions on reserves, mining method, production rates, metal prices and costs (both capital and operating) developed by ARR management in conjunction with consultants.

This presentation and the forward-looking statements made in this presentation, speak only as of the date of the presentation.

Accordingly, subject to any continuing obligations under the Corporations Act and the Australian Securities Exchange Listing Rules, ARR disclaims any obligation or undertaking to publicly update or revise any of the forward-looking statements in this presentation, whether as a result of new information, or any change in events, conditions or circumstances on which any such statements is based.

## Competent Person Statement

The information in this report that relates to Exploration Results is based on information compiled by Mr. Jim Guiling. Mr. Guiling is a Member of a Recognised Overseas Professional Organisation included in a list promulgated by the ASX (SME Registered Member of the Society of Mining, Metallurgy and Exploration Inc). Mr. Guiling is Principal of independent consultants World Industrial Minerals LLC. Mr. Guiling has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking 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. Guiling consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.

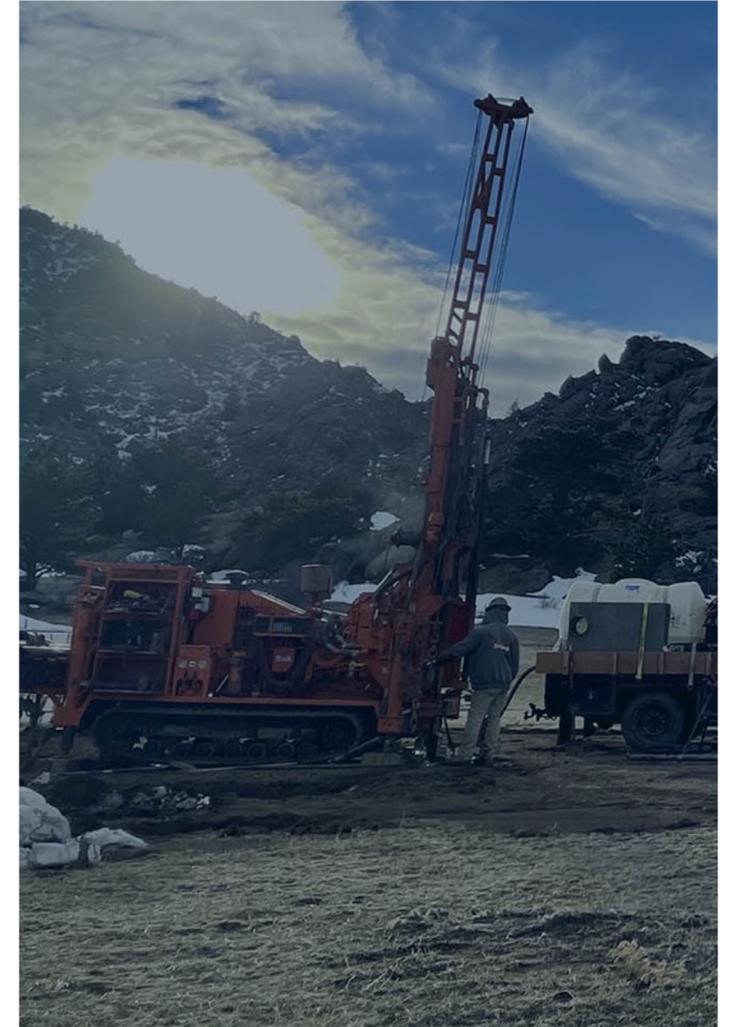
The information in this document that relates to Mineral Resource Estimate is based on information provided by Mr Alfred Gillman. Mr. Gillman is Principal of the independent consultant firm Odessa Resources Pty Ltd. Mr. Gillman is a Fellow and Chartered Professional of the Australian Institute of Mining and Metallurgy (AUSIMM) and 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 JORC Code. Mr. Gillman consents to the inclusion in the report of the matters based upon the information in the form and context in which it appears.

The mineral resources disclosed in this presentation are compliant with NI 43-101 standards which are close to the JORC Code in their key definitions. La Paz mineral resources can therefore be quoted as “qualifying foreign estimates” according to ASX listing rules.

ARR confirms it is not aware of any new information or data that materially affects the information included in the original market announcement, and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. ARR confirms that the form and context in which the Competent Person’s findings presented have not been materially modified from the original market announcement.

