



ASX: AR3

23 January 2025

Quarterly Activities Report

For the three months ended 31 December 2024

Highlights

Australian Government Grant for Koppamurra Rare Earths Project

- AR3 secured a \$5 million grant from the Australian Federal Government's International Partnerships in Critical Minerals Program.
- The grant is supporting the Koppamurra Project advancement through additional metallurgical testwork, completion of a Pre-Feasibility Study (PFS) and building / operating a demonstration plant.
- AR3's grant application was supported by AR3 shareholder and global advanced industrial materials manufacturer, Neo Performance Materials Inc (Neo) which has 30+ years of international rare earth magnetism experience.
- Grant funding validates the potential of the Koppamurra Project as a future source of rare earths, helping to create new and diversified supply chains vital to the world's clean energy transition.

Overland Uranium Project

- Inaugural drill program commenced in October 2024.
- Results from the first series of holes at the project's initial target validated AR3's geological model for the potential for sedimentary-hosted uranium deposits within the project area.
- Drilling intersected thick sequences of Murray group stratigraphy containing interbedded sands and clays. These formations display all the attributes required for pathways of uranium bearing groundwaters and for the potential for hosting uranium mineralisation.
- Drilling returned anomalous downhole natural gamma readings and portable X-ray fluorescence (pXRF) results (*ASX 13 November 2024 and 28 November 2024*), indicating the presence of uranium further reinforcing the region's exploration potential.
- Expanded project area to 4,000 km² in new frontier uranium region in South Australia, following Farm-In Agreement (*ASX 19 November 2024*).
- Follow up drilling, and extensional drilling completed in December reveals "palaeovalley" setting that is conducive for hosting uranium mineralisation (*ASX 21 January 2025*).

Corporate

- Maintained a strong cash position of \$5.5 million as of 31 December 2024, strengthened by receipt of \$750,000 initial grant payment and a \$708,000 R&D cash refund for research undertaken by the Company for the financial year ended 30 June 2024 under the Australian Government's Research and Development Tax Incentive Program.
- Annual General Meeting held 27 November 2024.
- Engage with this announcement at the AR3 [investor hub](https://www.ar3.com.au).

Executive Summary

Australian Rare Earths Limited (ASX: AR3) is pleased to provide an update on progress made during the quarter ended 31 December 2024.

Koppamurra Rare Earths Project

During the quarter AR3 was awarded \$5million grant under the Australian Government's International Partnerships in Critical Minerals Program. The funding will support additional metallurgical testwork, completion of a Pre-Feasibility Study (PFS), and the construction and operation of a Demonstration Plant to advance the Koppamurra Project and significantly derisk the development pathway. AR3 will match the grant funding, bringing the total planned expenditure to \$10 million spread over 2025 and 2026.

This grant funding validates the Koppamurra Project as a potential future source of rare earths, helping to create new and diversified supply chains vital to the world's clean energy transition.

Overland Uranium Project

The Overland Uranium Project expanded to 4,000 km² following the Farm-In Agreement announced in November 2024. This region shows strong potential for In-Situ Recovery (ISR) amenable uranium deposits, with promising paleochannel sediments of the Renmark and Murray Groups.

An inaugural drilling program at the Overland Uranium Project began in October 2024. Initial drilling has provided compelling evidence supporting AR3's initial geological model.

The five critical elements required for the formation of a sedimentary-hosted uranium deposit have been identified, including a uranium source rock, permeable sediments as migration pathways, and effective reductants acting as traps for uranium precipitation.

Financial Position

AR3 has maintained a strong cash position over the December quarter, following receipt of the first tranche of the International Partnerships in Critical Minerals grant funding from the Australian Government of \$750,000 in December 2024 as well as the R&D incentive for FY24 received in October 2024 of \$708,000.

This funding supports AR3's capability to continue to make material progress across its portfolio of clean energy transition metals projects.

Operational Review

Koppamurra Rare Earths Project

During the quarter AR3 secured a \$5 million grant from the Australian Government's International Partnerships in Critical Minerals Program. The funding will support additional metallurgical testwork, completion of a Pre-Feasibility Study (PFS), and the construction and operation of a Demonstration Plant to advance the project and significantly derisk the development pathway. AR3 will match the grant funding, bringing the total planned expenditure to \$10 million spread over 2025 and 2026.

