

ASX Announcement

Quarterly Activities Report and Appendix 5B

31 March 2020

Highlights

- Pre-FEED activities well advanced and due for completion in June Quarter
- KBR awarded integrated project management team contract for delivery of Nolans Project and mobilised to the Arafura office
- Major increase in mine life to 33 years of production as a result of a 54% increase in Ore Reserves to 29.5 million tonnes
- Life of mine schedule supports 39 years of production
- Completion of Rare Earth Separation Pilot Plant with NdPr/TREE> 99.9% and SEG-HRE/TREE> 99.5% specifications achieved
- In Principle Indigenous Land Use Agreement reached with native title holders
- Completion of Indigenous Engagement Strategy
- Marketing visit to Europe completed in early March to advance offtake discussions with several end users and supply chain partners
- MOU entered with Chinese downstream rare earth metal processor for conversion of NdPr oxide from Nolans to NdPr metal
- Execution of Advisory Agreement with Talaxis Ltd for strategic equity investment strategy, product offtake and market engagement
- Continued engagement with ECAs and debt advisor groups in Japan, Germany,
 USA and Australia
- Strong cash position of \$20.1 million and limited impact on Company's activities from COVID-19



Nolans NdPr Project

Execution Readiness

Progress has continued with Hatch Pty Ltd on the pre-front end engineering and design (**pre-FEED**) activities. These pre-FEED activities are aimed at finalising the basis of design, design specifications and philosophies along with finalising Arafura's overall project requirements in preparation for the early contractor involvement (**ECI**) phase of project delivery. Work on pre-FEED activities is well advanced and is anticipated to be completed in the second quarter of CY2020.

The integrated project management team (**IPMT**) which includes KBR and Wave International personnel (*refer to ASX Announcement 23 January 2020*) has been mobilising into Arafura's Perth office. Key personnel have been engaged in roles across the project team, however the ramp up has been slower than originally anticipated. The IPMT has been working to finalise key execution strategies, plans and processes in preparation for the ECI phase as well as continuing with preparation for tendering of key contracts, including those for the beneficiation plant, hydrometallurgical plant and sulphuric acid plant.

With the global investment environment compromised by the COVID-19 pandemic, the Company's indicative project implementation schedule is currently under review and will be updated once there is more certainty in market conditions to determine the timing of key milestones.

Tendering

The hydrometallurgical plant tender stage one has closed with a number of tenders received from joint ventures between Tier 1 engineering and construction contractors. The aim of tender stage one is to reduce the number of tenderers to two joint venture, or similar, contracting parties. The adjudication process is currently underway.

Ore Reserves and Life of Mine Update

Arafura completed an updated Ore Reserves estimate for its 100 per cent-owned Nolans Neodymium-Praseodymium (**NdPr**) Project in the Northern Territory (refer to ASX announcement 16 March 2020).

The Ore Reserves (and mining inventory) exclude all mineralisation intersected in deep exploration drilling completed at Nolans Bore during 2019 (refer to ASX announcement 9 March 2020).

The estimate was independently prepared by leading mining technical services provider Mining Plus Pty Ltd (**Mining Plus**). It incorporates the updated geometallurgical model derived from the results of beneficiation variability test work on mineralised material types that included samples from the 2019 drilling program (*refer to ASX announcements 17 and 18 December 2019*).



Reserves	Tonnes (m)	Rare Earths Treo %	Phosphate P ₂ O ₅ %	NdPr Enrichment %
Proved	5.0	3.0	13	26.2
Probable	24.6	2.8	13	26.5
TOTAL	29.5	2.9	13	26.4

As announced on 16 March 2020. Numbers may not compute exactly due to rounding. "NdPr enrichment" is the proportion of TREO comprising Nd_2O_3 and Pr_6O_{11} .

These Ore Reserves are based on the Project's Measured and Indicated Mineral Resources (refer to ASX announcement 7 June 2017) and on the pricing, processing and cost assumptions developed during the Definitive Feasibility Study (**DFS**) (refer to ASX announcement 7 February 2019). Only the mine design and scheduling have been revised to reflect the updated geometallurgical model.

In addition to the updated Ore Reserves, Mining Plus also prepared a life of mine (**LOM**) production schedule based on the mining inventory, which includes some of the Project's Inferred Mineral Resources, predominately in the later years of mining and processing. This mining inventory consists of approximately 39.9 Mt grading 2.8% TREO and 12% P₂O₅. Scheduling of the mining inventory, with some minor changes to the design envelope of the process plant, provides far superior financial outcomes over those delivered in the DFS base case.