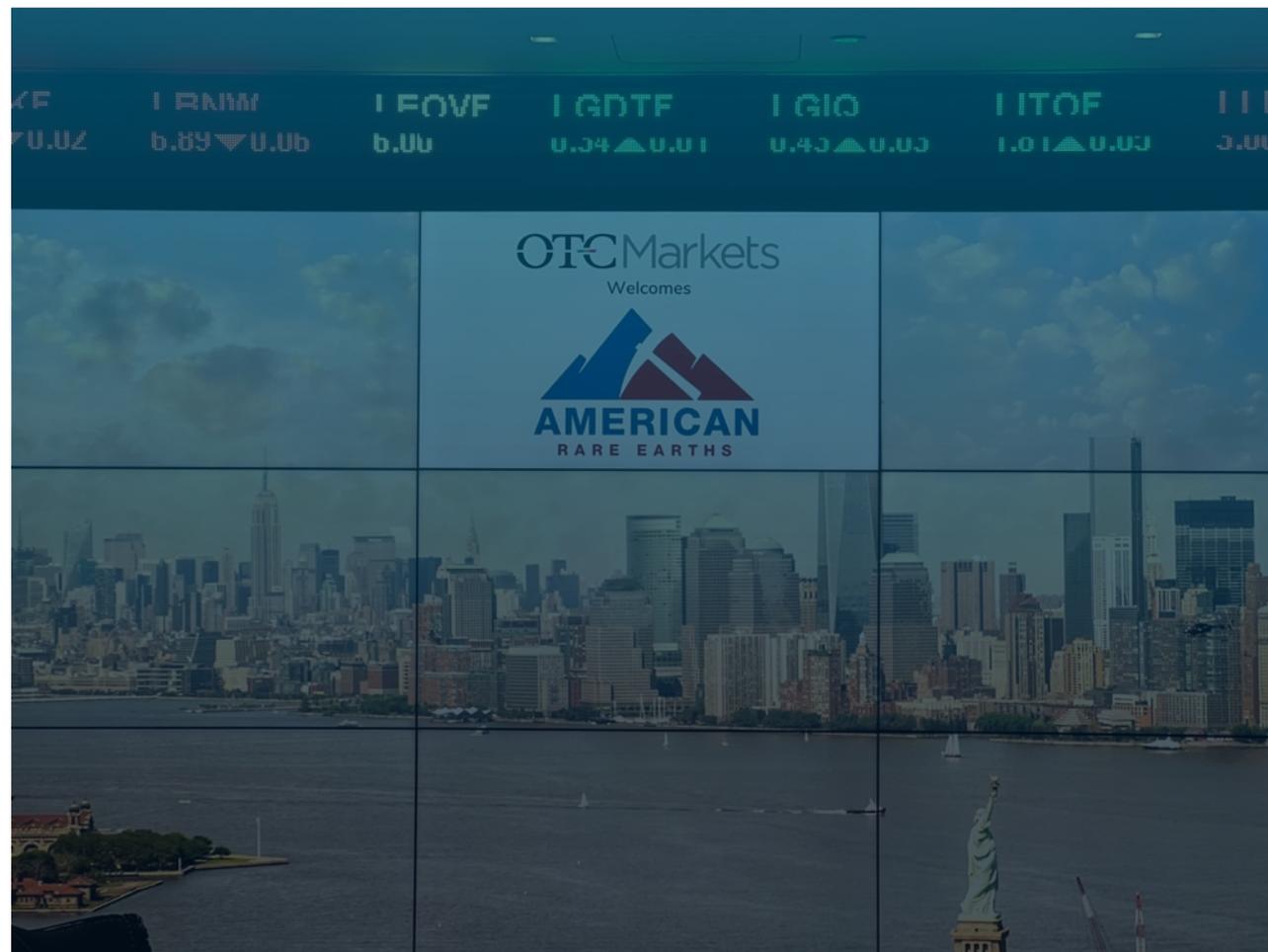
# Highlights for the March Quarter

- 1.43 billion tonne Maiden JORC Resource at Halleck Creek Project, Wyoming, USA
- Continued success with Halleck Creek metallurgical test work
- 118 unpatented federal lode mining claims at the new County Line prospect area add approximately 855 hectares (2,113 acres)
- Mel Sanderson transitioned to President of North American Operations and continues role on the Board.
- Mr Mark Terry was appointed as interim CFO



# Financials

- Well-funded to deliver on our objectives.
- On 31 March 2023, we had a cash position of \$13.465m.
- In addition to its strong cash position, the Company holds significant financial assets associated with ASX listed Cobalt Blue Holdings (COB).



