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16 February 2026

Koppamurra testwork optimisation delivers high recoveries of critical rare earth elements

- **Doubling of the rate of leaching on the heap leach:** Testwork confirms a clear pathway to materially faster leaching by doubling irrigation rates, delivering strong Magnet Rare Earth recoveries in around half the time.

- **~70% Magnet Rare Earth recoveries achieved:** Strong recoveries for Nd, Pr, Dy and Tb confirmed across optimised test conditions.

- **Reagent optimisation delivers cost upside:** Halving the use of magnesium sulphate ($MgSO_4$) in the leach solutions shows no measurable impact on recoveries, supporting reduced reagent intensity.

- **Lower capital and lower operating costs**: Faster leach cycles support the opportunity to achieve target production rates with a reduced heap leach footprint.

- **High recoveries of strategically important rare earths**: Testwork delivered high recoveries of Yttrium (70%), Gadolinium (69%) and Samarium (66%) - elements subject to China's expanded export controls[1] and increasingly critical to Western supply chains, as highlighted by the inclusion of these elements in an upcoming DoW Critical Minerals Request for Project Proposal to be released through the Defense Industrial Base Consortium (DIBC).

- **Optimisation program advancing with ANTSO:** Results strengthen the technical basis for pilot plant preparation[2], a comprehensive metallurgical optimisation program in progress with the Australian Nuclear Science and Technology Organisation (ANSTO) to further refine the flowsheet, and inform the Pre-Feasibility Study (PFS).

- Engage with this announcement at the AR3 ***investor hub.***

AR3 Managing Director and CEO, Travis Beinke, commented:

"These results represent a further step-change in our continued drive to simplify and optimise our Koppamurra rare earths project.

The latest heap leach testwork has demonstrated a clear pathway to materially increase leaching rates by doubling irrigation flow, while also delivering Magnet Rare Earth

[1] Export controls announced by China April 2025
[2] See ASX release 1 December 2025: AR3 advances Koppamurra with pilot-scale processing at ANSTO's new facility

recoveries up to ~70% - a significant improvement in performance at this stage of development.

Importantly, we have also shown that magnesium sulphate consumption can be halved with no measurable impact on leach kinetics or final extraction, supporting a lower reagent intensity flowsheet and strengthening the case for improved operating efficiency.

These outcomes build directly on our earlier work, including strong impurity rejection via the oxalic acid precipitation route, reinforcing a credible pathway to producing a high-quality Mixed Rare Earth Oxide product.

Together, this growing body of metallurgical work strengthens the technical basis for the Pre-Feasibility Study, supports pilot plant preparation with ANTSO, and further derisks the key scale-up parameters as we continue engagement with downstream customers."

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Overview

Australian Rare Earths Limited (ASX: AR3) is pleased to report a significant metallurgical update from recent testwork. The results are part of a comprehensive metallurgical optimisation program in progress with ANSTO as part of preparation for operating a pilot plant and will also inform the Koppamurra Pre-Feasibility Study.

The testwork program has been designed to explore optimisation opportunities across key clay preparation and processing stages of the project's flowsheet. Figure 1 below shows the Koppamurra conceptual project flowsheet with labels referencing the areas of focus for the comprehensive metallurgical optimisation program in progress with ANSTO and further detailed in this announcement.