Key highlights of the Ore Reserves and LOM schedule update included:

- 54% increase in Ore Reserves to 29.5 million tonnes
- Ore Reserves now support 33 years of production, an increase of 10 years on the DFS base case
- LOM schedule based on mining inventory of 39.9 million tonnes supports 39 years of production
- Significant reduction in OPEX for mining inventory schedule to US\$23.71/kg of NdPr oxide

Technology Programs

Arafura successfully completed Rare Earth Separation piloting during the quarter, the seventh and final stage in the Company's flowsheet piloting program for the Nolans Project (refer to ASX announcement 20 February 2020).

The second of two-solvent extraction (**SX**) pilot plant circuits operated at ANSTO Minerals (**ANSTO**) in Sydney over a 14-day period during January (Figures 1 and 2). This circuit produced a refined liquor in which NdPr constitutes >99.9% of the total contained rare earth elements (**TREE**). This followed the earlier operation of the pilot plant over a seven-day period in December (*refer to ASX announcement 23 December 2019*) from which a refined liquor was produced where SEG-HRE (middle and heavy rare earth) comprised >99.5% of the TREE. Continuous testing using these process liquors is planned for the near future.

<u>www.arultd.com</u> 3



A rare earth product precipitation program was commenced at ANSTO during the quarter, with testing expected to be completed in Q2 CY2020. This program includes:

- Preparation of rare earth product using pilot plant material which will be made available to customers for product qualification purposes.
- Continuous product precipitation testing to collect design data for FEED.

Other metallurgical test work programs using Australian testing facilities are continuing with the following either completed or in progress:

- An extensive corrosion testing program is underway on a variety of materials of construction across the breadth of the process flowsheet to provide critical final design information.
- Testing has been completed of nano-filtration as an alternative to ion exchange, for the purification of the Project's phosphoric acid product, with evaluation now in progress.



Figure 1: Arafura's NdPr separation circuit during pilot operation at ANSTO





Figure 2: Side on view of SX mixer-settlers in the NdPr separation circuit during pilot operation

Native Title & Mining Tenure

The Company reached an in-principle agreement with the three indigenous groups who hold native title rights over the Nolans Project area. This was achieved through negotiation with their Central Land Council (**CLC**) representatives and was ratified at a large gathering of the native title holders at Aileron in the last week of February 2020 (*refer to ASX announcement 2 March 2020*).

The agreement, which is in the form of an Indigenous Land Use Agreement (**ILUA**), also contains a section 31 agreement under the *Native Title Act*. Both the ILUA and section 31 agreements were planned to be endorsed and then executed by the full council of the CLC during April 2020. Unfortunately, with the onset of the COVID-19 pandemic and the associated precautionary measures introduced by the Northern Territory Government and the CLC, this planned council meeting has been postponed until such time travel restrictions designed to protect the wellbeing of the residents of remote indigenous communities in the Northern Territory are relaxed or withdrawn.

The consequence of this is that the Project's mining tenure cannot be granted until an executed section 31 agreement is received. The Company is liaising with the CLC and the Northern Territory Government on this matter and is completing related tenure grant prerequisites such as surveying to shorten the grant time frame once the agreements are executed by all parties.

Operational Licencing

Preparation of a detailed Mining Management Plan (**MMP**) covering the construction and initial operation of the Project continued during the quarter. To date, seventeen specific management plans have been written and are under review for content and compliance with the approval conditions. The remaining aspects of the MMP are being completed in close consultation with Northern Territory

A R A F U R A

Quarterly Activities Report and Appendix 5B

Government's Department of Primary Industry and Resources (**DPIR**) which is responsible for the assessment and authorisation of the MMP.

An application for a groundwater abstraction licence for the Nolans Project was lodged with the Northern Territory Government's Department of Environment and Natural Resources (**DENR**) in the previous quarter and is still pending approval. Whilst the lodgement of this application is not a legal requirement under current Northern Territory legislation, the Company is taking this step to provide additional security over the identified groundwater resource and to meet commitments made during the Environmental Impact Statement (**EIS**) community engagement process.

Exploration

Nolans (Rare Earths)

In March, Arafura reported final assay results from its September-October 2019 diamond core/RC drilling program at Nolans Bore. This nine-hole program included four deep exploration holes targeting down-dip extensions to Indicated and Inferred Resources in the deposit's North and Southeast Zones. Three of the four holes (NBRD1102, 1106 and 1109) intersected thick zones of rare earths mineralization up to about 200 metres vertically below the planned final mining pit (Figure 3) from the Definitive Feasibility Study. Geological/radiometric logging, density (SG) determinations and geochemical analysis of these zones confirm that the mineralized material types and assay grades are consistent with those that constitute the deposit's Mineral Resources. On this basis the Company considers there to be reasonable potential to increase the Mineral Resources at depth in the North and Southeast Zones.