# Halleck Creek Maiden JORC Resource

- 1.43 billion tonne Maiden JORC Resource at Halleck Creek Project, Wyoming, USA
- Identified 4.73 million tonnes of contained Total Rare Earth Oxides (TREO).
- Includes 1.05 million tonnes of highly valuable neodymium and praseodymium (NdPr).
- Mineralisation contains TREO average grade of 3,309 ppm, including NdPr at 22.2%.
- The deposit runs from surface to depths of up to 175.5m with consistent grades throughout, making deposit ideal for large-scale, low-cost open pit mining.
- The deposit is environmentally friendly and lower cost with negligible levels of penalty thorium and uranium.

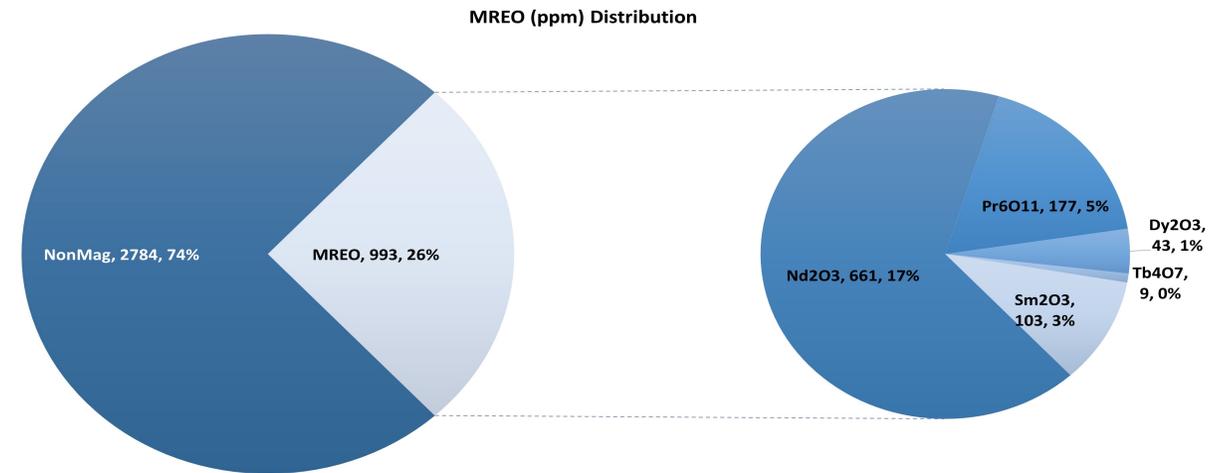


# 1.43 Billion Tonne Maiden JORC Resource

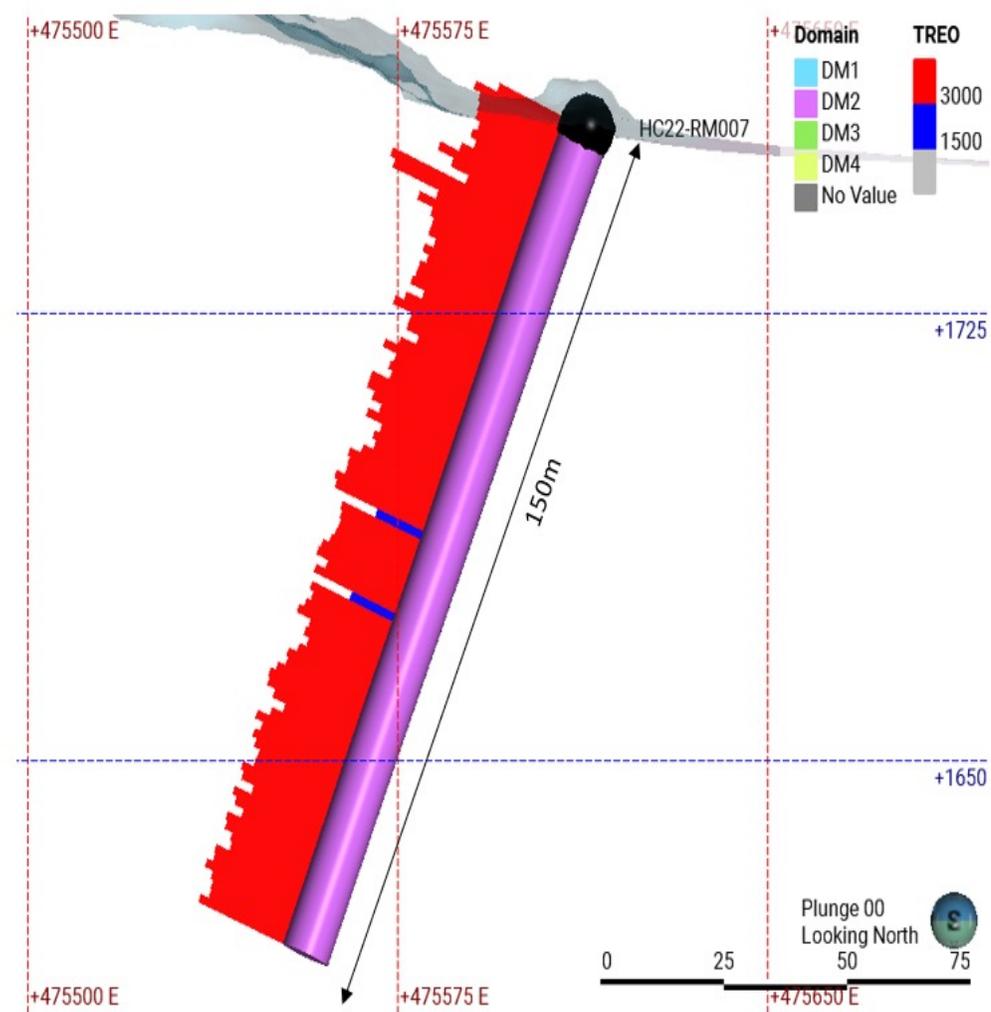
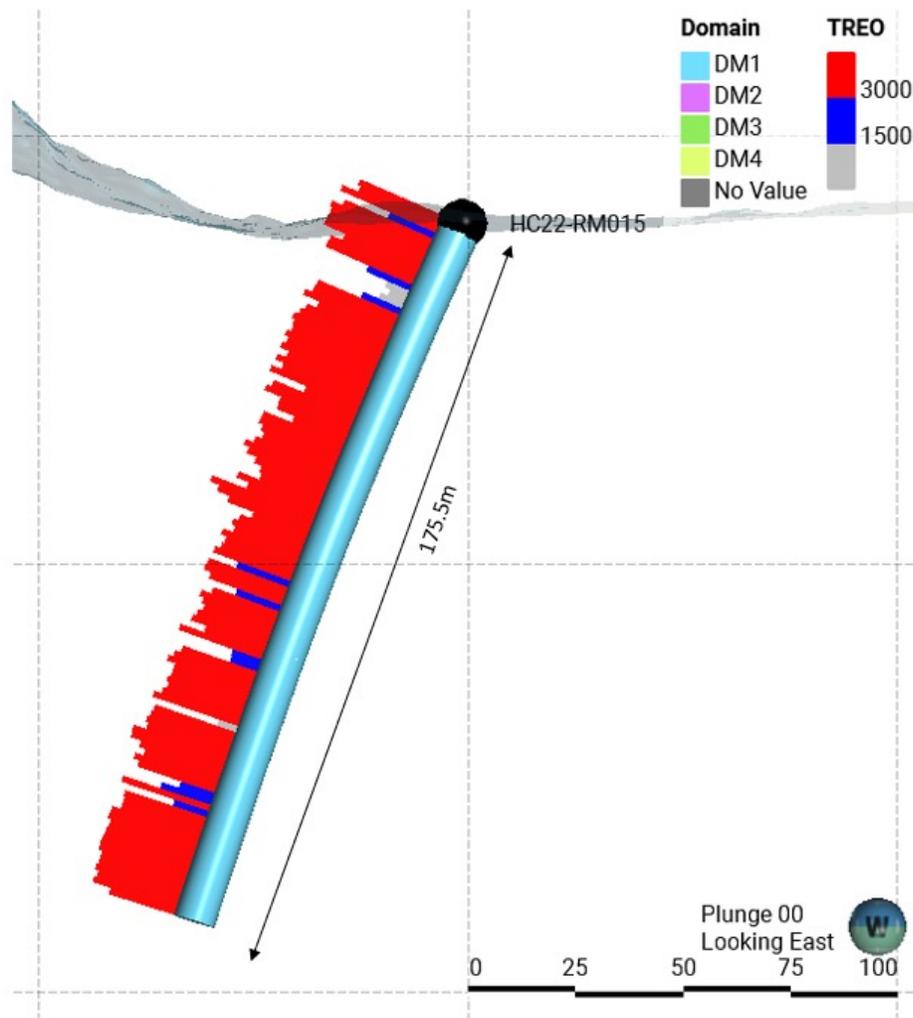
Resource Area	Tonnes (millions)			Kg TREO (millions)			Kg NdPr (millions)			Grade (ppm)	
	Indicated	Inferred	Total	Indicated	Inferred	Total	Indicated	Inferred	Total	TREO	NdPr
Overton Mountain	348	434	782	1,202	1,464	2,666	274	326	600	3,408	767
Red Mountain	274	373	647	907	1,158	2,065	202	248	450	3,190	695
Grand Total	622	807	1,430	2,109	2,622	4,731	477	573	1,050	3,309	734