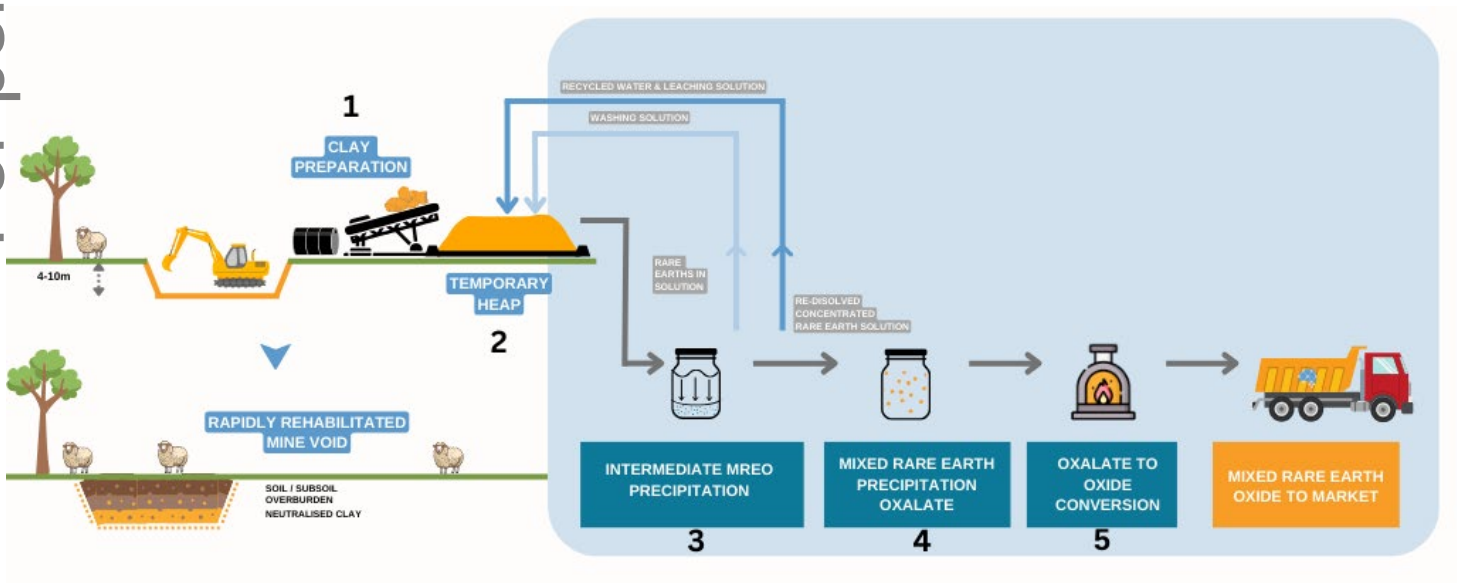

***Figure 1**: Koppamurra Conceptual Project Flowsheet*

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Testwork Overview

1. **Clay Preparation:** Testing agglomeration parameters to provide optimised sulphuric acid and binder dosage rates to minimise reagent consumption and costs.
2. **Temporary Heap**: Increasing irrigation rates of leaching solutions to potentially reduce the time clay is required to spend on the heap and/or to reduce the size of the heap pads to reduce capital and operating costs; Testing the reduction of reagents used in leaching to reduce operating costs; Pregnant Liquor Solution (PLS) recirculation testing to establish pathway for lower volumes moving to downstream processes with higher grade REE contents in solution.
3. **Intermediate MRE precipitation:** Testing a range of alternate reagents to optimise consumption rates and costs. Testing the operation of the precipitation at ambient temperatures to further lower costs.
4. **Mixed Rare Earth Precipitation to Oxalate:** Testing oxalic acid dosage rates, pH and temperature, while maximising rare earth recoveries.
5. **Oxalate to Oxide conversion:** Testwork to produce a final calcined product (Mixed Rare Earth Oxide) with minimal impurities.

Testwork progress update

This progress update summarises the significant improvements identified through increasing the irrigation rate over the heaps and reducing reagent consumption in the leaching stage. Testwork continues on the additional optimisation opportunities outlined above and are to be completed over the coming months.

The latest testwork has focused on optimising elements of the "2. Temporary Heap" stage of the flowsheet and confirms two key aspects: lower operating cost through reduced reagent intensity and a step-change improvement in leaching kinetics through higher irrigation rates, all while yielding magnet rare earth recoveries of ~70%.

2. Temporary Heap

Leaching rate upside: Using the baseline lixiviant conditions (0.3 M $MgSO_4$ at pH 2.2), increasing irrigation from 5 to 10 L/m^2/h (Test C15) approximately halved the time required to achieve target MREE extractions. The dysprosium (Dy) extraction profile is shown in Figure 2 – and is indicative of the full suite of MREE, as shown in Table 1.

Importantly, earlier ANSTO work indicates irrigation rates of up to 35 L/m^2/h are sustainable for ore washing, highlighting potential for further gains beyond leaching at 10 L/m^2/h demonstrated to date. This work showed that these very high irrigation rates in washing had minimal impact of the flowability of the heap, and that 'slumping' of the heap was not an issue impacting these flows.

Reagent optimisation and operating cost reduction: The baseline heap leach lixiviant (0.3 M $MgSO_4$ at pH 2.2) was adopted from the original tank leach flowsheet, where $MgSO_4$ was shown to enhance REE extraction. This program tested whether that concentration is required under heap conditions, or whether reduced $MgSO_4$, or acid alone over longer leach durations, can achieve comparable results.

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Comparison columns, along with the previously mentioned higher flowrate test (C15), were run concurrently at pH 2.2 and 5 L/m^2/h:

- No $MgSO_4$
- Reduced $MgSO_4$ (0.15 M) (Test C13)
- Base case $MgSO_4$ (0.3 M) (Test C14)

The tests confirmed that $MgSO_4$ is required, however, as shown in Figure 2, halving the $MgSO_4$ concentration had no measurable impact on either leaching rate or final extraction, supporting a clear opportunity to reduce reagent consumption without compromising performance.

