

ASX ANNOUNCEMENT

QUARTERLY ACTIVITIES REPORT AND APPENDIX 5B

23 January 2023



HIGHLIGHTS

- **World's third largest car manufacturer, Hyundai Motor Company and Kia Corporation, sign cornerstone binding offtake agreement for the supply for NdPr (in the form of NdPr Oxide or NdPr Metal) for a 7-year term.**
- **NT Government issues Mining Authorisation for the world class Nolans NdPr Project, with approval of the Project's Mining Management Plan, which also provides the final environmental approval for commencement of construction in early 2023.**
- **Strong cash position of \$125.2 million following partial completion (\$95.9 million) of \$121 million placement with balance and \$20 million Share Purchase Plan to settle in January 2023.**
- **Strategic investor, Hancock Prospecting Limited joins the register and will hold ~10% post transaction.**
- **Funding to be used for long lead equipment orders and early earthworks to commence Q1 2023.**
- **Project update released providing revised capital costs, operating costs and financial evaluation of the Project confirming improved forecast project financial outcomes.**
- **Monadelphous selected as preferred construction contractor for the Hydrometallurgical Plant and commenced an early contractor involvement phase.**
- **Significant progress on tendering of other construction and supply contracts ready for commencement of construction in early 2023.**
- **Increasing Australian and global strategic awareness of need for investment in NdPr projects and importance of linking Australian critical minerals supply with key international trading partners, such as the Republic of Korea, the United States, the European Union and Japan.**
- **Hydrometallurgical plant FEED effectively complete and now moving to detailed design.**
- **Share price ends year at 46.5c representing a 121% increase over 12 months.**

Arafura Rare Earths Limited | ABN: 22 080 933 455

Level 6, 432 Murray St, Perth WA 6000
PO Box 5773, St Georges Terrace, Perth WA 6831
T: +61 8 6370 2800 | W: www.arultd.com | E: arafura@arultd.com

NdPr

Arafura Rare Earths Limited (ASX: ARU) ("**Arafura**" or the "**Company**") provides the Quarterly Activities Report and Appendix 5B for the period ending 31 December 2022 for its 100%-owned Nolans Neodymium-Praseodymium (NdPr) Project (**Nolans**) in the Northern Territory.

Arafura Managing Director Gavin Lockyer said: *"The quarter to 31 December 2022 was one of the most outstanding quarters in terms of business changing achievements that Arafura has ever had. Each of those achievements, from the cornerstone binding offtake agreement signed with Hyundai Motor Company and Kia Corporation, through to the recent very successful share placement and share purchase plan result, confirms Nolans as an exceptionally valuable world-class NdPr rare earths project."*

The project financing process continues to gain momentum as the value of one of the only construction ready rare earth oxide projects of scale in the western world resonates with both customers and investors. Nolans is the most advanced and de-risked rare earths development project of scale outside of China and its "Ore to Oxide" process at a single site aligns seamlessly with the customers' ESG expectations.

Our Arafura team has worked extremely hard to reach a position where the Company is poised to become the next global rare earth oxide producer and the impressive milestones passed in the recent three month period are a fitting testament to that remarkable effort."

OFFTAKE, PLACEMENT, SHARE PURCHASE PLAN AND PROJECT FUNDING

Offtake

On 7 November 2022, the Company announced the signing of a binding offtake agreement with its key foundation offtake partner, South Korean based Hyundai Motor Company (**Hyundai**). Kia Corporation (**Kia**) can make orders under the offtake agreement in its own right. This follows the signing of the non-binding Memorandum of Understanding with Hyundai earlier in 2022 (refer to ASX Announcement dated 19 May 2022).

The Offtake Agreement is for the supply of NdPr from Nolans to Hyundai over a seven-year term (which may be extended for a further five years by mutual agreement). Under the Offtake Agreement, the buyer may choose whether to be supplied with NdPr Oxide or its equivalent in NdPr Metal. Contract volumes (per contract year) for NdPr Oxide are 600 tonnes per annum (**tpa**) in year one, increasing to 1,500 tpa in years four to seven to align with ramp up of the Project.

Supply of NdPr is currently anticipated to commence in calendar year 2025 subject to project financing, completion of construction and development and commissioning of Nolans.

Arafura is advancing negotiations with additional offtake parties which are progressing well. Several groups are aligned with European export credit agency (**ECA**) project financing mandates for critical minerals procurement. Arafura is aiming to conclude remaining binding offtake agreements during 2023 to align with final investment decision (**FID**).

Placement and Share Purchase Plan (SPP)

On 5 December 2022, the Company received firm commitments from Australian and international institutional, sophisticated and professional investors to raise approximately A\$121 million (before costs) under a placement of fully paid ordinary shares over two tranches at an issue price of A\$0.37 per share (refer to ASX announcements dated 5 December 2022 and 12 December 2022). Tranche 1 involved the issue of 259 million shares at a price of \$0.37 per new share to raise \$95.9 million pursuant to the Company's existing placement capacity under ASX Listing Rule 7.1. Tranche 2 involves the issue of a further 67.9 million shares at the same issue price to raise \$25.1 million and is expected to settle on 24 January 2023 following shareholder approval which was obtained at the general meeting held on 18 January 2023.

