



American Rare Earths Ltd

ASX: ARR OTCQB: ARRNF

February 22, 2022

"Developing Critical Mineral Resources for a Sustainable Future"

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.

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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.

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Competent Person Statement

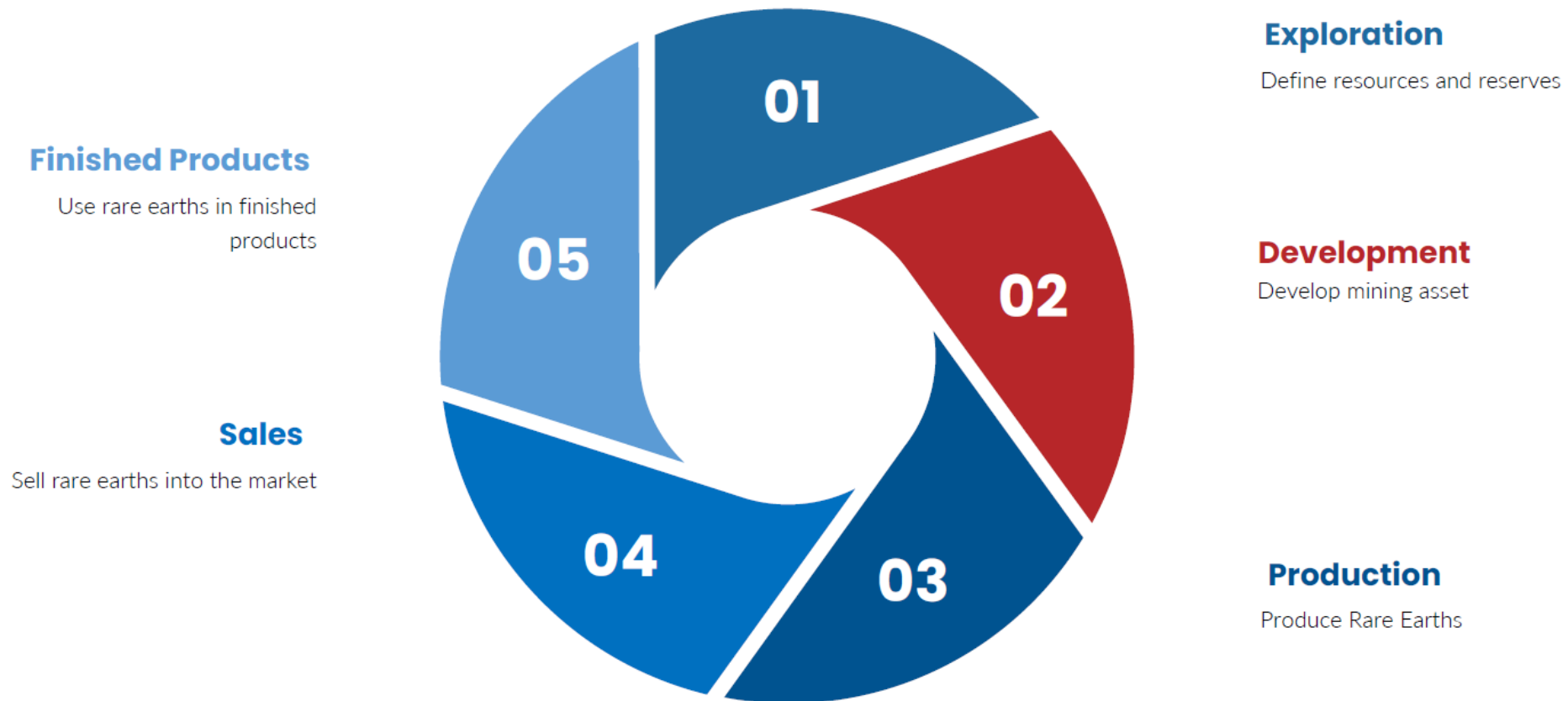
The information in this report that relates to Exploration Results is based on information compiled by Mr. Jim Guiling. Mr. Guiling is a Member of a Recognised Overseas Professional Organisation included in a list promulgated by the ASX (SME Registered Member of the Society of Mining, Metallurgy and 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.

