

## **HIGHLIGHTS**

- Nolans NdPr Project development continuing with early works construction advancing on site including:
  - Completion of village area bulk earthworks, commissioning of the 48-person fly-camp and commencement of commissioning of the first two phases of the construction camp.
  - Commencement of plant site bulk earthworks to develop the laydown area and area for the concrete batch plant.
  - Commencement of the installation of the 25km 450mm diameter water main from the borefield to the plant site with approximately 21km of the pipeline installed.
  - Completion of the raw water pond at the plant site and pipeline to the village.
  - Completion of the additional production bores required for construction activities in the borefield and commencement of the headworks.
  - Completion of the groundwater monitoring bores in the borefield, residue storage facility and plant site.
- MACA Interquip selected as preferred contractor for the beneficiation plant and engaged to complete an ECI phase to optimise the design.
- General Electric Company (GE) selected as a technology partner for power and steam generation, with the proposed gas turbine cogeneration solution offering fuel savings and emissions reductions of up to 29%.
- Independent power provider selected to implement GE technology.
- Binding Offtake Agreement in place with Siemens Gamesa Renewable Energy and advanced negotiations continuing with prospective offtake partners including automotive and wind turbine sector OEMs, and tier 1 motor component manufacturers.
- In-principle support for up to US\$300 million received from Canadian export credit agency Export Development Canada, linked to strategic arrangement with GE.
- Project finance activities progressing in line with debt-led funding strategy.
- Modern Manufacturing Initiative Grant Agreement executed with the Commonwealth for A\$30m and the first grant payment of A\$6m received.

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## **NOLANS NdPr PROJECT**

#### **Engineering Design and Procurement**

Engineering design and procurement for the Nolans Neodymium-Praseodymium (NdPr) Project (**Nolans** or **the Project**) continued during the quarter as the Project moved into early construction.

Activities across the following areas are outlined below:

- Hydrometallurgical plant
- Sulphuric acid plant
- Beneficiation plant
- Power Station
- Non-process infrastructure

## **Hydrometallurgical Plant**

Detailed design of the hydrometallurgical plant continued during the quarter. The focus of this work is progressing critical path areas to allow commencement of procurement and fabrication of tankage and structural steel, along with the commencement of concrete installation in line with the proposed construction schedule developed by Monadelphous as part of their early contractor involvement (**ECI**).

The following activities were undertaken or completed during the quarter.

- Progressive completion of Hazard and Operability (HAZOP) studies for vendor equipment packages and areas of the Nolans facility where significant changes have been made since the completion of initial HAZOP workshops, along with progressive completion of the process control narratives for the various plant areas to outline the detailed control and operational philosophy.
- Finalisation of individual area layouts.
- Technical and commercial conformance of supply contracts for long lead and critical mechanical equipment ready to place orders, as well as placement of interim orders for certified vendor data to allow detailed design to progress in advance of order placement.
- Continuation of detailed concrete, structural and tankage design.
- Delivery of updated material take-offs for bulk materials (concrete, structural steel, piping and electrical bulks), allowing Monadelphous to begin updating the Target Cost Estimate for the construction contract in advance of execution.
- Hydrometallurgical plant value engineering including:
  - Detailed review of piping materials selection with particular focus on the reduction of the use of rubber and PVDF lined piping and replacement with lower cost options.
  - Optimisation of pump seal arrangements to reduce water usage, maintenance requirements and cost.
  - Reduction of hydrochloric acid storage volumes to match initial consumption estimates and logistics considerations.
  - Rationalisation of equipment in the cerium solvent extraction circuit made possible by the deferral of production of a cerium product during initial operations.
  - Simplification of reagent dosing throughout the process to rationalise mix concentration numbers.

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## **QUARTERLY ACTIVITIES REPORT AND APPENDIX 5B**



- Rationalisation of structural steel for access requirements through the appropriate use of ladders and adjacent access.