Hancock Prospecting Pty Ltd acted as cornerstone investor in the Placement, committing to invest \$60 million across two tranches, which will result in a post-completion interest of ~10% in Arafura.

The Company also launched an SPP for eligible shareholders to raise an additional \$12 million (before costs) with the ability to scale back or raise a higher amount (subject to the ASX Listing Rules). As announced on 5 January 2023, the SPP was heavily oversubscribed with a total of 5,510 applications being received, representing a total application value of approximately \$81.5 million. Approximately \$1.2m was received from ineligible shareholders and those applications were rejected. The Company also used its discretion to reject applications from shareholders who held less than or equal to 100 shares at record date.

To thank shareholders for their support and commitment to the Company, the Board agreed to increase the amount offered to shareholders by over 65% to \$20 million accepting \$8 million in oversubscriptions. Valid applications were scaled back to approximately 26% of the application amount. Excess application funds resulting from invalid applications, the scale-back and any application funds received after the SPP closing date have been processed via direct credit or posted via cheque by the Company's share registry Link Market Services.

The combined funds raised under the placement and SPP totalling \$141 million (before costs) are intended to be used to accelerate the development of Nolans by:

- completion of an early contractor involvement (ECI) phase to optimise Nolans and agree a contract for the construction of the hydrometallurgical plant;
- placement of orders for long lead or near critical path items;
- commencement of fabrication in readiness for main plant construction;
- commencement of early works construction, including for the accommodation village, project water supply, earthworks and other associated items;
- continuation of detailed design and tender activities to advance the design and procurement of Nolans across all areas; and
- ongoing marketing and sales negotiations in the US, Asia and Europe and financing activities.
- general working capital

Project Funding

Arafura has recently appointed KfW IPEX- Bank (**KfW**) as an additional Mandated Lead Arranger (**MLA**) (refer to ASX announcement dated 17 January 2023). KfW will work in conjunction with Societe General and National Australia Bank who were appointed as initial MLAs to arrange the debt financing facility for Nolans. In addition to the role as an MLA, KfW will also be engaged as the ECA Structuring Bank to advise Arafura on relevant contractual and structural elements relating to ECA covered financing for Nolans and will manage ECA related workstreams through to financial close. As the geographic makeup of the offtake partners for NdPr becomes more certain, Arafura has increased its engagement with ECAs in the relevant jurisdictions. Arafura is targeting ECA guarantees to the commercial lenders as a means of creating sufficient liquidity for the targeted debt financing facilities.

The release of the November 2022 "Nolans Project Update" provided revised capital costs, operating costs and projected financial outcomes from Nolans. The Independent Technical Expert, SRK Consulting (Australia) Pty Ltd is also using the information from the update to complete the technical review of Nolans to support the financiers in the completion of their due diligence. Arafura in conjunction with its debt advisors HCF International Advisors, used the "Nolans Project Update" to prepare a revised project funding strategy incorporating the latest capital costs and operating costs. The Company continues to advance the negotiation of draft terms and due diligence for the debt financing facilities.

In December a face-to-face meeting was held in Sydney with the MLAs, Societe Generale and National Australia Bank together with Export Finance Australia and the Northern Australia Infrastructure Facility. KfW representatives from Germany also attended the meeting in advance of its appointment to the MLA group. The revised funding strategy incorporating the increased project funding requirement from the "Nolans Project Update" was presented during this meeting.

Advancement and negotiation of the finance facilities are targeted to allow for FID in March 2023 with contractual close on project financing to follow in mid-2023. The debt financing will be conditional on completion of a successful due diligence process, agreement of terms and conditions, credit approvals and entry into binding facility agreements.

In conjunction with the binding offtake agreement signed with Hyundai and Kia in November 2022, a heads of agreement (**HoA**) was signed for potential strategic investment by Hyundai and its affiliates. The HoA is non-binding and subscription funds contributed by Hyundai are intended to be applied towards funding a portion of the equity component of the development funding required for the Nolans. Due diligence and further work by Arafura, Hyundai and its advisors is now underway with the target of concluding the investment arrangements to coincide with project funding in mid- 2023. Arafura continues to engage with other offtake partners and strategic investors to build the cornerstone funding for the required project equity.

Arafura has a number of key funding activities running concurrently including offtake, debt funding, strategic equity investment and ECA engagement in several regions. No formal or binding agreements with these parties have been entered into and negotiations with all groups are incomplete. The Company, at this stage, has no certainty as to the timing and likelihood of successfully concluding binding agreements. Details of these arrangements will be announced to ASX if (and when) formal agreements have been executed.

