2024 Drilling commences in Cowboy State Mine Area

11 core holes and 12 reverse circulation holes planned for a total of 2,670 metres (8,760 feet)

Highlights

- ARR 2024 drilling campaign commences at Cowboy State Mine Area for a total of 2,670m including:
  - 11 core holes planned to drill approximately 1,590 metres (5,217 feet)
  - 12 reverse circulation holes planned to drill approximately 1,080 metres (3,543 feet)
- Drill campaign in the Cowboy State Mine area will upgrade resources, provide additional material for metallurgical test work and data to advance mine planning work towards prefeasibility analysis.

American Rare Earths (**ASX: ARR | OTCQX: ARRNF | ADR: AMRRY) (“ARR”** or the **“Company”**) is pleased to announce commencement of the drilling campaign at the Cowboy State Mine (**“CSM”**) area. This first stage of in-fill drilling will allow ARR to upgrade resource estimates at CSM while providing key data for pit design, environmental baseline studies and additional ore material for metallurgical testwork. The 23-hole program contains 11 core holes and 12 reverse circulation (**“RC”**) holes with a planned metreage of approximately 2,670 metres.

ARR has again partnered with FTE Drilling who completed the previous 2023 campaign on-time and on-budget. The seasoned team members will strive to repeat this for 2024.

Donald Swartz, CEO of American Rare Earths, commented:

"We are excited to commence our 2024 drilling campaign at the Cowboy State Mine area. This phase of in-fill drilling is crucial for upgrading our resource estimates and gathering essential data for pit design and environmental studies. Our partnership with FTE Drilling, who has consistently delivered on-time and on-budget, gives us confidence that we will achieve our goals for this year."

Richard Hudson, Chairman of American Rare Earths, commented:

"This drilling program marks another significant step forward in advancing the project towards prefeasibility analysis. The data and samples collected will provide a solid foundation for our metallurgical test work and resource modelling, ultimately enhancing our ability to develop a robust and sustainable mining operation."

“We look forward to providing investors with updates on the campaigns as they come through.”

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Exploration Plan

Exploration plans for the Cowboy State Mine area consist of drilling approximately 23 holes (12 RC holes and 11 HQ core holes) for a total of 2,670 metres (8,760 feet) (Figure 1). Drilling commenced on July 8, 2024, and will continue for approximately 6 to 8 weeks into August.

HQ sized core holes will vary in depth between 80 metres and 300 metres for approximately 1,590 metres. RC holes will vary in depth between 80 metres and 110 metres for approximately 1,080 metres. ARR geologists will photograph, log, split core at site, then submit samples to ALS Global for assay. Remaining core will be held in reserve for additional testing. RC samples will be collected using rotary splitting unit to provide three RC samples for logging, XRF, and assay.

The primary objectives of the exploration drilling include:

- Upgrading resource estimates to include a majority of measured and indicated resources, which will hopefully be converted to probable reserves as part of prefeasibility studies.
- Increasing resources at depth and to the west, defining geological contacts to the east
- Collecting core samples for geomechanical testing
- Collecting core samples for hydrological and baseline environmental testing
- Collecting samples for additional metallurgical testwork

Century Geophysical will collect televiewer and gamma logs from core holes. WSP will be at site assisting ARR with interpreting televiewer logs and collecting samples geomechanical testing.

The Company plans to utilise this drilling data to update geological resource models that will then feed into prefeasibility studies for the Cowboy State Mine area.

This announcement is authorised for release by the CEO of American Rare Earths.

