

27 April 2023

**ASX Announcement** 

# **QUARTERLY ACTIVITIES REPORT 31 MARCH 2023**

## **Highlights**

- Strong REE anomalies identified at Nolans East Project in initial surface sampling programme, interpreted to be from a proximal (close) source
- Nolans East located some 15km south-east of Nolans Bore, owned by Arafura.
- Exploration programmes have re-commenced for 2023 with expansion of the surface sampling programme at Nolans East, with results imminent
- Desktop targeting exercise at the Coomarie Project expanded
- Reprocessing of gravity data from the Amadeus Project allows target refinements ahead of drilling planned for Q3 CY2023

Bubalus Resources Limited (ASX: BUS) (**Bubalus** or **the Company**) is pleased to report its activities for the March Quarter of 2023.

## **Projects Summary & Activities**

#### **Nolans East Project**

During the quarter the Company received results from its surface sampling programme completed in the previous Quarter (Q4 CY2023). Surface sampling successfully identified anomalous rare earth element (REE) content at surface (refer ASX announcement 24 January 2023).

Assays from surface samples over an initial 2 km by 1 km returned a significant number of anomalous results with 41 of 170 samples returning > 500ppm total rare earth oxides (**TREO**) (refer Figure 1). The anomalous samples define an aggregate strike length of almost 2 kilometres. The anomalies are interpreted to trend WNW – ESE parallel to the regional structural trend (Figure 1).

In March surface sampling re-commenced at Nolans East Project, aiming to test mineralisation along the WNW-ESE trend and to define the extent of the anomalism on a broader scale. In addition infill sampling is being carried out to better define the anomalism quantitatively as well as confirming field observations that the anomalies are derived from a source proximal to (near to) the target area (refer ASX announcement 9 March 2023).

First assays from the sampling programme are expected to be received imminently. Results will provide data to aid the definition of targets for drilling in Q3 CY2023. The Company has commenced the approvals process required for drilling.





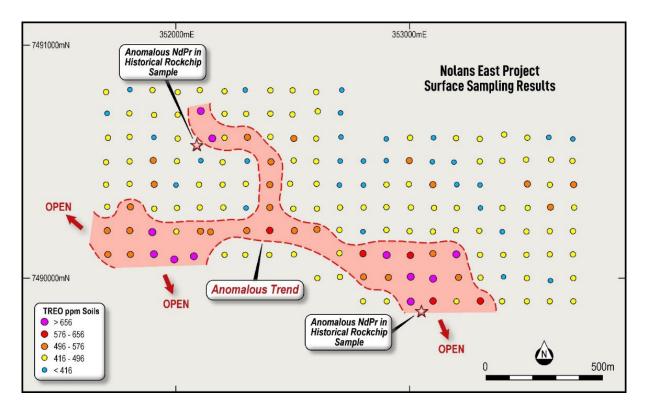


Figure 1: Results from surface sampling at Nolans East Project.

The Nolans East Project is located 15km south east of the Nolans Bore deposit owned by Arafura Resources Limited (**Arafura**) (Figure 2). A Mineral Resource of 56 million tonnes at an average grade of 2.6% total rare earth oxides (TREO) and 11% phosphate ( $P_2O_5$ ) has been defined by Arafura at Nolans Bore<sup>1</sup>. According to Arafura, neodymium-praseodymium oxides ( $Nd_2O_3+Pr_6O_{11}$ , **NdPr**) make up 26% of the TREO content at Nolans Bore.

Nolans Bore is a complex stockwork vein-style deposit with mineralisation occurring in in two stages (1) massive to granular fluorapatite with inclusions of REE silicates, phosphates and (fluoro) carbonates, and (2) calcite-allanite with accessory REE-bearing phosphate and (fluoro) carbonate minerals that vein and brecciate the earlier stage<sup>2</sup>. Nolans Bore was discovered by mapping and sampling of these veins at surface.

At Nolans East, the project area is over 90% covered with shallow sand cover with limited outcrop<sup>3</sup>.