NOLANS NdPr PROJECT

Engineering Design and Procurement

Engineering design and procurement for Nolans continued during the quarter as the Company prepared to commence project delivery. Activities across the following areas are outlined below:

- Hydrometallurgical plant
- Beneficiation plant
- Sulphuric acid plant
- Power station
- Process control system
- Non-process infrastructure

Hydrometallurgical Plant

Progress on the hydrometallurgical plant design with Hatch moved rapidly through design finalisation towards Approved for Detailed Design status and achieving "scope lock" for the design. During the quarter the following activities were undertaken or completed:

- Completion and issue of the key process design documents including metallurgical design criteria, process flow diagrams (PFDs) and mass and energy balances.
- Continuation of the finalisation of the piping and instrumentation diagrams (P&IDs).
- Lock down of the site plot plan and progressive finalisation of individual area layouts.
- Finalisation of remaining tenders for long lead equipment with selection and adjudication ongoing.
- Technical and commercial conformance of supply contracts for long-lead and critical mechanical equipment ready to place orders following FID.
- Update of the material take-offs for the bulk materials (concrete, structural steel, piping and electrical bulks) to feed into the project update estimating process.
- Value engineering on the hydrometallurgical plant, including:
 - Modularisation and skid mounting studies to look at pre-construction activities to reduce site personnel requirements.
 - Removal of air-blow from the gypsum filters following completion of additional vendor test work.
 - Review of scrubbing requirements and basis of design across the plant.
 - Rationalisation of water treatment plant requirements and design.
 - Finalisation of the design concept for the sulphation building to improve constructability and also maintainability of the sulphation equipment.

Beneficiation Plant

Following delivery of the updated engineering study from GR Engineering Services, the detailed scope of work has been prepared and used for tendering the EPC contract for delivery of the beneficiation plant.

Sulphuric Acid Plant

The commercial and technical contract with Chemetics for the design and supply of the sulphuric acid plant, including the associated oxygen plant, was executed during the quarter. Following this Chemetics commenced preliminary engineering and have provided the following design documents:

- Process flow diagrams.
- Sulphuric acid plant layout.
- Finalisation of cooling and other services requirements and steam production.
- Preliminary electrical load requirements.

Hatch also continued the balance of plant engineering in parallel with the detailed design of the sulphuric acid plant by Chemetics.

Power Station

The Company has received tenders from three parties for the power station, which includes steam generation for use in the process plant, on the basis of a build-own-operate (**BOO**) contract. These tender submissions include preliminary indications from tenderers around decarbonisation of the power and steam generation over the life of Nolans, which will be incorporated over time into the Company's greenhouse gas reduction pathway.

The tenders for the power station will be evaluated in the first quarter of 2023 with award following FID.

Project Consultancy Services continued evaluating the gas supply situation in the Northern Territory, with recent improvements in the production of gas from the Blacktip field and supply of gas into the domestic gas market from LNG companies causing a significant pull back in gas pricing, along with the reopening of the northern gas pipeline linking Northern Territory gas production to the east coast gas network. Following these developments preliminary enquiries and discussions have commenced with gas producers around locking in supply of natural gas for Nolans.

Non-Process Infrastructure

Non-process infrastructure (NPI) design progressed in several areas during the quarter, including:

- Completion of the process plant site bulk earthworks design.
- Completion of tendering for the supply of the borefield headworks, pipelines and pumping system equipment, including temporary equipment to provide construction water during early works construction.
- Continued negotiation of the leased construction village contract.
- Finalisation of the permanent accommodation village design in readiness for tendering of the fabrication and supply.
- Specification of the temporary potable water plant for the village supply during construction (after which potable water will be produced in the process plant) ready for tendering.
- Specification of the wastewater treatment plant for the village.
- Continuation of the communications system design, including temporary communications for early works, considering both microwave and fibre optic options with Telstra having commenced a study on the connection of site into their national fibre optic network.

Construction Tendering

Construction tendering continued during the quarter, with the aim of being ready for FID and commencement of construction in 2023. The activity across the various areas of Nolans are outlined below.

Hydrometallurgical Plant

Following the tendering of the hydrometallurgical plant using an alliance contracting model in the previous quarter the Company has selected Monadelphous as the preferred construction partner for the hydrometallurgical plant. Both companies that participated in the tender process provided detailed submissions with very little cost difference between the submissions providing significant confidence around the pricing received. Both tenderers also provided a range of value engineering proposals aimed at reducing the cost of the facility which are being investigated and incorporated into the design.

Monadelphous has now entered into an ECI phase with Arafura and Hatch to work collaboratively on the design of the hydrometallurgical plant, as well as commencing detailed construction planning in advance of commencement of construction of the hydrometallurgical plant in the third quarter of 2023.