AR3 will continue working closely with Neo Performance Materials Inc (Neo), which has 30+ years of international rare earths magnetics experience. AR3 has previously entered into a non-binding MOU for offtake with Neo. Neo continues to provide important technical support to the development of the Koppamurra project to further diversify its supply chain for its European midstream rare earth separation facility. Neo is expanding its European footprint with the addition of a sintered magnet facility near its midstream facility, positioning it as the leading vertically integrated magnet supplier in Europe.

Key deliverables that the grant funding will enable:

1. **Metallurgical Testwork and Flowsheet Development:** Laboratory scale metallurgical minerals processing test work to optimise and enhance the Project's process flowsheet. Heap leach engineering deliverables and equipment selection.
2. **Pre-Feasibility (PFS) Study:** Evaluation of the progressive heap leach and rapid rehabilitation flowsheet from the mine through to a Mixed Rare Earth product including social, environmental and economic assessments.
3. **Demonstration Plant Construction:** Demonstration scale equipment selection and optimisation, together with the construction of process infrastructure, based on design inputs from the flowsheet development and PFS.
4. **Demonstration Plant Operation:** Full-scale demonstration operation to validate process design, supporting the pathway to commercialisation

The grant funding validates the potential of the Koppamurra Project as a future source of rare earths, helping to create new and diversified supply chains vital to the world's clean energy transition.

Overland Uranium Project

During the quarter the project expanded to approximately 4,000 km² following the Farm-In Agreement with private minerals explorer Sheer Gold Pty Ltd (Sheer Gold), announced in November 2024. Under the Farm-In Agreement AR3 can earn 100% interest in the sedimentary-hosted uranium rights within Sheer Gold's EL 6678 by spending \$200,000 before 23 September 2025.

This strategic transaction adds 990km² of EL 6678, immediately adjoining AR3's Overland Uranium Project. This region shows strong potential for In-Situ Recovery (ISR) amenable, sedimentary-hosted uranium deposits. AR3 believes that the paleochannel sediments of the Renmark Group and Murray Group sediments (Eyre and Namba equivalents) offer significant potential for uranium discovery.