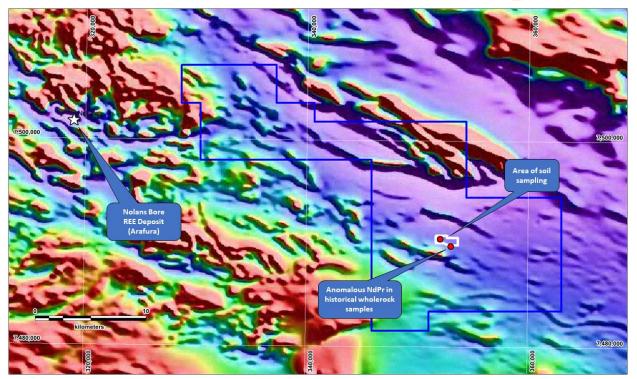
<sup>&</sup>lt;sup>1</sup> <u>https://www.arultd.com/projects/nolans.html</u>

Also ARU.ASX Announcement 7 June 2017 (Detailed Resource Assessment Completed)

<sup>&</sup>lt;sup>2</sup> Refer Huston, D.L., Maas, R., Cross, A. et al. The Nolans Bore rare-earth element-phosphorus-uranium mineral system: geology, origin and post-depositional modifications. Miner Deposita 51, 797–822 (2016). Also Independent Geologists Report, ASX Announcement 11 October 2022.

<sup>&</sup>lt;sup>3</sup> Refer Independent Geologists Report, ASX Announcement 11 October 2022.





*Figure 2:* Initial target area at the Nolans East Project over magnetics (TMI – NTGS data). Location of the Nolans Bore Deposit (owned by Arafura) also shown.

## **Coomarie Project**

During the Quarter the Company engaged Southern Geoscience to acquire and reprocess available geophysical data across the Coomarie Dome with the aim of delineating targets for initial work. Geophysical data will be used to identify the granite-sediment contact and structures cross-cutting the contact. In addition, imagery of radiometric data using different channels and ratios will be reviewed to enable ranking of magnetic targets as well as generate additional areas of interest. During the Quarter this targeting exercise has been expanded to produce a geological interpretation for the project area specifically focussed on delineating the granitic margin and cross cutting structures.

Following generation of targets at Coomarie Dome the Company will initiate ground activities at which will comprise collected detailed surface geochemical and geophysical data from the areas of interest. The Company has commenced engagement regarding access with the traditional owners of the land within which the Coomarie Project falls, via the Central Land Council.

The Coomarie Project is located approximately ~600km from Alice Springs, near the border with Western Australia and Northern Territory. The Project is located in the Tanami Region, which is the one of the most important tectonic units in the North Australian Craton, and has a stratigraphic succession which shows similarities with the Pine Creek and Halls Creek Orogens, other Paleoproterozoic successions in northern Australia. The Tanami Region is emerging as a potentially significant supplier of rare earth elements (REE) for global consumption due to the success of Northern Minerals (ASX.NTU) and PVW Minerals (ASX.PVW). Coomarie Dome is just 30 kilometres from PVW's Watts Rise heavy rare-earth element (HREE) discovery.





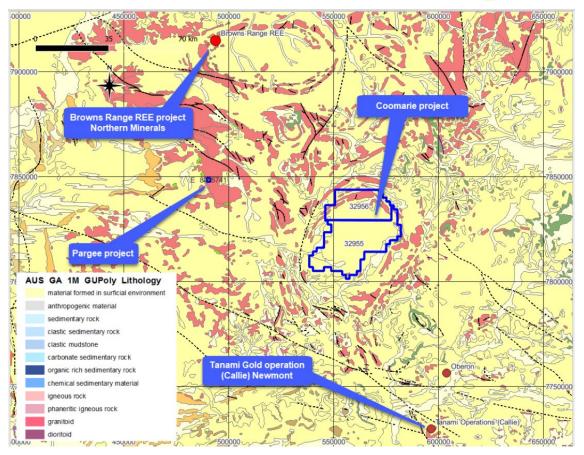


Figure 3: Coomarie and Pargee Projects relative to major resources in region.

REE mineralisation within the Tanami Region is hosted at unconformities between older metamorphic rocks associated with granitic intrusions and younger sediments (for example Browns Ridge (ASX.NTU)<sup>4</sup>, Watts Ridge-Castella (ASX.PVW)<sup>5</sup> and Mount Mansbridge (ASX.RMX)<sup>6</sup>). Mineralisation is often controlled by faults which cross cut the unconformity and are interpreted to have controlled fluid flow.

The Project is defined by a large negative magnetic anomaly ~50km in diameter known as the Coomarie Dome. This is interpreted by geophysics as a large composite intrusive body. The Coomarie Dome granitoid is only known from limited drillcore, which makes correlation difficult. Bubalus owns the entire domal structure at Coomarie and accordingly is able to pursue a similar exploration strategy to NTU's "Own the Dome" strategy<sup>4</sup>.