Beneficiation Plant

The tender package for the beneficiation plant was issued during the quarter, on a fixed price EPC basis, to three shortlisted tenderers. Tender submissions are due in the first quarter of 2023 and will be adjudicated ready for award prior to FID.

Power Station

The power station tenders have been received from a shortlist of independent power providers (**IPPs**) for a BOO contract for the installation. The tenders are currently being adjudicated on technical, commercial and ESG factors, including preliminary indications for decarbonisation of power and steam generation.

Non-Process Infrastructure

NPI tendering progressed in several areas during the quarter, including:

- Bulk earthworks is currently out for tender with a site visit carried out for tenderers (see Figure 1). The bulk earthworks package includes:
 - Site access road including the intersection with the Stuart Highway.
 - Plant site bulk earthworks.
 - Mine access road.
 - Mine and plant areas surface water management.
- Ready for award of the minor earthworks package, including the supply of a 48-person fly-camp, to an Indigenous owned contractor with long involvement in Central Australia, including a local office in Alice Springs.
- A holding contract has been entered into with NT Link for the rental of the construction village, with completion of the of relocation of buildings to Alice Springs and the lease agreement is currently being negotiated.
- Bore drilling contracts, including the large number of monitoring bores, have been tendered and adjudicated with award is anticipated in early 2023.
- Tenders have been received and are under adjudication for the borefield headworks, main pipeline installation and pipeline supply contracts.
- Tenders are ready for issue in early 2023 for modular and steel framed plant site buildings.

- Various tenders and price enquiries have been issued and received for minor supply, lease and procurement contracts to support the early stages of construction including:
 - Temporary office buildings.
 - Hire generating sets.
 - Potable water supply and delivery to site.
 - Fuel storage systems and fuel supply.
 - Paramedic and ambulance.



Figure 1: Earthworks Contractors Site Visit to Nolans

Other

Other construction or operational contracts underway include:

- Following receipt of tenders for the operational logistics contract for the transport of reagents and other supplies to site and the transport of rare earth and phosphoric acid products to Darwin Port, the tenders are currently being reviewed and adjudicated with selection of a preferred partner anticipated in the first half of 2023.
- Final negotiations for the village operations contract with ESS.

Project Update

On 11 November 2022 the Company released a "Nolans Project Update" providing updated capital costs, operating costs and projected financial outcomes from Nolans. The "Nolans Project Update" confirmed improvements to the economics of Nolans and its status as one of the only advanced NdPr ore to oxide projects of scale in the western world. Key outcomes from the "Nolans Project Update" included:

- Base Case pricing scenario with an average LOM NdPr pricing of US\$130 per kg:
 - NPV₈ of A\$2.4 billion (increase of 68%), IRR of 19.3%
 - Average EBITDA of A\$573m (increase of 62%) over LOM of 38 years
- Upside Case pricing scenario includes an average LOM NdPr pricing of US\$190 per kg:
 - NPV₈ of A\$4.2 billion (increase of 198%), IRR of 24.1%
 - Average EBITDA of A\$912m (increase of 158%) over LOM of 38 years
- Project pre-production capital cost estimated at A\$1,394m plus A\$196m contingency (representing 14%)

Key project information and financial metrics from the "Nolans Project Update" are provided in Table 1 below:

Table 1 Key Project Information – Nolans Project Update

Key Project Information		
Mining and Production		
Mine Life (years)	38	
NdPr Oxide (tpa)	4,440	
SEG/HRE Oxide (tpa)	474	
Phosphoric Acid (tpa 54% P ₂ O ₅ MGA)	144,393	
Product Pricing		
US\$/kg NdPr Oxide price – offtake period	125.50	
US\$/kg NdPr Oxide price – LOM	130.10	
Financial	US\$	A\$
Capital Cost		
Pre-production Capital (\$m)	995	1,394
Contingency (\$m)	140	196
Total (\$m)	1,135	1,590
Revenue		
Rare Earth Sales Revenue (\$m/annum)	587	822
Phosphoric Acid Sales Revenue (\$m/annum)	65	91
Operating Costs		
Mining Costs (\$m/annum)	(31)	(44)
Processing Costs (\$m/annum)	(138)	(193)
General and Administration Costs (\$m/annum)	(26)	(36)
EBITDA (\$m/annum)	409	573
KPI Analysis	US\$	A\$
Operating Cost \$/kg NdPr	43.95	61.60
Operating Cost \$/kg NdPr net of P ₂ O ₅ credit	34.64	48.52
NPV ₈ after tax (\$m)	1,693	2,358
IRR after tax (%)	19.3%	

Note: Numbers may not compute because of rounding. Product prices during the offtake period refer to the first seven years of production when offtake agreements will include discounts and other contract mechanisms put in place to underpin project finance for up to approximately 85% of NdPr oxide production with averages calculated as the weighted average over the specified period. Average revenue, costs and EBITDA are calculated as the arithmetic annual average following the anticipated two year ramp up period and excluding the final years of production from low grade stockpiles.