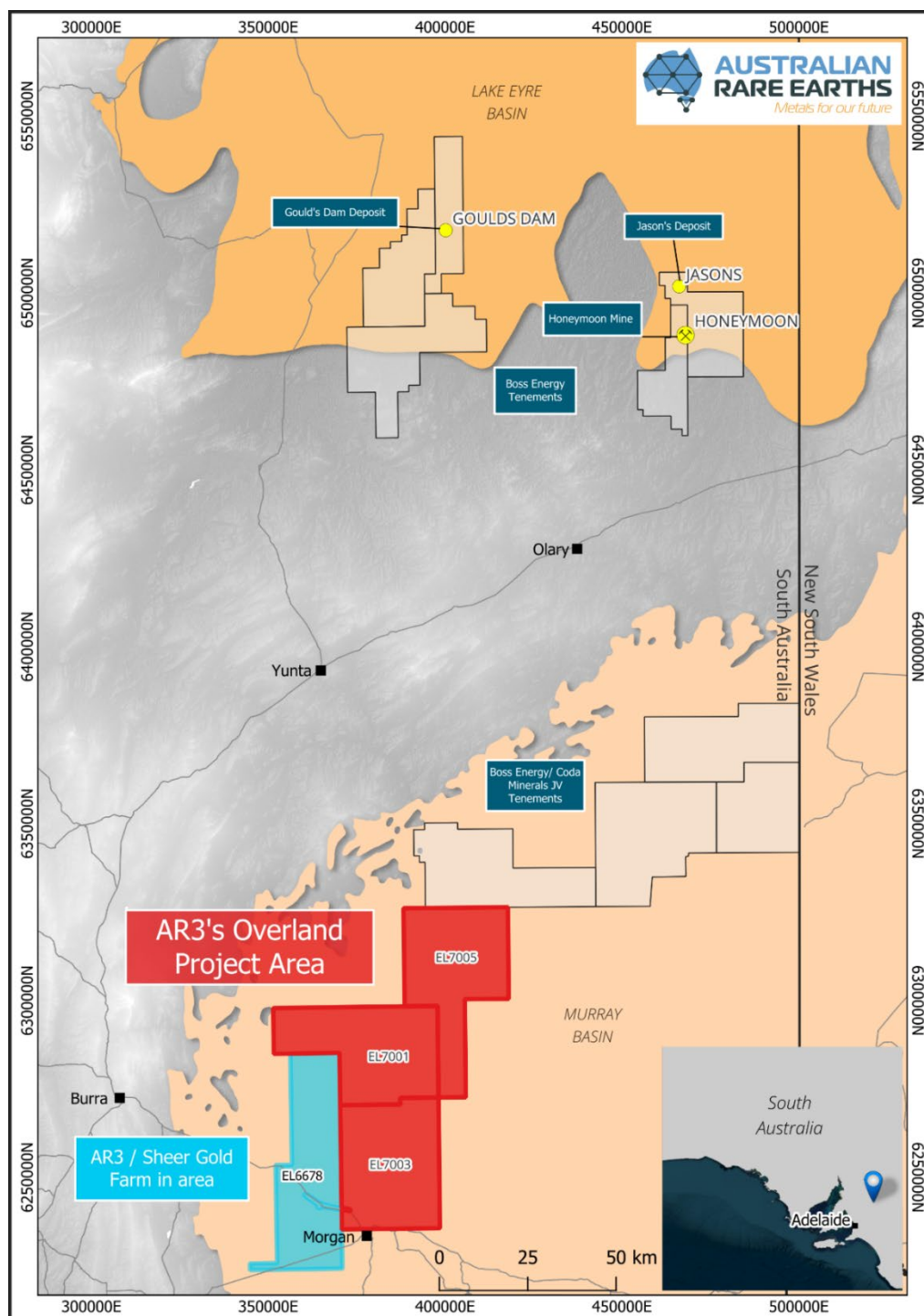


Figure 1: Overland Project area and Sheer Gold Farm-in area

An inaugural drilling program at the Overland Project began in October 2024, after receiving two approvals for the Exploration Program for Environment Protection and Rehabilitation (EPEPR), opening up approximately 770 km² of the total project area for immediate exploration.

Twenty-Five Air Core drill holes, totalling 3,271 meters, were drilled in 2024. The initial drilling yielded compelling evidence supporting AR3's initial geological model for In-Situ Recovery (ISR) amenable, sedimentary-hosted uranium deposits.

Drilling has intersected thick sequences of the Murray group stratigraphy containing sands and clays, which display all attributes required for pathways for uranium bearing groundwaters and for hosting uranium mineralisation. Drilling has revealed zones with anomalous gamma responses and elevated pXRF¹ uranium readings. These sequences are effectively bounded by confining clay layers above and below, with multiple zones of permeability identified, ideal settings for ISR amenable uranium deposits.

Drilling has also defined a north/south trending palaeovalley setting for the accumulation of thick sequences of Murray group stratigraphy containing sands, clays and on the western margin of the palaeovalley, abundant lignite horizons (see Figure 2 and 3), providing significant potential for hosting uranium mineralisation and an area of high priority follow-up targets in 2025.