## **Sulphuric Acid Plant**

Following the signing of the contract for supply of the sulphuric acid plant in February 2023, plant supplier Chemetics has commenced preliminary engineering to confirm the design and scope of supply. Detailed engineering and procurement by Chemetics is now awaiting approval to proceed.

Following receipt of a tender from Worley to complete the detailed engineering of the wraparound plant for the sulphuric acid plant, a decision was made to retain this work within the Hatch scope of work. Hatch subsequently commenced detailed design on the wraparound plant during the quarter.

#### **Beneficiation Plant**

Following the tendering of the beneficiation plant to a number of engineering firms, MACA Interquip (**Interquip**) was selected as the preferred contractor for the engineering and construction of the plant under an EPC contract arrangement. To facilitate finalisation of the design and pricing, Interquip commenced an ECI phase to investigate potential design optimisations identified during the tendering process. It is anticipated that this ECI phase will run for approximately two months and will be completed in the coming quarter.

#### **Power Station**

The Company has entered into a cooperation agreement with General Electric Company (**GE**) for the supply of a cogeneration power plant using aeroderivative LM2500 gas turbines to provide the Project's electrical power and steam requirements (refer to ASX announcement dated 20 June 2023). This design is anticipated to reduced carbon dioxide emissions from gas consumption by approximately 29% while paving the way for future integration of renewables into the Project's energy mix.

In parallel with its cooperation with GE, the Company has selected a preferred independent power provider (**IPP**) for power and steam generation based on GE's technology. An ECI agreement is being put in place with the IPP to deliver early engineering for the facility and ensure that power and steam are available in line with the Nolans development schedule.

#### **Non-Process Infrastructure**

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

- Finalisation of the design and procurement of minor equipment including camp main switchboard, borefield headworks, temporary water distribution and waste water collection systems.
- Continuation of the final design of plant site earthworks, site access road and surface water management.
- Finalisation of designs, specifications and scope of work for the NPI structural, mechanical, piping, electrical and instrumentation package.
- Review of tender submissions, site works contracts or supply contracts awarded and kick off meetings held for packages including:
  - Hydrogeological field support
  - Generator hire for the Nolans village and temporary facilities
  - Bulk earthworks, which entered into an ECI phase
  - Site communications and ICT

#### QUARTERLY ACTIVITIES REPORT AND APPENDIX 5B



- Raw water pond lining and village water pipeline installation
- Site fencing
- Temporary facilities.
- Key tenders released to the market or under evaluation include:
  - Concrete batch plant
  - Modular buildings
  - Steel framed buildings
  - Permanent village.
- Geotechnical investigation of the plant area completed with laboratory testing and final reporting outstanding.

#### Construction

Early works construction activities during the quarter focussed on readiness of the site to commence main construction, predominately focussed on access, accommodation and water supply. Construction activities included:

- Preparation of the raw water pipeline corridor from Borefield D to the process plant site in readiness for pipeline installation.
- Bulk earthworks associated with the site access road, including a permanent intersection with the Stuart Highway and approval and construction of the Amadeus Gas Pipeline crossing.
- Completion of bulk earthworks for the construction camp and permanent village.
- Commencement of plant site earthworks, with early works focussing on the bulk earthworks contractor laydown area and the concrete batch plant area.
- Commissioning and commencement of occupation of the 48-person fly-camp.
- Commencement of camp services for the operation of the fly-camp, delivery by ESS, which will be expanded to cover the construction village and permanent village as these facilities are ready for occupancy.
- Completion of the installation of phase one and two of the construction village, comprising central facilities and approximately 200 rooms with commissioning underway and expected completion in July.
- Installation of potable water storage and distribution systems for the construction camp, with a potable water treatment plant to be installed and commissioned next quarter and temporary water supply provided by tanker from Alice Springs.
- Installation of a wastewater collection tank and temporary off-site disposal, ahead of installation and commissioning of a permanent wastewater treatment plant in the next quarter.
- Completion of the drilling of groundwater monitoring bores across the borefields, residue storage facility and process plant areas, with drilling in the mine area to be completed early in the next quarter.
- Completion of the drilling of two additional production bores to provide sufficient water for construction works, fit out of the production bores, and installation of water pumping systems at Borefield D.
- Commencement of the installation of bore headworks, tankage and pumping systems at Borefield D.
- Installation (welding, trenching and burying) of approximately 21km of the permanent 25km arterial water pipeline from Borefield D to the process plant site. It is anticipated that the pipeline, borefield pumping systems, raw water dam and raw water distribution systems will be commissioned in August.
- Construction and lining of the raw water storage dam at the process plant site.
- Installation of the water pipeline from the raw water dam to the village water storage.
- Fencing of the site facilities on an ongoing basis.



