






Quarterly Activities Report and Appendix 5B

For the period
ending
31 December
2014

ASX: ARU



HIGHLIGHTS

-  **Nolans Project Stage 1 rare earth extraction testwork commences with two China-based institutes**
-  **Acid consumption reductions achieved from Australian-based rare earth extraction testwork programs**
-  **Amended Notice of Intent lodged with the Northern Territory Government's Environment Protection Authority**
-  **Northern Territory Government accepts applications for Mineral Leases over the Nolans Processing Site**
-  **Strong quarter-end cash balance of A\$18.5 million**

NOLANS PROJECT

STAGE 1 RARE EARTH EXTRACTION PROGRAM

During the period the Company commenced testwork with two China-based institutes for the review and optimisation of the Nolans rare earth ("RE") extraction (hydrometallurgical) flowsheet. Samples have been delivered to China and preliminary testwork completed. Initial results from the preliminary programs will be presented and reviewed with the assistance of SKN, Arafura's China-based consultant, in January and February.

The objective of the RE extraction optimisation work is to reduce operating costs for the RE Intermediate Plant. On completion of the preliminary testwork, laboratory-scale Stage 1 test work with both institutes will continue. On completion and analysis of Stage 1 results, a decision will be made to continue with Stages 2 and 3 of the program with one of the institutes.

AUSTRALIAN-BASED RARE EARTH EXTRACTION TESTWORK

In parallel with the China-based program, the Company has been progressing targeted confirmatory RE extraction batch and subsequent locked cycle testwork in Australia for the Sulphuric Acid Pre-leach / Double Sulphate Precipitation ("SAPL/DSP") flowsheet. A key focus of this work has been on testing reduced acid consumption conditions for the SAPL process.

Initial testwork produced positive results and subsequent locked cycle tests of the SAPL process using reduced acid ratio conditions were successful in confirming these initial testwork results. Slightly enhanced RE recoveries were also achieved when compared to the higher acid consumption base case.

These SAPL testwork results will be incorporated into the SAPL/DSP process model. The model will provide flows and compositions to permit updating of OPEX and CAPEX estimates. Scope definition is underway for an updated CAPEX estimate to commence in early 2015.

BENEFICIATION OPTIMISATION STAGE 2 TESTWORK COMMENCES

The Chengdu Analytical and Testing Centre for Minerals and Rocks (“CTC”) continued work on the Stage 2 beneficiation optimisation program during the quarter. The variability testwork component of the Stage 2 program will commence in the March quarter. Samples for the variability work have been prepared and are on hand for shipment to CTC.

NOTICE OF INTENT – REGULATORY APPROVALS

In December the Company lodged an amended Notice of Intent under the *Environmental Assessment Act* with the Northern Territory Government’s Environment Protection Authority (“EPA”). This facilitates a guideline review by the EPA to ensure that the Project’s Environmental Impact Statement (“EIS”) addresses the impact of the expanded footprint of the Nolans Site, including the Nolans Processing Site, accommodation village, borefield, and all access corridors. The Company expects that amended EIS guidelines will be issued shortly by the EPA.

Proposals from a number of environmental consulting groups to complete the Nolans Site EIS were received and evaluated in the December quarter. Work programs included in all the proposals confirm submission of the EIS report to the EPA in Q1 CY2016, in line with the Company’s schedule. The Company expects to finalise the commercial terms for the various service agreements with the leading proponents and appoint a consultant during the March quarter.

NOLANS SITE TENURE

During the quarter the Northern Territory Government’s Department of Mines and Energy (“DME”) accepted three Mineral Lease (“ML”) applications (MLs 30702, 30703 and 30704) from Arafura over the Nolans Processing Site (Figure 1). They are designed to cover the proposed locations of the RE Intermediate Plant, process residue storage facilities, evaporation ponds and accommodation village. The MLs are all located on land over which the Company holds existing and valid title (ELs 28498 and 29509) under the *Mineral Titles Act*. Granting of these MLs and the existing Nolans Mine Site ML application (ML 26659) is targeted for Q2 CY2016 subject to the successful completion of an Indigenous Land Use Agreement with the region’s Anmatjere native title custodians and receipt of the Project’s environmental approval.



ML 30702 covers an area of 72 ha, ML 30703 covers an area of 1,384 ha and ML 30704 has an area of 207 ha. The ML locations are all located outside the Ti Tree Basin catchment and water control district, are near the Amadeus Basin to Darwin gas pipeline, are underlain by shallow basement rocks and contain no significant surface drainage features. These applications are designated as ancillary MLs in support of facilities to the mining operation on the Nolans Mine Site ML 26659 (1,404 ha). Further applications for Access Authorities will be lodged with the DME to enable the construction of roads, pipelines, power lines and other infrastructure.



