



American Rare Earths

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

September 2022 Quarterly Activities



Disclaimers and Competent Person 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 its 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.

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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.

American Rare Earths

Developing critical minerals resources for a sustainable future



Expanding high value resources.



US Government funded R&D partnerships.



Exploring and developing new rare earth projects.



American Rare Earths
Geologist Brianna Crenshaw
at the La Paz Project.

Highlights for September Quarter



- La Paz metallurgical test work completed.
- US Department of Energy (DOE) funds next-generation rare earths processing research collaboration.
- Halleck Creek exploration target increases by 328%.
- Assay results from new claims area show significant upside for Halleck Creek.
- Completion of A\$14m institutional placement.



American Rare Earths
Geologist Sara Stotter at the
Halleck Creek Project.

Financials

- Well-funded to deliver our objectives.
- Cash position of \$17,417,000.
- 4,000,000 ASX:COB shares.
- \$3m promissory note with a financial asset value of \$2.8m.
- 400,000 shares issued due to the exercise of options.
- Rights to NSR royalty of 2% on cobalt production from Thackaringa Project.



A\$14m Institutional Placement

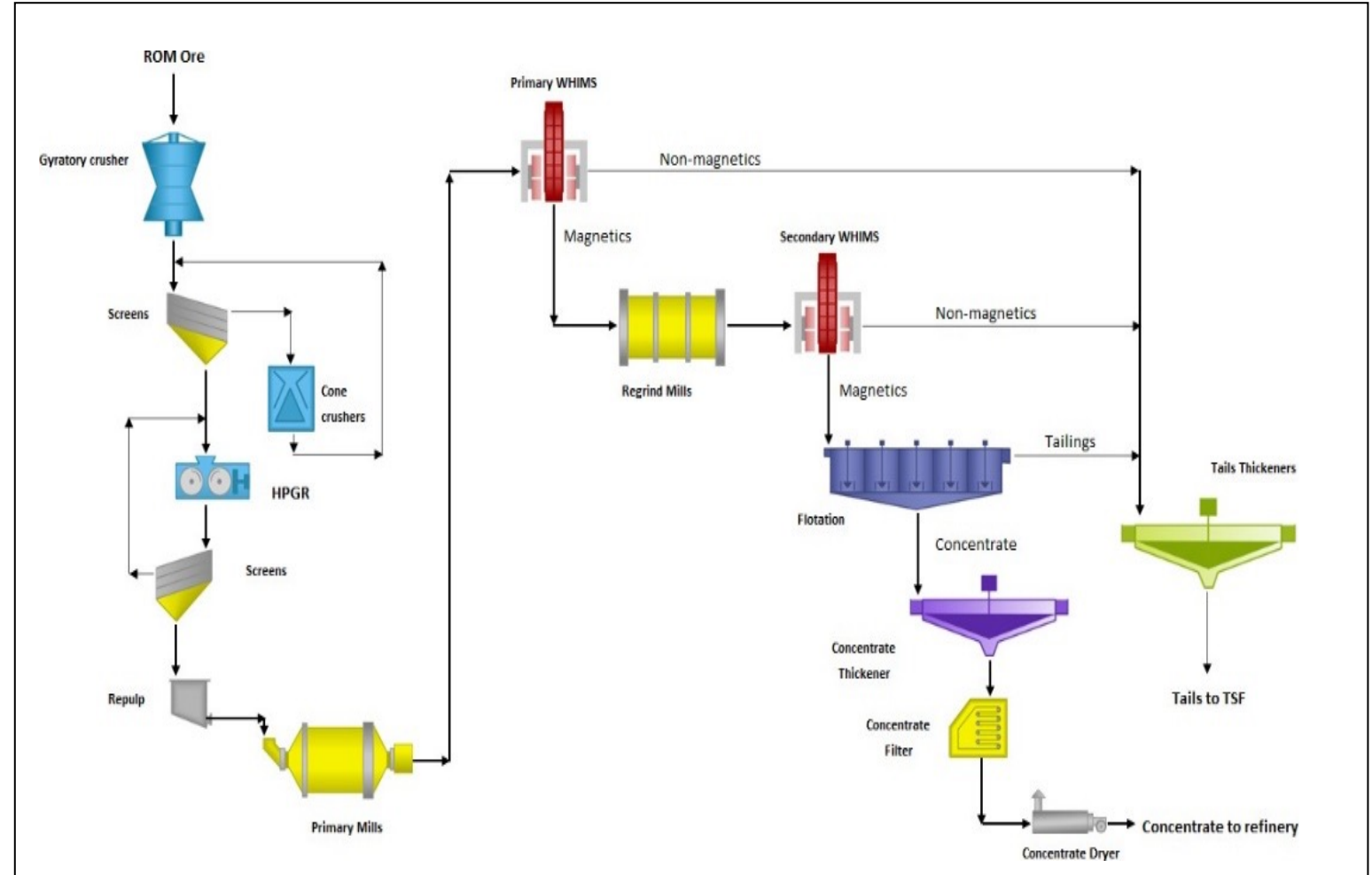


- Strongly supported by new and existing investors.
- Funding provides capital to accelerate exploration activities in North America.
- Major shareholder Fidelity International participates to maintain 9.9% holding.
- Shares issued at 0.29c per share.