“Building the next major Rare Earth and Critical Minerals Company to secure supply for the United States of America”



Investment Highlights



Compelling Market

Green Economy/Revolution
Rapid Growth in EV & Wind Turbines
Supply Demand Deficit
Increasing Prices
USA Securing Critical Minerals

Scale

Large, diverse & growing mineral deposit suite potential
>1 Billion tonnes of mineralized ore
One of the largest in North America

Cleaner & Greener

Negligible Thorium & Penalty Elements
Collaborating on renewable, sustainable processing

Leadership

Diverse, experienced US leadership & technical team
Track record of achievement

Quality

High volumes of magnet metals (Nd/Pr) and Scandium
1 of 5 classified US REE deposits in development

Value

Modest market capitalization & healthy cash position

Location

Mining friendly jurisdictions of AZ, WY, & NV
World-class infrastructure and workforce for high-efficiency open-cut mining

US Gov Engagement

Co-Applicant to DOD and DOE R&D projects supporting US supply chain strategy

Corporate Information

(ASX: ARR; OTCQB: ARRNF)

Offices

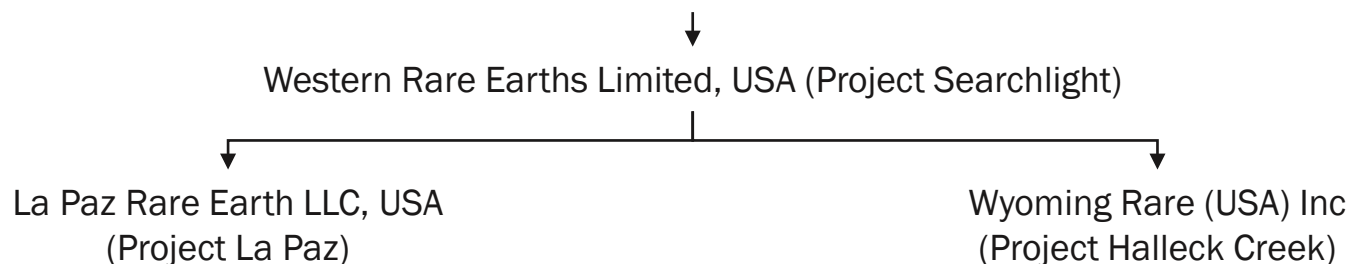
Sydney	NSW, AU
USA HQ	2410 W Royal Palm Rd
Phoenix	AZ, USA

Capital Structure (AUD)