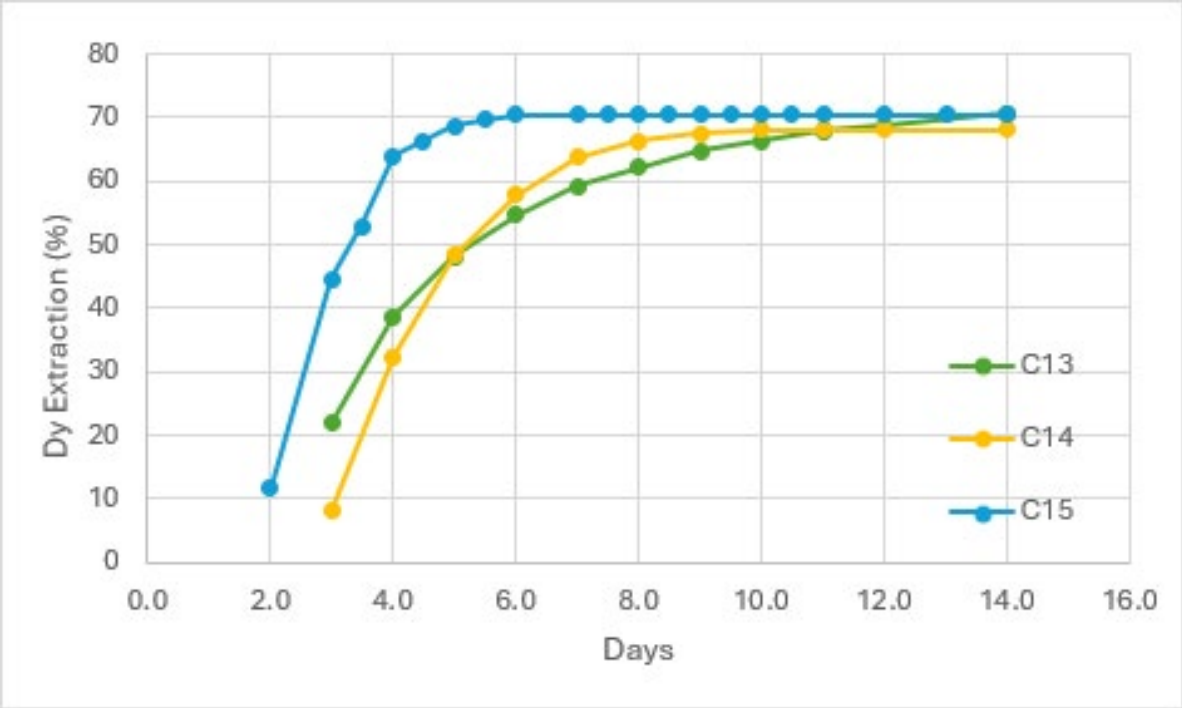

Figure 2: *Dy extraction over time; C15 at double flow rate compared with C12 (no $MgSO_4$), C13 (50% $MgSO_4$) & C14 (std conditions)*

Rare Earth Recoveries: The testwork has also resulted in increasing confidence of higher rare earth recovery rates with the key magnet rare earths recoveries reaching ~70% across a range of test conditions. Recovery improvement opportunities continue to be explored with increased recoveries resulting in additional revenue for the project.

	Reagent Addition	Liquor	Irrigation Rate	Test Duration	Recoveries %				
Column ID	$MgSO_4$	pH	(L/m2/hr)	(days)	Nd	Pr	Dy	Tb	MRE
AR3-C13	0.15 M	2.2	5	14	63	66	71	62	64
AR3-C14	0.3 M	2.2	5	14	64	66	68	64	65
AR3-C15	0.3 M	2.2	10	14	69	71	71	63	70

Table 1: *Column test conditions with Magnet Rare Earth recoveries*

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Test configuration: Column tests were conducted in 100 mm ID columns with a target bed height of ~1.0 m, loaded with ~6 kg of agglomerated ore per column. All four columns were operated concurrently at room temperature. The Koppamurra ore was a subsample of the same material used in the bulk leach program[3] and was agglomerated using the same acid and flocculant additions applied in prior programs.

Key takeaways

Collectively, these results materially improve the potential economics and scalability of the Koppamurra flowsheet. Demonstrating that heap irrigation rates can be at least doubled while maintaining strong recoveries provides a clear pathway to faster leach cycles, higher throughput and earlier MREO production from a given heap leach footprint.

In addition, the testwork confirms that a material reduction in $MgSO_4$ addition has no adverse impact on extraction, supporting lower reagent costs and simplified solution management. In practical terms, the combination of faster leach kinetics and lower reagent intensity provides a pathway to lower operating costs and, importantly, the potential to reduce capital intensity by achieving the same production outcome with smaller heap leach pads and associated infrastructure.

These optimisation outcomes build on the Company's earlier metallurgical milestones, including development of the downstream oxalic acid precipitation route and the production of a marketable mixed rare earth oxide product from pregnant leach solution[4].

Next Steps

The comprehensive metallurgical optimisation program with ANSTO outlined above continues with results key to further refinement of the flowsheet, with outcomes to be included in and inform the Pre-Feasibility Study. This work will set the foundation for the pilot plant operation to commence with ANSTO mid-2026.

The announcement has been authorised for release by the Board of Australian Rare Earths Limited.

