



#### **Quarterly Activities Report for the Period Ending 30 June 2024**

#### **Highlights**

- Successful grant approval for Cowboy State Mine ARR to receive A\$10.7 million of non-dilutive grant funding from State of Wyoming inclusive of permitting support
- Assay results expand rare earth enrichment within the Cowboy State Mine
- Further validation of the Halleck Creek Project via Independent Studies by Virginia Tech University
- ARR continues to advance Halleck Creek Project
  - Drilling program commenced at Cowboy State Mine
  - Research and development partnership funding secured with Defense Advanced Research Projects Agency (DARPA)
  - Environmental permitting activities initiated at Cowboy State Mine
  - Processing and metallurgical test work continues to progress
- Zircon Co-Product potential announced
- Increased interest in ARR's Halleck Creek project resulted in an indicative, conditional, and non-binding
  proposal received from NASDAQ-listed Special Purpose Acquisition Company to acquire (by an issue of
  shares) the Company's 100% owned subsidiary, Wyoming Rare (USA) Inc

American Rare Earths (ASX: ARR | OTCQX: ARRNF | ADR: AMRRY) ("ARR" or the "Company") is pleased to provide an overview of its quarterly activities for the period ending 30 June 2024 ("Quarter", "Reporting Period").

#### Chairman, Richard Hudson commented on the quarter:

"The June Quarter culminated with the announcement of non-dilutive grant funding from the State of Wyoming that represents technical validation of the project, permitting support and a shared vision for advancing sustainable resource development. We are even more optimistic about the Halleck Creek Project, and excited for things to continue to progress. This significant grant is a result of a concentrated effort from our dedicated team, and we are honoured with the result.

"We were encouraged by assay results from a recent mapping and sampling program in the Cowboy State Mine area that continue to demonstrate upside potential to our recently announced scoping study. Drilling has since commenced in the area to upgrade resources and advance mine planning work for prefeasibility analysis. We look forward to sharing the results as they come in."

# Successful grant approval for Cowboy State Mine – ARR to receive A\$10.7 million (US\$7.1 million) of grant funding from State of Wyoming

On 27 June 2024 the Company announced that the Cowboy State Mine at Halleck Creek has been approved by the State of Wyoming, USA, for up to A\$10.7 million (or US\$7.1M) in non-dilutive funding through a grant. The Funding Agreement was executed by American Rare Earths with the State of Wyoming, with support from partners Wyoming Energy Authority (**"WEA**") and the University of Wyoming Energy Resources Council (**"ERC**"). The WEA is committed to driving Wyoming's energy strategy by fostering investments in data, technology, and infrastructure. The Authority's mission is to support projects that contribute to the state's economic and environmental sustainability. The continued development of rare earth projects is a natural progression in the mission to support the growth of a secure and prosperous future for Wyoming's world-class energy economy.

#### Assay Results Expand Rare Earth Enrichment at Cowboy State Mine

During the Quarter, the Company announced assay results from a recent mapping and sampling program in the Cowboy State Mine area. These results will allow the Company to target higher grade areas contiguous to the mining area within the recently published scoping study. These results complement the recently announced updated JORC resource of 2.34 billion tonnes<sup>1</sup> and illustrate the consistently enriched mineralisation at Halleck Creek.

This mapping and sampling campaign within the Cowboy State Mine Area was focussed at a higher resolution. In total, 95 samples were sent for analysis at ALS Global, including 5 Quality assurance/Quality control samples of standards, blanks, and duplicates. The results are summarised in Table 1. The mapping refined contacts between the RMP and surrounding granites as shown in Figure 1. The new mapping and sampling campaign provides better constraints on the geology of the Cowboy State mine area for future resource targeting and drill hole planning. Specifically, areas covered with unconsolidated Tertiary gravel (Figure 2) were delineated, which offers significant upside.

Count	TREO	MREO	LREO	HREO
Average	3529	956	3133	396
Maximum	6211	1692	5683	578
Minimum	1523	435	1276	217

Table 1 – Statistical Summary of November 2023 Sampling Initiative using a 1,500 ppm TREO cut-off. 68 samples were included.



Figure 1 – Map showing the locations of the new surface samples. The line of section AA' seen on the map is illustrated in Figure 2.



