

**QUARTERLY EXPLORATION
ACTIVITY REPORT**



**FOR THE PERIOD ENDING
31 March 2005**

ABN 22 080 933 455
Unit 1, Level 2, 9 Bowman Street
South Perth WA 6151
Telephone: (08) 9367 1433, Facsimile: (08) 9367 1944
Email: arafura@arafuraresources.com.au Website: www.arafuraresources.com.au

QUARTERLY ACTIVITY REPORT FOR PERIOD ENDING 31 MARCH 2005

Highlights

- A 50% increase in resources at the Nolans Bore phosphate, rare earth, and uranium project.
- The inclusion of uranium in the resource estimate for Nolans Bore.
- An interim test-work progress report on Nolans Bore mineralization indicates that nitric acid digestion is an appropriate process route but requires further specific flowchart design for the Nolans rock types.
- Frances Creek iron ore on target to commence mining in 2006 with Territory Iron's successful capital raising and listing on ASX.
- The successful placement of 6,590,000 shares at A\$0.19 for \$1,251,210.
- Shareholder presentations given in Adelaide, Melbourne and Sydney.

NOLANS BORE PROJECT – Uranium Resources

"The inclusion of the uranium in the Nolans Bore resources adds significant value to the project"

In the December quarterly report Arafura announced the increase in resources at Nolans Bore. The resource was reviewed for the content and distribution of uranium given the significant increase in uranium prices in the last 6 months and a positive outlook for its commercial sale in the long term. It has been determined that the uranium may be economically recovered as a by-product of the metallurgical process and will add significant value to the economics of the operation.

The total indicated and inferred resource for phosphate, rare earth oxide and uranium oxide are stated at;

Indicated Resources

2.26 million tonnes at 14.9% P_2O_5 , 3.8% REO and 0.031% U_3O_8

Inferred Resources

3.54 million tonnes at 17.5% P_2O_5 , 3.9% REO and 0.032% U_3O_8

Total Indicated and Inferred Resources

5.81 million tonnes at 16.5% P_2O_5 , 3.9% REO and 0.031% U_3O_8

Based on these resources the total contained metal content at Nolans for each of the commodities are;

Phosphate as P_2O_5	958,500	tonnes
Rare Earth Oxides	226,500	tonnes
Uranium as U_3O_8	1,800	tonnes

The drill program undertaken so far has resulted in a significant increase in the current resources. It has also provided valuable qualitative and quantitative data into the understanding of the nature and distribution of the geology and mineralization at Nolans. With further drilling there is scope to significantly increase the size of the resource to make it a long term commercial operation. Subject to the availability of drill rigs, an additional drill program has been approved to commence in late May 2005. A significant increase in resources will enable Arafura to develop Nolans into a long life project with significant returns and long depreciation periods.

NOLANS BORE METALLURGICAL TEST-WORK – Progress report

This initial test work has provided positive results as well as a focus for the specific plant design and metallurgical processing for the Nolans Bore rock type. The report on the progress of test-work of Nolans Bore rock type indicate that the mineralization can be processed using nitric acid digestion, but requires a specific design to effectively produce commercial grade fertilizer products and optimize the extraction of uranium and rare earth minerals.

To undertake the next stage of the test-work, Arafura has engaged Western Minerals Technology Pty Ltd in Perth. WMT have extensive experience in aqueous solution metallurgy and have commenced the test-work. The objective will be to design a nitric acid digest process that effectively separates elevated grades of uranium and high grades of rare earth mineralization from solution that produces commercial grade and marketable products.

Further details on the reports findings are provided in Appendix 1.

FRANCES CREEK IRON ORE – Royalty payments

“Royalty payments from iron ore at Frances Creek likely to commence in 2006”

In 2003 Arafura entered into an agreement with Territory Iron for the rights to mine iron ore on our Frances Creek tenement in exchange for a royalty payment system. On 11 March 2005, Territory Iron Pty Ltd (ASX code - TFE) successfully listed on the Australian Stock Exchange and raised \$10 million for the exploration and development of iron ore properties in the Northern Territory. Arafura is maintaining open dialogue with Territory Iron while they further explore on the Frances Creek tenement.

Territory Iron has indicated that they will undertake further exploration in 2005 leading to development and mining in 2006. Frances Creek is likely to be Territory Iron's first mining project given the quality of the ore and its' close proximity to the railway line and the Darwin Port. On this basis Arafura will be entitled to a royalty pre-payment in the September quarter 2005 leading to royalty payments in 2006 on commencement of shipping.