Figure 1: Arafura's mineral tenure over the Nolans Site including mineral leases (ML – pale blue) and exploration licences (EL – grey)

EXPLORATION

AILERON – REYNOLDS (Rare Earths; Water; Extractive Minerals)

GROUNDWATER EXTRACTION LICENCE

The Company lodged a groundwater extraction licence application with the Water Resources Division of the Northern Territory Government's Department of Land Resource Management (ASX: ARU 22/10/14) during the quarter to secure water extraction rights from the Southern basins to service the operational requirements of the Nolans Project. The groundwater drilling program has now seen the establishment of fourteen production bores. Data collected from pump testing the production bores has been used to support the water licence application.

During December the Company also drilled 29 shallow holes as part of a basin margin investigation program. Data from this program will be used to examine the relationship between the eastern margin of the Whitcherry Basin (part of the Southern basins) and the Ti Tree Basin. This work will enable the Company to understand the groundwater flow and flux response during and following rainfall events. The information will be incorporated into the Nolans EIS and is important in seeking the relevant regulatory approvals for the Project.

YALYIRIMBI (Iron)

Ferrowest Limited (“Ferrowest”; ASX: FWL) is progressing work in relation to the Yalyirimbi Iron Project to earn up to a 60% interest in Arafura’s iron ore rights on EL 24548 through an incorporated joint venture. The iron rights are held through Arafura Iron Pty Ltd (“AIPL”).

Ferrowest has previously announced an estimate of Indicated and Inferred Mineral Resources for Yalyirimbi. During the quarter Arafura and Ferrowest completed the transfer of the 51% shareholding in AIPL and the appointment of the two Ferrowest nominated directors (ASX: FWL 30/10/14).

JERVOIS (Base and Precious Metals; Iron-Vanadium)

Rox Resources Limited (“Rox”; ASX: RXL) satisfied the conditions to earn a 51% interest in the base and precious metals mineral rights (Cu-Pb-Zn-Ag-Au-Bi-PGE) over EL 29701. Rox has elected to proceed to increase its interest to 70% by spending a further A\$1 million over two years to 10 December 2016 (ASX: RXL 16/12/14).

During the quarter Rox completed programs of reverse circulation (RC) and diamond core drilling at the Bonya prospect. Wide intervals of copper-enriched massive sulphides were intersected beneath the abandoned Bonya Mine workings in several drill holes at depths ranging from near surface to approximately 100 m. Assays have been reported by Rox (ASX: RXL 20/10/14; 05/11/14; 01/12/14). Further drilling is planned by Rox for the March quarter to investigate the interpreted westerly plunge to the mineralisation.

MT PORTER – FRANCES CREEK (Gold)

Ark Mines Limited (“Ark”, ASX: AHK) is progressing work to earn a 40% interest in the Mt Porter Project (comprising ML 23839, ELR 116 and EL 23237) and Arafura’s gold interests at Frances Creek (MA 389, EL 10137 and several Territory Resources’ MLs). Upon completion of the first earn-in benchmark Ark may increase its interest by 30% to a total of 70%.

During the quarter Ark completed an RC drilling and costeaning program at the Golden Honcho prospect (ASX: AHK 07/10/14). Assays reported by Ark (ASX: AHK 10/11/14) included a number of significant gold intercepts and was successful in increasing the strike length of the prospect by 60 m.



PLEASE ALSO REFER TO APPENDIX A FOR A SUMMARY OF ALL MINING TENEMENTS AND AREAS OF INTEREST AS AT 31 DECEMBER 2014.

CORPORATE

STRATEGY AND OUTLOOK

NOLANS PROJECT 2015 LOOKING AHEAD

As stated in the Nolans Development Report (ASX: ARU 02/09/14) the Company continues to work towards completing the Nolans Definitive Feasibility Study (“DFS”) in mid- to late-CY2015. The activities during the quarter including the lodgement of the amended Notice of Intent, the ML Applications over the Nolans Processing Site combined with the groundwater extraction licence are significant milestones. The commencement of the environmental and regulatory permitting process is a significant building block for the development of the Nolans Project. Other key activities that were advanced during the period included beneficiation optimisation work being completed in China, RE extraction optimisation work underway in China, and SAPL/DSP batch and locked cycle testwork currently being completed in Australia.