The best intercepts from the three holes were as follows:

- 46.76 m @ 1.5% TREO and 7% P₂O₅ from 316.72 m in hole NBRD1102 (Southeast Zone)
- 75.68 m @ 2.8% TREO and 11% P₂O₅ from 364.37 m in hole NBRD1106 (North Zone)
- 65.15 m @ 1.5% TREO and 6% P₂O₅ from 422.88 m in hole NBRD1109 (North Zone).

A total of five shallow infill resource definition core holes (NBDH1103-05, 1107-08) were also drilled across the Southeast Zone of the deposit to confirm detailed geological and material type information which will ultimately be used to refine resource modelling and better inform mine planning. The material types and assay results from these holes were consistent with expectations. Assay highlights from these holes included:

- 60.63 m @ 4.7% TREO and 22% P₂O₅ from 14.81 m in hole NBDH1103
- 56.01 m @ 2.5% TREO and 11% P₂O₅ from 17.00 m in hole NBDH1104
- 35.34 m @ 2.4% TREO and 11% P₂O₅ from 86.63 m in hole NBDH1105

- 26.87 m @ 1.9% TREO and 9% P₂O₅ from 32.33 m in hole NBDH1107
- 49.70 m @ 2.4% TREO and 12% P₂O₅ from 38.10 m in hole NBDH1108.

Bonya Joint Venture (Tungsten; Base and Precious Metals; Vanadium)

In January, Arafura's Bonya JV partner Thor Mining PLC (Thor) reported final assays from the 19-hole October 2019 RC drilling program at the White Violet and Samarkand tungsten prospects. Mineralization outcrops and remains open at depth at both prospects, and Samarkand shows potential for strike extension to the copper mineralization. Assay highlights from the program were as follows:

- 23 m @ 0.58% WO₃ from surface, including 6 m at 1.7% WO₃ from surface in hole 19RC035
- 8 m @ 0.74% WO₃ from 65 m, including 2 m at 2.48% WO₃ from 69 m in hole 19RC037
- 1 m @ 0.70% WO₃ from 42 m; and 1m at 2.32% WO₃ from 50 m in hole 19RC042
- 3 m @ 1.02% WO₃ from 22 m, including 1 m at 2.64% WO₃ from 22 m in hole 19RC039
- 1 m @ 0.79% WO₃ from 12 m in hole 19RC044
- 7 m @ 0.28% WO $_3$ from 43 m, and 9 m @ 1.1% Cu from 45 m, plus 2 m @ 2.17% WO $_3$ and 0.78% Cu from 78 m in hole 19RC046
- 1 m @ 2.07% WO₃ from 18 m in hole 19RC048.

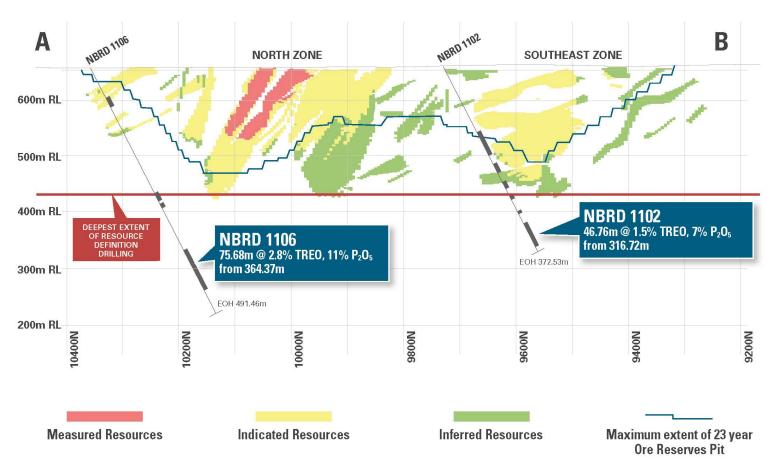
Based on the results of this and the 19-hole April 2019 RC drilling program, Mineral Resources were estimated and reported by Thor in January.

Deposit	Resources	Tonnes	Tungsten WO₃ %	Copper Cu %
White Violet	Inferred	495,000	0.22	0.06
Samarkand	Inferred	245,000	0.19	0.13
TOTAL		740,000	0.21	0.09

As announced on 9 January 2020. 0.05% WO₃ cut-off grade. Numbers may not compute exactly due to rounding.



Figure 3: Schematic cross-section across the Nolans Bore deposit showing the assay results and deep mineralized intervals in holes NBRD1106 (North Zone) and NBRD1102 (Southeast Zone).





