20 January 2026

Koppamurra test work produces high purity Mixed Rare Earth Oxide

- **High-purity Mixed Rare Earth Oxide (MREO) pathway established:** Metallurgical testwork has demonstrated a viable process to produce a **high-purity MREO**, using conventional low-risk technology.

- **Exceptional oxalate precipitation performance:** Mixed rare earth oxalate precipitation achieved **99.9% rare earth recovery** from solution while rejecting most impurities.

- **Strategically attractive and high-value rare earth assemblage:** The oxalate product contains a high proportion of **magnet rare earth elements**, together with **significant quantities of yttrium, gadolinium, samarium and lutetium** — elements subject to **China's expanded export controls** and tightening global supply conditions.

- **Robust processing approach:** The oxalic acid precipitation route to MREO provides a **simpler downstream purification pathway** than the mixed rare earth carbonate flowsheets being pursued by most western ionic clay projects.

- **High-quality MREO product:** On calcination, the initial, non-optimised oxalate product is projected to yield a **MREO grading of 98.6% pure REO + yttrium oxide (Y_2O_3) by weight,** positioning the Koppamurra product favourably for downstream separation and marketing.

- **Optimisation program underway:** As part of the pilot plant preparation[1], a comprehensive metallurgical optimisation program is underway with the **Australian Nuclear Science and Technology Organisation (ANSTO)** to further refine the oxalate pathway, with outcomes to inform the **Pre-Feasibility Study (PFS)**.

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

AR3 Managing Director and CEO, Travis Beinke, commented:

"This testwork marks an important milestone for Koppamurra, demonstrating a scalable processing pathway from ionic clay ore through to a high-purity mixed rare earth oxide using conventional, low-risk technology.

[1] See ASX release 1 December 2025: AR3 advances Koppamurra with pilot-scale processing at ANSTO's new facility

Importantly, the oxalate route has delivered very strong recoveries, excellent impurity rejection and a rare earth assemblage highly attractive for the production of magnets, plus other strategically constrained elements such as Yttrium. This shows Koppamurra can deliver a transportable, low-impurity product that will be highly attractive in the marketplace.

In an environment of tightening global supply chains and expanding export controls, these results support our strategy to deliver a technically robust, cost-effective and geopolitically relevant rare earth supply option. Optimisation work at ANSTO is now underway to inform the Pre-Feasibility Study and we will continue to engage with our potential downstream customers."

Overview

Australian Rare Earths Limited (ASX: AR3) is pleased to report a significant metallurgical development following recent testwork, which has simplified and improved the Koppamurra processing flowsheet, with the production of a high-purity Mixed Rare Earth Oxide (MREO). This downstream purification pathway is considerably simpler than the mixed rare earth carbonate (MREC) flowsheets being pursued by a number of other non-China ionic clay projects.

In assessing the optimal product strategy for the Koppamurra Project, AR3 has considered a range of technical, cost and downstream processing factors and has determined that production of a MREO represents the most cost-effective and economically beneficial option. Early-stage conversations with potential customers seeking mixed rare earth feedstocks have indicated an MREO product will be attractively positioned in the marketplace. Some of the benefits for customers include better material handling characteristics, lower transport costs, reduced impurity levels and higher overall product quality.

This program represents the first production of marketable rare earth products from bulk leaching the pregnant leach solution (PLS) from processing Koppamurra ores via a heap leach and rapid rehabilitation development approach. Importantly, it demonstrates a complete, scalable pathway from ore through to saleable rare earth intermediates using conventional processing techniques.

Testwork Overview

A ~three-tonne bulk heap leach campaign generated approximately 1,800 litres of rare earth solution via the application of a low strength magnesium sulphate irrigation solution pH of 2.2, and a sulphuric acid addition rate of 39 kg/t of ore during agglomeration (ASX Release: 26 June 2025). The solution was precipitated using a cost-effective magnesium oxide to produce an intermediate mixed rare earth product (ASX Release: 29 July 2025).[2]

[2] Details regarding the source of material used for the three-tonne heap leach campaign are described in Appendix 1, JORC Table 1 & 2 and illustrated in Appendix 2, Koppamurra Project Location Map with Trial Pit Location.

This intermediate material was subsequently re-dissolved into solution and used as feed for two downstream processing routes:

1. Oxalate precipitation, producing a mixed rare earth oxalate suitable for calcination to MREO; and
2. Carbonate precipitation, producing a mixed rare earth carbonate (MREC) as an alternative final product option.

Re-dissolution solutions prepared to enable rare earth precipitation from the intermediate material have delivered up to 96.5% recovery of rare earths. Further optimisation of this processing step is expected to yield even further rare earth recoveries for the intermediate product.

Both flowsheets were deliberately operated as first-pass, non-optimised circuits to confirm metallurgical response, product quality and impurity deportment.