Arafura commences 2015 with an aim to capitalise on the extensive work undertaken during recent years. Key work programs targeted for completion by the Company during 2015 include offtake and funding negotiations, securing an offshore site for the RE Separation Plant and the commencement of detailed engineering design. The Company looks forward to providing ongoing status reports on these programs over the course of the year.

MAGNET LEVERAGE

The Company’s medium term goal is to be a commercial producer of rare earths from the Nolans Project in the Northern Territory. On achievement of this goal the Company will be placed as one of the world’s leading rare earth producers with the capacity to meet 10% of annual global demand. For some time rare earths have been recognised as strategic minerals due to their use in variety of applications.

The strategic advantage of the Nolans Project extends beyond simply being a rare earths producer. The Nolans Project will be a significant producer of neodymium and praseodymium (NdPr) which are critical to the production of permanent magnets. Permanent magnet applications include the automotive industry, consumer electronics, hybrid technology and wind turbines. NdPr will generate over 75% of sales revenue for Arafura and provide significant exposure to the permanent magnet market which many industry commentators forecast will grow at 10% per annum. The Company is focussed on ensuring it maximises the leverage from its globally significant NdPr volumes in order to access offtake arrangements and strategic investment for project financing.

Figure 2 shows the key growth drivers for permanent magnets in 2003, 2008 and the forecast drivers for 2014 and 2020. The hard disk drive/voice coil market was the dominant demand driver in 2003. In the period from 2003 to 2014 other demand drivers have become as significant



including automotive, e-bike, hybrid and electric drive motors, and wind power generators. Green energy technology represents a significant driver of growth in demand over the forecast period to 2020.