Community

The Company completed its Indigenous Engagement Strategy (**IES**) document and distributed it to key stakeholders. The IES outlines Arafura's strategy to engage with the local Central Australian indigenous community through employment and involvement of local businesses in the Nolans Project. The IES is a requirement of the Northern Australian Infrastructure Facility (**NAIF**) investment proposal.

The Company has received its Economic Analysis of the Nolans Project report from ACIL Allen Consulting (**Acil Allen**), which addresses the public benefit requirement of the NAIF investment proposal. The report contains an Economic Impact Analysis and Cost Benefit Analysis on the Nolans Project and indicates that the Project will deliver significant long-term benefits to Australia and the Northern Territory over the life of the project. The Company last conducted an economic analysis of the Nolans Project in 2016 and an update was completed on the basis of the design, assumptions and financial model as presented in the DFS (refer to ASX announcement 7 February 2019). The economic impact analysis was performed using Tasman Global, a Computable General Equilibrium Model to estimate the economic impacts of construction and operation spending associated with the Project. Significant direct economic contributions are expected to be achieved from the Project through the generation of income to the Northern Territory and job creation, with an estimated \$8.7 billion contribution to Gross Territory Product over the life of the Project.

A summary of the Project's direct economic contribution metrics from the Acil Allen report is presented in Figure 4 below.



Figure 4: ACIL Allen Infographic summarising economic impact of Nolans Project

Direct economic contribution



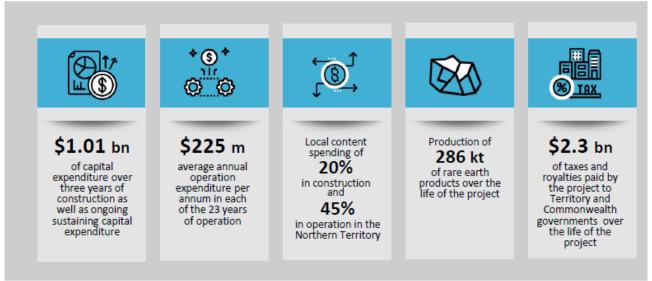
605
FTE* employees in construction over three years of which 175 are expected to be sourced from the Northern Territory



An average of

278

FTE employees in each year during steady state production of which **75** per annum are expected to be sourced from the Northern Territory



* FTE = Full time equivalent. One FTE is the equivalent of one person working for one year on a full time basis.

NdPr Oxide and Other Products

Marketing & Offtake

Following a nationwide shutdown that commenced in late-January due to the onset of COVID-19, Chinese industry restarted in March with many manufacturing facilities now operating at 50-80% capacity. Much of the rare earth industry and downstream NdFeB magnet producers are now operating, particularly in northern China, filling a backlog of offshore and domestic orders, and demand to deliver product shipments is stretching operational and logistics capability. Many automakers in China have restarted and the automotive industry is slowly returning to normality; for example, production of vehicles and components has resumed at 22 of 24 Volkswagen locations in China during the past month. Demand for NdPr oxide in the Chinese domestic economy is being driven by a ramp up in local demand or NdFeB magnets, and operational capacity is increasing to meet demand.

China sources NdPr and other rare earths from offshore jurisdictions like Malaysia, Africa, Myanmar, Australia and the USA to help meet domestic and global demand. Some of this supply has temporarily shut with some rare earth companies suspending operations due to COVID-19. Any extended operational shutdowns will tighten supply further and some supply chains like Japan could



be affected. Supply chains in Europe and the USA are reshaping to mitigate future events and the rare earth industry is no exception. The COVID-19 pandemic is a stark reminder of the fragility of supply chains, including those relating to critical minerals like rare earths, and is a prime motivator for direct investment being considered by governments and downstream customers in the sector.

Planned marketing visits to Japan, South Korea and China in January and February were cancelled in response to COVID-19 related international travel restrictions. Nonetheless Arafura was able to conduct a marketing visit to Europe in early March and continued advancing offtake discussions with several end users and supply chain partners. Whilst the Company is currently unable to meet end users and financiers in person, it continues to engage and communicate via telephone and video conferencing with groups in Japan, Europe and China.

The Company has commenced communication with its existing Chinese magnet manufacturing partners JingCi Material Science and Baotou Tianhe Magnetics, as well as a Japanese magnet manufacturer, to deliver samples of high purity NdPr oxide product from Arafura's recently completed rare earth separation pilot plant for pre-qualification and verification. The timing of delivery is being compromised by a temporary disruption to the Company's rare earth precipitation program at ANSTO due to the COVID-19-related suspension of some of ANSTO's activities.