The images below illustrate the progress of early construction activities on site during the quarter.



Figure 1: Final bulk earthworks at the Nolans Project permanent village area, late June 2023



Figure 2: Installation of the first floor of the Nolans construction camp mess buildings, May 2023





Figure 8: Nolans construction camp mess building interior, June 2023





Figure 3: Aerial view of the Nolans Project village area (June 2023) with fly camp and stage one and two construction camp buildings in place.

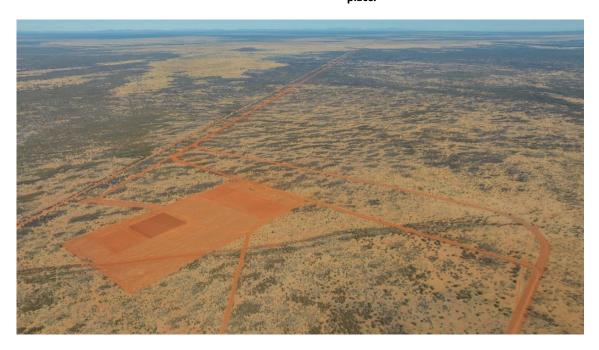


Figure 9: Aerial view of the Nolans processing plant site with bulk earthworks commenced for laydown and concrete batch plant, June 2023



Figure 10: Aerial view of Borefield D construction water tanks, pumps and equipment, June 2023



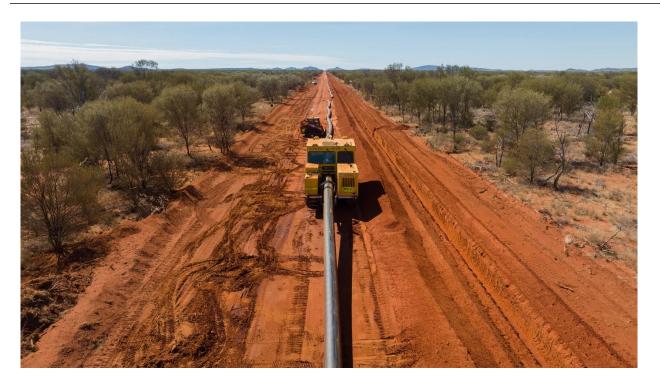


Figure 4: Installation of the 25km arterial water pipeline in progress (trench visible at right), June 2023



Figure 5: Construction of the site raw water storage dam in progress, June 2023

Construction activities in the coming quarter will include:

- Continuation of the construction of the Stuart Highway intersection, Amadeus Gas Pipeline crossing and site access road.
- Completion and commissioning of stages one and two of the construction camp, providing on-site accommodation capacity for approximately 250 workers.
- Installation and commissioning of potable water treatment plant and wastewater treatment plant for the village.
- Completion and commissioning of the water pipeline, borefield D headworks, raw water dam and raw water distribution systems.

## **QUARTERLY ACTIVITIES REPORT AND APPENDIX 5B**



- Completion of earthworks for the initial process plant laydown and concrete batch plant area.
- Complete the groundwater monitoring bore drilling at the mining area.
- Commencement of infrastructure installation for the permanent site communications link.