Technology Development

During the quarter some minor test work programs were progressed to provide key design information for the processing plant. These included:

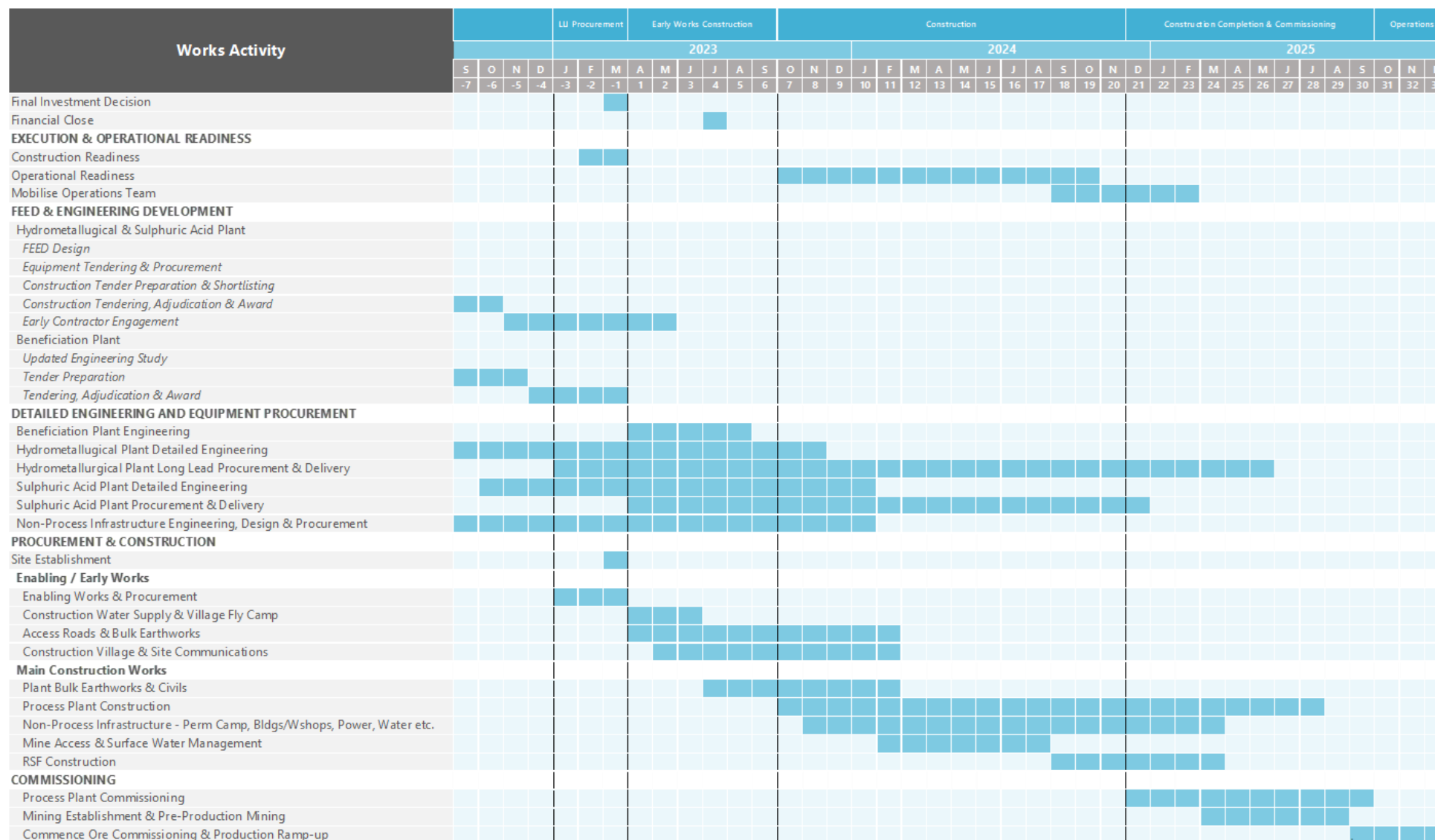
- Corrosion test work on the materials of construction for the rare earth sulphate precipitation reboiler aimed at reducing the cost of this package by confirming the suitability of alternate, lower cost, materials of construction.
- Testing of alternate membranes for the phosphoric acid purification to improve flux rates and phosphate recovery.
- Finalisation of the large-scale test program for the phosphoric acid purification following the completion of modelling of this area of the plant based on the bench scale testing. The large-scale testing will be used to confirm the performance of the process and for the vendor to provide performance warranties.
- Planning for testing of an alternate diluent for the solvent extraction following the removal from sale of the diluent used in previous pilot test work.