In March, Arafura entered into a non-binding memorandum of understanding (**MOU**) with a Chinese downstream rare earth metal processor in relation to the conversion of NdPr oxide from Nolans to NdPr metal at its metal conversion operations in Thailand and Vietnam. The rare earth processor already offers toll processing of non-Chinese feedstock, has vast expertise in metal processing and is a reputable toll manufacturer delivering metal product to Japanese clients. The Company is working towards negotiating and executing a formal toll conversion agreement with this supply chain partner in direct response to requests by European end users for the delivery of NdPr metal via a non-Chinese supply chain and an announcement will be made to ASX when such formal agreements have been entered into.

Arafura also has non-binding rare earth product offtake arrangements in place with several parties in Japan, Europe, South Korea, the USA and China, and for phosphoric acid product with parties in India. No formal agreements with these parties have been entered into and the Company at this stage has no certainty as to the timing and likelihood of concluding binding agreement terms. Arafura continues to work with the potential offtake partners and other supply chain partners and details of these arrangements will be announced to ASX when formal agreements have been entered into.

EV Demand & Business Disruption

As the 2019 calendar year drew to a close, Arafura began mapping out its market engagement programs and associated project funding activities for Q1 CY2020. There had been significant momentum in the Company's market engagement in the second half of 2019 and the Arafura team

was of the view 2020 would see a ramp up in planning and procurement by the automotive industry in Europe and Asia in readiness for the electric vehicle (**EV**) revolution. The onset of the COVID-19 virus in China caused serious disruption to Chinese supply chains in January and was further compounded by the impact of the virus flowing through to Europe in March and the resultant shutdown of its industries, including the automotive industry. The COVID-19 virus then combined with dramatic falls in oil prices which drove further and unprecedented falls in global stock market indices.

In Q1 CY2020 automotive sales have been supressed as buyer activity has been curtailed by uncertainty and general business disruption. Surging demand for EVs is a key and fundamental driver for NdPr demand to produce NdFeB magnets, critical to the efficient operation of EVs. This has forced Arafura to evaluate and stress test its offtake and funding strategy and consider if COVID-19, potential economic recession and record low oil prices will put a halt to the 2020 EV revolution.

It is reasonable to conclude recent events will work to reduce global automotive sales beyond Q1 CY2020; however there are a number of factors at play that support the view there is a compelling case for the EV revolution to pick up its momentum later this year. These include:

- Global emission reduction targets will continue to drive a regulatory environment that supports higher demand for EVs.
- Europe, China, Japan and South Korea are all major oil importers. Whilst low oil prices are providing some short-term relief there is significant interest in these countries in reducing their dependency on oil imports.
- Increased investment in battery technology and battery making capacity has been significant. Battery components are the single biggest component cost for EVs.

The automotive supply chain has already laid significant bets on battery technology and manufacturing capacity. This investment will drive EV momentum and continue to drive the trend of EV costs, closing the gap on internal combustion engine (ICE) vehicles. Investment in battery capability combined with the money invested in EV manufacturing will provide a runway for momentum to recover from the impact of COVID-19. According to Bloomberg New Energy Finance (Bloomberg NEF) EV battery packs currently cost US\$156 per kilowatt hour, a reduction of 85% when compared with the 2010 price of US\$1,100 per kilowatt hour. Whilst there is more work required to drive EV costs lower to achieve parity with ICE vehicles, it is likely the auto industry can now see this will be achieved by continuing to leverage the battery technology advances achieved over the last decade. Bloomberg NEF estimates in the period from 2020 to 2030 the battery share of total EV cost will reduce from 30% to less than 15%. The availability of increasingly reliable and low-cost battery technology that provides power efficiency will be a significant driver for increasing EV demand.



NdPr Market

The price of NdPr oxide on an ex-works China basis traded at the beginning of the quarter at US\$41 per kilogram and remained relatively stable in the previous quarter and up to commencement of Chinese New Year holidays from 17 January (Figure 5). The New Year holidays were originally set to end on 30 January, however amid the coronavirus breakout, most of China's industry remained shut up to 10 February and most operations and commercial activities recommenced from 17 February. Trade of rare earths and downstream magnet products was inactive during this period with limited upside to price movement of NdPr oxide.

Manufacturing activity in China rebounded in March and rare earth producers and magnet manufacturers capacity utilization rates increased to normal levels filling a backlog of overseas orders. China's exports of rare earths rose 19.2% year on year hitting their highest level since 2014 due to the order backlog, helping the industry rebound from lower business activity in January and February. Exports of rare earths totalled 5,551 tonnes in March according to Asian Metal.

NdPr oxide prices were lower during March reaching US\$38 per kilogram by end of the quarter. Despite increased business activity, Chinese inventory was adequate to cover the disruption and the lower demand in January and February contributed to lower prices.