Figure 2 - Cross Section A-A' through the Red Mountain 2023 sampling area

#### **Independent Studies Further Validate Halleck Creek Project**

On 6 May 2024, the Company was pleased to announce results from a metallurgical study on leaching extraction of REE from Halleck Creek ore by low temperature, direct acid leaching. The U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy ("EERE") awarded a three-year (2022-2025) research contract to Phinix, LLC with American Rare Earth and Virginia Tech as team members. This metallurgical study was carried out by researchers at the Department of Mining and Minerals Engineering at Virginia Tech. These positive results further confirm the findings of the metallurgical testwork carried out by Wood PLC<sup>2</sup> which were previously announced by ARR.

The two independent, peer-reviewed, technical studies were published, and further illustrated the economic potential of Halleck Creek:

- Minerals Engineering (Liu, et. al., 2024)
  - o 80% of Rare Earth Elements ("REE"s) extracted with low temperature, direct acid leaching.
  - Fast leaching kinetics are attributable to Halleck Creek metamict altered allanite , with 65% of REEs extracted in the first 10 minutes of leaching.
  - The allanite in Halleck Creek ore is less refractory than typical monazite or bastnaesite minerals, which cannot be effectively leached using low-temperature acid tank leaching.
- Green and Smart Mining Engineering (Xiao and Zhang, 2024)
  - High-grade rare-earth enriched Halleck Creek ore highlights its economic potential.
  - Density and magnetic separation techniques have demonstrated effectiveness in separation.

#### **Technical Summary:**

Under the direction of Wencai Zhang, Ph.D., Dr. Wei Liu and doctoral candidate Zhongqing Xiao performed leaching testwork and published the results (Liu, et. al., 2024) at Virginia Tech for the project. Virginia Tech used finely ground sample material from the Halleck Creek Project,  $p80 = 47.9 \mu m$ , that was concentrated using magnetic separation to produce a mixed rare earth concentrate ("Concentrate"). The leaching testwork compared the effects of a variety of acids, acid concentrations, temperatures, solid/liquid ratios, and particle sizes, to determine leach kinetics and the recovery of REE from the Concentrate.

Virginia Tech demonstrated that approximately 80% of REE were extracted from the Concentrate using 1 M sulfuric acid at 75° C for 2 hours. Importantly, this work shows that the REE can be successfully recovered using mildly acidic, readily available chemicals at low temperatures which might decrease capital and operating costs and potentially reduce environmental impacts of the project. The study also demonstrated that the amorphous crystalline structure of the Halleck Creek allanite due to the metamictization of the allanite over geologic time further enhances the leachability of the ore.

This phase of testwork focused on the leaching kinetics of the Concentrate. During this stage of the EERE project, Virgnia Tech did not attempt to isolate discrete rare earth elements. As the project continues, Virginia Tech will focus on isolating discrete REE.

Allanite is the primary REE bearing mineral at the Halleck Creek project. Importantly, allanite is less refractory than monazite or bastnaesite, as monazite and bastnaesite cannot typically be leached using low-temperature acid tank leaching. No significant silica gel formation was observed during leaching.

Allanite from Halleck Creek exhibits "metamict", amorphous texture, resulting from decomposition of the crystalline structure of the mineral due to low-level decay of uranium and thorium over a 1.4-billion-year period. The amorphous nature of the allanite appears to enhance REE leaching. Virginia Tech performed leach tests on allanite concentrates at elevated temperatures. Figure 3, below, illustrates that REE recovery decreases with increased temperature particularly when exceeding 900° C.



Figure 3 – The effect of roasting on the recovery of REE from the allanite feed sample. The allanite feed sample was roasted in a muffle furnace for two hours. Leaching conditions: 1 M H2SO4, d80 = 47.9 µm, 75 °C, S/L ratio = 25 g/L, and 2 h.

Virginia Tech hypothesizes that allanite recrystalizes at higher temperatures and reduces the ability to leach REE from the Concentrate. A novel, comprehensive allanite review paper prepared by leading researchers on allanite leaching supports this hypothesis and highlights the potential of allanite as an REE ore mineral (Xiao and Zhang, 2024). The allanite review paper also suggests that future metallurgical research focusing on separation and leaching is needed (Xiao and Xhang, 2024). We would encourage readers to review this paper, which is the most comprehensive review and summary of metamict altered allanite to date.