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Engage and Contribute at the AR3 investor hub: https://investorhub.ar3.com.au/

[3] See ASX release 26 June 2025: Bulk leach program delivers strong rare earth recoveries at Koppamurra
[4] See ASX release 20 January 2026: Koppamurra test work produces high purity Mixed Rare Earth Oxide

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Competent Person's Statement

The information in this report that relates to metallurgical results is based on information compiled by Australian Rare Earths Limited and reviewed by James Davidson who is the principal Metallurgist of Rendement and is a Fellow of the AusIMM. Mr Davidson has sufficient experience that is relevant to the metallurgical testing which was undertaken to qualify as a Competent Person as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Davidson consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

The information in this report that relates to Exploration results is based on information compiled by Australian Rare Earths Limited and reviewed by Mr Rick Pobjoy who is the Chief Technical Officer of the Company and a member of the Australian Institute of Mining and Metallurgy (AusIMM). Mr Pobjoy has sufficient experience that is relevant to the style of mineralisation, the type of deposit under consideration and to the activities undertaken to qualify as a Competent person as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Pobjoy consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

About Australian Rare Earths Limited

Australian Rare Earths (AR3) is an emerging diversified critical minerals company, strategically positioned to meet the growing global demand for uranium and rare earth elements:

- *AR3's Koppamurra Rare Earths Project in South Australia and Victoria is a significant deposit of light and heavy rare earths, which has secured important Australian government support through a $5 million grant to accelerate development. With support from global advanced industrial materials manufacturer, Neo Performance Materials, AR3 is progressing toward a Pre-Feasibility Study and a demonstration facility, solidifying its role in diversifying global rare earth supply chains for the clean energy transition.*
- *AR3's large ~8,000 km^2 Overland Uranium Project in South Australia shows strong uranium discovery potential, with initial drilling identifying opportunities for substantial near-surface and deeper deposits.*

With strategic projects and strong government support, AR3 is poised to benefit from significant growth in the critical minerals market.

JORC Table 1 – Section 1

Section 1 Sampling Techniques and Data		
Criteria	**Explanation**	**Comment**
Sampling techniques	*Nature and quality of sampling (e.g., cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g., 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g., submarine nodules) may warrant disclosure of detailed information.*	*Mechanical excavation techniques were applied to the recovery of samples, for bulk leach testwork, from the area of AR3's Trial Pit. Trial Pit samples were taken from a number of discrete locations within the pit, each nominally 1m wide x 1m long x 0.5m deep. Material from these locations were loaded into a dump truck by an excavator and taken to a laydown site for assessment.* *Up to 5 x dump truck piles of material from each discrete location were placed on the laydown. Up to 12 x bulka bags were filled from those (up to) 5 x piles of material and each was provided a unique Bulka Bag # which referenced a Location and sample pile number. Eg C2L1aP3 (C2 - cut bench 2, L1a – location 1a, P3 – pile 3).* *Samples provided for column leach and bulk leach testwork were sourced from Trial Pit Locations;* *C2L1aP3, Bulka Bag #146* *C2L3P2, Bulka Bag #121* *C4L4P5, Bulka Bag #410* *C4L4P2, Bulka Bag #345* *Each of these four bulka bags were emptied into separate piles on a clean warehouse floor at Brisbane MetLabs (BML), composited into single pile using skid steer. Performed standard cone and quarter homogenization method on the pile using skid steer. Heavy dusting as the ore was dry was managed through water added via mist at ~2L/min over ~25 mins.* *Final mixed composite transferred to 18 x 200L drums via skid steer.* *Final mass across drums was ~3324 kg (note this is actually more than the as-received mass, but some water mass added during dust suppression – still within typical lab/weigh scale accuracy).* *1 x drum was set aside for redundancy.* *The remaining 17 x drums were screened to 31.5 mm top size.*

Section 1 Sampling Techniques and Data		
Criteria	**Explanation**	**Comment**

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Drilling techniques	*Drill type (e.g., core, reverse circulation, open- hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g., core diameter, triple or standard tube, depth of diamond tails, face-sampling bit, or other type, whether core is oriented and if so, by what method, etc).*	• *No drilling techniques were used in the recovery of the samples from the Trial Pit used in the bulk leach testwork.*
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples.* *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• *Not applicable, no drilling was used in the recovery of the samples used in the bulk leach testwork*

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Criteria	Explanation	Comment
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* *The total length and percentage of the relevant intersections logged.*	***Excavation and Stockpiling of Ore Samples from Trial Pit*** *Trial Pit samples were taken from a number of discrete locations within the pit, nominally 1m wide x 1m long x 0.5m deep. Sampling from the Trial Pit was undertaken using the Sampling Procedure and Action Register developed by WGA for AR3, 19th April 2022, detailed as follows;* • *When digging nears a sample location within the pit, Pit Manager is to communicate with the excavator operator, the truck operator and Geologist, the location number (L1, L2, L3, L4) to be excavated and the sub-area within the ore sampling area where the ore sample material is to be off-loaded.* • *For each sample location, the four (4) truck loads are to be off-loaded within the corresponding ore sampling sub-area as defined by the signs. Loads of the same sample location are ideally off-loaded into distinct separate piles, however if space is limited, load piles can be slightly overlapped.* ***Ore Identification*** *For each of the four (4) truck load piles within a sample location, place a 'pile stake' denoting the cut stage, the sample location and the pile number for the four (4) separate sub-area as follows:* • *Cut stage_sample location pile number (i.e. C1_L2_P4)* • *For each ore sample location, a visual inspection of the individual four (4) piles is to be performed to determine if the lithology of the piles aligns with the expected lithology from the Geovia Surpac model spreadsheet:* • *If the actual lithology aligns with the expected lithology, keep these piles and sample.* • *Add a 'SAMPLE' comment to the pile stake.* • *If the actual lithology DOES NOT align with the expected lithology, for ≤50% (i.e. less than or equal to two (2) out of four (4) piles) of the ore sample, disregard these piles and do not sample.* • *Add a 'DO NOT SAMPLE' comment to the pile stake.* • *Add a comment within the Geovia Surpac*