## **Technology Development**

During the quarter some minor test work programs were completed, providing key design information and confirmation of performance predictions for the processing plant. These are detailed below.

- Corrosion test work on the materials of construction for the rare earth sulphate precipitation reboiler.
- Completion of the pilot test program for phosphoric acid purification using vibratory shear enhanced processing technology to confirm the final configuration and performance of the process, allowing the vendor to provide performance warranties.
- Completion of testing of an alternate diluent for solvent extraction, following the removal from sale of the diluent
  used in previous pilot test work, and an alternate reagent for cerium solvent extraction. Both alternates tested
  performed in line with expectations.

## **Project Schedule**

Refinement of the Nolans Project execution schedule continued during the quarter, with key activities including:

- Fine tuning of the construction schedule for the hydrometallurgical plant by Monadelphous as part of ECI works, to identify efficiencies and alternatives to match equipment delivery schedules.
- Updating of engineering schedules to align with construction contractors' prescribed timelines, to ensure delivery of materials when required.
- Development of a detailed completions and commissioning schedule in line with the construction schedule and completions and commissioning plans being developed.
- Integration of the beneficiation plant, sulphuric acid plant and non-process infrastructure schedules into the overall project schedule with the hydrometallurgical plant and developing detailed all of project resourcing to confirm the required village accommodation levels.

The key factor impacting the execution schedule remains project funding progress. A number of funding activities continue to advance as detailed in the Project Funding section of this report. The Company continues to target finalisation of its project funding activities in the second half of 2023 and will provide further guidance regarding the Nolans schedule in relation to full construction and commissioning works once timelines for debt and equity funding solidify.

In the interim, procurement and early works construction remain focussed on activities which will de-risk the final construction schedule and project execution costs. Key de-risking activities during the quarter included:

- Continuation of detailed engineering to optimise progress ahead of the commencement of main construction.
- Securing equipment vendors and procurement of certified vendor data for equipment packages to support the engineering effort.
- ECI phases for a number of construction packages to fully define execution strategies and identify execution synergies and reduce costs.
- Commencement of engineering on non-process infrastructure packages with suppliers to allow work to be forward loaded on site, reducing peak accommodation requirements and associated risks.

#### QUARTERLY ACTIVITIES REPORT AND APPENDIX 5B



Completion of additional early works including accommodation and earthworks, to allow additional work fronts
to be accessed earlier in the construction schedule and provide flexibility and opportunities for resource leveling.

## **Operational Licencing**

The various pre-conditions of the groundwater extraction licence for the Project's production borefield and water supply (granted in late March 2023) were met during the quarter, ready for extraction of water for construction from Borefield D.

An updated access authority for the site access road, accommodating realignments at the Stuart Highway to match the final intersection design and the final crossing of the Amadeus Gas Pipeline, was issued by the Department of Industry, Tourism and Trade following receipt of approval from the Central Land Council (**CLC**) and the receipt of the sacred site clearance certificate for additional areas of impact.

The application for the Aboriginal Areas Protection Authority (**AAPA**) certificate was re-submitted covering only the native title area to expedite approval by the CLC.

## **Sustainability**

## **Greenhouse Gas Emissions Reduction Pathway**

The Company's greenhouse gas emissions reduction pathway for Nolans was released in January, outlining how Arafura intends to meet its 2050 net zero commitment (refer to ASX Announcement dated 31 January 2023). During the quarter work commenced on the early stages of investigation and implementation of the pathway, with activities including:

- Investigation of the impact of moving to a gas turbine-based co-generation power station solution considering both up front emissions and the impact as renewable generation is introduced over the life of mine. This investigation showed that the move to a cogeneration solution provided an up-front 29% saving in emissions; however, this saving was reduced with the progressive implantation of renewables but was never worse than a reciprocating engine solution through to the project maximum renewable penetration.
- Continued collection of wind data from site using the SODAR installed in mid-2022.
- Early stage engagement around the implementation of renewables for electricity generation with the Company's preferred IPP.
- Commencement of a desktop study with the CSIRO Renewable Heat and Industrial Decarbonisation group to complete an assessment of renewables implementation, with a particular focus on thermal generation and storage. It is anticipated that this program of work will be completed in the upcoming quarter.