Mixed Rare Earth Oxide (MREO) – Preferred Pathway

Initial oxalate precipitation testwork, applied 100% stoichiometric addition of oxalic acid to REE and primary gangue minerals (waste material) content of the feed solution. The test which added 0.86M oxalic acid to the 45°C re-dissolution solution delivered exceptional metallurgical performance, achieving 99.9% recovery of total rare earth oxides from solution while rejecting the majority of impurities. The resulting oxalate product contained less than 0.5% measured impurities by weight, dominated by calcium (See Table 1 and Table 2).

Oxalic acid is known for its use as the active ingredient in many commercial rust and stain removers. It is a powerful, selective household cleaner and stain remover. China is the world's largest producer and exporter of oxalic acid with production also located in India, Japan, South Korea and in Europe providing alternate sources of oxalic acid supply.

Calcination, a high-temperature heat treatment that transforms the rare earths from an oxalate, is used to convert the mixed rare earth oxalate product to a final marketable MREO. The calcination step removes the oxalate (carbon-oxygen) component and water as gases, converting the material into a stable rare earth oxide that is projected to contain approximately:

- ~98.6% of REO + Y_2O_3 by weight
- ~1.4% of total impurities by weight

These results present an attractive option for a high-purity, market-relevant MREO using a simple and scalable flowsheet. The initial round of test work has successfully demonstrated the recoveries to the mixed rare earth oxalate stage, with the conversion to an MREO to be undertaken as part of the next phase of testwork. Calcination is a conventional, well-understood industrial process with extensive commercial precedent, and is therefore regarded as low technical and execution risk.

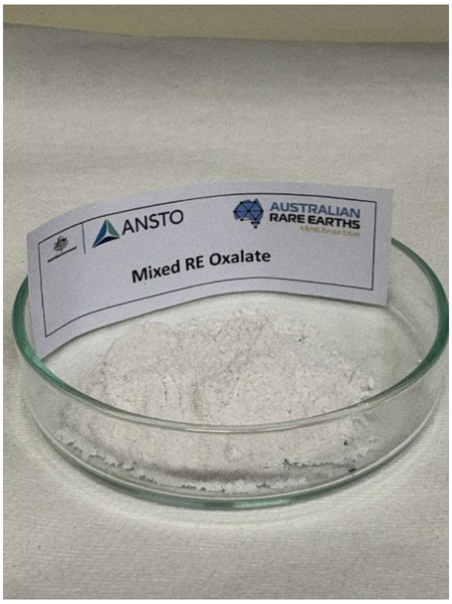

***Figure 1**: Sample of AR3's mixed rare earth oxalate*

	as oxide in oxalate*	as oxide calcined**
Impurities	**wt% Product**	
Al_2O_3	0.025	0.07
CaO	0.406	1.05
FeO	0.011	0.03
K_2O	0.007	0.02
MgO	0.039	0.10
MnO	0.012	0.03
$Na_2O^{\#}$	-	-
SO_4	0.010	0.03
SiO_2	0.036	0.09
	0.55	**1.4**

Below detection limit

U^	<10 ppm
Th^	<10 ppm

^ Below detection limit. Assays are inferred from the feed concentrations to Oxalate precipitation

Table 1: Impurity Deportment

	as oxide in oxalate*	as oxide calcined**
REO	**wt% Product**	
La_2O_3	6.32	16.3
CeO_2	11.80	30.4
Pr_6O_{11}	**1.71**	**4.4**
Nd_2O_3	**6.79**	**17.5**
Sm_2O_3	**1.30**	**3.4**
Eu_2O_3	0.32	0.8
Gd_2O_3	**1.29**	**3.3**
Tb_4O_7	**0.19**	**0.5**
Dy_2O_3	**1.05**	**2.7**
Ho_2O_3	0.20	0.5
Er_2O_3	0.51	1.3
Tm_2O_3	0.06	0.2
Yb_2O_3	0.34	0.9
Lu_2O_3	**0.05**	**0.1**
Y_2O_3	**6.27**	**16.2**
$TREO+Y_2O_3$	**38.2**	**98.6**

Table 2: Rare Earth Oxide Deportment

Rare earths highlighted in Table 2 are subject to Chinese export controls from 4 April 2025.

** Laboratory analysis of the oxalate product generated in this test work has been converted to its oxide form using the appropriate oxide conversion factors.*

*** Calcined product calculation assumptions include; • The rare earth portion remains as rare earth oxides (REO + Y_2O_3), • The impurities (Ca, Mg, etc.) remain in the solid – but become oxides, • The oxalate and any bound water decompose and are driven off as gases (mainly CO_2, CO and H_2O). The combined rare earths and gangue element mass is all that remains and now represents 98.6 and 1.4% respectively of the calcined product.*

Mixed Rare Earth Carbonate (MREC) – Alternative Product Option

As part of the same testwork program, AR3 also successfully produced a mixed rare earth carbonate (MREC), confirming MREC as a technically viable alternative product. While further optimisation is required to reduce impurity levels, the carbonate route provides optionality and flexibility as downstream processing strategies are refined. No additional work is currently planned for the MREC option with priority being given to the MREO option.