The outlook for Q2 CY2020 is for rare earths to remain relatively stable. NdPr oxide prices are seeing limited impact from the U.S.-China trade war although this brought a new focus to the sector highlighting dependency on China. Now a new focus is on supply chain security with reliance on China as a key threat as a result of the COVID-19 outbreak. China also relies heavily on importing rare earths and sources supply of NdPr oxide from Malaysia, Africa, Myanmar, Australia and the USA to help meet domestic and global demand. Some of this supply has temporarily shut with suspension of operations. Any extended operational shutdowns over the coming months will tighten supply further and some supply chains like Japan could be affected which could increase prices for NdPr oxide over the quarter.

In the coming months, China will continue to expand its domestic economy with increased demand for rare earths, and policy changes such as abandoning plans to lower new energy vehicle (**NEV**) subsidies in 2020 will incentivise the industry to expand with higher expected demand for magnets that use NdPr oxide. The challenge in the coming months for rare earth demand is the restart of end use manufacturing in Europe and the U.S. and purchase of NdFeB magnets from overseas buyers. The German automotive industry has already signalled restarting car plants across Europe in Q2 CY2020 and many other car makers and industry sectors consuming NdFeB magnets will follow.

China has raised its mining output quota for rare earths in the first half of 2020 by 10% from a year earlier, looking to step up production after COVID-19 disrupted activity in the sector. The Ministry of Industry and Information Technology (**MIIT**) lifted the official rare earth mining output quota for the first half of 2020 to 66,000 tonnes up from 60,000 tonnes for the first half of 2019.



NdPr oxide EXW China, converted to US\$/kg \$60 \$55 \$50 US\$ per kilogram \$45 \$40 \$35 \$30 28.480.19 30, Apr. 19 31,1121,19 31:1ec:18 30.Jun.19 32,111,29 30:580:19 31.02.19

Figure 1: NdPr Oxide Price
EXW China VAT inclusive, converted to US\$

COVID-19 Impact

In early January 2020, the World Health Organisation (**WHO**) was notified of the COVID-19 virus and confirmed human-to-human transmission can occur. A pandemic was declared by mid-March 2020. China was the first country affected, and many of its industries, including the rare earth industry went into dormant mode following widespread prolonged closure of business subsequent to Chinese New Year celebrations. This disruption to production, distribution networks and the end use product market is expected have an impact on the supply chain globally.

Whilst customer offtake and funding engagement during the quarter continued to be positive, there is the risk COVID-19 and its impact on economic activity is a threat to continued momentum. Travel restrictions imposed by the Australian and State/Territory governments are being monitored while the Company pursues alternative measures to continue engagement with key groups. The Company's operations remain largely unaffected as tele and video conferencing technology has enabled meetings to continue.



In line with Australian Government directions, a risk assessment was carried out and modified work protocols were established. Arafura's Perth-based staff and contractors have successfully transitioned to work from home, while its Darwin-based staff are continuing to operate from the Darwin office. There has been limited impact on productivity and the Company continues to reassess all work programs as it balances progress on the Project with cash conservation.

Project Funding

During the quarter Arafura executed a Capital Markets, Marketing and Logistics advisory agreement with Talaxis Limited (**Talaxis**), the technology metals investment and development company (*refer to ASX announcement 3 February and 5 February 2020*). Talaxis acquired a 5% strategic interest in Arafura through its participation as a sub-underwriter in Arafura's \$23.2 million underwritten entitlement offer (*refer to ASX announcement 20 June 2019*). The agreement formalises work performed between Arafura and Talaxis to examine equity investment and product offtake opportunities. Under the agreement Talaxis will assist Arafura to:

- Introduce potential strategic partners to finance the finance the development of the Nolans Project.
- Target key markets and counterparties for Arafura's product mix.
- Identify the optimal logistics routes to take Arafura's products to market.
- Locate the logistics routes and access to infrastructure for the transport and handling of project inputs, including reagents.

Planning commenced for a Talaxis hosted road show to introduce Arafura to investors who may be interested in Project funding and those that may be interested in Project equity. Roadshow timing will be monitored for the impact from COVID-19 travel restrictions, but some initial market engagement has commenced via video conferencing. The term of the Talaxis agreement is for a period of 12 months and can be extended by mutual agreement and the agreement included provision for capital introduction fees payable at standard market rates, on completion of a capital raising with parties introduced by Talaxis.

Arafura continued to progress its engagement with key advisor groups and Export Credit Agencies (**ECA**) to advance the initiatives required to secure Nolans Project funding. The Company met with groups in Hong Kong, Europe and Australia during the quarter. It is likely travel restrictions will remain in some form through Q2 CY2020 but the Company has been able to continue its engagement through the use video conferencing and other technology. Manufacturers have experienced supply chain issues arising from COVID-19, there is heightened awareness of the over reliance of the world's manufacturing industries on China-sourced NdPr products and the pressing need for supply diversification. The Company will continue to leverage the issues around supply chain diversification and the strategic significance of NdPr for its engagement with potential project

funding sources. Continued engagement with these groups supports the view that the strategic nature of NdPr, the alignment with clean energy applications and the specialised capital equipment requirements of the Project is a good fit with the mandate of several ECAs.