#### DOMESTIC STAKEHOLDER ENGAGEMENT

During the quarter, engagement continued with key Nolans stakeholders including the Northern Territory government, Traditional Owners, the Central Land Council, Alice Springs community, the Project's surrounding pastoralists, and local communities and environmental groups.

Community and stakeholder engagement activities during the quarter included:

- Community engagement sessions in Alice Springs and communities local to the Nolans project area to understand interest, capabilities and areas of opportunity for training and development.
- Consultation to inform the development of a focused program to facilitate First Nations employment opportunities, including pathways to employment, long-term retention initiatives and wrap around services to support participation and success.

Arafura continued to engage informally with key stakeholders to provide updates on the development of Nolans.

#### **EXPLORATION**

#### **Nolans**

Re-modelling of the central part of the Nolans orebody was completed during the quarter and has been incorporated into the mine planning process. This work will be ongoing, aimed at tendering of the initial mining contract in the first half of 2024.

The processing of the detailed gravity survey of the orebody and surrounding area was concluded during the quarter and 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.

Planning for an expanded gravity survey focused on known exploration targets near to Nolans, prior to the commencement of activity in the mine area, is currently underway. It is anticipated that the field work for this expanded gravity survey will be undertaken in the second half of 2023.



## MACROECONOMIC DEVELOPMENTS

#### **NdPr Market**

The NdPr oxide price declined 17% during the quarter from US\$76 per kg to US\$63 per kg, due to continued demand weakness for sintered magnets used in the downstream manufacturing and industrial sectors, along with macro-economic slowdown in China. Equipment and high-tech manufacturing sectors are experiencing a rebound in factory output measured by the Purchasing Managers Index in both production and demand, with signs of the Chinese economy improving.

The global electric vehicle (**EV**) market remains very strong with sales reaching record highs in some months over the last quarter. The Chinese market remains robust but not as strong as other regional markets such as Europe. The magnet market has multiple uses, and some sectors including consumer electronics and household appliances have weakened, contributing to lower demand for magnets and NdPr feedstock. During the quarter, China unveiled a \$72 billion package of tax break schemes over four years for new energy vehicles (**NEV**) to support economic growth, bolster slower auto sales and support the growth of and transition to cleaner energy sources. China is expected to deploy further large-scale economic stimulus measures in the coming months.



Figure 6: NdPr oxide price EXW China (inclusive VAT) converted to US\$



## OFFTAKE AND PROJECT FUNDING

#### **Offtake**

In April, the Company announced the signing of a binding offtake agreement with leading global wind turbine manufacturer Siemens Gamesa Renewable Energy A/S (**Siemens Gamesa**) (refer ASX Announcement dated 11 April 2023) for the supply of NdPr metal over a five-year term, with an option to extend for a further two years. Contract volumes (per Contract Year) are 200 tonnes per annum (tpa) commencing in year one, increasing to 360tpa in year two and 400tpa in years three to five to align with ramp up of production at Nolans.

The Siemens Gamesa agreement is the second binding offtake agreement for Nolans, following the signing of an agreement in November 2022 with key foundation offtake partner Hyundai Motor Company (**Hyundai**), under which Kia Corporation can also make orders (refer ASX Announcement dated 7 November 2022).

The company continues to advance its negotiations with several prospective offtake partners to close-out the approximate remaining 47% of the target 85% annual NdPr production to be contracted under long-term sale agreements. The remaining volume of NdPr product being negotiated far exceeds the Nolans production design capacity of 4,400 tpa with focus to conclude offtake arrangements that align most favourably with the project funding objectives and particularly the indicative support offered by the Euler Hermes ECA.