<sup>&</sup>lt;sup>6</sup> RMX.ASX Announcement 19 July 2022 (Company Presentation July 2022)



<sup>&</sup>lt;sup>4</sup> NTU.ASX Announcement 9 June 2022 (Corporate Presentation)

<sup>&</sup>lt;sup>5</sup> PVW.ASX Announcement 1 November 2022 (Presentation – Australian Rare Earth Conference)



#### **Pargee Project**

The Pargee Project is located 70km west of the Coomarie Project along the Tanami Road and then 50km north of the Tanami Road. The Project is located towards the western end of the Granites – Tanami Inlier, which is a highly deformed and metamorphosed, Palaeoproterozoic block of rocks approximately 250km long and 100km wide. Most of the area of the Pargee Project is interpreted to be underlain by lithologies of the Killi to the east and Lower Stubbins Formation to the west as well as the Upper Stubbins Formation and a folded dolerite unite in the centre. An undifferentiated gneiss and to a minor degree a granite underlay the western portion.

There has been no recorded exploration and mineralisation over the Pargee Project. During the Quarter activities comprised finalising an agreement with the Traditional Owners of the land within which the Pargee Project falls.

#### **Amadeus Project**

Exploration at Amadeus during the Quarter continued to focus on compilation and review of the extensive exploration data which generated by previous exploration activities.

Detailed gravity surveys across the Amadeus Project have been undertaken by the Northern Territory Geological Survey (NTGS) as part of a regional gravity survey and this data was reprocessed during the Quarter to refine targeting at each of the 18 known manganese prospects. A key finding was that surface mineralisation does not appear to be coincident with the peak gravity anomalies in the project area. This has led to refinement of the planned drill programme for Amadeus.

The Company has commenced the approvals process for drilling at the Amadeus Project and plans to commence drilling during Q3 CY2023, provided all relevant stakeholders provide their consent.

A field reconnaissance programme across the Amadeus Project in late 2022 confirmed good access to the project area and regional infrastructure to support drilling.

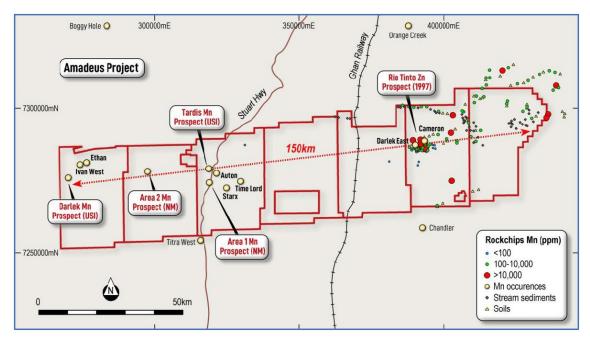


Figure 4: Location of Amadeus Project (Prospects defined to date (Mn >1% highlighted as red dots))



The Arunta Block is divided into three Provinces (Northern, Central and Southern), but only the Central and Southern lie within the Amadeus Project area. The Central and Southern Provinces are separated by the WNW trending Redbank Thrust Zone (**RTZ**). The RTZ is a high-strain zone of anastomosing shears that separate granulite-facies rocks of the Central Province from amphibolite-facies rocks of the Southern Province.

The Amadeus Basin represents a relic of sediments that covered Central Australia from the Neoproterozoic to the end of the Devonian. It consists of a basal unit of Heavitree Quartzite with an overlying Bitter Springs Formation. Unconformably overlying these basal units are the Areyonga, Pioneer, and Pertatataka Formations. These units are then unconformably overlain by the Arumbera Sandstone. Several units of clastic and carbonate rocks have been deposited from the Cambrian through to the Devonian.

The Amadeus Project geology comprises an intracratonic Proterozoic basin. It overlies the Palaeo-Mesoproterozoic basement of the Musgrave Province to the south and the Arunta Region to the north (Edgoose, 2012) Lindsay (1987) has identified that the Late Proterozoic basin appears to have consisted of two major poorly circulated anoxic sub-basins, which perhaps opened to the ocean in the south. Because of this disconnection to the ocean the salinity of the basin waters was often high and on occasion hypersaline. During at least two periods the salinity was high enough to form thick evaporate units. Both oxygen availability in the sea and salinity has important roles to play the formation of manganese deposits.

The two main potential source rocks for the manganese in the Amadeus come from the Arunta Region (North) and from the Musgrave Province (South). It is considered that the Mn contents in specific lithologies within both these terranes could have provided sufficient material for Mn mineralisation to develop in the Amadeus Basin via sedimentation and reworking.

In addition historical RAB drilling by Rio Tinto Exploration identified zinc and cobalt anomalies within the Amadeus Project area (Figure 5). No further work has been completed to investigate these anomalies.