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		model spreadsheet, detailing both the number of piles that did not align with the expected lithology and the actual lithology of those piles • *If the actual lithology DOES NOT align with the expected lithology, for >50% (i.e. three (3) or more piles) of the ore sample, keep these piles and sample.* • *Add a 'SAMPLE' comment to the pile stake* • *Update the Geovia Surpac model spreadsheet with the actual lithology of the ore sample and record in the comments section that a difference in lithology was identified for all sample location piles* • *Place the pile stake in the corresponding pile and photograph each pile separately* ***Ore Sampling for XRF Testing*** • *For the piles identified as 'SAMPLE', sample spear (or hand-grab based on the lithology of pile), three (3) samples of approximately 500g from the pile at random (i.e. from top, middle and base of pile).* • *Place each 500g sample in a separate, calico bag with pre-assigned sample identification code.* • *Based on the number of piles identified as 'SAMPLE' for each sample location, a minimum of six (6) and a maximum of twelve (12) 500g samples are to be taken for each sample location.* • *Record the following within the XRF CSV file: Pre-assigned sample identification code (e.g. 683229) Cut stage_sample location_pile number (i.e. C1_L2_P4)* ***Ore Sampling for Bulk Bagging*** • *For the piles identified as 'SAMPLE', instruct the mini excavator operator to take the required tonnage (based on the Geovia Surpac model spreadsheet) from piles at random to the bulk bag filling station.* • *For each bulk bag, record the following: Cut stage and sample location (i.e. C1_L1) and average pXRF Yttrium values across all samples for the sample location* • *Once required tonnage from a sample location is bagged, instruct the grader operator to push piles identified as 'DO*

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		NOT SAMPLE' and leftover ore from the sampled piles, into the overburden stockpile.
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all cores taken.* *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* *For all sample types, the nature, quality, and appropriateness of the sample preparation technique.* *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* *Measures taken to ensure that the sampling is representative of the in- situ material collected, including for instance results for field duplicate/second-half sampling.* *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• *The pre-split samples from the 4 x bulka bags (17 x drums) were passed through a 31.5 mm screen and the oversize gently crushed and recombined with the undersize. Oversize that could not be broken down – tamp material for example was collected and set aside (less than 0.5% of total mass). The material was then taken through to agglomeration.*

Criteria	**Explanation**	**Comment**
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* *Nature of quality control procedures adopted (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of*	• *The samples for the BML Bulk Leaching program of work were subsampled and assayed by a combination of XRF and ICP (in-house - BML). Due to concern regarding Ca concentration, multiple head assays undertaken (both fresh new samples and repeats).* ***ANSTO Testwork on MREO and MREC precipitation**:* • *Samples, including the PLS, were analysed in-house by ANSTO and were not contracted out to third party service providers.* • *ANSTO Minerals conducts its activities in accordance with AB-0101 ANSTO Quality Policy, following the guidelines of ISO 9001 requirements for Quality Management Systems.* • *Elemental analysis of samples was undertaken using the following*

	accuracy (i.e., lack of bias) and precision have been established.	*approach:* • *Solids – a combination of XRF and digestion/ICP-OES/ICP-MS.* • *Liquors – a combination of ICP-OES and ICP-MS.* • *For elemental concentrations measured using ICP-OES and ICP-MS, the instrument is calibrated using ICP standard solutions containing the elements of interest. Internal standards are added to each sample to determine recoveries. Certified reference liquors are used to verify the calibration. Each calibration curve is verified to ensure a correlation coefficient of 0.995 or better for quantitative results. Internal standard recoveries are verified to ensure 100 ± 30%. Method blank and/or calibration blank solutions are analysed at the beginning of the sample sequence and high blank values investigated, and appropriate action taken where appropriate.* *The adopted QA/QC protocols are acceptable for this stage of test work. The sample preparation and assay techniques used are industry standard and provide a total analysis.*