#### **ARR Continues to Advance Halleck Creek Project**

On 13 June 2024, the Company gave an update on the operations taking place at the Halleck Creek Project, addressing previously announced project milestones, as well as announcing upcoming exploration drilling at the site. Under the DARPA Environmental Microbes as a BioEngineering Resource (EMBER) program, Phase II was recently awarded an additional US\$4.6 million in R&D funding for continued studies. This is noteworthy as prior work from this research has been utilised in the current processing flowsheet, using gravity separation techniques developed in the research, and the R&D continues to utilise Halleck Creek ore<sup>3</sup>.

# Research and development partnership funding with Defense Advanced Research Projects Agency (DARPA) announced

New Research and Development partnership funding approved by Defense Advanced Research Projects Agency (DARPA), with Lawrence Livermore National Laboratory being awarded US\$4.6 million<sup>4</sup> – part of these funds will be used by Lawrence Livermore National Laboratory to continue work to support flowsheet design at Halleck Creek.

#### **Environmental permitting activities initiated at Cowboy State Mine**

WWC Engineering (WWC), from Sheridan, Wyoming, will oversee and conduct baseline environmental data collection activities at the Cowboy State Mine area, these will include vegetation and animal monitoring surveys. Additional studies will commence after consultation with the Wyoming Department of Environmental Quality – Land Quality Division.

#### Processing and metallurgical testwork continue to progress

ARR continues to refine mineral processing flowsheets with ongoing work at Mineral Technologies and SGS Canada. Mineral Technologies ran approximately 400 kg of Halleck Creek core across spiral separators showing distinct separation between the material (Figure 4 and Figure 5). Mineral Technologies collected 53 samples and submitted them for assay with ALS Global, with results pending.

<sup>&</sup>lt;sup>3</sup> ASX Announcement, 22 January 2024

<sup>&</sup>lt;sup>4</sup> https://www.llnl.gov/article/51036/concentrating-rare-earth-elements



Figure 4 – MG 12 Spiral from Mineral Technologies and Halleck Creek Feed in the Spiral



Figure 5 – Separation Products from Rougher Spiral Processing

SGS Canada is performing high-pressure grinding roll (HPGR), gravity separation, wet-high intensity magnetic separation, and electrostatic separation tests on approximately 75 kg of Halleck Creek core (Figure 6 and Figure 7). The SGS testwork is designed to build upon separation testing performed by Wood PLC in 2023, with a focus on gravity separation as the primary separation method with results expected in Q3 2024.



Figure 6 – Halleck Creek -400 x +100 µm Feed on Wilfley Table



Figure 7 – Gravity Concentrate of -400 x +100 µm Fraction with observable Allanite, Amphibole and Zircon

ARR is developing processing and leaching test programs and will be using approximately 3 tonnes of available core samples from Halleck Creek and core samples collected during the July 2024 drilling at the Cowboy State Mine area. The processing and separation testwork will be based on the results of current Mineral Technologies and SGS Canada testing and is expected to commence in Q3 2024.

SGS Canada has developed a comprehensive testwork plan focusing on leaching, impurity removal and preliminary rare earth oxide processing with work to commence in Q3/Q4 2024.

#### **Zircon Co-Product Potential Announced**

On 29 May 2024, the Company announced the zircon co-product potential alongside REE processing at Halleck Creek as part of a research collaboration with the School of Energy Resources ("SER") at the University of Wyoming.

This work is a significant step forward in understanding the potential of zircon within the Red Mountain pluton at ARR's flagship Halleck Creek REEs project. Dr Lily Jackson, an expert in sedimentology, tectonics, and geochronology from SER, has led this research. The Company aims to understand the significance of zircon within the REEs bearing Red Mountain pluton at Halleck Creek. Zircon, like allanite, contains REEs elements and has the potential to be a significant contributor of Heavy REEs ("HREE") at Halleck Creek.

#### **Technical Summary:**

Preliminary assessments uncovered notable anomalies in zircon within core samples collected from the Red Mountain pluton. The preliminary findings indicate that zircon may occur in greater abundance than previously observed (Figure 8). Observations also reveal that zircon in the samples have metamict cores like metamict cores observed in allanite at Halleck Creek. Furthermore, this preliminary work indicates that metamict zircon cores (centres) exhibit an exceptional enrichment in REEs Elements compared to their rims. This is well illustrated by cathodoluminescence images as observed in Figure 9.