CAPITAL RAISING

“Arafura successfully raises \$1.2521 million in issued capital”

On 21 March 2005, Arafura completed a capital raising through the placement of 6,590,000 shares for \$1.2521 million. The shares were placed through Bell Potter Securities Ltd to professional and sophisticated investors at an issue price of A\$0.19 per share. Proceeds will be used for the exploration of Arafura's tenements and metallurgical and engineering studies for Nolans Bore in 2005.

APPOINTMENT OF MANAGING DIRECTOR

On 28 February 2005, the Board approved the appointment of Alistair Stephens to the position of Managing Director. The previous Managing Director, Mick Muir, will continue his involvement in the company as Executive Director. Mick Muir has dedicated himself to the growth of Arafura and was an important contributor to the successful listing of Arafura on the Australian Stock Exchange in November 2003. His continued involvement will be valuable as Arafura takes the next steps into advancing project developments.

SHAREHOLDER PRESENTATIONS

Shareholder presentations were undertaken at Adelaide, Melbourne and Sydney. At these meetings shareholders were given an update on the results of exploration in 2004 and the plans ahead for 2005. The results indicate that Arafura has delivered

on its commitments outlined in the prospectus in 2003 and advanced a number of key projects. Additional exploration in 2005 will focus primarily on the Kurinelli gold project, Lagoon Creek uranium and Nolans phosphate-REO-uranium but also undertake some activity to progress other regional projects.

OUTLOOK

Lagoon Creek

Arafura is in the process of designing an exploration program that will target the most prospective areas of the tenement. This will consist of airborne geophysical surveys and ground geochemistry. Lagoon Creek hosts significant uranium and gold mineralization that is very similar to the rock types and controls on mineralization with the large Westmoreland Uranium field in Queensland. The exploration will use the Queensland deposit as a model for the identification of prospective ground in the Northern Territory where uranium mining is legislatively possible.

Nolans Bore

Drilling at Nolans Bore will commence late May 2005. We have contracted a drilling company that is currently completing drilling in South Australia before moving onto Nolans Bore. The first phase is expected to be approximately 7,500 metres of drilling.

Kurinelli

Planning and mobilization of equipment and personnel for the next phase of soil sampling and regional field work for the Kurinelli gold project has commenced now that the wet season has come to a close. The soil sampling program will follow up on 6 gold anomalies identified in the first regional program with specific focus on the largest on the anomaly that is over 4 kilometres in length.

Pine Creek Gold – Frances Creek and Mt Porter

The collection of environment data for the Mt Porter public environmental report (PER) has commenced and will continue through the dry season. Upon completion and acceptance by the Northern Territory Government authorities, this will clear the way for the mining at Mt Porter.

The status of the re-commissioning of the Union Reefs mill is still uncertain. Northern Gold released some encouraging drill results during the month that will help build the resource base needed to justify the mills re-start.

Appendix 1- Nolans Bore Test-work

Background

In 2004 Arafura collected bulk samples of Nolans Bore high grade phosphate and rare earth rock type. This was shipped to Yara International ASA (Yara) technical and research facility in Norway for metallurgical test-work to assess the application of the Nolans rock type to Yara's current and standard processing technology.

The Process

The Yara digestion and production process involves 6 stages. These are

- 1) Whole rock digestion in nitric acid,
- 2) Removal of acid insoluble silicate minerals,
- 3) Crystallization and filtration of calcium-nitrate products,
- 4) Solution neutralization and filtration of rare earth oxide minerals,
- 5) Rare earth minerals filter cake production and
- 6) Solution neutralization and production of nitrogen – phosphate based fertilizer.

The Findings

The progress report indicates that the apatite rock and rare earth minerals are amenable to nitric acid digestion. All phosphate minerals are totally liberated in the digestion process resulting in products that can be used for fertilizer products.

While the uranium and rare earth minerals are both digestible in nitric acid the Yara process cannot effectively separate enough of these products from the final fertilizer products to be commercially marketable. This is primarily a function of the specific nature of Yara's process design and not a feature of a limitation in metallurgical solutions.

The Issues

The issues that have been identified with the Nolans rock on the process designed for Yara's Kola ore are;

- 1) The acid insoluble content is higher than Kola ore,
- 2) Rare earth grades that are too high for the process design, and
- 3) High grades of uranium.

The high insoluble content of the rock can be solved with changes to the engineering design by designing a centrifuge process for higher insoluble content. The rare earth and uranium grades require both specific alterations to the process flowchart and extraction processes. Both of these can be achieved with existing technology.

Yara's process has been specifically designed for an apatite rock from the Kola Peninsula in Russia. While this rock has some basic similarities to the Nolans Bore

rock type (an apatite rock), there are some important and subtle mineralogical differences with the uranium content and high grades of rare earth minerals. The use of this general technology is an effective and simple way of determining nitric acid as a viable process route.