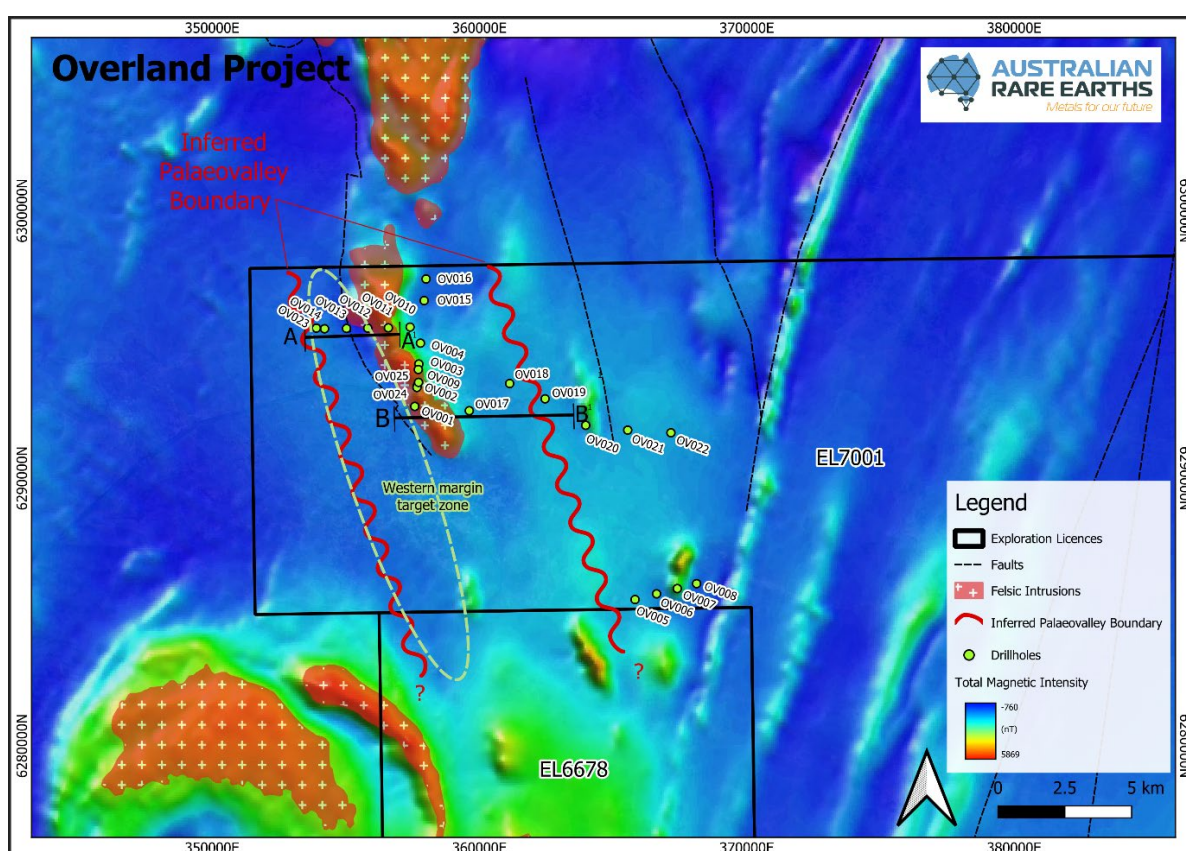


Figure 2: Overland drilling relative to airborne magnetics, faulting, and interpreted felsic intrusives. Recent drilling has defined a highly prospective palaeovalley and western margin target zone- both targeted for immediate follow up drill testing.

¹ **Cautionary Statement-** In relation to the disclosure of pXRF results, the Company cautions that estimates of uranium elemental abundance from pXRF results should not be considered a proxy for quantitative analysis of a laboratory assay result. Assay results are required to determine the actual widths and grade of the mineralisation. The company uses an Olympus Vanta M Series portable X-ray Fluorescence (pXRF) analyzer to screen Air Core drilling samples for mineralization prior to submitting samples to a commercial laboratory for assay. This provides an initial understanding of the mineralization distribution before sampling, ensuring submitted samples are representative of the targeted mineralization. While pXRF confirms the presence of mineralization, it does not accurately determine elemental concentrations due to limitations such as a small analysis window, uneven distribution, shallow penetration depth, and irregular surfaces. The pXRF results are indicative and the pXRF readings are subject to confirmation by chemical analysis from an independent laboratory. The Olympus Vanta M Series (S/N 842924) pXRF was last inspected on 11/07/2023 by SA Radiation Pty and checked against known standard reference material daily