Project Schedule

The “Nolans Project Update” (refer to ASX announcement dated 11 November 2022) provided an updated project delivery schedule which is provided in Figure 2. Key dates in the overall schedule for Nolans include:

- Commencement of the ECI engagement with the construction contractor for the hydrometallurgical plant in November 2022.
- Commitment to long lead equipment procurement, particularly for sulphation equipment, with orders placed early 2023.
- FID in March 2023 allowing continuation of long lead equipment procurement and commencement of early works construction.
- Early works construction period of six month focussing on the construction accommodation village, construction water supply and process plant bulk earthworks.
- Financial Close of project funding mid-2023.
- Main construction period of 24 months from October 2023, with overlapping commissioning period of up to 10 months.
- Mining contractor mobilisation in March 2025 and pre-production mining of four to five months prior to commencement of ore processing.
- First ore processing in late-September 2025 and first production towards the end of 2025.

All dates presented are contingent on securing funding for the activities as required.



Operational Licencing

As part of the Northern Territory mining authorisation process, a mining management plan and associated environmental management plans (**EMPs**) for Nolans were submitted to the Northern Territory Department of Industry, Tourism and Trade (**DITT**) in Q4 2021. These draft documents were updated incorporating comments and queries from DITT and were accepted as final by DITT in Q3 2022.

During the quarter these plans were submitted to the Northern Territory Parliament for approval with the Company receiving the Mining Authorisation for Nolans on 15 November 2022.

In addition, four of the EMPs have been submitted to the federal Department of Climate Change and Energy Efficiency under the Nolans federal EPBC approval and will be assessed under the EPBC legislation with comments received during the quarter.

Additionally, in mid-2022 the Company applied for various Access Authorities to provide access to the various Mineral Leases that house Nolans and associated infrastructure. These Access Authorities were approved and granted by the Northern Territory government on 21 November 2022. A small number of additional Access Authorities, which are required to accommodate minor changes to proposed road alignments, are currently being applied for with the Northern Territory government.

The groundwater extraction licence (**GWEL**) application for Nolans' production, borefield and water supply continues to move through the regulatory process. Approval was not received in 2022 with the regulator requesting an independent peer review of the management plan and groundwater modelling. This independent peer review was commenced during the quarter and has been submitted, along with any required modifications to the management plan and modelling, in early January 2023. Advice from the regulator is that approval is expected to be granted by March 2023 in-line with the Company's aim of declaring FID during that month.

ESG

During the quarter, Arafura worked to finalise the greenhouse gas reduction pathway for Nolans' fixed power generation, including the power station and process plant steam generation. The reduction pathway considered various options for reaching zero emissions by 2050 in-line with the Company's aim of achieving net-zero carbon footprint in that timeframe. The study utilises the methodologies adopted by the Clean Energy Finance Corporation and the Minerals Research Institute of Western Australia to develop a decarbonisation pathway including options such as:

- Solar PV.
- Wind power generation.
- Battery and other electrical storage.
- Concentrated solar thermal generation.
- Thermal energy storage.
- Steam turbines for electrical generation from thermal storage.
- Electric boilers and heat pumps.
- Bio-fuels and synthetic fuels.
- Green hydrogen production, storage and use.

It is anticipated that the results of this greenhouse gas reduction pathway will be released in early 2023 with the updated sustainability report for the company released soon after.

DOMESTIC STAKEHOLDER ENGAGEMENT

Working with the Northern Territory government, the Company is reviewing and updating its local and indigenous employment strategies. These strategies are beginning well in advance of construction to ensure these long lead time approaches are well established through construction and into site operations.

Arafura has continued to engage with key stakeholders including the Central Land Council, Arid Lands Environment Centre, local government and local businesses during the quarter to provide updates on the progress of Nolans. This engagement will increase as the Company moves into enabling works construction and establishes a permanent Alice Springs office in early 2023.

EXPLORATION

Nolans

Re-modelling of the central part of the Nolans orebody continued during the quarter with the aim of providing a detailed audit of the block model for due diligence, as well as developing a block model that is more amenable to mine planning to allow better short-term production planning once mining commences. This re-modelling will be completed in early 2023.

The processing of the detailed gravity survey of the orebody and surrounding area continued during the quarter. Once complete, and following the completion of the re-modelling exercise, the gravity survey will be used to confirm the geological interpretation of aspects of the geological model, as well as providing information on exploration targeting in the search for similar orebodies to Nolans in the Company's exploration leases.

MACROECONOMIC DEVELOPMENTS

Global Markets

October and November saw the start of strict lockdowns in China as efforts to sustain their 'Zero Covid Policy' which since announced, resulted in local officials shutting down residential districts and sealing up buildings in dozens of Chinese cities. Asia's factory output dropped with China's demand due to these strict measures with the effects rippling through Taiwan, South Korea and Malaysia, which are heavily reliant on Chinese demand. These impacts reinforced the global concern and importance of securing diversified critical mineral supply chains.