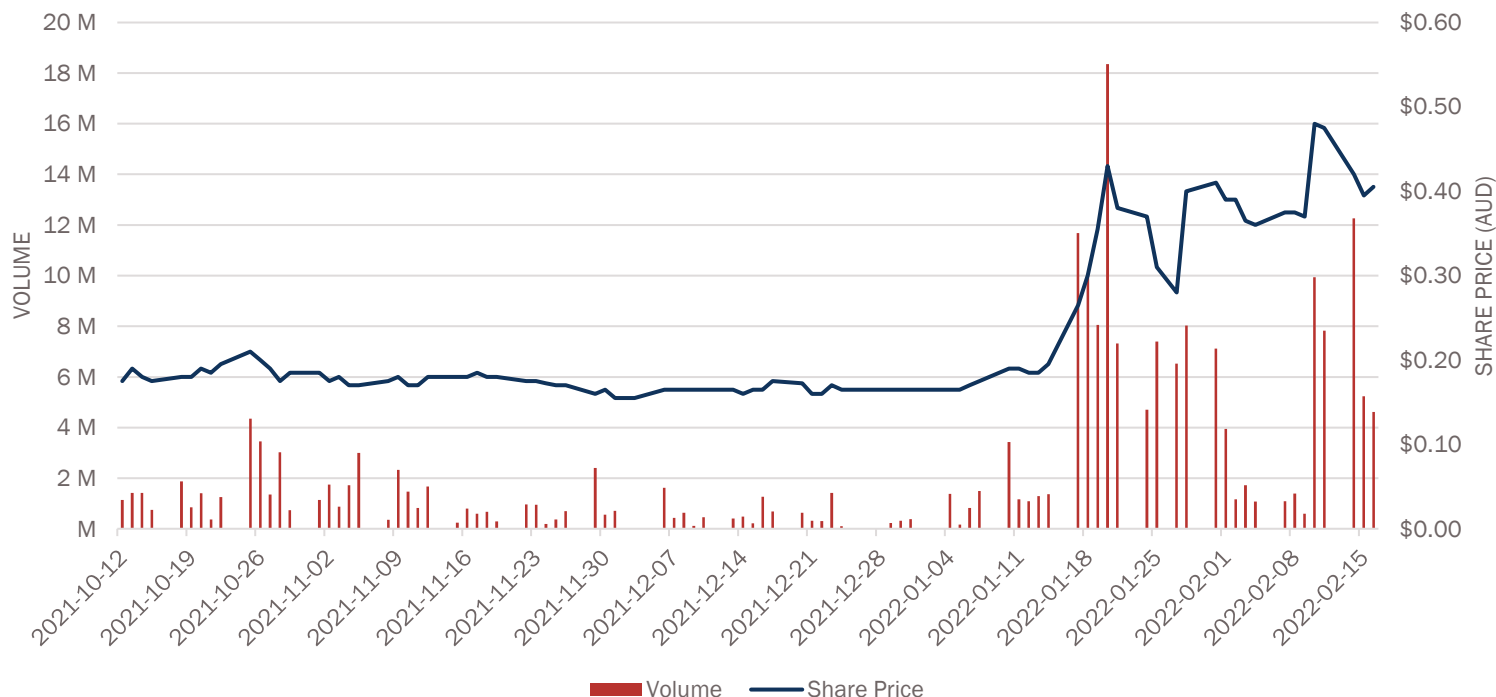
Price (16 Feb 2022)	\$0.405
12 month hi-low	\$0.06 - \$0.54
Shares Outstanding	393.15m
Market Cap	\$159m
Cash (at 31 Dec 2021)	\$8.16m

Company Ownership Structure

American Rare Earths Limited (Australia)



Share Price History (16 February 2022)



Key Projects

Searchlight, NV

- <30km from only producing REE mine in US
- Initial sampling encountered substantial grades of heavy and magnet REE
- Exploration planning underway