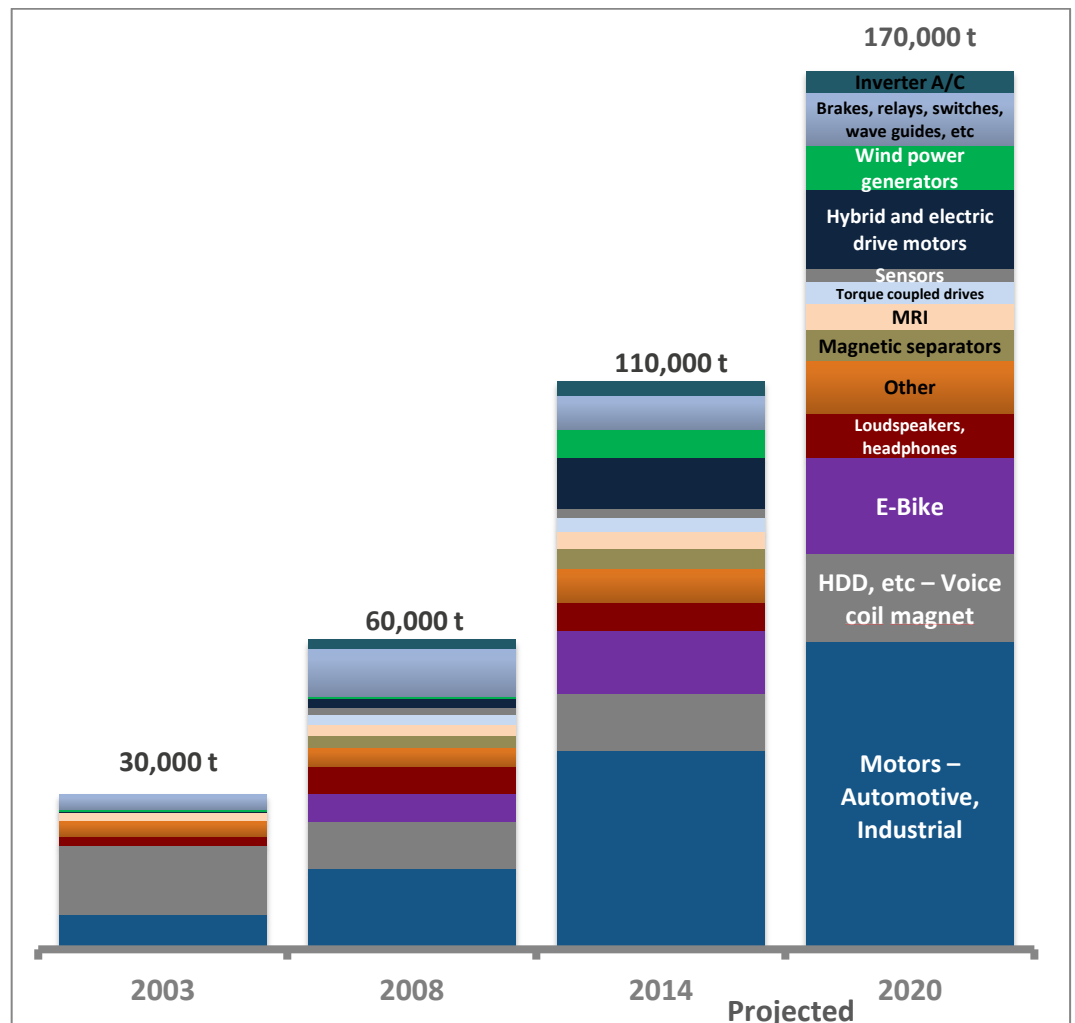


Figure 2: Growth drivers for NdFeB permanent magnets. Volumes represent sintered NdFeB magnet output. Source: Association of China Rare Earth Industry.

Toronto-based Stormcrow Capital (“Stormcrow”) released a rare earths sector coverage report [The Rare Earths Market Keeps Changing](#) in November 2014 and identified that the financial market’s lack of interest in resources investment places significant emphasis for rare earth projects to attract strategic investment (e.g. end-user). Stormcrow sets out the criteria or attributes (Figure 3) likely to be assessed by a strategic investor examining rare earth projects. A key driver will be magnet materials and specifically production of meaningful levels of NdPr and/or dysprosium. This conclusion is supported by the strong growth forecast for the key drivers in permanent magnet demand. Arafura’s Nolans Project is one of only a handful of projects identified by Stormcrow as being of “Strategic Grade”, and this outcome can be attributed to a number of characteristics including production from Nolans of large volumes of NdPr and the low geopolitical risk associated with Australian-based resource projects.



Attribute	Arafura
Feasibility complete by end of 2015	✓
Located in a jurisdiction with low geopolitical risk	✓
Long-life, low-risk resource with planned output that supports ≥ 20 years of production	✓
NdPr Oxide output $> 2,000$ t p.a. OR Dy Oxide output > 250 t p.a.	✓
Low production cost to remain competitive in a cyclical downturn	✓
Minimal technical and/or social acceptance risk in minimally populated mining region	✓

Figure 3: Stormcrow attributes and criteria necessary for rare earth development projects to attract strategic support

RARE EARTH MARKETS

China's Ministry of Commerce ("MOFCOM") issued announcements in January 2015 stating they will cancel their policy on export quotas and tariffs for rare earths after losing their World Trade Organisation ("WTO") appeal in August 2014. China is proposing to abolish its export quota regime and begin to implement an export licensing system as a tool to limit export of rare earths. China is taking a phased approach to the elimination of its export control system in a manner that satisfies the WTO ruling, and is likely to adjust export duties on or around 2 May 2015 as the WTO deadline will expire on that day.

To export rare earths, enterprises shall apply to the designated issuing agency for export licenses and make export declaration at the specified port. Additionally, MOFCOM indicated that all exports are now to be distributed through only nine designated ports.

The Chinese Government will continue to adjust its rare earths policy to further tighten its supply of rare earths. The formation of six large rare earth production groups is expected to establish control of rare earth mining and processing, and continue to crackdown on illegal producers. Further policy announcements around rare earth resource taxation and national stockpiling of rare earths will follow in the near future.

CORPORATE

As at 31 December 2014 the Company had A\$18.5 million cash on hand and remains in a strong financial position to commercialise the Nolans Project. The Company continues to look at all

options available to ensure funds are expended in a prudent manner and to ensure maximum value is created for shareholders through these efforts.

As at 24 November 2014 the Company changed its registered office and principal place of business to **Level 3, Durack Centre, 263 Adelaide Terrace, Perth, WA, 6000**. All other contact details remain unchanged as shown below.

Mailing Address: PO Box 5773, St Georges Terrace, Perth, WA, 6831

Telephone: +61 8 6210 7666

Fax: +61 8 9221 7966

Website: www.arultd.com

Email: arafura@arultd.com



Appendix 5B

Mining exploration entity quarterly report

Introduced 1/7/96. Origin: Appendix 8. Amended 1/7/97, 1/7/98, 30/9/01, 01/06/10.