Remaining offtake negotiations are with highly credible groups with direct strategic raw material procurement intent and industry leaders in automotive OEM, tier 1 motor component and the wind turbine sectors, making for a diversified quality customer base.

## **Project Funding**

During the quarter Arafura received a letter of interest from Canadian export credit agency (ECA) Export Development Canada (EDC) for the provision of up to \$US300 million in potential debt financing for Nolans (refer to ASX Announcement dated 20 June 2023).

The indicative support is linked to a strategic arrangement between EDC and General Electric Company (GE) to advance energy transition initiatives. Arafura and GE signed a Memorandum of Understanding in 2022 (refer to ASX Announcement dated 12 July 2022) for supply of NdPr from Nolans for use in the manufacture of permanent magnets used in GE's offshore wind turbines; the companies are in the process of negotiating a long-term sales agreement.

The indicative support from EDC aligns with Arafura's debt-led funding strategy for Nolans and follows the Company's receipt of in-principle support from German ECA Euler Hermes for up to US\$600 million in untied loan guarantees in relation to offtake by German companies (refer to ASX Announcement dated 29 March 2023) and up to a combined A\$350 million from Export Finance Australia (refer to ASX Announcement dated 7 May 2021) and the Northern Australia Infrastructure Facility (refer to ASX Announcements dated 18 June 2021 and 29 March 2023).

A workshop with the lender group was held in May to progress negotiation of debt terms. Finalisation of the debt structure remains subject to obtaining greater certainty around offtake agreements with associated ECA untied loan guarantee cover and agreeing remaining terms with lenders, including an appropriate level of contingency funding. SRK provided a final Independent Technical Expert report to lenders during the quarter.

Advancement of the Project's finance facilities are targeted to allow for contractual close on project financing in H2 2023. 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 parallel with project financing and offtake, project equity initiatives are also advancing with potential offtake partners, strategic investors and some key institutional investors. Equity financing negotiations continue with Hyundai under the existing heads of agreement.

## **QUARTERLY ACTIVITIES REPORT AND APPENDIX 5B**



In March 2022 (refer to ASX Announcement dated 16 March 2022) Arafura was awarded grant funding of A\$30 million under the Federal Government Modern Manufacturing Initiative (**MMI**) which will contribute to the capital expenditure associated with the construction of the rare earth separation plant at Nolans. The grant was awarded under the MMI Collaboration Stream which was targeted to a small number of transformational projects. In May, Arafura Nolans Project Pty Ltd executed a MMI Grant Agreement with the Commonwealth and in June the first payment for A\$6 million was received and will be utilised in engineering and procurement activities associated with the separation plant.

Arafura has several key funding activities running concurrently, including debt funding, strategic equity investment and ECA engagement in several regions. The Company continues to target finalisation of its project funding activities in the second half of 2023, however there is no guarantee or certainty that the targeted debt and equity funding package will be secured. Debt financing is conditional on completion of a successful due diligence process, agreement of terms and conditions, credit approvals and entry into binding facility agreements. The Company will provide further details about project funding arrangements for the development of the Project as and when binding agreements are entered into.

#### **CORPORATE**

## **Director Resignation**

During the quarter Quansheng Zhang resigned as a Non-Executive Director of the Company (refer to ASX Announcement dated 19 May 2023). Mr Zhang was the nominee director of former major shareholder East China Non-Ferrous Mineral Resources Co Ltd (ECE). Mr Zhang's resignation followed a two-month leave of absence while ECE considered its preferred path forward in light of a strategic shift to focus on domestic projects. ECE has subsequently divested its shareholding in the Company.