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Halleck Creek, WY

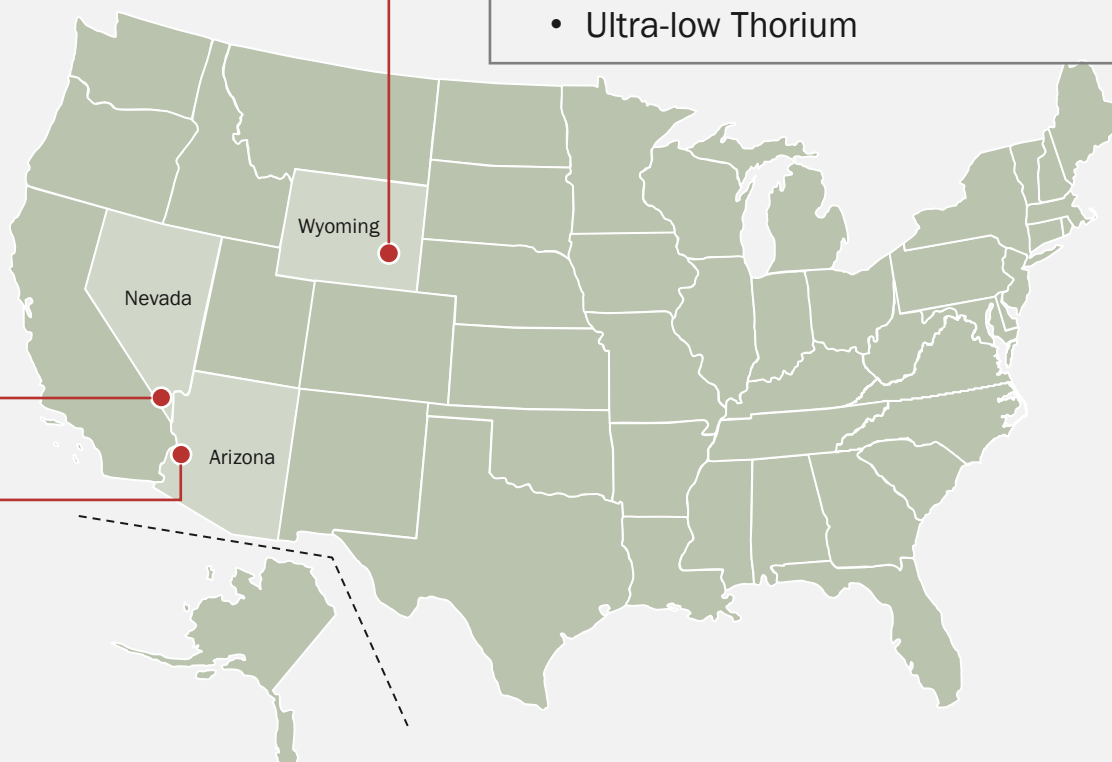
- Surface sampling shows high grade REEs >3000ppm avg TREO
- Maiden drill program being prepared
- Ultra-low Thorium

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La Paz, AZ

- Largest US Exploration Target in development
- Priority Project
- High volume Magnet Metals (Nd,Pr) & Scandium
- Negligible Thorium

1



High value Magnet REEs

60

Nd

Neodymium

59

Pr

Praseodymium

66

Dy

Dysprosium

65

Tb

Terbium

21

Sc

Scandium

62

Sm

Samarium

La Paz REE + Scandium Project

- La Paz is ARR's priority REE project and was acquired in 2019
- Exploration Target of 742-928 million tonnes added to the JORC Compliant Resource of 170.6 million tonnes
- Developing scoping and economic studies for IRR and NPV estimates due in 2022