Name of entity

ARAFURA RESOURCES LIMITED

ABN

22 080 933 455

Quarter ended ("current quarter")

31 December 2014

Consolidated statement of cash flows

		Current Quarter \$A'000	Year to date (6 months) \$A'000
Cash flows related to operating activities			
1.1	Receipts from product sales and related debtors	-	-
1.2	Payments for (a) exploration & evaluation	(2,087)	(4,294)
	(b) development	-	-
	(c) production	-	-
	(d) administration	(992)	(2,387)
1.3	Dividends received	-	-
1.4	Interest and other items of a similar nature received	330	435
1.5	Interest and other costs of finance paid	(2)	(5)
1.6	Income taxes paid	-	-
1.7	Other (provide details if material)	270	270
Net Operating Cash Flows		(2,481)	(5,981)
Cash flows related to investing activities			
1.8	Payment for purchases of: (a) prospects	-	-
	(b) equity investments	-	-
	(c) other fixed assets	(68)	(70)
1.9	Proceeds from sale of: (a) prospects	-	-
	(b) equity investments	-	-
	(c) other fixed assets	-	-
1.10	Loans to other entities	-	-
1.11	Loans repaid by other entities	-	-
1.12	Other (provide details if material)	-	-
Net investing cash flows		(68)	(70)
1.13	Total operating and investing cash flows (carried forward)	(2,549)	(6,051)

+ See chapter 19 for defined terms.



1.13	Total operating and investing cash flows (brought forward)	(2,549)	(6,051)
Cash flows related to financing activities			
1.14	Proceeds from issues of shares, options, etc.	-	-
1.15	Proceeds from sale of forfeited shares	-	-
1.16	Proceeds from borrowings	-	-
1.17	Repayment of borrowings	-	-
1.18	Dividends paid	-	-
1.19	Other – Capital Raising Expenses	-	-
Net financing cash flows		-	-

Net increase (decrease) in cash held		(2,549)	(6,051)
1.20	Cash at beginning of quarter/year to date	21,049	24,547
1.21	Exchange rate adjustments to item 1.20	1	5
1.22	Cash at end of quarter	18,501	18,501

Payments to directors of the entity and associates of the directors

Payments to related entities of the entity and associates of the related entities

		Current Quarter \$A'000
1.23	Aggregate amount of payments to the parties included in item 1.2	(242)
1.24	Aggregate amount of loans to the parties included in item 1.10	Nil

1.25 Explanation necessary for an understanding of the transactions

Salaries, fees and superannuation of Directors to the Company

Non-cash financing and investing activities

2.1 Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows

Nil

2.2 Details of outlays made by other entities to establish or increase their share in projects in which the reporting entity has an interest

Nil

+ See chapter 19 for defined terms.

Financing facilities available

Add notes as necessary for an understanding of the position

	Amount available \$A'000	Amount used \$A'000
3.1 Loan facilities	Nil	Nil
3.2 Credit standby arrangements	Nil	Nil

Estimated cash outflows for next quarter

	\$A'000
4.1 Exploration and evaluation	1,858
4.2 Development	-
4.3 Production	-
4.4 Administration	1,240
Total	3,098

Reconciliation of cash

Reconciliation of cash at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts is as follows.

	Current Quarter \$A'000	Previous Quarter \$A'000
5.1 Cash on hand and at bank	1,407	800
5.2 Deposits at call	17,094	20,249
5.3 Bank overdraft	-	-
5.4 Other (provide details)	-	-
Total: cash at end of quarter (item 1.22)	18,501	21,049

Changes in interests in mining tenements

	Tenement reference	Nature of interest (note (2))	Interest at beginning of quarter	Interest at end of quarter
6.1		Interests in mining tenements relinquished, reduced or lapsed		
		Interests in mining tenements acquired or increased		

+ See chapter 19 for defined terms.



Issued and quoted securities at end of current quarter

Description includes rate of interest and any redemption or conversion rights together with prices and dates.

	Total number	Number quoted	Issue price per security (see note 3)	Amount paid up per security (see note 3)
7.1 Preference securities <i>(description)</i>				
7.2 Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs, redemptions				
7.3 +Ordinary securities	441,270,644	441,270,644		
7.4 Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs				
7.5 +Convertible debt securities <i>(description)</i>				
7.6 Changes during quarter (a) Increases through issues (b) Decreases through securities matured, converted				
7.7 Options	1,878,000 6,750,000 5,190,000 3,000,000	- - - -	<i>Exercise price</i> \$0.23 \$0.14 \$0.105 \$0.105	<i>Expiry date</i> 31-12-15 18-07-16 30-09-18 20-11-18
7.8 Issued during quarter	5,190,000 3,000,000	- -	<i>Exercise price</i> \$0.105 \$0.105	<i>Expiry date</i> 30-09-18 20-11-18
7.9 Exercised during quarter	-	-	-	-
7.10 Expired during quarter	1,750,000 600,000	- -	<i>Exercise price</i> \$0.70 \$0.81	<i>Expiry date</i> 24-11-14 31-12-14

+ See chapter 19 for defined terms.