Dr Jackson of the University of Wyoming performed laser ablation inductively coupled plasma mass spectrometry analyses on several metamict zircon phenocrysts (crystals) which provided preliminary REE values. The pinpoint laser ablation showed that the metamict centres of the zircon contained anomalously high levels of REEs relative to the rims of the zircon. Lastly, the highly metamict zircon cores suggest that REEs contained within them may be more readily leached than unaltered zircon, potentially offering an avenue for efficient REE recovery. These observations highlight the need for further exploration into the unique properties of zircon at Halleck Creek.

ARR and the University of Wyoming are collaborating to continue investigation of zircon at Halleck Creek. The initial collaboration will consist of performing QEMSCAN analysis at the University of Wyoming, to provide quantitative mineral analysis, and benchtop-scale REE leaching to assess how metamictization of zircon affects extraction of REEs from zircon.



Figure 8 - Heavy mineral separates illustrating previously unrecognized abundance of zircon in the Red Mountain pluton ore.



Figure 9 – Back scatter electron and cathodoluminescence image of a single zircon grain from Red Mountain pluton exhibiting metamict and REE enriched cores.

ARR reviewed ZrO2 values in drilling assay data across Halleck Creek. In 5,012 drilling assay samples with TREO greater than 1,000ppm, ZrO2 values ranged from 38ppm to 7,402ppm with an average of approximately 2,077ppm. In comparison to average crustal abundance of 300ppm, as determined by the USGS, the average ZrO2 values in Halleck Creek data are approximately 7 times average crustal abundance.

As a proof-of-concept study, Sepro Systems, in Vancouver, British Columbia, performed preliminary rougher spiral separation using 71kg of Halleck Creek core material. Sepro ground the core samples to p80 of 250 µm. The ground sample was mixed in the pump box at a pulp density of 28% and pumped to the top of a 7-turn mineral spiral. The preliminary rougher spiral concentrate showed significant upgrade of zircon of 4.9.

The spirals tests showed zircon recovery and 66.2%, for the concentrate material. Upgrades of zircon improved when the concentrate and middlings product were combined, indicating that cleaner, scavenger spiral testing would improve overall upgrade factors and recovery.

#### Indicative, Conditional and Non-Binding Proposal Received by ARR

On 26 April 2024, the Company announced that it had received an indicative, conditional and non-binding proposal from a NASDAQ-listed Special Purpose Acquisition Company ("SPAC") to acquire, by an issue of shares, the Company's 100% owned subsidiary Wyoming Rare (USA) Inc, which holds the Company's 2.34 billion tonne Halleck Creek Rare Earth Project ("Halleck Creek"). The proposal would have resulted in Wyoming Rare (USA) Inc. being listed (via a combination) with the SPAC as a separate entity on the NASDAQ Exchange in the USA.

The Board of ARR are aware of the potential benefits of this type of proposal, however are mindful of the significant potential of Halleck Creek, and the need to maximise returns to shareholders, while minimising dilution and declined to advance at the time.

The Board will continue to evaluate all strategic alternatives to ensure optimal returns to its shareholders, particularly after reaching certain near-term operational milestones that will provide investors further confidence in the significant value the Company believes is presented by Halleck Creek.

#### Mr Kenneth Traub and Mr Paul Zink resign as Non-Executive Directors

Mr Kenneth Traub resigned from the Company on 20 June 2024. Mr Paul Zink resigned on 30 June 2024. The Board wishes both Mr Traub and Mr Zink well and thanked them for their efforts and contribution to the Company.

#### **Subsequent events**

#### Drilling program July 2024 in Cowboy State Mine area

The Company mobilised drillers and drilling began in early July. The 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 2,470 metres (8,100 feet) (Figure 10).



Figure 10 – Proposed Drill Hole Locations (2024)

### **Cash and Financial Assets**

The Company is well funded with a 30 June 2024 cash position of AUD\$16.3m and financial assets associated with ASX listed Cobalt Blue Holdings (ASX:COB) and Godolphin Resources (ASX:GRL) of AUD\$3.8m.

The Company has sufficient resources to carry out its planned FY 2025 activities.

#### **Expenditure**

The Company had net cash expenditures of AUD\$ 0.8m for operating costs and AUD\$0.7m for investing activities during the quarter.

Payments to related parties are included in item 6 of the Appendix 5B. Item 6.1 relates to payment of non-executive directors' fees, superannuation and consulting fees for the quarter.