La Paz Metallurgical Test Work Completed

- Results confirm ore responds positively to conventional processing.
- Conceptual flowsheet developed.
- Next steps underway to optimize the process.



Proposed Simplified La Paz Concentrator Flowsheet

Halleck Creek Exploration Target Increase

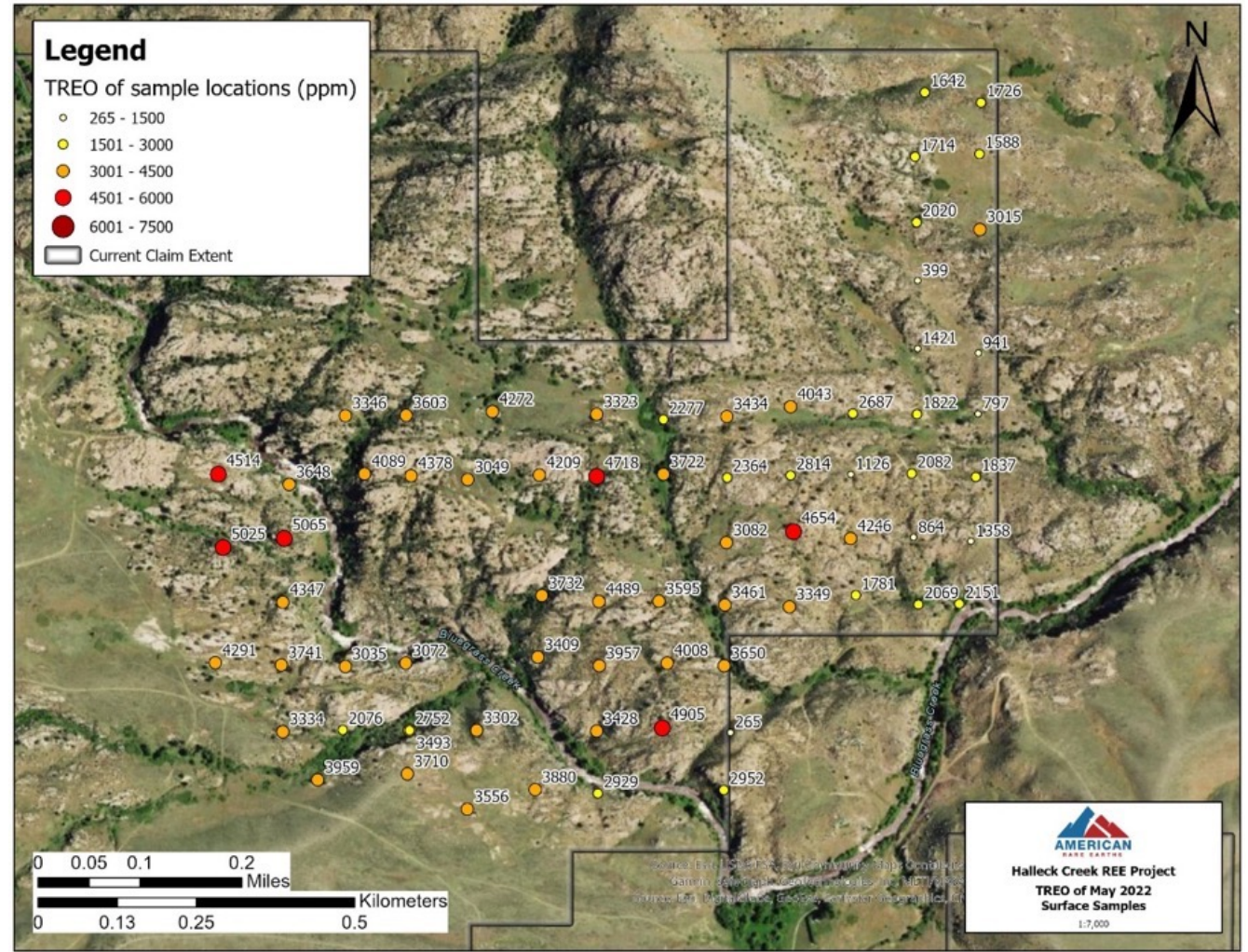


- New exploration target more than three times larger than previously estimated.
- Updated target outlines 1.01-1.27 billion tonnes.
- TREO grades range 2,245–2,807 parts per million (ppm).