December saw the easing of Covid restrictions which were in turn, replaced with widespread infections within the Chinese community. Despite these impacts, the global economy is confident China can resume commercial functions. The Biden administration has also announced that several Chinese organisations will be removed from a red flag trade list, a sign of better cooperation between China and the US.

NdPr Market

The price of NdPr oxide rose 9.5% from US\$94 per kg to US\$103 per kg at the end of the quarter and the average yearly price of NdPr was US\$123 per kg. The spot price is recovering with improvement in downstream purchasing as end users start to replenish inventory for new orders leading into Chinese New Year holidays in January 2023. The Chinese government lifted Covid-19 restrictions which has caused disruption to production and supply chains however the downstream electric vehicle (**EV**) market remains very strong.

Magnet manufacturing and magnet exports are stable and the EV industry is boosting overall yearly demand with 8.8 million vehicles sold globally from January to November 2022. This represents a 37% increase compared to 2021 total EV sales of 6.4 million vehicles. The global EV market is expected to reach 10 million vehicles in 2022.

Exports of magnets from China remain strong in 2022 with year-to-date volume of 48,611 tonnes. Germany, the USA and South Korea remain the main destinations with a share of 40% of the total magnet exports for EV and electronic applications.

NdPr oxide EXW China, converted to US\$/kg



Figure 3: NdPr Oxide Price EXW China inclusive VAT converted to US\$

CORPORATE

Cash Position

On 31 December 2022, Arafura had \$125.2 million in cash reserves including, \$95.9 million from completion of Tranche 1 of the \$121 million (before costs) placement and \$1.0m from the exercise of 3.0 million listed options. Subsequent to the end of the quarter:

- The SPP was completed to raise an additional \$20 million (refer ASX announcement dated 5 January 2023).
- Tranche 2 of the placement to raise \$25.1 million was approved by shareholders at the general meeting held on 18 January 2023 and is expected to settle on 24 January 2023.

The Company is well funded to commit to long lead procurement items and commence enabling works in Q1 2023.

During the quarter, the Company spent ~\$0.6 million on exploration and evaluation activities, ~\$1.8 million on corporate, administration and business development costs and ~\$13.9 million on project development activities which relate to FEED. Further details are available in the attached Appendix 5B.

Average monthly cash expenditure for the quarter ended 31 December 2022 was ~\$5.7m (excluding the capital raise), increasing slightly from the previous quarter. It is expected that cash outflows will continue to increase as the Company commits to long lead procurement and enabling works in the following quarter.

Payments of \$246,000 reported in Item 6.1 of the attached Appendix 5B relate to salaries, fees and superannuation paid to Directors.

Annual General Meeting

The Company's annual general meeting was held at 10.00am WST on 20 October 2022. All resolutions were passed by way of a poll.

Change of Company Name

The Company's shareholders passed a resolution to change the Company's name from Arafura Resources Limited to Arafura Rare Earths Limited.

COVID-19

Arafura continues to monitor changes to the status of COVID-19 and all State, Territory and Federal Government advice around social distancing, travel restrictions, contact tracing and vaccination. Staff and contractors are advised of any updates to policies and procedures to ensure alignment with recommendations as international and domestic travel resumes. Arafura continues to enforce a requirement that staff and contractors work from home until a negative test has been received.

Tenements

In accordance with ASX Listing Rule 5.3, please refer to Appendix 1 for a listing of all tenement holdings.

Forward Looking Statements

This report includes forward-looking statements. These statements relate to the Company's expectations, beliefs, intentions or strategies regarding the future. These statements can be identified by the use of words like "will", "progress", "anticipate", "intend", "expect", "may", "seek", "towards", "enable" and similar words or expressions containing same.

The forward-looking statements reflect the Company's views and assumptions with respect to future events as of the date of this announcement and are subject to a variety of unpredictable risks, uncertainties, and other unknowns. Actual and future results and trends could differ materially from those set forth in such statements due to various factors, many of which are beyond our ability to control or predict. Given these uncertainties, no one should place undue reliance on any forward-looking statements attributable to the Company, or any of its affiliates or persons acting on its behalf. The Company does not undertake any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. Neither the Company nor any other person gives any representation, warranty, assurance, nor will guarantee that the occurrence of the events expressed or implied in any forward-looking statement will actually occur. To the maximum extent permitted by law, the Company and each of its advisors, affiliates, related bodies corporate, directors, officers, partners, employees and agents disclaim any responsibility for the accuracy or completeness of any forward-looking statements whether as a result of new information, future events or results or otherwise.