This announcement has been authorised for release by the Board of American Rare Earths Limited.

For further information contact:

Jane Morgan Investor and Media Relations Jane Morgan Management E: <u>im@janemorganmanagement.com.au</u> P: +61 (0) 0405 555 618

#### **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:**

<u>American Rare Earths</u> (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.

# Appendix 1 – La Paz Tenements 30 June 2024

Mining tenements held at the beginning of the quarter			Mining te acqui disposed during th	enements red or d/expired e quarter	Mining tenements held at the end of the quarter		juarter	
Serial Number	Claim Name	Claimant Name	Beneficial Interest %	Reference	Location	Serial Number	Claim Name	Claimant Name
639 Acres	Exploration License 008-120965-00	LA PAZ RARE EARTH LLC	100%			639 Acres	Exploration License 008-120965-00	LA PAZ RARE EARTH LLC
AZ101556959 - AZ101556965	LA PAZ-1 - LA PAZ-7	LA PAZ RARE EARTH LLC	100%			AZ101556959 - AZ101556965	LA PAZ-1 - LA PAZ-7	LA PAZ RARE EARTH LLC
AZ101558159 - AZ101558165	LA PAZ-8 - LA PAZ-14	LA PAZ RARE EARTH LLC	100%			AZ101558159 - AZ101558165	LA PAZ-8 - LA PAZ-14	LA PAZ RARE EARTH LLC
AZ101558166 - AZ101558178	LA PAZ-33 - LA PAZ-45	LA PAZ RARE EARTH LLC	100%			AZ101558166 - AZ101558178	LA PAZ-33 - LA PAZ-45	LA PAZ RARE EARTH LLC
AZ101559358 - AZ101559378	LA PAZ-46 - LA PAZ-66	LA PAZ RARE EARTH LLC	100%			AZ101559358 - AZ101559378	LA PAZ-46 - LA PAZ-66	LA PAZ RARE EARTH LLC
AZ101560374 - AZ101560379	LA PAZ-67 - LA PAZ-69	LA PAZ RARE EARTH LLC	100%			AZ101560374 - AZ101560379	LA PAZ-67 - LA PAZ-69	LA PAZ RARE EARTH LLC
AZ101560377	LA PAZ-71	LA PAZ RARE EARTH LLC	100%			AZ101560377	LA PAZ-71	LA PAZ RARE EARTH LLC
AZ101560378	LA PAZ-73	LA PAZ RARE EARTH LLC	100%			AZ101560378	LA PAZ-73	LA PAZ RARE EARTH LLC
AZ101560379	LA PAZ-75	LA PAZ RARE EARTH LLC	100%			AZ101560379	LA PAZ-75	LA PAZ RARE EARTH LLC
AZ101560380 - AZ101560389	LA PAZ-92 - LA PAZ-101	LA PAZ RARE EARTH LLC	100%			AZ101560380 - AZ101560389	LA PAZ-92 - LA PAZ-101	LA PAZ RARE EARTH LLC
AZ101859569 - AZ101859589	LA PAZ-108 - LA PAZ-128	LA PAZ RARE EARTH LLC	100%			AZ101859569 - AZ101859589	LA PAZ-108 - LA PAZ-128	LA PAZ RARE EARTH LLC
AZ101735180 - AZ101735200	LA PAZ-129 - LA PAZ-149	LA PAZ RARE EARTH LLC	100%			AZ101735180 - AZ101735200	LA PAZ-129 - LA PAZ-149	LA PAZ RARE EARTH LLC
AZ101736380 - AZ101736400	LA PAZ-150 - LA PAZ-170	LA PAZ RARE EARTH LLC	100%			AZ101736380 - AZ101736400	LA PAZ-150 - LA PAZ-170	LA PAZ RARE EARTH LLC
AZ101737338 - AZ101737358	LA PAZ-171 - LA PAZ-191	LA PAZ RARE EARTH LLC	100%			AZ101737338 - AZ101737358	LA PAZ-171 - LA PAZ-191	LA PAZ RARE EARTH LLC
AZ101738345 - AZ101738365	LA PAZ-192 - LA PAZ-212	LA PAZ RARE EARTH LLC	100%			AZ101738345 - AZ101738365	LA PAZ-192 - LA PAZ-212	LA PAZ RARE EARTH LLC
AZ101739385 - AZ101739391	LA PAZ-213 - LA PAZ-219	LA PAZ RARE EARTH LLC	100%			AZ101739385 - AZ101739391	LA PAZ-213 - LA PAZ-219	LA PAZ RARE EARTH LLC
AZ101924809 - AZ101924821	LA PAZ-220 - LA PAZ-232	LA PAZ RARE EARTH LLC	100%			AZ101924809 - AZ101924821	LA PAZ-220 - LA PAZ-232	LA PAZ RARE EARTH LLC
AZ101957743 - AZ101957763	LA PAZ-233 - LA PAZ-253	LA PAZ RARE EARTH LLC	100%			AZ101957743 - AZ101957763	LA PAZ-233 - LA PAZ-253	LA PAZ RARE EARTH LLC
AZ101958229 - AZ101958236	LA PAZ-254 - LA PAZ-261	LA PAZ RARE EARTH LLC	100%			AZ101958229 - AZ101958236	LA PAZ-254 - LA PAZ-261	LA PAZ RARE EARTH LLC
AZ105263134 - AZ105263153	LA PAZ-262 - LA PAZ-281	LA PAZ RARE EARTH LLC	100%			AZ105263134 - AZ105263153	LA PAZ-262 - LA PAZ-281	LA PAZ RARE EARTH LLC
AZ105764412 - AZ105764506	LA PAZ-282 - LA PAZ-376	LA PAZ RARE EARTH LLC	100%			AZ105764412 - AZ105764506	LA PAZ-282 - LA PAZ-376	LA PAZ RARE EARTH LLC