Yara was used for the initial test-work as they hold technology applicable for the processing of apatite rock types that are similar to Nolans Bore. They have access to fertilizer markets, extensive operational experience and extensive technical expertise in the field of processing apatite rock for the production of fertilizer products.

The information in this report that relates to drilling and geological interpretation is based on information compiled by Mr John Goulevitch of Exploremine Pty Ltd who is a Fellow of the Australian Institute of Geoscientists. Mr Goulevitch has sufficient experience relevant to this style of mineralization to qualify as a Competent Person as defined in the 1999 edition of Australian Code for Reporting of Mineral Resources and Ore Reserves (JORC Code) and consents to the inclusion in this report of the matters based on his information in the context in which it appears. Mr Goulevitch is Exploration Manager of Arafura Resources NL.

MINING EXPLORATION ENTITY QUARTERLY REPORT

ARAFURA RESOURCES NL

080 933 455

31 March 2005

	Current Qtr \$A'000	Year to Date (9 months) \$A'000
Cash flows related to operating activities		
1.1 Receipts from product sales and related debtors		
1.2 Payments for: (a) exploration and evaluation	(108)	(497)
(b) development		
(c) production		
(d) administration	(237)	(607)
1.3 Dividends received		
1.4 Interest and other items of a similar nature received	20	67
1.5 Interest and other costs of finance paid		
1.6 Income taxes paid		
1.7 Other (provide details if material)		
Royalty received		
Cost reimbursement		25
GST Refund/(Paid)	6	13
Net Operating Cash Flows	(319)	(999)
Cash flows related to investing activities		
1.8 Payment for purchases of: (a) prospects		
(b) equity investments		
(c) other fixed assets	(3)	(10)
1.9 Proceeds from sale of: (a) prospects		
(b) equity investments		
(c) other fixed assets		
1.10 Loans to/from other entities		
1.11 Loans repaid by other entities		
1.12 Other (provide details if material)		
Net Investing Cash Flows	(3)	(10)
1.13 Total operating and investing cash flows (carried forward)	(322)	(1,009)

1.13 Total operating and investing cash flows (brought forward)	(322)	(1,009)
Cash flows related to financing activities		
1.14 Proceeds from the issue of shares, options, etc.	1,252	1,252
1.15 Proceeds from the sale of forfeited shares		
1.16 Proceeds from borrowings		
1.17 Repayment of borrowings		
1.18 Dividends paid		
1.19 Other – Capital Raising Expenses	(63)	(63)
Net financing cash flows	1,189	1,189
Net increase (decrease) in cash held	867	180
1.20 Cash at beginning of quarter/year to date	1,702	2,389
1.21 Exchange rate adjustments		
1.22 Cash at end of quarter	2,569	2,569

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 Qtr \$A'000
1.23 Aggregate amount of payments to the parties included in item 1.2	95
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

Directors Fees & Super (28) Salaries & Super (67)

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

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

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		
3.2 Credit standby arrangements		

Estimated cash outflows for next quarter

	\$A'000
4.1 Exploration and evaluation	300
4.2 Development	
Total	300

Reconciliation of cash

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

5.1 Cash on hand and at bank

5.2 Deposits at call

5.3 Bank Overdraft

5.4 Other (provide details)

Total: cash at end of quarter (Item 1.22)

Current Quarter \$A'000	Previous Quarter \$A'000
21	17
2,548	1,685
2,569	1,702

Changes in interests in mining tenements

6.1 Interests in mining tenements relinquished, reduced or lapsed

Tenement Reference	Nature of interest (note (2))	Interest at Beginning of Quarter	Interest at End of Quarter
	Nil		

6.2 Interests in mining tenements acquired or increased

	Nil		
--	-----	--	--

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.

	Number Issued	Number quoted	Issue price per security (cents)	Amount paid up per security (cents)
7.1 Preference securities (description)				
7.2 Issued during Quarter				
7.3 Ordinary securities	50,547,508	34,388,336		
7.4 Issued during Quarter	6,590,000	6,590,000		
7.5 Convertible debt securities (description)				
7.6 Issued during quarter				
7.7 Options (description)	25,850,000	11,950,000	Exercise Price 20 cents	Expiry Date 30/6/2008
7.8 Issued during Quarter				
7.9 Exercised during Quarter				
7.10 Expired during Quarter				
7.11 Debentures (totals only)				
7.12 Unsecured notes (totals only)				

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:

Ross Arancini
Company Secretary

Date: 27 /04 /2005

Notes

1. The quarterly report is to provide a basis for informing the market how the activities of the entity have been financed for the past quarter and the effect on its cash position. Any 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 standards used do not address a topic, the Australian standard on that topic (if any) must be complied with.