Bulk
tonnage
170Mt



Near surface
resource &
upside



High volumes of
Magnet Metals:
Nd, Pr, Dy, Tb



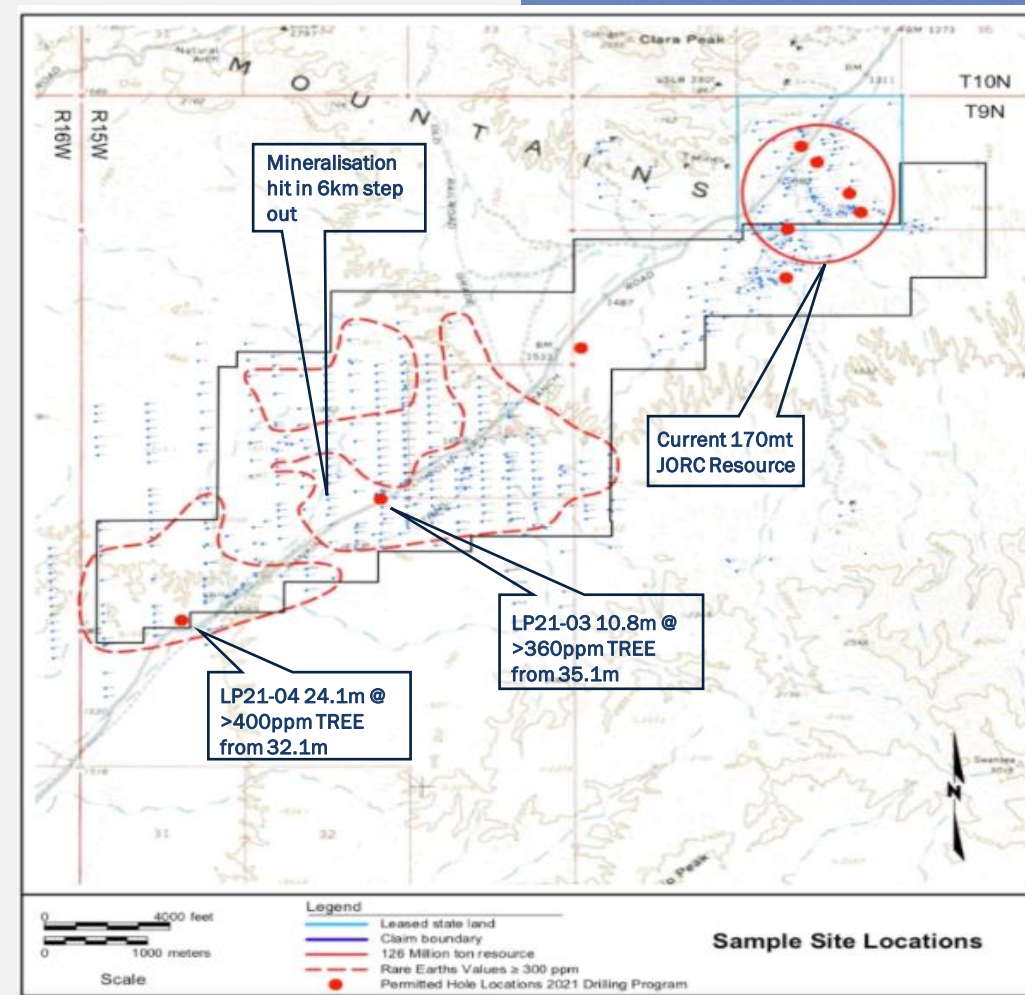
Extremely low in
thorium



High volume of
Scandium



Proximity
to key
infrastructure



Resource Upside

Multiple opportunities to substantially increase the JORC Resources at La Paz:

Scope

Current Resource estimate encompass only 10.2% of project area hosting 170 million tonnes of mineralized ore with an average grade of 469 ppm TREO

Maiden Resource area open laterally and at depth

Additional mineralization discovery <4km to the Southwest resulting in an estimated Exploration Target ranging 742 to 928 million tonnes with 350 to 400 ppm TREO.

Quality

Plan to increase Indicated portion of existing JORC Resource with tighter spaced drilling to convert from Inferred status