Mining tenements at the beginning of the quarter			Mining tenements acquired during the quarter			Mining tenements held at the end of the quarter			
Serial Number	Claim Name	Claimant Name	Beneficial Interest %	Reference	Claim Name	Location	Serial Number	Claim Name	Claimant Name
WY101766644 - WY101766648	REX-1 - REX-5	Wyoming Rare (USA) Inc	100%				WY101766644 - WY101766648	REX-1 - REX-5	Wyoming Rare (USA) Inc
WY105250218 - WY105250231	REX 10 - REX 23	Wyoming Rare (USA) Inc	100%				WY105250218 - WY105250231	REX 10 - REX 23	Wyoming Rare (USA) Inc
WY105260482 - WY105260501	REX 24 - REX 43	Wyoming Rare (USA) Inc	100%				WY105260482 - WY105260501	REX 25 - REX 43	Wyoming Rare (USA) Inc
WY105250232 - WY105250260	REX 44 - REX 72	Wyoming Rare (USA) Inc	100%				WY105250232 - WY105250260	REX 44 - REX 72	Wyoming Rare (USA) Inc
WY105772327 - WY105772255*	REX 75 - REX 165	Wyoming Rare (USA) Inc	100%				WY105772327 - WY105772255*	REX 75 - REX 165	Wyoming Rare (USA) Inc
WY105772203 - WY105772278*	REX 167 - REX 176	Wyoming Rare (USA) Inc	100%				WY105772203 - WY105772278*	REX 167 - REX 176	Wyoming Rare (USA) Inc
WY105772299 - WY105772326*	REX 178 - REX 257	Wyoming Rare (USA) Inc	100%				WY105772299 - WY105772326*	REX 178 - REX 257	Wyoming Rare (USA) Inc
WY105804752 - WY105804869	REX 258 - REX 375	Wyoming Rare (USA) Inc	100%				WY105804752 - WY105804869	REX 258 - REX 375	Wyoming Rare (USA) Inc
0-43568 – 0-43571	Halleck Creek	Wyoming Rare (USA) Inc	100%				0-43568 – 0-43571	Halleck Creek	Wyoming Rare (USA) Inc
				2024-2819 - 2023- 2856	TREX 79 - TREX 116	Albany County	2024-2819 - 2023- 2856	TREX 79 - TREX 116	Wyoming Rare (USA) Inc
				2024-2857 - 2023- 2864*	TREX 170- TREX 181	Albany County	2024-2857 - 2023- 2864*	TREX 170- TREX 181	Wyoming Rare (USA) Inc
				2024-2865 - 2023- 2905*	TREX 183 - TREX 223	Albany County	2024-2865 - 2023- 2905*	TREX 183 - TREX 223	Wyoming Rare (USA) Inc
						*Non-incl	usive range		

