

# Continued Exceptional Drilling Results at Halleck Creek

written by Raj Shah | December 14, 2023

## Recent RC drilling assays confirm significantly higher grades (+26%)

### Highlights

- 15 RC holes each drilled to 102 m for a total of 1,530 m.
- Assay results confirm higher-grade rare earth mineralization from surface, remaining open at depth:
  - Average TREO grade increased 26% to 4,179 ppm for the entire exploration program.
  - Highest grade assay of 11,040 ppm TREO.
- Numerous holes exhibit grades exceeding 1500 ppm TREO along nearly their entire 102 m length, including;
  - HC23-0M044: 102 m @ 5472 ppm TREO
  - HC23-0M038: 100.5 m @ 4493 ppm TREO
  - HC23-0M033: 102 m @ 4291 ppm TREO
  - HC23-0M042: 100.5 m @ 4281 ppm TREO
- Neodymium and Praseodymium (NdPr) distribution continues at 23%.
- Resource modeling update is currently underway with significant upgrade to JORC resource estimates expected in the coming months.

December 14, 2023 ([Source](#)) – [American Rare Earths Limited](#) (ASX: ARR | ADRs – OTCQX: AMRRY | Common Shares – OTCQB: ARRNF) (“**ARR**” or the “**Company**”) is pleased to announce continued exceptional drilling results from its October-November 2023 drilling campaign<sup>1,2</sup> at Overton Mountain, located within the broader Halleck Creek Rare Earths project area. See Figure 1. Of the fifteen-reverse circulation (RC) holes drilled, there was an average TREO value 24% higher than that of the Company’s previous JORC resource estimate<sup>3</sup> (3,309 ppm TREO). Nine of the fifteen RC holes exhibit an average TREO value of greater than 4,000 ppm, utilizing a cutoff value of 1,500 ppm. The addition of the final RC assays will be a significant contribution to upgrading the Company’s current 1.43 billion tonne JORC resource. The fence diagrams presented herein illustrate the homogenous nature of the deposit which lends itself to low-cost, near-zero strip ratio mining operations. See Figure 2.

**CEO Donald Swartz commented on the results:**

“Exceptional results from the recent resource upgrade drilling campaign at the Halleck Creek Resource Area have not only surpassed our expectations, but are expected to exceed our previous resource estimates. The average TREO values of the RC holes, especially HC23-OM044’s outstanding intercept, demonstrate the potential of this project.”

“These results along with the recently announced diamond drilling results provide us confidence to be able to provide shareholders with a significant upgrade to our JORC resource estimates, which is expected in Q1 2024.”

1. ASX announcement November 1, 2023
2. ASX announcement December 7, 2023
3. ASX announcement March 30, 2023

## **Extract from Technical Summary**

Since the announcements on November 1, 2023 and December 7, 2023, assays for all fifteen RC holes drilled at the Overton Mountain resource area have been received. The drill holes were spaced between 50 and 75 meters apart showing vertical and lateral continuity across the exploration area. Major intercepts from RC assays reinforce excellent results produced from diamond core. ARR is confident that a significant measured resource will be achieved.

HC23-0M044 is the most impressive RC hole, exhibiting the best intercept observed at the Halleck Creek to date.

- HC23-0M044 averages 4,207 ppm TREO over 57.00 m; averages 8,364 ppm TREO over 31.50 m.

Average NdPr comprises 23% of TREO from all fifteen RC holes, consistent with previously announced diamond core results. Penalty elements remain de minimis, with an average thorium concentration of 69 ppm, and an average uranium oxide concentration of 7 ppm.

This announcement has been approved by the CEO of American Rare Earths.

**Full technical summary and JORC Report can be found [here](#).**

**Competent Persons Statement:** The information in this document is based on information compiled by personnel under the direction of Mr. Dwight Kinnes. This work was reviewed and approved for release by Mr. Dwight Kinnes (Society of Mining Engineers #4063295RM) who is employed by American Rare Earths 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. Kinnes consents to the inclusion in the report of the matters based upon the information in the form and context in which it appears.

**About American Rare Earths Limited:**

[American Rare Earths](#) (ASX: ARR | ADRs – OTCQX: AMRRY | Common Shares – OTCQB: ARRNF) owns the Halleck Creek, WY and La Paz, AZ rare earth deposits which have the potential to become the largest and most sustainable rare earth projects in North America. American Rare Earths is developing environmentally friendly and cost-effective extraction and processing methods to meet the rapidly increasing demand for resources essential to the clean energy transition and US national security. The Company continues to evaluate other exploration opportunities and is collaborating with US Government-supported R&D to develop efficient processing and separation techniques of rare earth elements to help ensure a renewable future.

**Head Office**

American Rare Earths Ltd  
1658 Cole Blvd, Suite G30  
Lakewood, CO, 80401  
[info@americanrareearths.com.au](mailto:info@americanrareearths.com.au)  
americanrareearths.com.au

For additional information:

**Susan Assadi**

**Media Relations US**

[sassadi@americanree.com](mailto:sassadi@americanree.com)  
347 977 7125

**Beverly Jedynak**

**Investor Relations US**

[Beverly.jedynak@viriathus.com](mailto:Beverly.jedynak@viriathus.com)  
312 943 1123