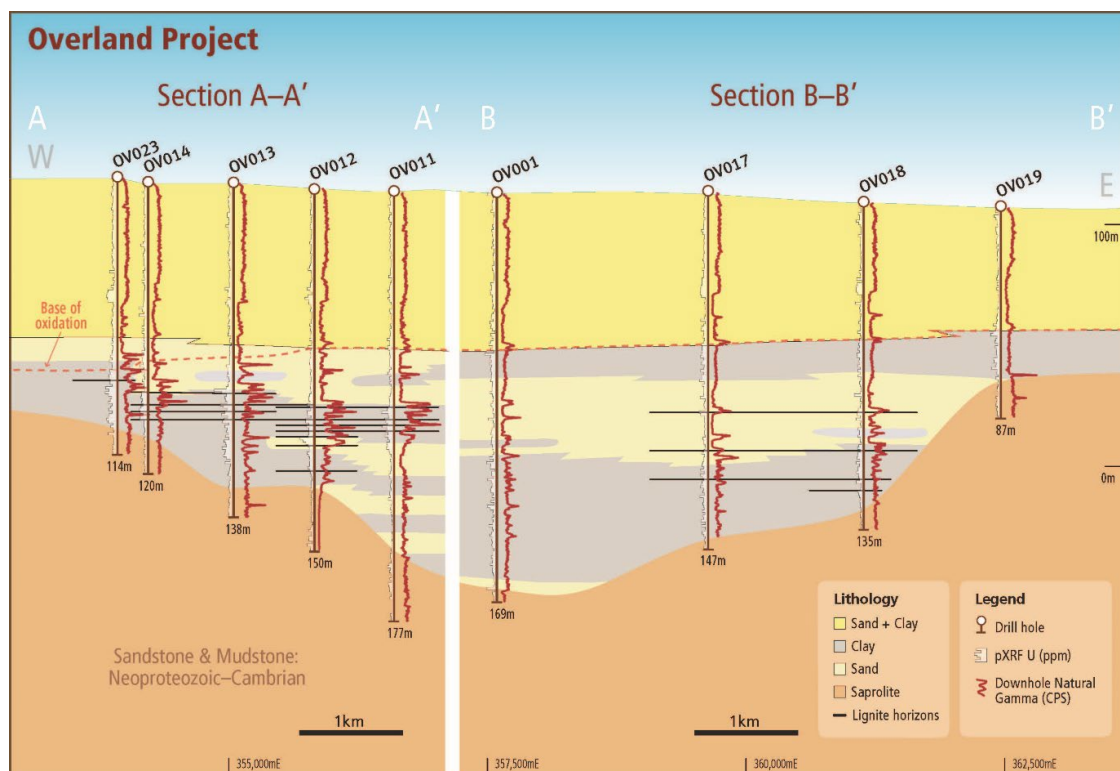


Figure 3: Cross section A-A1 and B-B1 across the defined palaeovalley showing lithology, pXRF U (ppm), and Gamma (CPS). Note the increased lignite horizons along the western margin and coinciding anomalous gamma response. Also note, the 2 Sections have been brought together in the same plane to illustrate the palaeovalley setting, see Figure 2 for section location plan.



Figure 4: Air Core drilling at Overland

Figure 5 is an illustrative example of individual drillhole details from the western margin of the defined palaeovalley.