# Appendix 2 – Halleck Creek Tenements 30 June 2024

## Appendix 3 – Searchlight Tenements 30 June 2024

Mining tenements at the beginning of the quarter			Mining tenements acquired during the quarter		Mining tenements held at the end of the quarter			
Serial Number	Claim Name	Claimant Name	Beneficial	Reference	Location	Serial Number	Claim Name	Claimant Name
NV105228419 - NV105228498	T-01 - T-80	Western Rare Earth LLC	100%			NV105228419 - NV105228498	T-01 - T-80	Western Rare Earth LLC

## Appendix 4 – Beaver Creek Tenements 30 June 2024

Mining tenements at the beginning of the quarter			Mining ter acquired d quar	nements luring the rter	Mining t	enements held at ti	he end of the quar	ter	
Claim Name	Claim Name	Claimant Name	Beneficial Interest %	Reference	Location	Serial Number	Claim Name	Claimant Name	Beneficial Interest %
WY106313626 - WY106313662	BM 1 - BM 27	Wyoming Rare (USA) Inc	100%			WY106313626 - WY106313662	BM 1 - BM 27	Wyoming Rare (USA) Inc	100%
0-43773	0-43773	Wyoming Rare (USA) Inc	100%			0-43773	0-43773	Wyoming Rare (USA) Inc	100%

Appendix 5B

# Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity				
American Rare Earths Limited				
ABN	Quarter ended ("current quarter")			
86 003 453 503	30 June 2024			

Cons	solidated statement of cash flows	Current quarter \$A'000	Year to date (12 months) \$A'000
1.	Cash flows from operating activities	-	-
1.1	Receipts from customers		
1.2	Payments for	-	-
	(a) exploration & evaluation		
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(471)	(1,786)
	(e) administration and corporate costs	(557)	(3,531)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	147	492
1.5	Interest and other costs of finance paid	-	(5)
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	39	164
1.8	Other (provide details if material)	-	-
1.9	Net cash from / (used in) operating activities	(842)	(4,666)
2.	Cash flows from investing activities	_	
2.1	Payments to acquire or for:		
	(a) entities		
	(b) tenements	-	(511)
	(c) property, plant and equipment	-	(90)
	(d) exploration & evaluation	(689)	(3,010)
	(e) investments	-	(1,087)
	(f) other non-current assets	(45)	(59)

Cons	olidated statement of cash flows	Current quarter \$A'000	Year to date (12 months) \$A'000
2.2	Proceeds from the disposal of:	-	-
	(a) entities		
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	181
	(e) other non-current assets	-	42
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	Net cash from / (used in) investing activities	(734)	(4,534)
3.	Cash flows from financing activities	-	13,500
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)		
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	400
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	(810)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material): Lease payments	(35)	(134)
3.10	Net cash from / (used in) financing activities	(35)	12,956
4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	17,913	12,485
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(842)	(4,666)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(734)	(4,534)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	(35)	12,956

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (12 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	(3)	58
4.6	Cash and cash equivalents at end of period	16,299	16,299

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	16,299	17,913
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	16,299	17,913

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000			
6.1	Aggregate amount of payments to related parties and their associates included in item 1	194			
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-			
Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.					

Appendix 5B Mining exploration entity or oil and gas exploration entity quarterly cash flow report

7.	<b>Financing facilities</b> Note: the term "facility' includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the sources of finance available to the entity.	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000		
7.1	Loan facilities	-	-		
7.2	Credit standby arrangements	-	-		
7.3	Other (please specify)	-	-		
7.4	Total financing facilities	-	-		
7.5	Unused financing facilities available at qu	arter end			
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.				

8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (item 1.9)	(842)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(689)
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(1,531)
8.4	Cash and cash equivalents at quarter end (item 4.6)	16,299
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	16,299
8.7	Estimated quarters of funding available (item 8.6 divided by item 8.3)	10.65
	Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.	
8.8	If item 8.7 is less than 2 quarters, please provide answers to the following questions:	
	8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?	
	Answer: N/A	
	8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?	
	Answer: N/A	

# 8.8.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer: N/A

Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

#### **Compliance statement**

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date: 31 July 2024

Authorised by: The Audit & Risk Committee (Name of body or officer authorising release – see note 4)

#### Notes

- This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
- 2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
- 3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
- 4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee – eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
- 5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's Corporate Governance Principles and Recommendations, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.