Figure 1 – Location of drillholes from Fall 2023 Drilling Campaign

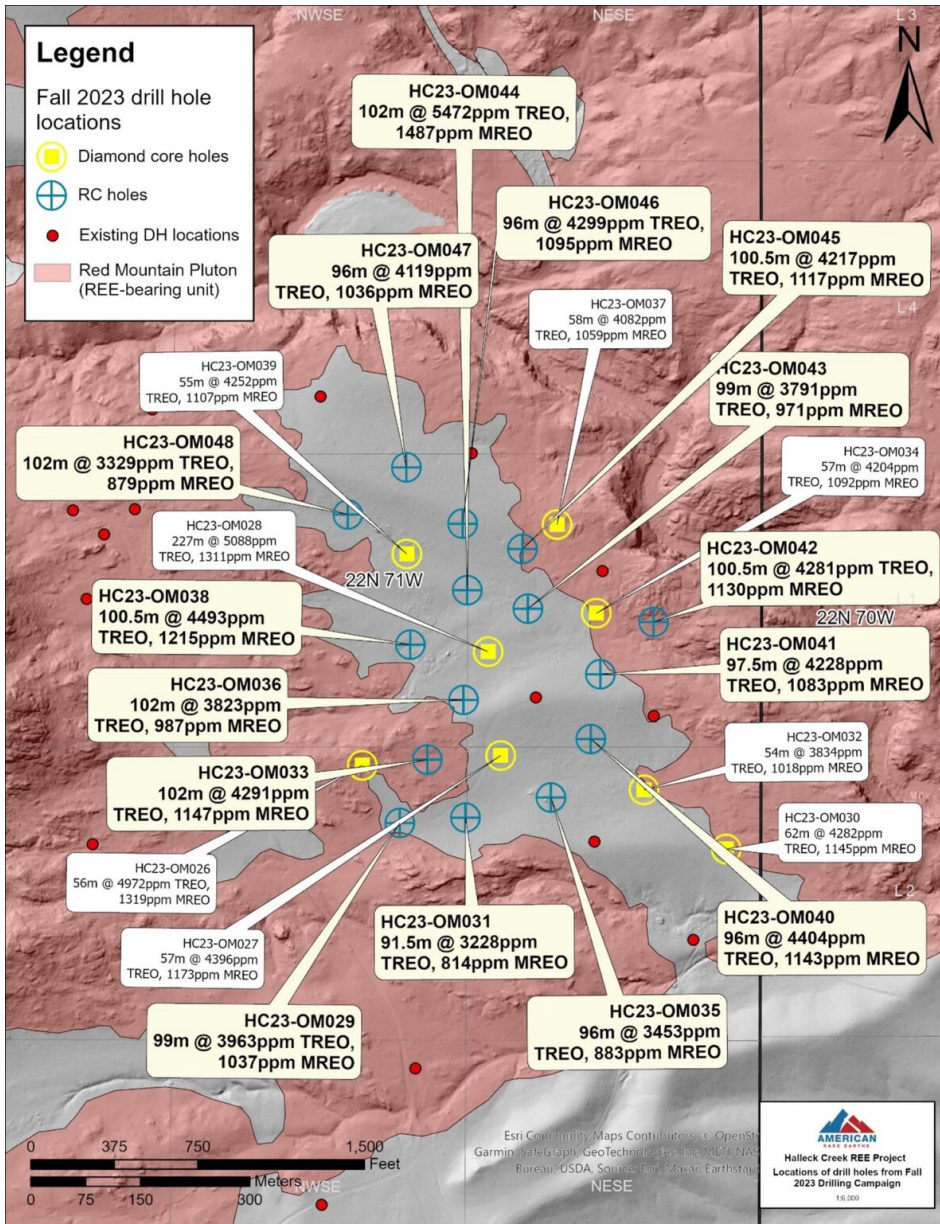
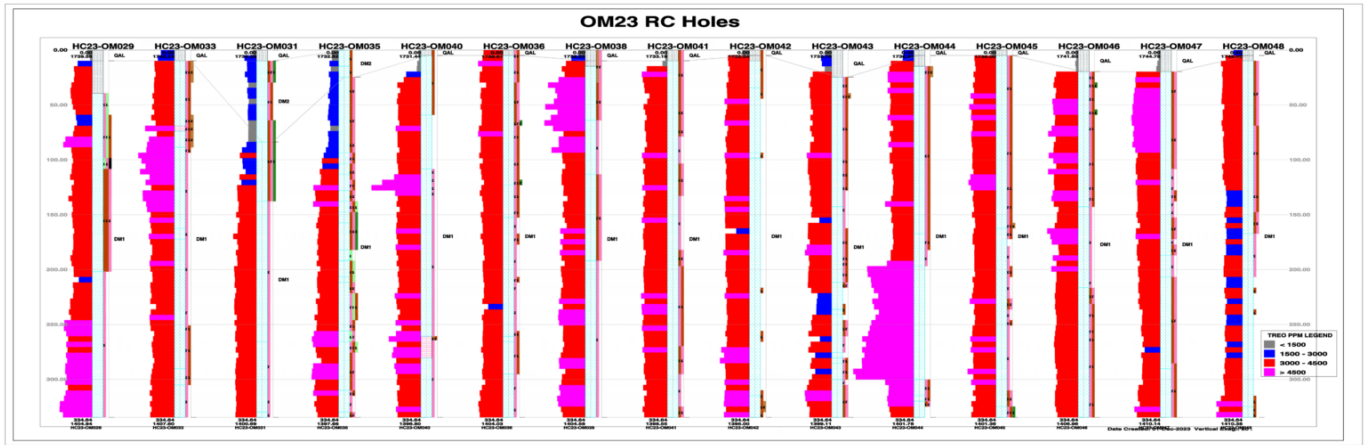


Figure 2 – Fence diagram of 2023 core and RC holes with assays



Photos accompanying this announcement are available at:  
<https://www.globenewswire.com/NewsRoom/AttachmentNg/7dad4846-6403-4740-b893-be74d8c58cc2>  
<https://www.globenewswire.com/NewsRoom/AttachmentNg/9ef20833-3581-4c39-8310-f8e87095f518>