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Criteria	Explanation	Comment
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.* *The use of twinned holes.* *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* *Discuss any adjustment to assay data.*	• *All results are checked by the CP for reporting of this testwork.*
Location of data points	*Accuracy and quality of surveys used to locate drill holes (collar and down- hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* *Specification of the grid system used.* *Quality and adequacy of topographic control.*	*Trial Pit samples for Bulk Leach testing were taken from 4 x discrete locations within the Trial Pit,* Appendix 2, Koppamurra Project Location Map with Trial Pit Location. *The Trial Pit location is within an area roughly 140m long by 45m wide (6,300m^2) bounded by these co-ordinates;* • *5884400mN, 493385mE* • *5884400mN, 493525mE* • *5884445mN, 493525mE* • *5884445mN, 493385mE.* • *The datum used is GDA2020/MGA Zone 54.* • *Topographic data over the Trial Pit and over the southern area of the Koppamurra Mineral Resource (including all Inferred/Indicated/Measured resource areas) is derived from a fixed wing LiDAR survey flown in May 2022 by Aerometrex using their RIEGL VQ-780ii sensor. The LiDAR survey data was captured at a minimum 25 points per meter and flown at a height of 591m to ensure ~10cm vertical accuracy.* • *The Trial Pit location was set out by Licensed Surveyors; Alexander & Symonds Pty Ltd 27A Crouch Street South Mt Gambier, South Australia* • *The accuracy of the locations is sufficient for this stage of exploration.*

Criteria	Explanation	Comment

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Data spacing and distribution	*Data spacing for reporting of Exploration Results.* *Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* *Whether sample compositing has been applied.*	• *Sampling from the Trial Pit was conducted at 18 discrete locations within the Pit and totaled ~500t of material from an excavation that uncovered ~3,500t of REE mineralized clays in total.* • *Sample sizes from each of the 18 locations were nominally 1m wide by 1m long by 0.5m thick.* • *6 sample locations were located on cut bench 1, 5 sample locations were located on cut bench 2, 3 sample locations were located on cut bench 3, 4 sample locations were located on cut bench 4.* • *Up to 12 x bulka bags were filled from those (up to) 5 x piles of material and each was provided a unique Bulka Bag # which referenced a Location and sample pile number. Eg C2L1aP3 (C2 - cut bench 2, L1a – location 1a, P3 – pile 3)* • *Samples used in the Bulk Leach Testwork were 1 x bulka bag (of the up to 12) from 4 locations, 2 x from cut bench 2 and 2 x from cut bench 4.* • *The 4 x samples were composited together to provide approximately 3.3t of material for bulk leach testwork.*
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• *The Koppamurra mineralisation is interpreted to be hosted in flat lying clays that are horizontal. Undulation of the clay unit is influenced by the weathered limestone basement below.* • *All drill holes are vertical which is appropriate for horizontal bedding and regolith profile.* • *The Koppamurra drilling was oriented perpendicular to the strike of mineralisation defined by previous exploration and current geological interpretation.* • *The strike of the mineralisation is north south, and the high grades follow a northwest-southeast trend.* • *All drill holes were vertical, and the orientation of the mineralisation is relatively horizontal.* • *The orientation of the drilling is considered appropriate for testing the lateral and vertical extent of mineralisation without any bias.*

Criteria	Explanation	Comment

Sample security	*The measures taken to ensure sample security.*	• *For the Bulk leach ore samples:*
		  • *Approximately 2,941 kg of ore, securely packaged in bulk bags on pallets and wrapped in heavy-duty plastic (total weight 3,370 kg), was transported from Adelaide to Brisbane Met Labs by truck via Northline, a leading Australian freight and logistics provider.*
		  • *Upon arrival no reports of tampering with the sample were made.*
		• *For the PLS samples sent to ANSTO:*
		  • *Approximately 2,000 L of PLS was securely transported in IBCs on pallets from Brisbane Met Labs to ANSTO by truck via FedEx, a reputable multinational freight and logistics provider. To mitigate the risk of loss, the PLS was shipped in two separate consignments. The 2000 L of PLS was split across two IBCs, where the second shipment was dispatched only after confirmation of safe delivery of the first shipment to ANSTO.*
		  • *Upon arrival no reports of tampering with the sample were made.*

Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	• *A review of the Metallurgical Bulk Leach Test Work and results was undertaken by Rendement – Consulting Engineers – James Davidson. Rendement is the CP for Metallurgical Testwork.*

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Appendix I - JORC Table 1 - Section 2, Reporting of Exploration Results

Section 2 Reporting of Exploration Results		
Criteria	**Explanation**	**Comment**
Mineral tenement and land tenure status	*Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• *Koppamurra Project comprises of a granted South Australian Exploration Licences (EL), EL6509, EL6613, EL6690, EL6691, EL6942, and EL6943 along with Victorian EL007254 and EL007719 covering a combined area of ~6,300 km^2 which is in good standing.* • *The Trial Pit excavation and sampling work was completed on the tenement EL 6509 which is 100% owned by the company Australian Rare Earths Ltd.* • *EL6509 is within 100m of a Glen Roy Conservation Park and the Naracoorte Caves National Park, the latter of which is excised from the tenement. The License area contains several small Extractive Mineral Leases (EML) held by others, Native Vegetation Heritage Agreement areas, as well as the Deadman's Swamp Wetlands which are wetlands of national importance.* • *A Native Title Claim by the First Nations of the South East #1 has been registered but is yet to be determined. The claim area includes the areas covered by EL's 6509, 6613, 6690, 6691, 6942, and 6943.* • *The Exploration License EL6509 original date of grant was 15/09/2020 with an expiry date of 14/09/2028.* • *Details regarding royalties are discussed in chapter 3.4 of Australian Rare Earths Prospectus dated 7 May 2021.*