Production Targets and Forecast Financial Information

The information in this report that relates to production targets and forecast financial information is extracted from the Company's ASX announcement dated 11 November 2022 (Nolans Project Update). The production target is based on 12% Proved Reserves, 62% Probable Reserves and 26% inferred resources as reported in the Company's ASX announcement dated 11 November 2022. There is a low level of geological confidence associated with inferred mineral resources and there is no certainty that further exploration work will result in the determination of indicated mineral resources or that the production target itself will be realised. Arafura confirms that all material assumptions underpinning the production target and forecast financial information derived from the production target set out in the Company's ASX announcement dated 11 November 2022 (including any assumptions referred to in the Company's ASX announcement dated 11 November 2022 that were sourced from the DFS as set out in the Company's ASX announcement dated 7 February 2019 (Nolans Project Definitive Feasibility Study) or from the Updated Mining Study as set out in the Company's ASX announcement dated 16 March 2020 (Major Increase in Mine Life for the Nolans Project)), continue to apply and have not materially changed.

APPENDIX 5B

Mining exploration entity and oil and gas exploration entity quarterly report

Name of entity	
Arafura Rare Earths Ltd	
ABN	Quarter ended ("current quarter")
22 080 933 455	31 December 2022

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	(13,913)	(25,801)
	(c) production	-	-
	(d) staff costs	(839)	(1,728)
	(e) administration and corporate costs	(1,844)	(3,375)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	417	564
1.5	Interest and other costs of finance paid	(8)	(18)
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other (provide details if material)	-	-
1.9	Net cash from / (used in) operating activities	(16,187)	(30,358)

2.	Cash flows from investing activities	-	-
2.1	Payments to acquire:		
	(a) entities		
	(b) tenements and bonds	-	-
	(c) property, plant and equipment	(18)	(106)
	(d) exploration and evaluation	(563)	(1,535)
	(e) investments	-	-
	(f) other non-current assets	-	-
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 (security deposits)	-	-
2.6	Net cash from / (used in) investing activities	(581)	(1,641)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	96,882	138,429
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	(3,843)	(5,759)
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 (repayment of lease liabilities)	(71)	(142)
3.10	Net cash from / (used in) financing activities	92,968	132,528

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	49,009	24,681
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(16,187)	(30,358)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(581)	(1,641)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	92,968	132,528
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	125,209	125,209

5.	Reconciliation of cash and cash equivalents	Current quarter \$A'000	Previous quarter \$A'000
	at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts		
5.1	Bank balances	20,788	10,256
5.2	Call deposits	104,421	38,753
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	125,209	49,009

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate number of payments to related parties and their associates included in item 1	(246)
6.2	Aggregate number 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

Salaries, fees and superannuation of Directors of the Company.

7.	Financing facilities <i>Note: the term “facility” includes all forms of financing arrangements available to the entity.</i> <i>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.		
Not applicable.			

8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (item 1.9)	(16,187)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(563)
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(16,750)
8.4	Cash and cash equivalents at quarter end (item 4.6)	125,209
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	125,209
8.7	Estimated quarters of funding available (item 8.6 divided by item 8.3)	7.5
	<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: Not applicable.	
	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: Not applicable.	
	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: Not applicable.	
	<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

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

Date: 23/01/2023

Authorised by: The Audit Committee

(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 – e.g., 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.

APPENDIX A – MINING TENEMENTS HELD AS AT 31 DECEMBER 2022

Tenement reference	Project	Holder	Nature of interest	Interest at beginning of quarter	Interest at end of quarter	Notes
ML 26659 ML 30702 ML 30703 ML 30704 ML 32411 ML 32412 ML 32413 ML 32414 ML 32415 ML 32416	Nolans, NT	Arafura Nolans Project Pty Ltd	Mineral Lease	100% 100% 100% 100% 100% 100% 100% 100% 100% 100%	100% 100% 100% 100% 100% 100% 100% 100% 100% 100%	
EL 28473 EL 28498 EL 29509 EL 31224 EL 31284 EL 31957	Aileron–Reynolds, NT	Arafura Rare Earths Ltd	Exploration Licence	100% 100% 100% 100% 100% 100%	100% 100% 100% 100% 100% 100%	
EL 29701	Bonya JV, NT	Arafura Rare Earths Ltd	Exploration Licence	60%	60%	Thor Mining Plc 40%, Arafura Rare Earths Limited 60%
EL 32167	Jervois Vanadium, NT	Arafura Rare Earths Ltd	Exploration Licence	60%	60%	Thor Mining Plc 40%, Arafura Rare Earths Limited 60%
ML32722	Nolans, NT	Arafura Nolans Project Pty Ltd	Mineral Lease	100%	100%	Application lodged.
ML33107	Nolans, NT	Arafura Nolans Project Pty Ltd	Mineral Lease	100%	100%	Application lodged.
EMEL 32672 EMEL 32673 EMEL 32674 EMEL 32675 EMEL 32676	Nolans, NT	Arafura Nolans Project Pty Ltd	Extractive Mineral Exploration License	100%	100%	
EMP33078 EMP33079 EMP33080 EMP33081 EMP33082 EMP33083 EMP33084 EMP33085	Nolans, NT	Arafura Nolans Project Pty Ltd	Extractive Exploration Licence	100%	100%	Application lodged.