7.11	Debentures <i>(totals only)</i>	-	-
7.12	Unsecured notes <i>(totals only)</i>	-	-

Compliance statement

1 This statement has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Act or other standards acceptable to ASX (see note 4).

2 This statement does give a true and fair view of the matters disclosed.

Sign here:



Date: 30 January 2015

Print name: Peter Sherrington
(Company Secretary)

Notes

1 The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity wanting to disclose additional information is encouraged to do so, in a note or notes attached to this report.

2 The "Nature of interest" (items 6.1 and 6.2) includes options in respect of interests in mining tenements acquired, exercised or lapsed during the reporting period. If the entity is involved in a joint venture agreement and there are conditions precedent which will change its percentage interest in a mining tenement, it should disclose the change of percentage interest and conditions precedent in the list required for items 6.1 and 6.2.

3 **Issued and quoted securities** the issue price and amount paid up is not required in items 7.1 and 7.3 for fully paid securities.

4 The definitions in, and provisions of, *AASB 1022: Accounting for Extractive Industries* and *AASB 1026: Statement of Cash Flows* apply to this report.

5 **Accounting Standards** ASX will accept, for example, the use of International Accounting Standards for foreign entities. If the standards used do not address a topic, the Australian standard on that topic (if any) must be complied with.

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+ See chapter 19 for defined terms.



Appendix A – Mining Tenements Held As At 31 December 2014

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				0%	100%	Application Lodged
ML 30703				0%	100%	Application Lodged
ML 30704				0%	100%	Application Lodged
EMEL 30510				100%	100%	Application Lodged
EL 28498 EL 28473 EL 29509 EL 27337 EL 24741 EL 30160	Aileron–Reynolds, NT	Arafura Resources Ltd	Exploration Licence	100% 100% 100% 100% 100% 100%	100% 100% 100% 100% 100% 100%	
EL 24548	Aileron–Reynolds, NT	Arafura Resources Ltd	Exploration Licence	100%	100%	Arafura Iron Pty Ltd (AIPL) shareholders are Arafura 49% and Ferrowest Ltd (FWL) 51%. FWL has a right to acquire up to 60% of AIPL
		Arafura Iron Pty Ltd	Non-iron rights Iron rights	100% 100%	100% 100%	
EL 29701	Jervois, NT	Arafura Resources Ltd	Exploration Licence	100%	100%	Rox Resources Ltd (RXL) has a right to acquire up to 70% of the base and precious metals rights

+ See chapter 19 for defined terms.



Tenement reference	Project	Holder	Nature of interest (note (2))	Interest at beginning of quarter	Interest at end of quarter	Notes
EL 10137	Frances Creek, NT	Territory Resources Ltd	Gold Rights	100%	100%	Ark Mines Ltd (AHK) has a right to acquire up to 70% of the gold rights
ML 24727			Gold Rights	100%	100%	
ML 27228			Gold Rights	100%	100%	
ML 25087			Gold Rights	100%	100%	
ML 25088			Gold Rights	100%	100%	
ML 25529			Gold Rights	100%	100%	
ML 27225			Gold Rights	100%	100%	
ML 27226			Gold Rights	100%	100%	
ML 27230			Gold Rights	100%	100%	
ML 27227			Frances Creek Pty Ltd	Frances Creek Pty Ltd	Gold Rights	
ML 27229	Gold Rights	100%			100%	
ML 29930	Gold Rights	100%			100%	
MA 389	Gold Rights	100%			100%	
ELR 116	Mt Porter, NT	Arafura Resources Ltd	Exploration Licence in Retention	100%	100%	Ark Mines Ltd (AHK) has a right to acquire up to 70% of all mineral rights on the tenements, with an immediate right to mine ML 23839 subject to regulatory approvals
ML 23839			Mineral Lease	100%	100%	
EL 23237			Exploration Licence	100%	100%	
EL 25754	Pamela, NT	Arafura Resources Ltd	Exploration Licence	100%	100%	Application Lodged

+ See chapter 19 for defined terms.