

American Rare Earths Channel Sampling Program Highlights TREO Grades up to 13,651 ppm

written by Raj Shah | May 8, 2025

HIGHLIGHTS

- Channel sampling across Cowboy State Mine returned TREO grades up to 13,651 ppm (1.37%)
- 15 of 106 samples exceeded 4,500 ppm TREO
- Magnet rare earth oxides (MREO) averaged 1,023 ppm, approximately 28% of total TREO composition
- Heavy Rare Earth Oxides (HREO) averaged 464 ppm, representing ~13% of TREO composition
- Results will be incorporated into the resource model in support of Pre-Feasibility Study, which remains on track for completion in late 2025

May 8, 2025 ([Source](#)) – [American Rare Earths Limited](#) (ASX: ARR | OTCQX: ARRF | ADR: AMRRY) (ARR or the Company) is pleased to report the results from a mapping and channel sampling program across the Cowboy State Mine (CSM) area, part of the Halleck Creek Rare Earths Project in Wyoming. A total of 106 channel samples were collected across Red Mountain by geologists from Wyoming Rare (USA) Inc (WRI), ARR's wholly owned U.S. subsidiary, in collaboration with technical support from Geosyntec.

Assay results confirmed elevated rare earth mineralization across the Red Mountain area, including a standout sample grading 1.37% (13,651ppm) Total Rare Earth Oxide (TREO). TREO grades of Red Mountain Pluton (RMP), the rare earth bearing rock

type, ranged from 711 ppm to 13,651 ppm with an average of 3,661 ppm. On average, magnet rare earth oxides¹ (MREO) account for approximately 28% of the total rare earth content (1,023 ppm), while heavy rare earth oxides² (HREO) represent around 13% (464 ppm). A total of 15 samples exceeded 4,500 ppm TREO, indicating areas of elevated-grade material within the system.

These results further highlight the southern portion of Red Mountain as hosting some of the highest-grade material observed to date for the CSM area. The channel sampling data is currently being incorporated into an updated geological model and mineral resource estimate for the CSM area. This model will assist mine planning and support the Pre-Feasibility Study, which remains on track for completion in late 2025.

Chris Gibbs, Chief Executive Officer, said:

“Halleck Creek is shaping up to be the next major rare earths project in the United States. With the high-value core four magnet rare earths including neodymium, praseodymium, dysprosium and terbium consistently present across the Cowboy State Mine, we are advancing one of the few U.S. projects capable of supplying these critical materials at scale.

What’s especially encouraging is the continued confirmation of these core four rare earths across the sampled area. In particular, terbium and dysprosium are vital for high-temperature magnet performance and remain in extremely limited supply outside of China. Based on our Scoping Study, they are expected to contribute over 25 percent of project revenues, despite representing a small percentage of overall tonnage.

Importantly, we don’t need federal permitting reform to move forward. Being located on state lands in Wyoming gives us a clear and streamlined path to development. With China’s recent export bans on terbium and dysprosium, the national importance

of Halleck Creek as a secure domestic source has never been clearer.

As outlined in our Updated Scoping Study³, a staged development could see first production as early as 2029. With its scale, simplicity and multi-generational resource potential, Halleck Creek has the attributes to become one of America's most significant rare earths projects."

Detailed announcement with JORC Table and technical report can be [found here](#).

This release was authorized by the Chairman of American Rare Earths.

About American Rare Earths Limited:

American Rare Earths (ASX: ARR | OTCQX: ARRNF | ADR: AMRRY) is a critical minerals company at the forefront of reshaping the U.S. rare earths industry. Through its wholly owned subsidiary, Wyoming Rare (USA) Inc. ("WRI"), the company is advancing the Halleck Creek Project in Wyoming—a world-class rare earth deposit with the potential to secure America's critical mineral independence for generations. Located on Wyoming State land, the Cowboy State Mine within Halleck Creek offers cost-efficient open-pit mining methods and benefits from streamlined permitting processes in this mining-friendly state.

With plans for onsite mineral processing and separation facilities, Halleck Creek is strategically positioned to reduce U.S. reliance on imports—predominantly from China—while meeting the growing demand for rare earth elements essential to defense, advanced technologies, and economic security. As exploration progresses, the project's untapped potential on both State and Federal lands further reinforces its significance as a cornerstone of U.S. supply chain security. In addition to its

resource potential, American Rare Earths is committed to environmentally responsible mining practices and continues to collaborate with U.S. Government-supported R&D programs to develop innovative extraction and processing technologies for rare earth elements.

Investors can follow the Company's progress at www.americanree.com

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A photo accompanying this announcement is available at <https://www.globenewswire.com/NewsRoom/AttachmentNg/09dbcb71-a182-4729-9412-882b9afa9fdc>

¹ MRE0 = Pr6011, Nd203, Tb407, and Dy203

² HRE0 = Y203, Eu203, Gd203, Tb407, Dy203, Ho203, Er203, Tm203, Yb203, and Lu203

³ ASX Announcement 7 March 2025



American Rare Earths Limited in Halleck Creek, Wyoming