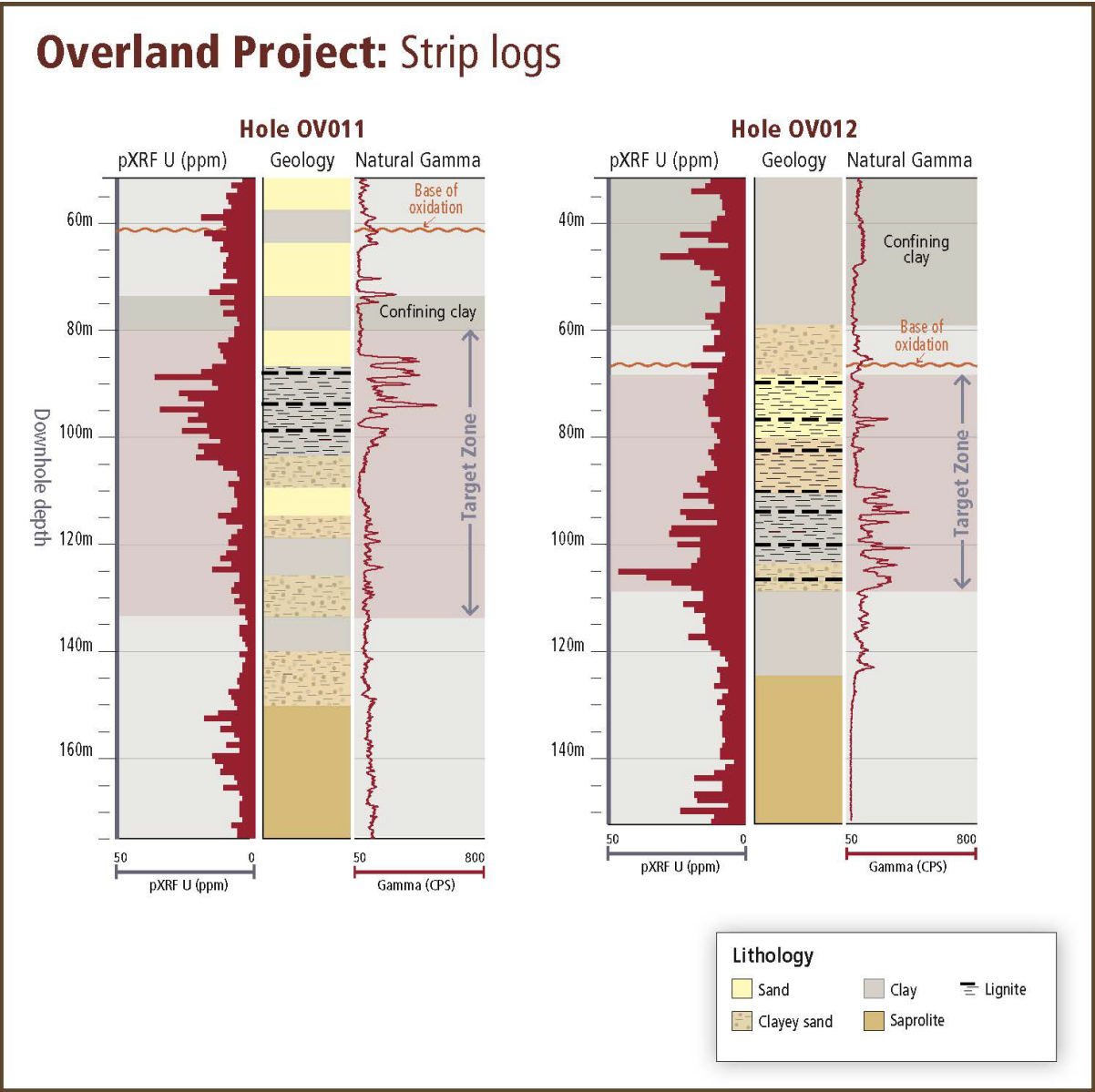


Figure 5: Examples of down hole logging detail, with anomalous natural gamma readings (CPS) and pXRF U (ppm) including some of the highest peak gamma responses of 406 CPS in hole OV011 at ~95m, 350 CPS in hole OV012 at ~92m, and peak pXRF U ppm responses of 39 ppm in hole OV011 from 90-91m and 45 ppm in hole OV012 from 103-104m¹.

Research work has commenced with CSIRO Minerals, to map the sediment-basement architecture, and palaeochannel sequences within the Murray and Renmark Group sediments using historical geophysical (airborne electromagnetic) data across AR3 tenure. The results of this research will be assessed for its future application in assisting drill targeting. This research project is part funded by the CSIRO Kick-Start Program. Kick-Start is an initiative for innovative Australian start-ups and SMEs, providing funding support and access to CSIRO’s research expertise and capabilities to help grow and develop their business.

Northern Queensland Rare Earths Project

No activities were conducted over the Company's Queensland projects during the reporting period.

Financial Update

Australian Rare Earths Limited completed the quarter with \$5.5 million of cash in hand.

The Company confirmed receipt of funding under the recently announced \$5 million grant from the Australian Government's International Partnerships in Critical Minerals (IPCM) Program. AR3 finalised and signed the grant agreement with the Australian Government and its initial grant instalment of \$750,000 was received in late December 2024. The grant work program will commence in January 2025.