Halleck Creek Bluegrass Assay Results

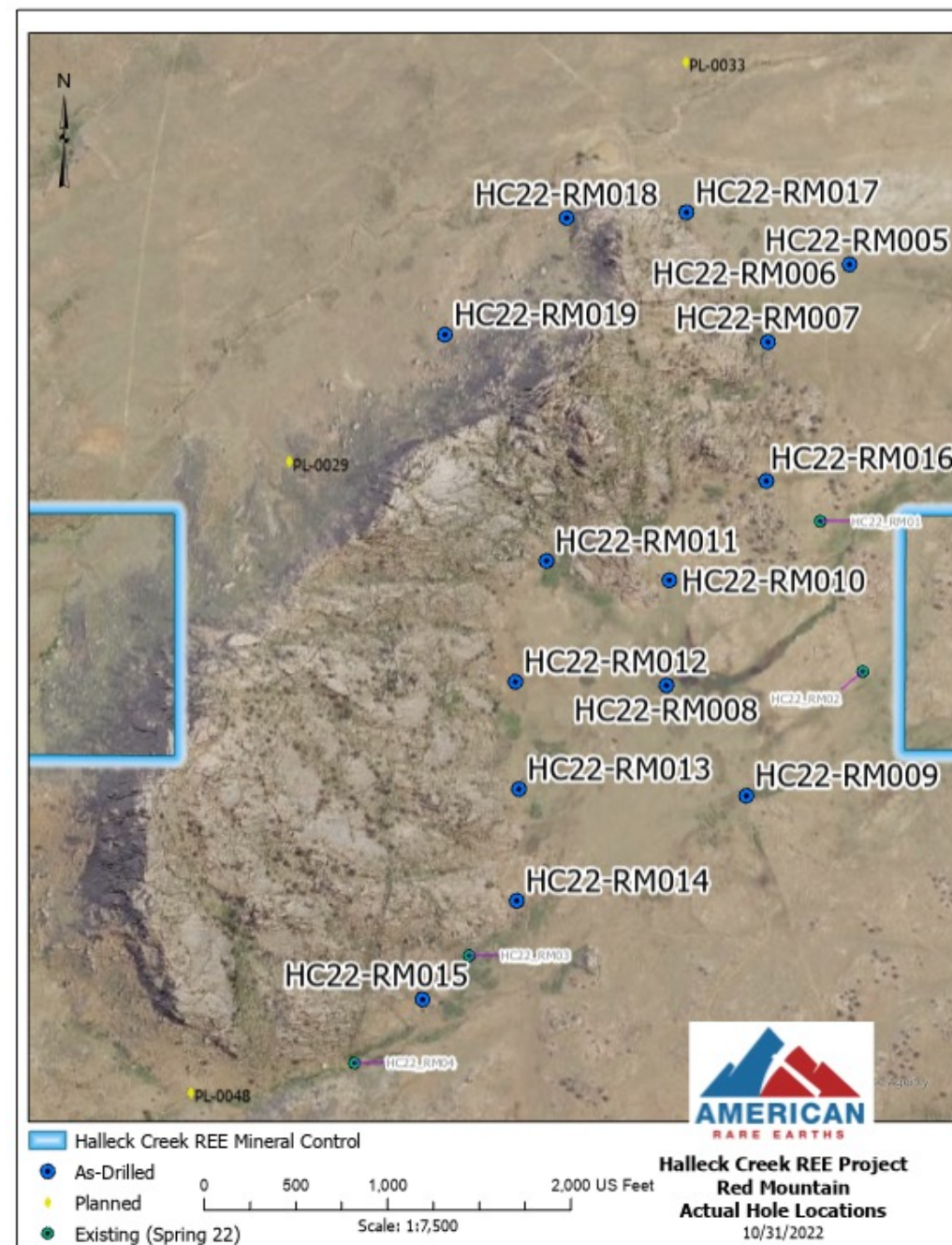
- Newly claimed area of 32 unpatented federal land claims.
- Surface samples exhibit average TREO of 3051 ppm.
- REE mineralisation has potential to expand significantly.
- Results indicate REE continues east of Overton Mountain.



TREO Values and Location of Surface Samples from May 2022 Sampling Initiative

Halleck Creek Resource Drilling

- Drilling approximately 44 holes at Red Mountain and Overton Mountain.
- To date: 14 holes drilled, 2125 meters, 1,400 samples.
- CQM occurring and depths to 150m
- Resource Model and Maiden Resource Estimates to follow in Q1 2023



US Department of Energy Research Collaboration



- American Rare Earths wholly joined as industry partner in research consortium including Virginia Tech University.
- Team awarded R&D funding by US Department of Energy (DOE).
- Project's goal to produce rare earths oxide products of greater than 95% purity.



Outlook



AGM

- 9.30 am ACDT (South Australia)/ 10am AEDT, Tuesday 8 November

Halleck Creek

- Continue drilling to define a significant JORC Resource.
- Continue metallurgical testwork.

La Paz

- Permitting activities underway in the southwest area.

R&D partnerships



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