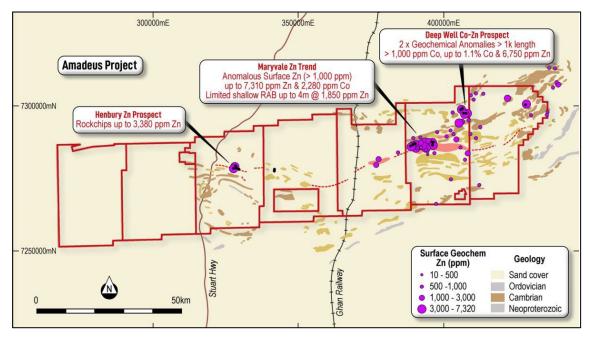


Figure 5: Summary of base metal anomalies identified in historical exploration at Amadeus.



### Corporate

### **Cash Position**

Bubalus held cash reserves at the end of quarter of approximately \$4.2 million.

#### **Shareholder Information**

As at 31 March 2023, the Company had 438 shareholders and 33,661,750 ordinary fully paid shares on issue with the top 20 shareholders holding 52.70% of the total issued capital.

## **ASX ADDITIONAL INFORMATION**

## Finance and Use of Funds

Pursuant to the requirements of Listing Rule 5.3.1: Exploration and Evaluation Expenditure during the Quarter was \$146,674. Full details of exploration activity during the Quarter are set out in this report.

Pursuant to the requirements of Listing Rule 5.3.2: There were no substantive mining production and development activities during the Quarter.

Pursuant to the requirements of Listing Rule 5.3.5: Payments to related parties of the Company and their associates during the Quarter was \$43,028. The Company advises that this relates to director's fees and consulting services. As per ASX Listing Rule 5.3.4 the following expenditures have occurred:

Item	Current Quarter \$	Year-to-Date \$	Prospectus dated 24 August 2022* \$
Exploration - Amadeus Project	81,227	106,382	1,240,000
Exploration - Nolans East Project	49,699	69,466	810,000
Exploration - Coomarie Project	8,816	15,360	690,000
Exploration - Pargee Project	6,931	8,008	60,000
Cash Consideration Paid to Vendors	_	103,495	105,286
Expenses of the Offer	-	585,154	571,884
Corporate and Administration Costs	108,867	232,584	603,400
Working Capital	(38,086)	5,713	1,223,981

\*Costs per the prospectus are over the first two years following admission of the Company to the official List of ASX.

ASX: BUS	
bubalusresources.com.au	



## **TENEMENT TABLE AS AT 31 MARCH 2023**

Tenement ID Project Status Holder(s)*		Lalder(a)*	Interest at	
Tenement iD	Project	Status	Holder(S)	End of Quarter
EL32796	Amadeus	Granted	Tomorrow Minerals Pty Ltd	100%
EL32797	Amadeus	Granted	Tomorrow Minerals Pty Ltd	100%
EL32798	Amadeus	Granted	Tomorrow Minerals Pty Ltd	100%
EL32799	Amadeus	Granted	Tomorrow Minerals Pty Ltd	100%
EL32800	Amadeus	Granted	Tomorrow Minerals Pty Ltd	100%
EL32801	Amadeus	Granted	Tomorrow Minerals Pty Ltd	100%
EL32802	Amadeus	Granted	Tomorrow Minerals Pty Ltd	100%
EL32955	Coomarie	Application	Jarrah Nia Exploration Pty Ltd	-
EL32956	Coomarie	Granted	Jarrah Nia Exploration Pty Ltd	100%
EL32957	Nolans East	Granted	Jarrah Nia Exploration Pty Ltd	100%
E80/5741	Pargee	Application	Jarrah Nia Exploration Pty Ltd	-

\* Tomorrow Minerals Pty Ltd and Jarrah Nia Exploration Pty Ltd are 100% owned subsidiaries of Bubalus Resources Limited.

This announcement has been authorised by the Board of Directors of Bubalus Resources Limited.