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Further information

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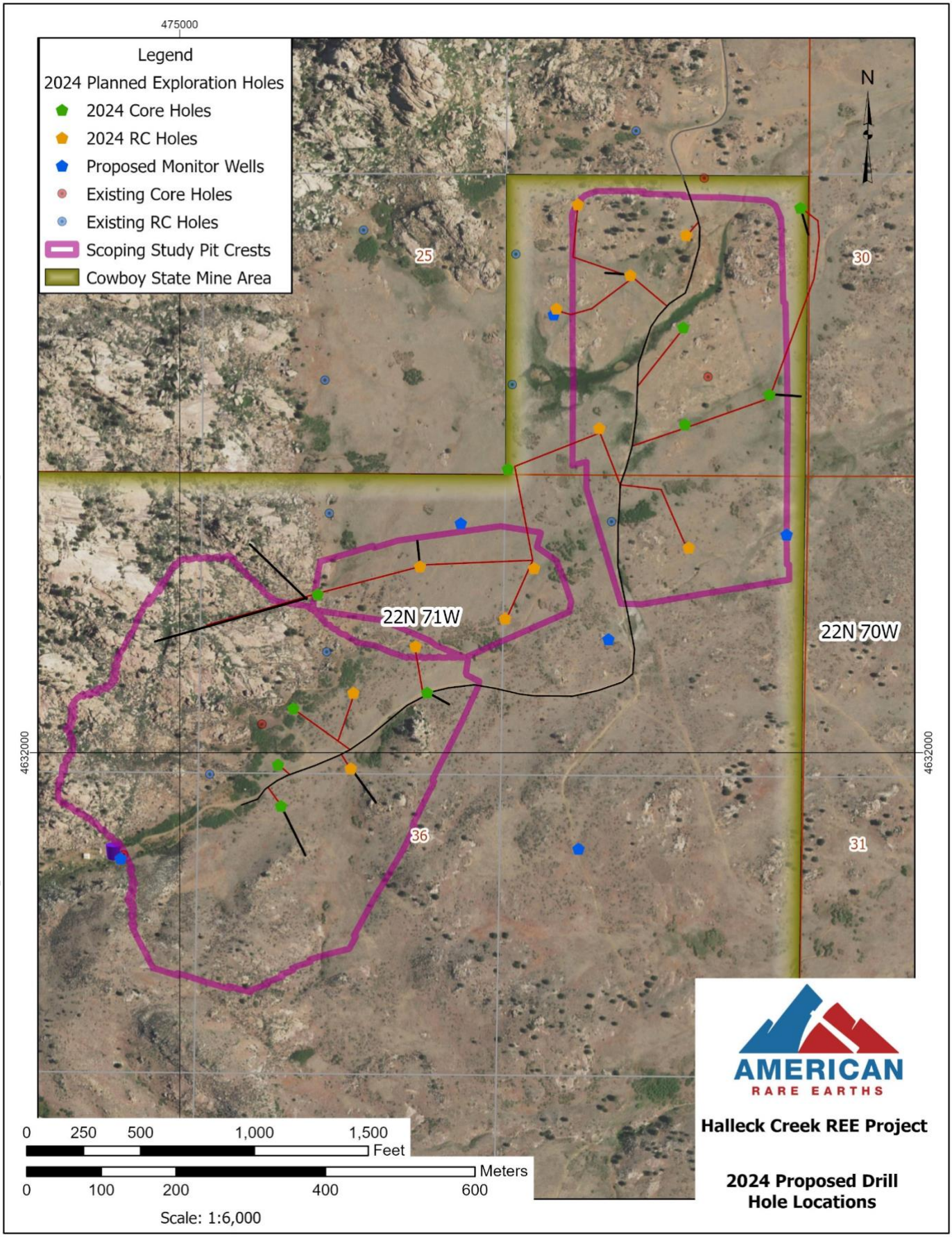

Figure 1 – 2024 Proposed Drill Hole Locations

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Figure 2 – Exploration Equipment in front of Red Mountain

Figure 3 – Staging and Logging Area

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Figure 4 – Reverse Circulation Rig at Hole HC24-RM023

Competent Persons Statement:

The information in this document is based on company work performed in September and October 2023. 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 | OTCQX: ARRNF | ADR: AMRRY)** owns the Halleck Creek, WY rare earth deposit which has the potential to become the largest and most sustainable rare earth project in North America. The Company 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 (REEs) elements to help ensure a renewable future.