Next Steps

- Advance customer engagement for the **high-purity MREO** product
- 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**

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

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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 km² 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.

APPENDIX I – JORC TABLE 1 & 2

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**

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*

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*

		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*

		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.*

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

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.*

APPENDIX I – JORC TABLE 1 & 2

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.*

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.*

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.*

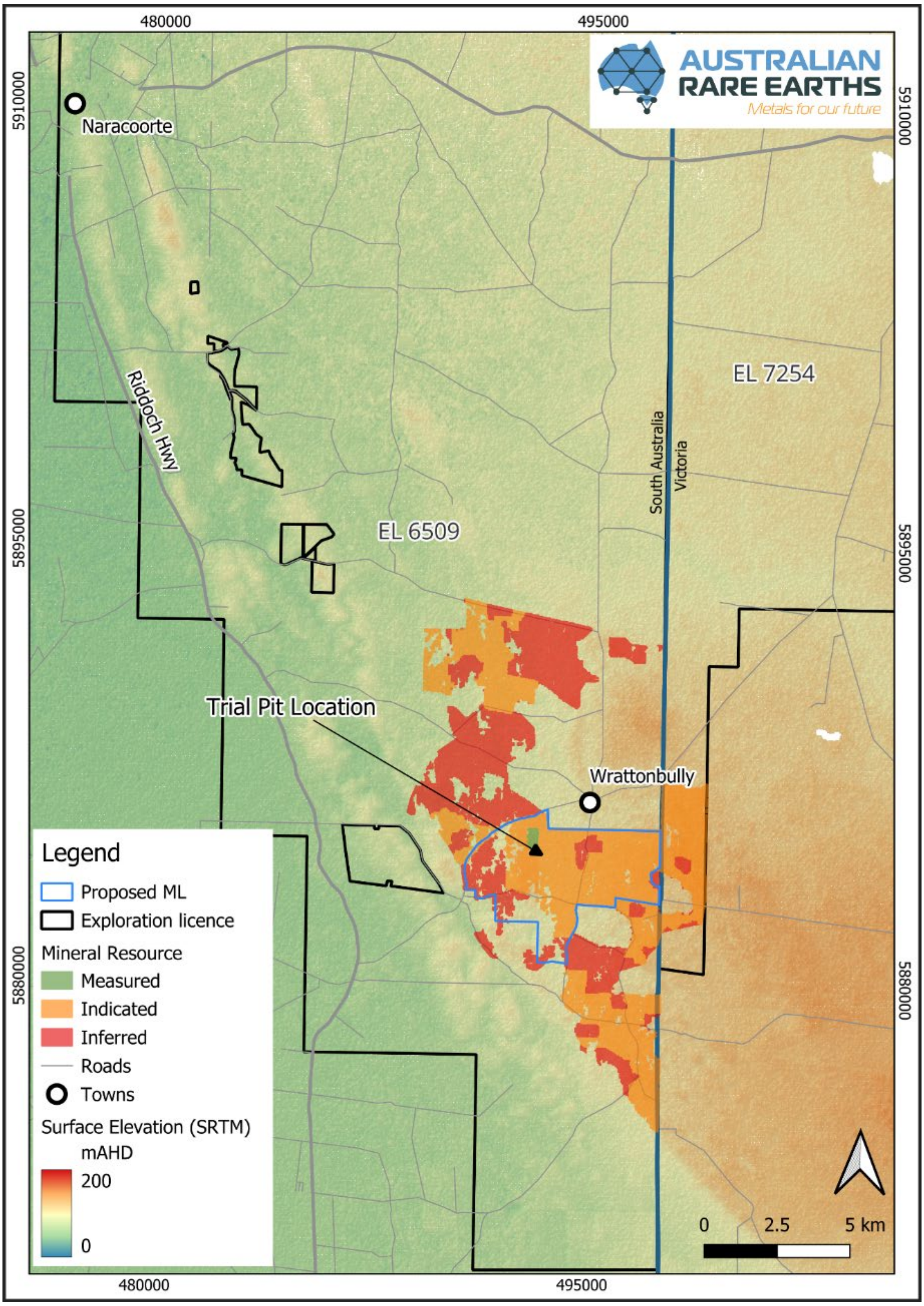
Criteria	Explanation	Comment
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If 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*

	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.*

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.