For more information, please contact: Mr Alec Pismiris M: +61 402 212 532

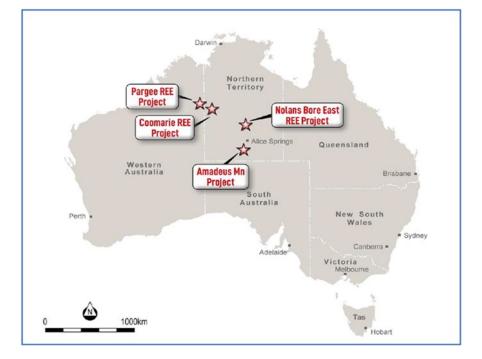
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### **ABOUT BUBALUS RESOURCES**



Bubalus has four projects, the Amadeus Project (prospective for Manganese), the Coomarie Project (prospective for Heavy Rare Earths), the Nolans East Project (prospective for Light Rare Earths) and the Pargee Project (prospective for Heavy Rare Earths), which are located in premier geological provinces in the Northern Territory and Western Australia:

*Amadeus Project* (Mn) - Significant land package with 150kms of strike containing outcropping high grade manganese covering 5,436km<sup>2</sup>, located 125km south of Alice Spring where historical exploration has identified 11 manganese occurrences, along with cobalt and Ni-Zn-Cu also identified.

*Nolans East Project* (Light REEs) - The project covers 380km<sup>2</sup> of the Arunta Province, analogous to Nolan's Bore light rare earth deposit and is prospective for light rare earths, located only 15kms east of Arafura's (ASX:ARU) 56Mt NPV \$1.011Bn light rare earth deposit.

*Coomarie Project* (Heavy REEs) - The project covers 1,153 km<sup>2</sup> and presents as a geological analogue to Browns Dome, host to Northern Minerals' (ASX:NTU) Browns Range heavy rare earths deposit where mineralisation is hosted on margins of granite dome intrusive where the unconformity between Gardiner Sandstone and Browns Range Metamorphics exist and located in the Tanami Region.

*Pargee Project* (Heavy REEs) - The project is prospective for heavy rare earths and located 30kms from PWV Resources' (ASX:PVW) Watts Rise heavy rare earths discovery.



#### **COMPETENT PERSONS STATEMENT**

Information in this report relating to Exploration Results is based on information compiled, reviewed and assessed by Mr. Bill Oliver, who is a Member of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mr. Oliver is a Director of Bubalus Resources and 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 by the 2012 Edition of the Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Mr. Oliver consents to the inclusion of the information in the form and context in which it appears.

Some of the information in this Announcement is extracted from the Independent Geologist's Report contained within the Prospectus released to the ASX on 11 October 2022 and available to view on the Bubalus Resources Limited website, www.bubalusresources.com.au or on the ASX website, www.asx.com.au under the ticker code BUS.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.



## Appendix 5B

## Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

BUBALUS RESOURCES LIMITED

ABN

17 654 970 751

Quarter ended ("current quarter")

51

31 March 2023

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	-	-
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(36)	(66)
	(e) administration and corporate costs	(71)	(379)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	8	8
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other (GST movements)	30	(14)
1.9	Net cash from / (used in) operating activities	(69)	(451)

2.	Cash flows from investing activities		
2.1 Payments to acquire or for:			
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) exploration & evaluation	(147)	(303)
	(e) investments	-	-
	(f) other non-current assets	-	-

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (9 months) \$A'000
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 (security deposits paid)	-	-
2.6	Net cash from / (used in) investing activities	(147)	(303)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	5,000
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	(2)	(373)
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	(2)	4,627

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	4,396	305
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(69)	(451)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(147)	(303)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	(2)	4,627

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (9 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	4,178	4,178

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	178	4,396
5.2	Call deposits	4,000	-
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)	4,178	4,396

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	38
6.2	Aggregate amount of payments to related parties and their associates included in item 2	5
	if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must includ nation for, such payments.	le a description of, and an

ASX Listing Rules Appendix 5B (17/07/20) + See chapter 19 of the ASX Listing Rules for defined terms.

## Appendix 5B Mining exploration entity or oil and gas exploration entity quarterly cash flow report

7.	<b>Financing facilities</b> Note: the term "facility' includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the sources of finance available to the entity.	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$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 facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		itional financing
	N/A		

8.	Estim	nated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (item 1.9)		(69)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))		(147)
8.3	Total r	elevant outgoings (item 8.1 + item 8.2)	(216)
8.4	Cash and cash equivalents at quarter end (item 4.6) 4,178		
8.5	Unused finance facilities available at quarter end (item 7.5)		
8.6	Total available funding (item 8.4 + item 8.5) 4,178		
8.7	Estimated quarters of funding available (item 8.6 divided by item 8.3)		19.34
	Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.		
8.8	If item 8.7 is less than 2 quarters, please provide answers to the following questions:		
	8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?		
	Answer: N/A		
	8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?		
	Answer: N/A		
	<u> </u>		

8.8.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer: N/A

Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

## **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: 27 April 2023

Authorised by: <u>By the Board of Bubalus Resources Limited</u> (Name of body or officer authorising release – see note 4)

#### Notes

- 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.