The \$5 million grant will be paid upon AR3 providing progress reports demonstrating progress of the Project against the agreed activities. Progress reports will be provided on a 6 monthly basis, with the first report due 30 July 2025. AR3 will contribute matched progress payment funding totalling \$5 million. The material terms of the agreement are outlined in the ASX Announcement dated 7 January 2025.

Additionally, the Company received \$708,000 in R&D cash refund in October 2024.

Corporate Updates

Conference Presentation

During the quarter, Managing Director and CEO Travis Beinke presented at the Noosa Mining Investment Conference in November 2024. The presentation highlighted Australian Rare Earths' progress on the Koppamurra Project, a major deposit of valuable rare earth elements in South Australia and Victoria. The presentation also outlined the Company's plans to develop a sustainable supply of metals for clean energy, including the addition of uranium exploration projects in South Australia.

The Company attended the Metals Events 20th International Rare Earths Conference in Washington DC in October 2024 (*See ASX, 16 October 2024*).

Annual General Meeting

The Company hosted its Annual General Meeting on 27 November 2024 (*See ASX, 27 November 2024*), providing an overview of the Company's operational and financial year results to shareholders. All resolutions were passed.

Listing Rule 5.23 Disclosure

The Company confirms that it is not aware of any new information or data that materially affects the Exploration Results and/or the estimates of Mineral Resources in this release, and in respect of the estimates of Mineral Resources reported, that all material assumptions and technical parameters underpinning the estimates continue to apply and have not changed.

List of Tenements

Tenement	Location	Commodity	Project	Jurisdiction
EL6509	Naracoorte	Rare Earths	Koppamurra	SA
EL6613	Frances	Rare Earths	Koppamurra	SA
EL6690	Keith	Rare Earths	Koppamurra	SA
EL6691	Bordertown	Rare Earths	Koppamurra	SA
EL6942	Wattle Range	Rare Earths	Koppamurra	SA
EL6943	Tarpeena	Rare Earths	Koppamurra	SA
EL007254	Apsley	Rare Earths	Koppamurra	Victoria
EL007719	Minimay	Rare Earths	Koppamurra	Victoria
EL008208	Lake Mundi	Rare Earths	Koppamurra	Victoria
EL008254	Dartmoor	Rare Earths	Koppamurra	Victoria
EMP27952	Massie Creek	Rare Earths	Massie Creek	QLD
EMP28169	Stones Creek	Rare Earths	Dalrymple	QLD
EMP28168	Mt Wickham	Rare Earths	Dalrymple	QLD
EMP28165	Riverside	Rare Earths	Dalrymple	QLD
EPM28167	Burdekin	Rare Earths	Dalrymple	QLD
EPM28166	Dalberg	Rare Earths	Dalrymple	QLD
EL7005	Sturt Vale	Uranium	Overland	SA
EL7001	Warnes	Uranium	Overland	SA
EL7003	Bunyang	Uranium	Overland	SA
EL7010	Wirrealpa	Uranium	Triggs Bore	SA
EL7011	Moolawatana	Uranium	Hamilton Creek	SA

1 – All tenements are 100% held by AR3

Capital Structure

Shares on issue: 158,989,727 fully paid ordinary shares.

Options on issue: 27,771,480 unlisted options, comprising:

- 6,000,000 exercisable at \$0.30 and expiring 25 January 2025
- 8,163,147 exercisable at \$0.57 and expiring 9 May 2025
- 1,000,000 exercisable at \$1.02 and expiring 9 May 2025
- 500,000 exercisable at \$0.57 and expiring 4 July 2025
- 2,000,000 exercisable at \$0.60 and expiring 29 July 2025
- 1,750,000 exercisable at \$0.50 and expiring on 2 December 2025
- 500,000 exercisable at \$0.47 and expiring on 28 February 2026
- 1,500,000 exercisable at \$0.37 and expiring on 26 November 2026

- 1,500,000 exercisable at \$0.50 and expiring on 26 November 2026
- 1,550,000 exercisable at \$0.50 and expiring on 2 December 2026
- 1,500,000 exercisable at \$0.4739 and expiring on 20 December 2026
- 1,808,333 exercisable at \$0.435 and expiring on 26 November 2027

Appendix 5B Disclosures

The Company's cash balance at the end of the Quarter was A\$5,513,000.