There are strong linkages between Nolans NdPr offtake and project funding strategies. Arafura's project funding strategy continues to work on the basis project equity will be attracted if the Company can demonstrate it has advanced its product offtake arrangements and has also engaged with the debt market and identified a viable debt structure and key debt terms. The Company's view is project equity should be sought with the objective of maximising the valuation for the equity raising with advanced but conditional debt terms and continues to target ECA tied and untied loan facilities.

Corporate

Cash Position

Arafura had \$20.1 million in cash reserves at 31 March 2020 and this strong financial position has enabled the Company to continue to advance the Nolans Project notwithstanding the business interruptions arising from the COVID-19 pandemic. The Company continues to be prudent in its engagement with consultants and contractors to ensure it maintains flexibility in order to deal with any new challenges arising out of the COVID-19 pandemic and its impact on financial markets.

For the quarter ended 31 March 2020, average monthly cash expenditure was \$944,000 compared with \$1,170,000 for the December 2019 quarter. The monthly average for the quarter was lower as a result of the completion of drilling programs at Nolans Bore and on the Bonya JV in the prior quarter and completion of the rare earth separation pilot program in the current quarter. The Company expects the expenditure profile for Q2 CY2020 to decrease as a result of the completion of technology programs for the Project.

Appointment of Joint Company Secretary

Miss Catherine Huynh was appointed Joint Company Secretary, along with continuing Company Secretary and Chief Financial Officer, Mr Peter Sherrington, effective 3 April 2020.

Office relocation

The Company has recently signed a lease for new office premises and will change its principal place of business to Level 6, 432 Murray Street, Perth, WA 6000. The Company expects to complete the office relocation on 11 May but will provide a formal notification of the change of address and its Perth telephone number via the Australian Securities Exchange announcements platform. The Company has increased its Perth office footprint by approximately 25% but has managed to secure an existing office fit out that can accommodate over 2.5 times the current office's seating capacity. The subdued commercial real estate leasing conditions assisted the Company in securing a less than

5% increase in occupancy costs and it now has sufficient space to accommodate the planned requirements of Arafura and the IPMT.

Nolans Project Exploration Results, Mineral Resources and Ore Reserves

The information in this report that relates to Exploration Results was released in an announcement dated 9 March 2020 (Drilling Confirms Deep Extensions to Mineralization) and was completed in accordance with the guidelines of the JORC Code (2012). The information in this report that relates to Mineral Resources was released in an ASX announcement dated 7 June 2017 (Detailed Resource Assessment Completed) and was completed in accordance with the guidelines of the JORC Code (2012). The information in this report that relates to Ore Reserves was released in an ASX announcement dated 16 March 2020 (Major Increase in Mine Life for the Nolans Project) and was completed in accordance with the guidelines of the JORC Code (2012).

Arafura confirms that it is not aware of any new information or data that materially affects the information included in these original market announcements and that all material assumptions and technical parameters underpinning the estimates in the original market announcements continue to apply and have not materially changed. Arafura confirms that the form and context in which the Competent Person's findings are represented have not been materially modified from the original market announcements.

Mineral Resources

Resources	Tonnes (m)	Rare Earths Treo %	Phosphate P ₂ O ₅ %	NdPr Enrichment %
Measured	4.9	3.2	13	26.1
Indicated	30	2.7	12	26.4
Inferred	21	2.3	10	26.5
TOTAL	56	2.6	11	26.4

As announced on 7 June 2017. 1.0% TREO cut-off grade. Numbers may not compute exactly due to rounding. "NdPr enrichment" is the proportion of TREO comprising Nd_2O_3 and Pr_6O_{11} .

Ore Reserves

Reserves	Tonnes (m)	Rare Earths Treo %	Phosphate P ₂ O ₅ %	NdPr Enrichment %
Proved	5.0	3.0	13	26.2
Probable	24.6	2.8	13	26.5
TOTAL	29.5	2.9	13	26.4

As announced on 16 March 2020. Numbers may not compute exactly due to rounding. "NdPr enrichment" is the proportion of TREO comprising Nd_2O_3 and Pr_6O_{11} .