Growth

Opportunities to increase drilling locations inside the boundary

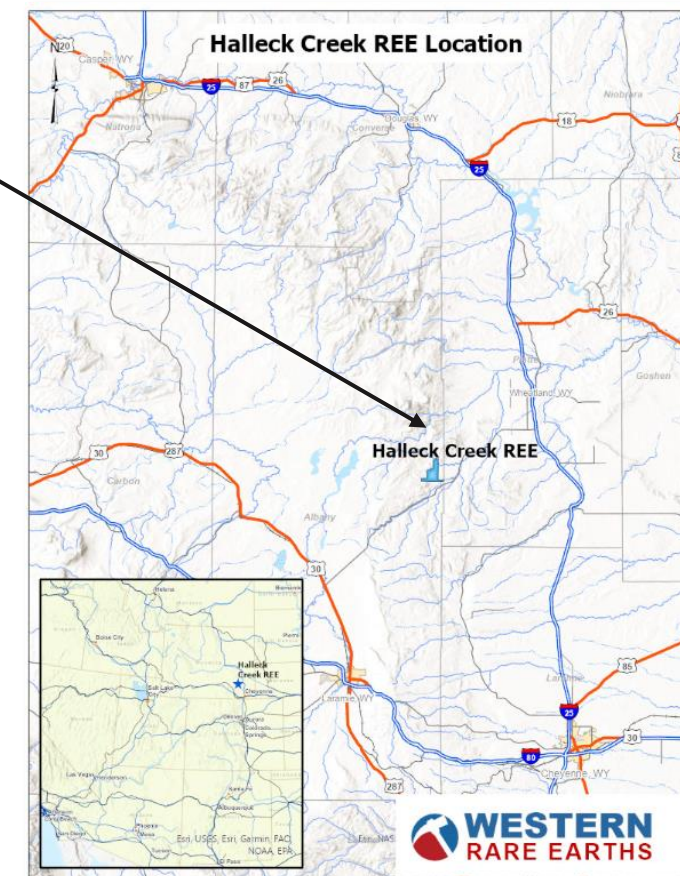
>55% of the 206 drill holes ended in mineralisation thus opportunity to extend at depth – holes down to 200m are planned



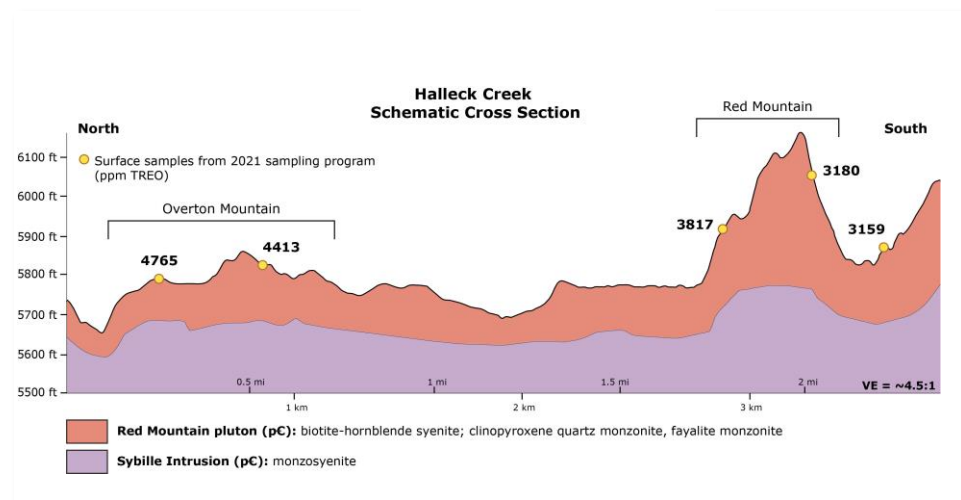
Halleck Creek

- ARR has claims and leases totaling 1,257h at Halleck Creek, in close proximity to infrastructure
- 197 surface geochemistry samples across the Halleck Creek Red Mountain Pluton with avg grade 3187ppm TREO
- The highest-grade sample contained 6,731ppm TREO
- Preparing exploration permitting documents for initial exploration drilling program

Halleck Creek



Schematic cross section at Halleck Creek



Red Mountain Pluton



Upcoming Activity & News Flow



With a portfolio of rare earths assets and participation in R&D efforts, ARR is anticipating a high tempo of activity in the coming 18 months and beyond.

Operational Activity	Q1 CY22	Q2 CY22	Q3 CY22	Q4 CY22	Q1 CY23
La Paz					
Complete Nagrom mineral processing /metallurgy testing					
Complete Scoping study					
New ore body drilling (SW area)					
Resource expansion drilling (depth & lateral) expansion, Geotech, H2O investigation					
Complete Preliminary Economic Assessment					
Halleck Creek					
Secure drilling permits					
Maiden drill program					
Metallurgical study					
Resource drill program					
Maiden JORC Resource					

Questions