AR3's accompanying Appendix 5B (quarterly Cashflow Report) includes an amount in item 6.1 which constitutes executive remuneration and non-executive director fees for the quarter.

During the period, the Company spent approx. \$1,171,000 on exploration activities for the Overland and Koppamurra projects. This included direct costs which include, drilling, geochemical assays, metallurgical test work and resource estimation. This figure also includes allocation of wages directly attributed to specific exploration and development activities.

Upcoming Activities for the next quarter:

Koppamurra

- Commence work associated with the International Partnerships in Critical Minerals Grant:
 - Laboratory scale metallurgical minerals processing test work
 - Planning for the Pre-Feasibility Study

Exploration

- Drilling at the Overland Uranium Project will re-commence in late January 2025, initially targeting the palaeovalley setting defined there and its western margin of the palaeovalley, as this area is considered highly prospective for hosting uranium mineralisation.
- Obtain regulatory approvals to commence drilling within EL6678 where AR3 has a Farm-in Agreement with Sheer Gold.

Investor Relations

- Investor Presentation at the RIU Conference in Fremantle on 18-20 February 2025

The Board of Australian Rare Earths authorised this announcement to be released to the ASX.

For further information please contact:

Australian Rare Earths Limited

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Media Enquiries

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We encourage shareholders and followers to ask any questions here: <https://investorhub.ar3.com.au>



About Australian Rare Earths Limited

Australian Rare Earths is committed to the timely exploration and development of its 100% owned, flagship Koppamurra Project, located in the new Koppamurra rare earths Province in southeastern South Australia and western Victoria. Koppamurra is a prospective ionic clay hosted rare earth deposit, uniquely rich in all the elements required in the manufacture of rare earth permanent magnets which are essential components in electric vehicles, wind turbines and domestic appliances. In addition, AR3 is actively reviewing other potential prospective areas which may also host uranium and ionic clay hosted rare earth deposits throughout Australia.

The Company is focused on executing a growth strategy that will ensure AR3 is positioned to become an independent and sustainable source of energy transition metals, playing a pivotal role in the global transition to a green economy.

Appendix 5B

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

Name of entity

Australian Rare Earths Limited

ABN

73 632 645 302

Quarter ended ("current quarter")

31 December 2024

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 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 - <i>net of allocations to capitalised exploration assets</i>	(132)	(596)
	(e) administration and corporate costs	(264)	(663)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	59	138
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives – R&D Tax incentive	708	708
1.8	Other (provide details if material)	-	-
1.9	Net cash from / (used in) operating activities	371	(413)

2.	Cash flows from investing activities		
2.1	Payments to acquire or for:		
	(a) entities	-	(570)
	(b) tenements	-	-
	(c) property, plant and equipment	(2)	(3)
	(d) exploration & evaluation	(1,171)	(1,933)
	(e) investments	-	-
	(f) other non-current	-	-

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	730	730
2.6	Net cash from / (used in) investing activities	(443)	(1,776)

3.	Cash flows from financing activities		
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	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	-
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)	(39)	(77)
3.10	Net cash from / (used in) financing activities	(39)	(77)

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	5,624	7,779
4.2	Net cash from / (used in) operating activities (item 1.9 above)	371	(413)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(443)	(1,776)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	(39)	(77)

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	5,513	5,513

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	5,319	5,450
5.2 Call deposits	-	-
5.3 Bank overdrafts	-	-
5.4 Other (Term Deposits)	194	174
5.5 Cash and cash equivalents at end of quarter (should equal item 4.6 above)	5,513	5,624

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 <i>* The payments disclosed here relate to fees and salaries paid to all Directors (including Managing Director) during the quarter.</i>	165
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.

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

7.	Financing facilities <i>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.</i>	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 quarter 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)	371
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(1,171)
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(800)
8.4	Cash and cash equivalents at quarter end (item 4.6)	5,513
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	5,513
8.7	Estimated quarters of funding available (item 8.6 divided by item 8.3)	6.89 quarters
<i>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.</i>		
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		
<i>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.</i>		

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:23 JANUARY 2025.....

Authorised by:By the Board.....
(Name of body or officer authorising release – see note 4)

Notes

1. 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.