#### **Cash Position**

On 30 June 2023, Arafura had cash reserves of \$129 million, which included \$6 million received from the Federal Government under the Modern Manufacturing Initiative. During the quarter, the Company spent ~\$0.9 million on exploration and evaluation activities, ~\$2.3 million on corporate, administration and business development costs and ~\$27.1 million on project development activities including detailed engineering and development work at site. Further details are available in the attached Appendix 5B.

Average monthly cash expenditure for the quarter ended 30 June 2023 was ~\$7.7m – an increase from the previous quarter as the Company commenced early works construction activity.

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

## **QUARTERLY ACTIVITIES REPORT AND APPENDIX 5B**



#### **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	30 June 2023

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (9 months) \$A'000	
1.	Cash flows from operating activities			
1.1	Receipts from customers	_	-	
1.2	Payments for			
	(a) exploration & evaluation	T - 1	-	
	(b) development	(27,084)	(66,516)	
	(c) production	-	-	
	(d) staff costs	(991)	(3,515)	
	(e) administration and corporate costs	(2,264)	(7,997)	
1.3	Dividends received (see note 3)	-	-	
1.4	Interest received	1,285	3,198	
1.5	Interest and other costs of finance paid	(18)	(47)	
1.6	Income taxes paid	-	-	
1.7	Government grants and tax incentives	5,991	5,991	
1.8	Other	-	-	
1.9	Net cash from / (used in) operating activities	(23,081)	(68,886)	





2.	Cash flows from investing activities		
2.1	Payments to acquire:		
	(a) entities	_	-
	(b) tenements and bonds	-	-
	(c) property, plant and equipment	(97)	(279)
	(d) exploration and evaluation	(878)	(2,924)
	(e) investments	-	-
	(f) other non-current assets (environmental bond and term deposit)	(393)	(1,877)
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	-	-
2.6	Net cash from / (used in) investing activities	(1,368)	(5,080)

3.	Cash flows from financing activities			
3.1	Proceeds from issues of equity securities			
	(excluding convertible debt securities)	102	185,169	
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	(20)	(6,693)	
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)	(190) (403)		
3.10	Net cash from / (used in) financing activities	(108)	178,073	





4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	153,393	24,680
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(23,081)	(68,886)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(1,368)	(5,080)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	(108)	178,073
4.5	Effect of movement in exchange rates on cash held	12	61
4.6	Cash and cash equivalents at end of period	128,848	128,848

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	19,587	9,377	
5.2	Call deposits	109,261	144,016	
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)	128,848	153,393	

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	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				
Salar	Salaries, fees and superannuation of Directors of the Company.				





7.	Financing facilities  Note: the term "facility' includes all forms of financing arrangements available to the entity.  Add notes as necessary for an understanding of the sources of finance available to the	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000		
7.4	entity.				
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 quar	ter 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 a	applicable.				

8.	Estimated cash available for future operating activities	\$A'000		
8.1	Net cash from / (used in) operating activities (item 1.9)	(23,081)		
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(878)		
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(23,959)		
8.4	Cash and cash equivalents at quarter end (item 4.6)	128,848		
8.5	Unused finance facilities available at quarter end (item 7.5)	-		
8.6	Total available funding (item 8.4 + item 8.5)	128,848		
8.7 Estimated quarters of funding available (item 8.6 divided by item 8.3)				
	Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.			
8.8	If item 8.7 is less than 2 quarters, please provide answers to the following of	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 objeand, if so, on what basis?			
	Answer: Not applicable.			
	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.			

## **QUARTERLY ACTIVITIES REPORT AND APPENDIX 5B**



#### **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: 28 July 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 30 JUNE 2023**

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%	
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%	
EL 29701	Bonya JV, NT	Arafura Rare Earths Ltd	Exploration Licence	60%	60%	Thor Mining Plc 40%, Arafura Resources Limited 60%
EL 32167	Jervois Vanadium, NT	Arafura Rare Earths Ltd	Exploration Licence	60%	60%	Thor Mining Plc 40%, Arafura Resources 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 Mineral Permit	100%	100%	