Criteria	**Explanation**	**Comment**
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	• *Exploration activities by other exploration companies in the area have not previously targeted or identified REE mineralisation.* • *Historical exploration activities in the vicinity of Koppamurra include investigations for coal, gold and base metals, uranium, and heavy mineral sands.* • *Historical exploration by other parties is detailed in Chapter 7 of Australian Rare Earths Prospectus dated 7 May 2021.*

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Geology	*Deposit type, geological setting and style of mineralisation.*	• *The Koppamurra deposit is interpreted to contain analogies to ion adsorption ionic clay REE deposits. REE mineralisation at Koppamurra is hosted by clayey sediments interpreted to have been deposited onto a limestone base (Gambier Limestone) and accumulated in an interdunal, lagoonal or estuarine environment.* • *A dedicated research program investigating the source of the REE at Koppamurra is ongoing, with no definitive source of the REE confirmed to date although preliminary results of this study have ruled out the alkali volcanics in south- eastern Australia which was originally considered.* • *Mineralogical test work previously conducted on clay samples from the project area established that the dominant clay minerals are smectite and kaolin, and that the few REE-rich minerals detected during the SEM investigation are considered consistent with the suggestion that a significant proportion of REE are distributed in the material as adsorbed elements on clay and iron oxide surfaces.* • *There are several known types of regolith hosted REE deposits, including: ion adsorption clay deposits, alluvial and placer deposits. Whilst Koppamurra shares similarities with both ion adsorption clay deposits and volcanic ash fall placer deposits, there are also several differences, highlighting the need for further work before a genetic model for REE mineralisation at Koppamurra can be confirmed.* • *There is insufficient geological work undertaken to determine any geological disruptions, such as faults or dykes, that may cause variability in the mineralisation.*

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Criteria	Explanation	Comment
Drill hole Information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* - *easting and northing of the drill hole collar* - *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* - *dip and azimuth of the hole* - *down hole length and interception depth* - *hole length.* *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• *Not applicable, no drilling was used in the recovery of the samples used in the bulk leach testwork.*
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• *No metal equivalents have been used.*

Criteria	Explanation	Comment
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• *Any intercepts reported are down hole lengths.* • *The mineralisation is interpreted to be flat lying. Morphology of the mineralised unit is influenced by the morphology of the undulating limestone basement below.* • *Drilling defining the Koppamurra Mineral Resource estimate is vertical perpendicular to mineralisation. Any internal variations to REE distribution within the horizontal layering was not defined, therefore the true width is considered not known.*
Diagrams	*Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• *Diagrams are included in the body of this release identifying the location of the Trial Pit, where samples used for this Bulk Leach Testwork were excavated from.*
Balanced reporting	*Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• *This release contains all results that are consistent with the JORC guidelines.* • *Where data may have been excluded, it is considered not material.*

Criteria	Explanation	Comment
Other substantive exploration data	*Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating*	• *AR3 has completed tank leach test work at ANSTO (ASX release: Highly successful metallurgical tests point to significantly lower processing costs, 16 May 2023).* • *AR3 has produced MREC at ANSTO from the tank leach test work (ASX release: First Mixed Rare Earth Carbonate (MREC) produced, 09 March 2023).* • *AR3 has completed column test work at ANSTO investigating the agglomeration, percolation and recoveries from columns to simulate the use of heap leach as a potential component of the process flowsheet (ASX*

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	substances.	*release: Latest Testwork Affirms Low Capex Development for Koppamurra, 08 July 2024).* • *AR3 column leach tests carried out at ANSTO have investigated lixiviant composition in columns C1, C2 and C3 using samples sourced from various locations and bench heights within the Trial Pit (location identified in diagram in the body of this release) and variability sample testing in columns C4, C5 and C6 from samples sourced from the drilling cuttings composites (CP03a, CP04a and CP10a) selected as examples of variability across the orebody (ASX release: Latest Testwork Affirms Low Capex Development for Koppamurra, 08 July 2024).* • *To demonstrate scalability, AR3 conducted two tests. First, a small-scale column leach trial (test "C11") using a sample from the Koppamurra Bulk Sample Pit, was completed at ANSTO, employing the same equipment and processes, including agglomeration, as previous column tests (ASX Releases: 2 April 2024 and 8 July 2024). Second, a larger-scale test processing approximately 3 tonnes of similar ore as tested in C11, validated the scalability, achieving rare earth recoveries consistent with the C11 column leach results. These tests confirm a well-understood scale-up from small-scale to bulk processing. (ASX release: Bulk leach program delivers strong rare earth recoveries at Koppamurra, 26 June 2025)* • *AR3 Successful produced a Mixed Rare Earth Oxide intermediary product via 1,800L of Pregnant Leach Solution (PLS), delivering ~34kg of MREO, an intermediate step to producing a final Mixed Rare Earth product (ASX release: Koppamurra Rare Earths Project metallurgical testwork progressing well, 29 July 2025)* • *All known relevant exploration data and metallurgical test results have been reported*

Criteria	Explanation	Comment
		in this release.