Bonya JV Competent Persons Statement

The information in this report that relates to Bonya exploration results is based on information compiled by Richard Bradey, who holds a BSc in Applied Geology and an MSc in Natural Resource Management and who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Bradey is an employee of Thor Mining PLC. He has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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' (JORC Code 2012). Mr Bradey consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Bonya Mineral Resources is based on information compiled by Dr Graeme McDonald. Dr McDonald acts as an independent consultant to Thor Mining PLC and is a Member of The Australasian Institute of Mining and Metallurgy. He has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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' (JORC Code 2012). Dr McDonald consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

Production Targets and Forecast Financial Information

The information in this report that relates to production targets and forecast financial information is derived from an ASX announcement dated 16 March 2020 (including the cost and pricing assumptions referred to in the Company's 16 March 2020 announcement that were used in the DFS and which are set out in the Company's ASX Announcement dated 7 February 2019 Nolans Project Definitive Feasibility Study) continue to apply and have not materially changed.

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.

<u>www.arultd.com</u> 18



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.



Appendix 5B

Mining exploration entity and oil and gas exploration entity quarterly report

Name of entity

Arafura Resources Ltd

ABN

Quarter ended ("current quarter")

22 080 933 455 31 March 2020

Con	solidated 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 (if expensed)	-	-
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(422)	(1,157)
	(e) administration and corporate costs	(241)	(1,389)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	80	277
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	(2)
1.7	Government grants and tax incentives	-	237
1.8	Other (provide details if material)	-	-
1.9	Net cash from / (used in) operating activities	(583)	(2,034)



2.	Cash flows from investing activities		
2.1	Payments to acquire:		
	(a) entities	-	-
	(b) tenements	-	(11)
	(c) property, plant and equipment	(17)	(32)
	(d) exploration & evaluation (if capitalised)	(2,160)	(6,129)
	(e) investments	-	-
	(f) other non-current assets	(71)	(71)
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	1,278
2.6	Net cash from / (used in) investing activities	(2,248)	(4,965)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	23,246
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	-	(1,551)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	Net cash from / (used in) financing activities	-	21,695



4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	22,925	5,398
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(583)	(2,034)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(2,248)	(4,965)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	21,695
4.5	Effect of movement in exchange rates on cash held	1	1
4.6	Cash and cash equivalents at end of period	20,095	20,095

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	279	1,258
5.2	Call deposits	19,816	21,667
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)	20,095	22,925

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	(190)
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-

Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments



7.	Financing facilities Note: the term "facility" includes all forms of financing arrangements available to the entity.	Total facility amount at quarter end	Amount drawn at quarter end \$A'000
	Add notes as necessary for an understanding of the sources of finance available to the entity.	\$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 qu	uarter end	-
7.6	Include in the box below a description of each rate, maturity date and whether it is secured facilities have been entered into or are proposinclude a note providing details of those facilities.	or unsecured. If any add osed to be entered into af	itional financing

8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (Item 1.9)	(583)
8.2	Capitalised exploration & evaluation (Item 2.1(d))	(2,160)
8.3	Total relevant outgoings (Item 8.1 + Item 8.2)	(2,743)
8.4	Cash and cash equivalents at quarter end (Item 4.6)	20,095
8.5	Unused finance facilities available at quarter end (Item 7.5)	-
8.6	Total available funding (Item 8.4 + Item 8.5)	20,095
8.7	Estimated quarters of funding available (Item 8.6 divided by Item 8.3)	7

- 8.8 If Item 8.7 is less than 2 quarters, please provide answers to the following questions:
 - 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.		

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.	

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.		



Compliance Statement

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

Date:	23/04/2020
Authorised by:	(Catherine Huynh- Company Secretary)

Notes

- 1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
- 2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
- 3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
- 4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
- 5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.



Appendix A – Mining Tenements Held as at 31 March 2020

Tenement reference	Project	Holder	Nature of interest (note (2))	Interest at beginning of quarter	Interest at end of quarter	Notes
ML 26659	Nolans, NT	Arafura Rare Earths Pty Ltd	Mineral Lease	100%	100%	Application Lodged
ML 30702		,		100%	100%	Application Lodged
ML 30703				100%	100%	Application Lodged
ML 30704				100%	100%	Application Lodged
EL 28473	Aileron–	Arafura	Exploration	100%	100%	
EL 28498	Reynolds,	Resources	Licence	100%	100%	
EL 29509	NT	Ltd		100%	100%	
EL 31224				100%	100%	
EL 31284				100%	100%	
EL 31957				100%	100%	
EL 29701	Bonya JV, NT	Arafura Resources	Exploration Licence	60%	60%	Thor Mining Plc 40%,
		Ltd				Arafura Resources Limited 60%
EL 32167	Jervois Vanadium, NT	Arafura Resources Ltd	Exploration Licence	60%	60%	Thor Mining Plc 40%, Arafura Resources Limited 60%