- Magnet Rare Earth Elements (Nd, Pr, Dy, Tb, Sm) comprise approximately 26% of the total rare earths
- Magnetic Rare Earth Distribution:
  - Nd<sub>2</sub>O<sub>3</sub> at 661 ppm (17%),
  - Pr<sub>6</sub>O<sub>11</sub> at 177 ppm (5%),
  - Sm<sub>2</sub>O<sub>3</sub> at 103 ppm (3%),
  - Dy<sub>2</sub>O<sub>3</sub> at 43 ppm (1%), and
  - Tb<sub>4</sub>O<sub>7</sub> at 9 ppm (0.09%)

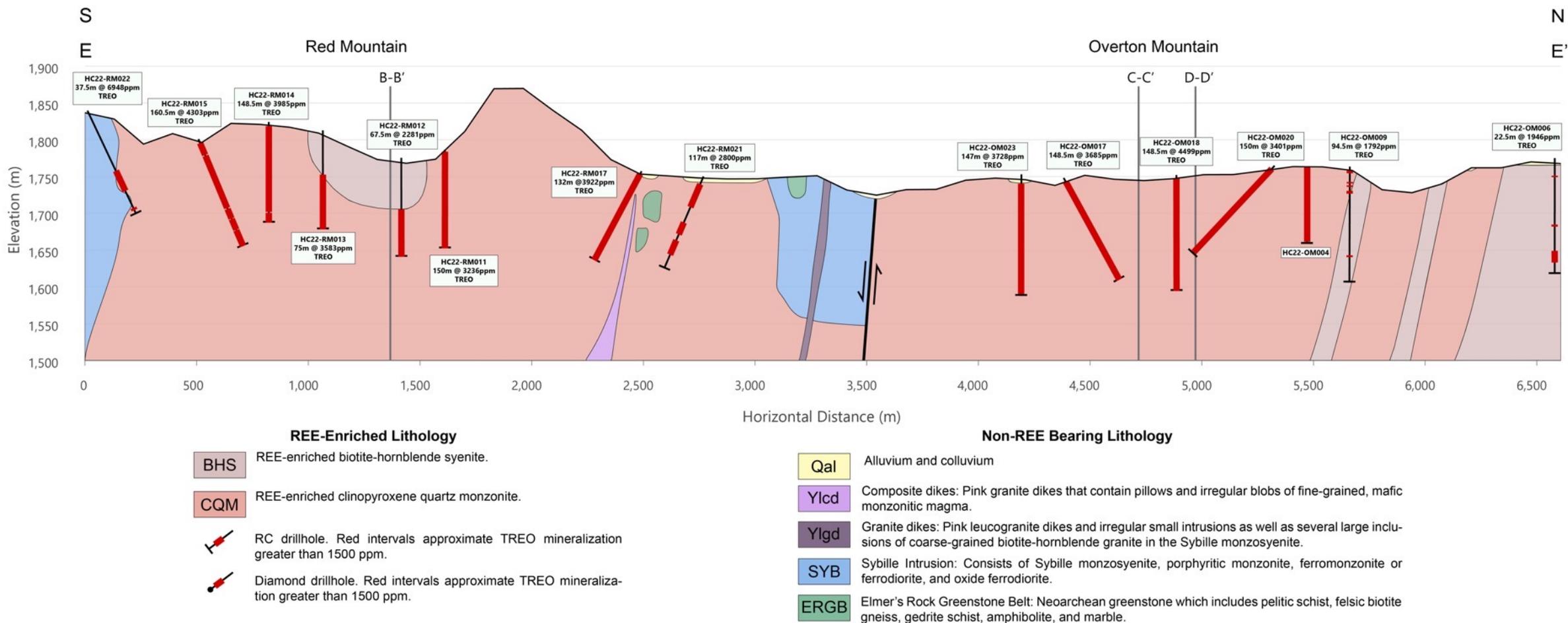
## Magnetic Rare Earth Distribution



# Significant Intercepts & Consistent Mineralisation



# Red Mountain and Overton Mountain



# Outlook for June Quarter

The recent Halleck Creek JORC Resource exceeded the Company's expectations and it is now focused on accelerating the development by:

- Continuing with further metallurgical test work programs to optimise the process flow sheet; and
- Commencing work on scoping study activities and economics.



# Contact Us

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