Further work	*The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• *Metallurgical test work next steps are:*
		  • *Optimise intermediate washing to reduce calcium, magnesium and sulphur impurities*
		  • *Refine reagent dosing, pH control and residence times*
		  • *Confirm commercial-scale MREO grades through direct assay of calcined oxide*
		  • *Further optimise the flowsheet to balance impurity control, reagent consumption and recovery.*

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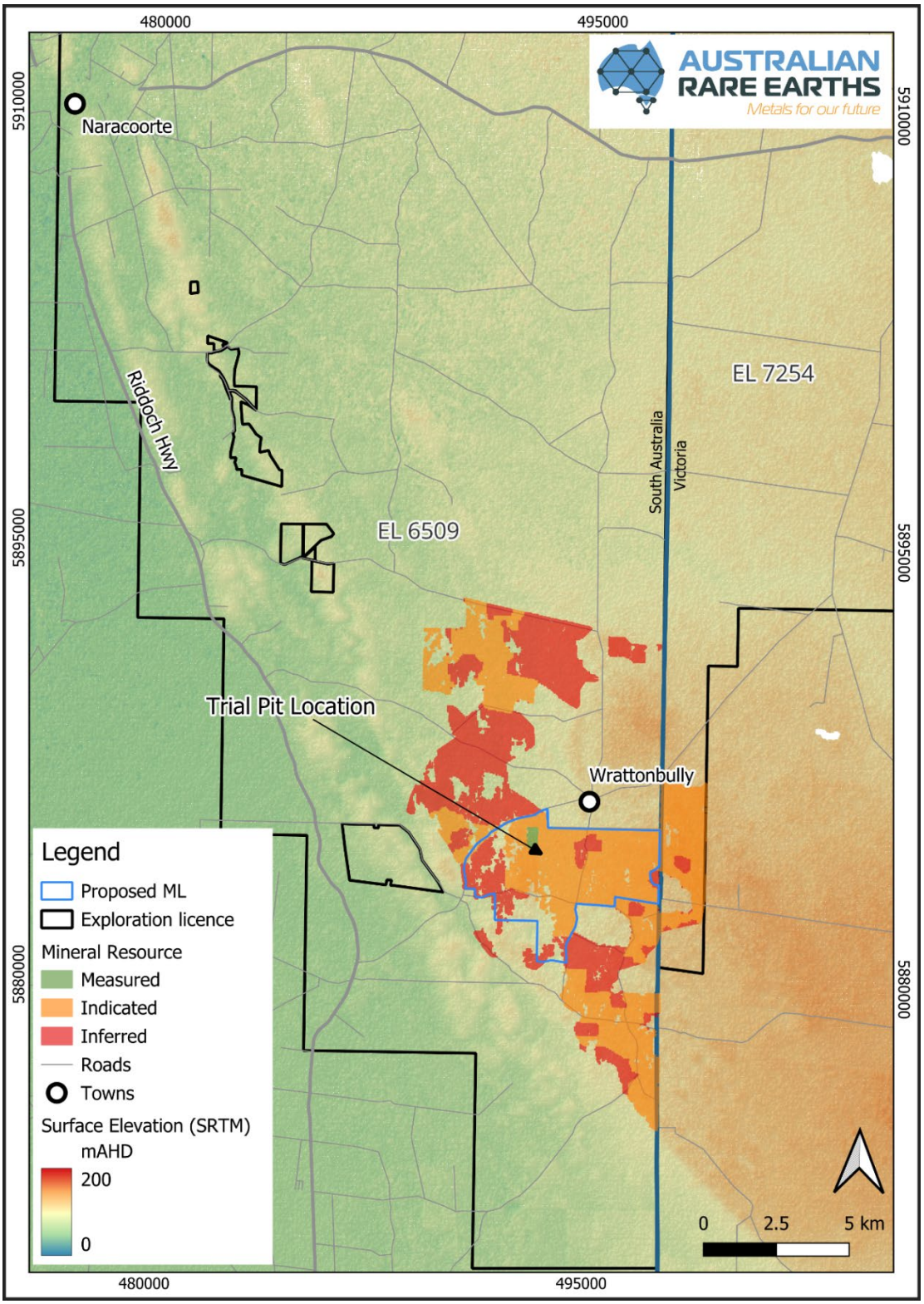
Appendix 2: Koppamurra Project Location Map with Trial Pit Location



Koppamurra Project Location Map with Trial Pit Location, significant Mineral Resource Estimate area and the proposed Mine Lease application area. The Trial Pit was conducted within an area 140m long x 45m wide centred on co-ordinates 5,884,422.5mN, 493,455mE GDA2020 MGA Zone 54. Samples from the Trial Pit were utilised for the testwork outlined in this announcement and detailed in the JORC table.