

**QUARTERLY EXPLORATION
ACTIVITY REPORT**



**FOR THE PERIOD ENDING
31 December 2004**

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QUARTERLY ACTIVITY REPORT FOR PERIOD ENDING 31 DECEMBER 2004

HIGHLIGHTS

CORPORATE ACTIVITY

Alistair Stephens appointed Chief Executive Officer.

KURINELLI SOIL SAMPLING

Wide spaced geochemical soil sampling at the Company's 100% owned gold project produced highly anomalous results over a large core gold area of 15-20 square kilometres.

MT PORTER GOLD PROJECT GAINS NATIVE TITLE AGREEMENT

Arafura and the Native Title applicants have reached a compensation agreement which has allowed the Northern Territory Government to grant a mining lease over the Mt Porter mining project.

LAGOON CREEK URANIUM GOLD PROJECT

A literature search of previous data has identified significant uranium and gold occurrences on the Lagoon Creek fault, an extension of the Westmoreland fault.

NOLANS BORE RARE EARTH/PHOSPHATE PROJECT

Latest drilling results have lifted the Nolans Bore Inferred Resource tonnage by 50% to 5.8 million tonnes and confirmed the continuity of wide mineralised zones at depth.

➤ **APPOINTMENT OF CHIEF EXECUTIVE OFFICER**

Mr Alistair Stephens has accepted the appointment as Chief Executive Officer of Arafura Resources NL.

Alistair is a geologist with experience in mineral exploration and mining as well as the mining service industry.

Alistair's previous position was with the explosives group Orica where he was commercial manager for explosives for the western region. Prior to Orica Alistair worked for Newmont as an exploration geologist in the Pacific Islands, as a mine geologist with KCGM and Normandy and for WMC in mine design, mine planning, processing plant management and production planning in the nickel division.

Alistair is a Bachelor of Science (Hons) from JCUNQ, he holds a Graduate Diploma in Business (Curtin) and is currently studying for MBA (Curtin).

Mr I.G. (Mick) Muir has resigned as the Company Managing Director but remains as an Executive Director of Arafura.

➤ **KURINELLI GOLD PROJECT**

Geochemical soil sampling at the Company's 100% owned Kurinelli gold project has identified numerous anomalies including a core gold zone of 15-20 square kilometres.

Within the core gold zone there is a primary target measuring 2 kilometres x 4 kilometres which reported a peak value of 236 ppb Au and supported by neighbouring values of 5-18 ppb Au.

The wide spaced sample program (500m x 500m) covered some 91 square kilometres of the Kurinelli Zone. This zone is an extensive, discrete, geological entity that was identified by aeromagnetic data and envelopes all of the known Kurinelli mineralisation.

The program was designed to sample in-situ residual soils, screened to -2mm and analysed for gold platinum and palladium.

This regional program was the first use of modern exploration techniques since the Kurinelli Goldfield was first discovered in the 1890s.

The Kurinelli Goldfield is located in the Davenport Province, the south-easterly part of the Tennant Creek Inlier. It is 400km north east of Alice Springs and 100 km east of the Stuart Highway.

Kurinelli was first discovered by a prospector called Davidson in the 1890`s. Davidson is credited with the discovery of the Tanami goldfield.

Until recently the Kurinelli field was covered by a reserve which precluded company exploration. Arafura has the major ground position at Kurinelli with a land holding of approximately 1500 Sq Km.

➤ **MT PORTER GOLD PROJECT**

Arafura and the Native Title Claimants for the region, have reached agreement which will allow the Company to be granted a mining tenement, being Mineral Lease 23839, covering the Mt Porter gold deposit.

The agreement was reached after 12 months of negotiation between the Company and the Northern Land Council, which represented the Native Title Claimants, and included assistance from the National Native Title Tribunal.

Following the granting of the mining title, Arafura will proceed with data collection for a Public Environment Review, which is required as part of a Mine Management Plan.

➤ **LAGOON CREEK URANIUM-GOLD PROJECT**

Arafura has carried out an extensive literature search which has identified uranium and gold mineralisation at the Lagoon Creek project.

The tenement covers an area of 218 Sq Km and is located 260 km east of Borroloola in the Northern Territory and adjacent to the Queensland border.

The prospective host rocks that crop out have a significant radiometric signature and contain narrow widths of mineralisation in drill holes. Drill holes have been identified with intersections up to 1m @ 2.4% U₃O₈ (52.8 lbs per ton) that are associated with gold values of up to 1m @ 6.8 g/t Au.

Mineralisation is located at the contact between the Siegal Volcanic and Westmoreland Conglomerate rock types within the tenement. The nature of the host rocks, faults and known mineralisation makes this ground highly prospective for economic occurrences of uranium mineralisation.

Arafura will continue with literature research during the current wet season which prohibits ground access by field crews.

➤ **NOLANS BORE RARE EARTH /PHOSPHATE PROJECT**

Resource tonnage at Nolans Bore has been increased by 50% after inclusion of drill results from the 2004 program.

Drilling of 20 RC percussion holes and 5 diamond core holes confirmed Arafura`s opinion that Nolans Bore has the potential to be a world class rare earth/phosphate resource.

Drilling was confined to the West Zone of the Nolans Bore deposit where strong mineralisation has been confirmed over a strike length in excess of 300 metres and a width of up to 80 metres and mineralisation remains open to the northeast and southwest and at depth.

The new resource, detailed under, has been prepared using a conventional 'sectional polygon' method. Data for the calculations was obtained from costeaning in 2000, RC drill holes in 2001 and the 2004 drilling. A 1% REE cut-off was used.

RESOURCE CATEGORY	TONNES	REO %	P₂O₅ %
Indicted	2,260,000	3.8	14.9
Inferred	3,540,000	3.9	17.5
TOTAL	5,810,000	3.9	16.5

The information in this report that relates to drilling and geological interpretation is based on information compiled by Mr John Goulevitch of Exploremin Pty Ltd who is a Fellow of the Australian Institute of Geoscientists. Mr Goulevitch has sufficient experience relevant to this style of mineralisation 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.

1.13 Total operating and investing cash flows (brought forward)	(313)	(687)
Cash flows related to financing activities		
1.14 Proceeds from the issue of shares, options, etc.		
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		
Net financing cash flows		
Net increase (decrease) in cash held	(313)	(687)
1.20 Cash at beginning of quarter/year to date	2,015	2,389
1.21 Exchange rate adjustments		
1.22 Cash at end of quarter	1,702	1,702

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	105
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 (60) Salaries & Super (45)

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

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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

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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	230
4.2 Development	
Total	230

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.

	Current Quarter \$A'000	Previous Quarter \$A'000
5.1 Cash on hand and at bank	17	-
5.2 Deposits at call	1,685	2,015
5.3 Bank Overdraft		
5.4 Other (provide details)		
Total: cash at end of quarter (Item 1.22)	1,702	2,015

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	EL9725		143	72
	EL 10214		160	80
	EL10215		177	88
	EL23671		500	250
	EL9823		17	NIL

6.2 Interests in mining tenements acquired or increased

	Nil		
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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	43,957,508	27,798,336		
7.4 Issued during Quarter				
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: xx/01/2005

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.
